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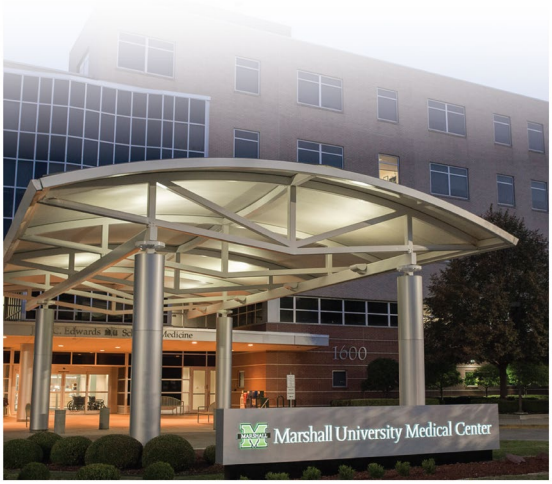

Marshall University Joan C. Edwards School of Medicine

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For Medical Education Programs with
Full Accreditation Surveys in the 2018-19 academic year

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Abbreviations and Definitions

Abbreviation	Definition
AAMC	American Association of Medical Colleges
AAMC GQ	American Association of Medical Colleges Graduate Questionnaire
AAMC-HHMI	AAMC and the Howard Hughes Medical Institute
ACGME	The Accreditation Council for Graduate Medical Education
ACPs	Academic Citizenship Points
ACS	Advanced Clinical Skills
ACTSI	Appalachian Clinical and Translational Sciences Institute
ADA	American Disability Act
AEOP	Army Educational Outreach Program
AEOP/REAP	Army Educational Outreach Program Research and Engineering Apprenticeship Program
AEOP/TSA	Army Educational Outreach Program Technology Student Association
AMA	American Medical Association
AMC	Academic medical center
AMCAS	American Medical College Application Service
APSC	Academic and Professionalism Standards Committee
ASTHO	Association of State Territorial Health Officials
AY	Academic Year
BMR	Biomedical Research
BS/MD	Accelerated BS to MD Program
CBSE	Comprehensive Basic Science Examination
CC	Curriculum Committee
CCC	Clinical Clerkship Committee
CCE	Clinical Competency Examination
CDC	Centers for Disease Control and Prevention
CEC	Curriculum Evaluation Committee
CEO	Chief Executive Officer
CFRC	Charleston Family Resource Family Center
CHH	Cabell Huntington Hospital
CiM	Careers in Medicine
CiM MSPI	Careers in Medicine's Medical Specialty Preference Inventory
CIO	Chief Information Officer
CMS	Centers for Medicare and Medicaid Services
COCA	Commission on Osteopathic College Accreditation
COMLEX	Comprehensive Osteopathic Medical Licensing Examination
COMSEP	Committee on Medical Student Education in Pediatrics
CQI	Continuous quality improvement
CSO	Community Service Organization
DCTS	Department of Clinical and Translational Sciences
DHHR	Department of Health and Human Resources
DT/D&T	Disease & Therapeutics
EMS	Emergency Medical Services
EMT	Emergency Medical Technicians
EPAs	Entrustable Professional Activities
ERAS	Electronic Residency Application Service
FAFSA	Free Application for Federal Student Aid
FERPA	Family Education Rights and Privacy Act
FTE	Full Time Employee

FY	Fiscal Year
FYTD	Fiscal Year to Date
GEAR-UP	Gaining Early Awareness and Readiness for Undergraduate Programs
GME	Office of Graduate Medical Education
HCPI	Health Care Pipeline Initiative
HIPAA	Health Insurance Portability and Accountability Act
HSL	Health Science Library
HSTA	West Virginia Health Sciences and Technology Academy
H-STEM	Healthcare, science, technology, and engineering
IACUC	Institutional Animal Care and Use Committee
IC's	Institutional Competencies
ICS	Introduction to Clinical Skills
IPE	Interprofessional Education
IRB	Institutional Review Board
ISA	Independent Student Analysis
IT	Information Technology
JCESOM	Joan C. Edwards School of Medicine
LCME	Liaison Committee on Medical Education
LGBTO	Lesbian, Gay, Bisexual, Transgender, and Other
LPNs	Licensed Practicing Nurses
LTD	Long-term Disability
MCAT	Medical College Admission Test
MMO	Marshall Medical Outreach program
MOU	Memorandum of Understanding
MS1/MS2/MS3/MS4	1st, 2nd, 3rd, or 4th year medical student
MSPE	Medical Student Performance Evaluation
MU	Marshall University
MUJCESOM	Marshall University Joan C. Edwards School of Medicine
MUMC	Marshall University Medical Center
MUSOM	Marshall University School of Medicine
NAACP	National Association for the Advancement of Colored People
NAMME	National Association of Medical Minority Educators, Inc.
NBME	National Board of Medical Examiners
NIH	National Institute of Health
NPA	National Partnership for Action to End Health Disparities
NRMP	National Residency Match Program
OAA	Office of Academic Affairs
OB/GYN	Obstetrics & Gynecology
OFA	Office of Faculty Advancement
OME	Office of Medical Education
OMH-National	Office of Minority Health
OSA	Office of Student Affairs
OSCE	Objective structured clinical examination
OSHA	Occupational Safety and Health Administration
OTC	Over-the-counter
P&T	Promotion and tenure
PACE	Promoting a Community of Excellence
PEDS	Pediatrics
POD	Principles of Disease
Project PREMED	Project Providing Real Experiences for future Marshall Educated Doctors

RHEC	Regional Health Equity Council
ROI	Return on Investment
SDL	Self-directed learning
SF/S&F	Structure and Function
SLAC	Second Level of Appeals Committee
SMMC	St. Mary's Medical Center
SNMA	Student National Medical Association
SOM	School of Medicine
STEM	Science, Technology, Engineering, and Mathematics
Step 2 CS/CK	USMLE Step 2 Clinical Skills/Knowledge
SWVAHEC	Southern West Virginia Area Health Centers
TBL	Team-Based Learning
URM	Under-Represented Minorities in Medicine
USMLE	United States Medical Licensing Examination
UTCAA	AAMC's Uniform Clinical Training Affiliation Agreement
VA/VAMC	Hershel "Woody" Williams Veteran Affairs Medical Center
VSAS	Visiting Student Application Service
VSLO	Visiting Student Learning Opportunities Service
WV	West Virginia
WVHEPC	West Virginia Higher Education Policy Committee
WVSU	West Virginia State University
WVU	West Virginia University
Y2Q	Year 2 Survey
YHEMOP	The Youth Health Equity Model of Practice
yNPA	Youth National Partnership for Action to End Health Disparities

STANDARD 1: MISSION, PLANNING, ORGANIZATION, AND INTEGRITY

A medical school has a written statement of mission and goals for the medical education program, conducts ongoing planning, and has written bylaws that describe an effective organizational structure and governance processes. In the conduct of all internal and external activities, the medical school demonstrates integrity through its consistent and documented adherence to fair, impartial, and effective processes, policies, and practices.

SUPPORTING DOCUMENTATION

Provide maps illustrating the location of affiliated hospitals and any regional campuses.

See Appendix *1.0-1 Campus Map.docx*

1.1 STRATEGIC PLANNING AND CONTINUOUS QUALITY IMPROVEMENT

A medical school engages in ongoing planning and continuous quality improvement processes that establish short and long-term programmatic goals, result in the achievement of measurable outcomes that are used to improve programmatic quality, and ensure effective monitoring of the medical education program's compliance with accreditation standards.

NARRATIVE RESPONSE

a. Provide the mission and vision statements of the medical school.

Mission Statement - The Joan C. Edwards School of Medicine at Marshall University is a community-based, Veteran Affairs affiliated medical school dedicated to providing high quality medical education and postgraduate training programs to foster a skilled physician workforce to meet the unique healthcare needs of West Virginia and Central Appalachia. Building upon its medical education foundation, the school seeks to develop centers of excellence in clinical care, including primary care in rural, underserved areas, focused and responsive programs of biomedical science graduate study, biomedical and clinical science research, academic scholarship, and public service outreach. The school is committed to fulfilling its mission by creating a diverse and inclusive academic community that is sustained in a collegial and nurturing environment of life-long learning.

Vision Statement - To be known for excellence in teaching, patient care, and scientific contributions that enhance the health care communities in the region.

b. Describe the process used by the medical school to develop its most recent strategic plan, including the school's mission, vision, goals, and associated outcomes. How often is the strategic plan reviewed and/or revised?

The strategic planning committee is made up of institutional leaders in the areas of education, research, citizenship, and service. The 15 members worked as subcommittees specific to their area of interest and expertise to review outcomes from the previous strategic plan. These outcomes were disseminated to all faculty and staff. A new strategic plan was developed based on the outcomes of the previous plan, the solicited feedback, the committee's vision, and the goals to be achieved over the next five years. The new plan was then disseminated to faculty and staff for review and comments. Once finalized by the committee, the new plan was presented to the JCESOM Dean for approval.

c. Describe how, when, and by whom the outcomes of the school's strategic plan are monitored. Provide two examples of outcomes based on recent strategic goals/objectives, and a description of the actions or activities undertaken to evaluate the outcomes. Also note if the desired outcomes have been achieved.

The strategic plan is monitor by the Dean's cabinet on an annual basis and renewed every five years by an ad hoc subcommittee for strategic planning with input from faculty and staff.

From our Strategic Plan developed in 2012, we have achieved multiple goals. Two examples of such goals include:

1. Strategy #3.2 – Improve and expand philanthropy in support of the medical school and its programs

The Office of Development & Alumni Affairs continues to cultivate donors and raise money for medical student scholarships such as annual fund mailings, face-to-face meetings, phone calls, and an annual major scholarship fundraiser. The 2018 event, Standing Out in Our Field 5, raised an additional $100,000 for our scholarship endowment. From July 1, 2015 to June 30, 2018, we increased endowments by an additional $700,000. The current market value of our scholarship endowments is somewhat complex as it resides in two substantial buckets. Those funds managed by the Marshall Foundation contain just over $8.5 million. Another fund, outside of Marshall University, the Edwards Charitable Foundation, has somewhat over $33 million in assets and pays out at least $1.2 million per annum, according to a contractual agreement. During the 2017-2018 academic year, 187 students received one or more scholarships and/or tuition waivers from the JCESOM.

2. Priority #2 for Research – Increase cooperative research with sister medical schools and medical centers within the State of West Virginia and the Tri-State Area.

Recognizing pilot funding is critical to promoting scholarly activity, the Appalachian Clinical and Translational Science Institute (ACTSI) and the Department of Clinical and Translational Sciences (DCTS) provided 6 pilot grants to JCESOM Faculty for a total of $150,000. The ACTSI also provides pilot grants to Marshall University Faculty, 1-2 grants for $25-50,000. Finally, the ACTS/DCTS administers the Medical Student Research Program at JCESOM for $80,000 per year for medical students to conduct research with a faculty mentor. This has resulted in a substantial increase in medical students performing research from 10 in 2012 to 74 this year.

In August 2015, Marshall University and West Virginia University each pledged $250,000 annually for a three-year combined effort of $1.5 million to support innovative clinical projects and/or translational research that we believe will ultimately help faculty members at both schools better serve West Virginians and attract future external funding. The goals of this combined effort are to stimulate collaborative clinical projects and translational research between Marshall University and West Virginia University to address health issues in West Virginia and demonstrate the ability of two of the state's medical universities to work together to develop self-sustaining programs to solve real-world problems.

In recent years, we have been fortunate to be the recipient of a West Virginia IDeA Network of Biomedical Research Excellence (WV-INBRE) grant and a Center for Biomedical Research Excellence (COBRE) grant.

The National Institutes of Health (NIH) created the Institutional Development Award (IDeA) program to assist states that receive less than $6MM a year in NIH funds to become more competitive for biomedical research funding. The IDeA program is currently managed by the National Institute of General Medical Sciences (NIGMS) with 23 states (including West Virginia) and Puerto Rico eligible to apply for IDeA funding. Currently, the IDeA program has three primary programs: The IDeA Network of Biomedical Research Excellence (INBRE), Center of Biomedical Research Excellence (COBRE) and IDeA-Clinical and Translational Research (IDeA-CTR) programs. Eligible states are allowed one INBRE and one IDeA-CTR and up to three COBREs per research intensive institution. The Joan C. Edwards School of Medicine currently has active an INBRE and COBRE award and is a partner institution with West Virginia University in an IDeA-CTR award. The current WV-INBRE award is: Total Cost: $17,581,101. The current COBRE award is: Total Costs: $10,827,016. The amount JCESOM receive from the West Virginia Clinical and Translational Science Institute (WVCTSI) award is Total Costs: $4,323,300 over the 5 years of the award.

The Marshall University Joan C. Edwards School of Medicine (MU JCESOM) Center of Biomedical Research Excellence (COBRE) named Appalachian Center for Cellular transport in Obesity Related Disorders (ACCORD) is a national center of excellence focused on molecular mechanisms of cellular

transport abnormalities in obesity-associated health disparities in West Virginia and Central Appalachia (WV/CA). Many of the innumerable health disparities of West Virginia and Central Appalachia have their roots in widespread obesity prevalent in the region. Thus, the goal of ACCORD is to enhance institutional obesity related biomedical research capacity, develop new resources as future cores (e.g., Biostatistics and Study Design), provide pilot funding and promote training of not just junior investigators, but the future generation of investigators (e.g., graduate students, post-doctoral fellows) as well in obesity research. ACCORD is funded by a $10.78 million five year grant by the NIGMS of the National Institutes of Health

While we have achieved notable success in both of these areas, we continue to strive for ongoing improvement in both of these areas as part of our strategic planning.

d. Describe the process used and resources available for quality improvement activities related to the medical education program. For example, is there an office or dedicated staff to support quality improvement activities at the levels of the medical school or university?

The JCESOM has a 1.0 FTE dedicated to quality improvement related to the medical education program. This administrative position is responsible for organizing and maintaining all documents related to quality improvement. The LCME Accreditation Committee meets monthly, reviewing one standard per month, to ensure that all 12 standards and 93 elements are reviewed over the course of each academic year. This committee creates and develops action plans to address all quality improvement initiatives regarding medical education. Action plan must have final approval by the curriculum committee.

e. Describe how the medical school monitors ongoing compliance with LCME accreditation elements. The response should address the following questions:

1. Which elements are monitored (e.g., all standards, a subset of standards)?
2. How often is compliance with elements reviewed (mid-cycle, yearly, at some other interval)?
3. What data sources are used to monitor compliance?
4. What individuals or groups receive the results?
5. Describe one example of an action taken resulting from CQI monitoring of LCME accreditation elements.

1. Which elements are monitored (e.g., all standards, a subset of standards)?

The JCESOM LCME Accreditation Committee monitors all 93 elements contained within the 12 Standards of the DCI.

2. How often is compliance with elements reviewed (mid-cycle, yearly, at some other interval)?

The JCESOM LCME Accreditation Committee meets monthly to ensure that the 93 elements contained within the 12 Standards of the DCI are reviewed annually.

3. What data sources are used to monitor compliance?

All available data sources are used to populate the DCI as each element is reviewed. Sources include the internal student surveys, the AAMC GQ, the StandPoint™ survey, course and clerkship reviews, and outcome data from medical licensing exams.

4. What individuals or groups receive the results?

Any gaps or updates are identified and addressed in an ongoing quality improvement process. The report is posted on the JCESOM LCME webpage and is available to any faculty member or student using their institutional username and password.

5. Describe one example of an action taken resulting from CQI monitoring of LCME accreditation elements.

An example of an improvement made as a result of LCME Accreditation Committee review resulted in an updated policy for selecting candidates for interviews. Previously, candidates were selected solely by Office of Admissions staff, not the Admissions Committee. The new policy states that the Interview Selection Committee, a subcommittee of the Admissions Committee, will meet weekly to review medical school candidates for an invitation to interview.

SUPPORTING DOCUMENTATION

1. The strategic goals and objectives of the medical school.

   Appendix 1.1-1 Strategic Goals and Objectives.docx

2. An executive summary of the most recent medical school strategic plan.

   Appendix 1.1-2 Strategic Plan.pdf

1.2 CONFLICT OF INTEREST POLICIES

A medical school has in place and follows effective policies and procedures applicable to board members, faculty members, and any other individuals who participate in decision-making affecting the medical education program to avoid the impact of conflicts of interest in the operation of the medical education program, its associated clinical facilities, and any related enterprises.

NARRATIVE RESPONSE

a. Place an "X" next to each unit for which the primary institutional governing board is directly responsible:

X	University system
X	Parent university
	Health science center
X	Medical school
	Other (describe):

b. If the institutional primary board is responsible for any units in addition to the medical school (e.g., other colleges), is there a separate/subsidiary board for the medical school?

There is not a subsidiary board for the medical school.

c. Is the medical school part of a for-profit, investor-owned entity? If so, identify any board members, administrators, or faculty members who are shareholders/investors/administrators in the holding company for the medical school.

Not applicable.

d. Place an "X" next to each area in which the medical school or university has a faculty conflict of interest policy:

X	Conflict of interest in research
X	Conflict of private interests of faculty with academic/teaching/responsibilities
X	Conflict of interest in commercial support of continuing medical education

e. Describe the strategies for managing actual or perceived conflicts of interest as they arise for the following groups:

1. Governing board members
2. University and medical school administrators
3. Medical school faculty

1. Governing board members

Concerns regarding conflicts of interest for the Marshall University Board of Governors are addressed by the West Virginia Higher Education Policy Committee (WVHEPC). Their policies are adopted in accordance with the WV Governmental Ethics Act. The WVHEPC oversees a public policy agenda for all public West Virginia universities.

2. University and medical school administrators

Concerns regarding conflicts of interest for the University are covered in the Marshall University Board of Governors' Policies. Identified conflicts of interest are handled and adjudicated by the President or his designee. The policy includes the ability for individual units within the university to have more stringent policies as needed. The JCESOM has such a superseding policy.

3. Medical school faculty

Concerns regarding conflicts of interest within the medical school are reviewed by the Dean and the Dean's Cabinet with input from the Risk Management Officer of Marshall Health, the practice plan affiliate, where appropriate. It is expected that the process for policy awareness and ethical self and other reporting will set the standard, but violations can be variously dealt with, as per the school policy.

SUPPORTING DOCUMENTATION

1. Policies and procedures intended to prevent or address financial or other conflicts of interest among governing board members, administrators, and faculty (including recusal from discussions or decisions if a potential conflict occurs).

   See Appendix *1.2-1 Conflict of Interest Policy.pdf*

2. Documentation, such as minutes illustrating relevant recusals or affirmations, that conflict of interest policies are being followed.

   See Appendix *1.2-2 COI Compliance.pdf*

1.3 MECHANISMS FOR FACULTY PARTICIPATION

A medical school ensures that there are effective mechanisms in place for direct faculty participation in decision-making related to the medical education program, including opportunities for faculty participation in discussions about, and the establishment of, policies and procedures for the program, as appropriate.

SUPPORTING DATA

Table 1.3-1 | Standing Committees

List all major standing committees of the medical school and provide the requested information for each, including whether members are *all appointed* (A), *all elected* (E), or whether the committee has *both appointed and elected members* (B), and whether the committee is charged with making *recommendations* (R), is *empowered to take action* (A), or *both* (B).

Committee	Reports to	Total Voting Members	Total Faculty Voting Members	Membership Selection (A/E/B)	Authority (R/A/B)
Admissions Committee	Dean	33	25	B	B
Curriculum Committee	Dean	14	10	E	A
Personnel Advisory Committee	Dean	13	13	E	R
Academic and Professionalism Standards Committee	Dean	11	8	A	A
Faculty Council	Dean	16	16	E	B

NARRATIVE RESPONSE

a. Summarize how the selection process for faculty committees ensures that there is input from the general faculty into the governance process. Note whether committees include members elected by the faculty or members nominated or selected through a faculty-administered process (e.g., through a "committee on committees").

Admissions Committee – The Chair and Co-Chair are appointed by the Dean. Recommendations for new members are taken from current members of the Admissions Committee, former Admissions Committee members, and department chairs. The Executive Committee reviews all recommendations, talks with suggested members to discern interest and availability to interview and attend meetings. The available vacancies are filled by a simple majority vote of the Executive Committee using a holistic approach to determine the best candidates for the Admissions Committee, including considerations of diversity, judgment, clinical and administrative experience, and willingness and availability to serve. In, general, the committee meets an established policy of 51% faculty member participation. The final selection of new members is subject to review by the Faculty Council of the medical school. Each new members is asked to serve a three year term, although members may remain on the Admissions Committee for multiple terms at the discretion of the Chair.

Curriculum Committee – Each member of the curriculum committee is elected by their department. The student members are elected by their classmates.

Academic and Professionalism Standards Committee – Recommendations for membership are made by the department chairs and approved by the dean.

Personnel Advisory Committee – The Personnel Advisory Committee shall consist of one elected representative from each department. The department shall elect its representative. Faculty holding

administrative positions as department chairperson or above and faculty who are not full-time employees of the Joan C. Edwards School of Medicine at Marshall University are not eligible to serve on this committee.

Faculty Council – The council will consist of representatives elected from the Basic Science and Clinical Departments of JCESOM, along with the Chair of the Council. The number of representatives for each department will depend on the number of full-time faculty, as shown below:

Number of full-time faculty	Number of representatives
4-15	1
16-30	2
31-45	3
46 or more	4

Departments with fewer than four full-time faculty will be combined for the purposes of electing representatives to the faculty council. In the event that the total number of full-time faculty in these combined departments is greater than 15, the number of representatives elected will be as in the table above, with no more than one representative from any of the individual departments. The representatives are to be elected from eligible faculty within the Department. No one who holds the title of Assistant-, Associate-, Vice-Dean or Chair, or who has been a member of the Council for the previous four consecutive years, is eligible for membership.

b. Describe how faculty are made aware of policy and other types of changes that require input from faculty and how such input is obtained. Describe one recent specific opportunity for faculty to provide such input.

Faculty are made aware of changes in policies and procedures via faculty meetings and electronically via email with subsequent posting in the faculty section of the JCESOM website. One recent policy change was an update to the faculty bylaws. The structure of the basic science department had changed from three separate departments to a single Department of Biomedical Sciences. This was incongruent with the previous faculty bylaws. The Curriculum Committee had recommended updating the nature of its membership and standard operating procedures to reflect this new organizational structure. These changes were incorporated into a new set of faculty bylaws. Faculty were notified via email three weeks prior to a faculty meeting of the specific changes being recommended and the rationale for them. Comments were solicited via email, and further comments and discussion were heard at the meeting. The bylaw changes were approved by faculty vote.

c. List the number and type of general faculty meetings held during the past academic year. Indicate whether these meetings were held "virtually" or in-person. Describe how faculty were made aware of meeting agendas and outcomes.

In the 2018 calendar year, the school of medicine held five in-person general faculty meetings.

1. State of the Medical School, April 5, 2018 – Dean
2. State of Medical Education, May 24, 2018 – Vice Dean of Medical Education
3. Risk Management Program, July 26, 2018 – Chief Medical Officer
4. State of Graduate Medical Education, September 20, 2018 – Vice Dean of Graduate Medical Education
5. State of Research, November 29, 2018 – Vice Dean of Clinical and Translational Research

Each faculty meeting includes a PowerPoint presentation with outcomes data and potential changes in policies and/or procedures followed by discussion and a faculty vote when necessary. Faculty are made aware of meeting dates via email, followed by monthly reminders.

d. Describe any mechanisms other than faculty meetings (such as written or electronic communications) that are used to inform faculty about issues of importance at the medical school.

All major announcements are made via email. The Office of Medical Education publishes a quarterly newsletter for both students and faculty. The Office of Public Relations publishes a monthly newsletter entitled “From the Dean’s Suite.” Social media is also used as an appropriate and complementary resource. The required default sign-on computer page for the internal JCESOM website publishes frequently updated and highlighted banners that feature current and important JCESOM news. Finally, all department chairs and administrators are expected to further duplicate and disseminate all important information in both a top-down and bottom-up fashion.

1.4 AFFILIATION AGREEMENTS

In the relationship between a medical school and its clinical affiliates, the educational program for all medical students remains under the control of the medical school's faculty, as specified in written affiliation agreements that define the responsibilities of each party related to the medical education program. Written agreements are necessary with clinical affiliates that are used regularly for required clinical experiences; such agreements may also be warranted with other clinical facilities that have a significant role in the clinical education program. Such agreements provide for, at a minimum the following:

- The assurance of medical student and faculty access to appropriate resources for medical student education
- The primacy of the medical education program's authority over academic affairs and the education/assessment of medical students
- The role of the medical school in the appointment and assignment of faculty members with responsibility for medical student teaching
- Specification of the responsibility for treatment and follow-up when a medical student is exposed to an infectious or environmental hazard or other occupational injury
- The shared responsibility of the clinical affiliate and the medical school for creating and maintaining an appropriate learning environment

SUPPORTING DATA

Table 1.4-1 | Affiliation Agreements

For each inpatient clinical teaching site used for the inpatient portion of required clinical clerkships, provide the page number(s) in the current affiliation agreement where passages containing the following information appear. Add rows as needed.

1. Assurance of medical student and faculty access to appropriate resources for medical student education
2. Primacy of the medical education program's authority over academic affairs and the education/assessment of medical students
3. Role of the medical school in the appointment and assignment of faculty members with responsibility for medical student teaching
4. Specification of the responsibility for treatment and follow-up when a medical student is exposed to an infectious or environmental hazard or other occupational injury
5. Shared responsibility of the clinical affiliate and the medical school for creating and maintaining an appropriate learning environment

		Page Number(s) in Agreement				
Clinical teaching site	Date agreement last signed	1. Access to resources	2. Primacy of program	3. Faculty appointments	4. Environmental hazard	5. Learning environment
Cabell Huntington Hospital	10/31/2018	2	1	3	2-3	2
Charleston Area Medical Center	2/15/2017	3	2	3	3	4
Huntington Internal Medicine Group	3/4/2016	2	1	2	2-3	2
Logan Regional Medical Center	2/9/2017	2	1	2	2-3	2
Mildred Mitchell Bateman Hospital	2/23/2017	2	1	2	2-3	2
Pleasant Valley Hospital	2/9/2017	2	1	2	2-3	2

River Park Hospital	2/9/2017	2	1	2	2-3	2
St. Mary's Medical Center	2/28/2017	2	1	2	2-3	2
VA Medical Center	3/10/2016	3	3	3	3	3

SUPPORTING DOCUMENTATION

1. The signed/executed affiliation agreement for each clinical teaching site at which students complete the inpatient portions of required (core) clinical clerkships and/or integrated longitudinal clerkships. This does not include clinical teaching sites only used for electives or selectives or those used for ambulatory teaching.

Note: Each affiliation agreement should be saved as a separate document and named according to the following convention: 1.4._AA_Site Name.

See Appendix:
1.4-1 AA CAMC.pdf
1.4-1 AA CHH.pdf
1.4-1 AA HIMG.pdf
1.4-1 AA LRMC.pdf
1.4-1 AA MMBH.pdf
1.4-1 AA PVH.pdf
1.4-1 AA River Park.pdf
1.4-1 AA SMMC.pdf
1.4-1 AA VAMC.pdf

1.5 BYLAWS

A medical school promulgates bylaws or similar policy documents that describe the responsibilities and privileges of its administrative officers, faculty, medical students, and committees.

NARRATIVE RESPONSE

a. List the topics that are included in the bylaws that apply to the medical school (e.g., charges to committees, definition of faculty)

Topics included in the bylaws applicable to the medical school are as follows:

- Purpose
- Powers
- Membership (definition of faculty)
- Meetings
- Officers
- Records
- Faculty Council
- Committees (composition and charges):
    - Admissions Committee
    - Curriculum Committee
    - Academic Standards and Professionalism Committee
    - Personnel Advisory Committee (Promotion and Tenure)
- Adoption and Amendment of Bylaws

b. Describe the process for changing bylaws, including the individuals and groups that must approve changes.

Bylaws may be adopted or amended by a sixty percent majority vote of full-time faculty members present at any regularly called faculty meeting if the faculty have received notice of the proposed changes at least ten days prior to the meeting. Bylaws or changes therein become effective upon approval by the President of Marshall University.

c. Briefly describe how the bylaws are made available to the faculty.

Faculty bylaws are available to faculty through the policy webpage of the faculty website.

SUPPORTING DOCUMENTATION

1. The bylaws that apply to the medical school should be available in the survey team's home room during the survey visit. The survey team should have online access to the bylaws prior to the survey visit.

See Appendix *1.5-1 Faculty Bylaws.pdf*

1.6 ELIGIBILITY REQUIREMENTS

A medical school ensures that its medical education program meets all eligibility requirements of the LCME for initial and continuing accreditation, including receipt of degree-granting authority and accreditation by a regional accrediting body by either the medical school or its parent institution.

SUPPORTING DATA

a. Provide the state in which the institution is chartered/legally authorized to offer the MD degree.

West Virginia

b. Place an "X" next to the institutional (regional) accrediting body that accredits the medical school or parent institution:

	Middle States Association of Colleges and Schools
	New England Association of Schools and Colleges
X	Higher Learning Commission (formerly known as the North Central Association of Colleges and Schools)
	Northwest Commission on Colleges and Universities
	Southern Association of Colleges and Schools
	Western Association of Colleges and Schools

c. Provide the current institutional accreditation status.

Fully accredited

d. Provide the year of the next institutional accreditation survey.

The next accreditation survey will be in the 2025-2026 academic year.

STANDARD 2: LEADERSHIP AND ADMINISTRATION

A medical school has a sufficient number of faculty in leadership roles and of senior administrative staff with the skills, time, and administrative support necessary to achieve the goals of the medical education program and to ensure the functional integration of all programmatic components.

2.1 ADMINISTRATIVE OFFICER AND FACULTY APPOINTMENTS

The senior administrative staff and faculty of a medical school are appointed by, or on the authority of, the governing board of the institution.

NARRATIVE RESPONSE

a. Briefly describe the role of the primary institutional governing board in the appointment of members of the medical school administration, including the dean, the dean's staff, and members of the faculty. Note if the governing board has delegated the responsibility for some or all of these appointments to another individual (e.g., the university president, provost, medical school dean).

The Marshall University Board of Governors is ultimately responsible for appointing the Dean of the medical school. The appointment of the Dean's staff and faculty members has been delegated to the Dean with contractual oversight and signature by the President of the University

2.2 DEAN'S QUALIFICATIONS

The dean of a medical school is qualified by education, training, and experience to provide effective leadership in medical education, scholarly activity, patient care, and other missions of the medical school.

NARRATIVE RESPONSE

a. Indicate whether the dean has ultimate responsibility for all missions of the medical school or if some of these (e.g., patient care) are under the authority of another administrator.

The Dean has ultimate responsibility for all missions of the medical school. The Dean also appoints Vice Deans for each mission: medical student education, graduate medical education, outreach and development, clinical affairs, and research. The Vice Deans report directly to the Dean.

b. Provide a brief summary of the dean's experience and qualifications to provide leadership in each area of the medical school's missions for which he/she has responsibility.

Joseph Shapiro, MD, the current Dean, appointed in 2012, has had multiple years of experience in a wide variety of settings. He is an outstanding academic nephrologist. He served as the Chairman of Internal Medicine for 13 years at the University of Toledo just prior to assuming his role as Dean at Marshall University Joan C. Edwards School of Medicine. Dean Shapiro also served six years as the Associate Dean for Business Development at the University of Toledo. As a researcher, he has received multiple grants including over $50 million in NIH funding as either a principal or co-investigator. He has also been on the editorial board for more than twenty medical and scientific journals. He has more than 300 original research publications, review articles, book chapters, and patents. In the course of his professional life, he has overseen and successfully fostered a variety of initiatives at all academic levels. Throughout his career, he has always been well-respected as an educator who was actively involved in trainee education, including medical students, residents, and fellows. Dr. Shapiro was recently elected to Mastership status of the American College of Physicians. He clearly has the skill set necessary to support the JCESOM in all of its missions and responsibilities.

c. Describe the process used to evaluate the dean to ensure that he/she provides effective leadership, including the interval at which this evaluation takes place.

The Dean is evaluated annually by the President and the Marshall University Board of Governors. Additionally, he is evaluated every two to three years by an externally performed 360 degree evaluation and feedback process that becomes incorporated with his annual review. He also reports bi-weekly at the Marshall University President's Cabinet meeting and monthly in a one-on-one meeting with the President.

SUPPORTING DOCUMENTATION

1. Dean's abbreviated curriculum vitae.

See Appendix *2.2-1 Dean's CV.pdf*

2.3 ACCESS AND AUTHORITY OF THE DEAN

The dean of a medical school has sufficient access to the university president or other institutional official charged with final responsibility for the medical education program and to other institutional officials in order to fulfill his or her responsibilities; there is a clear definition of the dean's authority and responsibility for the medical education program.

NARRATIVE RESPONSE

a. Summarize the dean's organizational and informal access to university and health system administrators. Provide examples to illustrate the dean's access to these administrators.

The Dean has direct access to the Marshall University President, the Marshall University Board of Governors, and the CEOs of all three of our major teaching hospitals. He has been thoroughly involved with the establishment of an Academic Medical Center (AMC) with our major affiliate, Cabell Huntington Hospital. Through these relationships, the Dean is able to maintain and continuously enhance the support for the medical student clerkships, as well as residency and fellowship stipends and various collaborative research efforts.

b. Describe the dean's authority and responsibility for the medical education program.

The Dean serves as the Chief Academic and Administrative Officer of the Joan C. Edwards School of Medicine, leading the faculty and staff of the school in planning, securing resources, implementing, and evaluating activities related to academic operations, research, service, and patient care programs. The Dean actively participates in various institutional planning, implementing, and evaluating activities.

The Board of Governors and the President of the University charge the Dean with guiding the school toward the proper financial under-pinning, the physical space, and the administrative structure that will provide the proper total learning environment for a fully accredited allopathic medical school and its post-graduate learning programs.

SUPPORTING DOCUMENTATION

1. Organizational chart illustrating the relationship of the medical school dean to university administration, to the deans of other schools and colleges, and to the administrators of the health science center and affiliated teaching hospitals (if relevant). If the medical school is part of a larger non-academic entity (not-for-profit or for-profit/investor-owned), the chart should include the relationship of the dean or other senior academic officer to the board of directors or officers of that entity.

Appendix 2.3-1 Admin Org Chart.docx

2. Dean's position description. If the dean has an additional role (e.g., vice president for health/academic affairs, provost), include that position description, as well.

Appendix 2.3-2 Dean's Position Desc.docx

3. Relevant excerpts from the faculty bylaws or related documents describing the dean's role and/or authority regarding the medical education program.

   Appendix 2.3-3 Dean's Role.docx

2.4 SUFFICIENCY OF ADMINISTRATIVE STAFF

A medical school has in place a sufficient number of associate or assistant deans, leaders of organizational units, and senior administrative staff who are able to commit the time necessary to accomplish the missions of the medical school.

SUPPORTING DATA

Table 2.4-1 | Office of the Associate Dean of/for Students

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of students who were *satisfied/very satisfied* (aggregated) with the Office of the Associate Dean of/for Students.

	GQ 2017		GQ 2018	
	School %	National %	School %	National %
Accessibility	88.8	79.5	73.7	78.7
Awareness of student concerns	85.5	72.7	52.7	71.1
Responsiveness to student problems	85.2	72.1	52.7	70.0

Table 2.4-2 | Office of the Associate Dean of/for Students

Provide data from the independent student analysis (ISA), by curriculum year, on the percentage of students who were *satisfied/very satisfied* (aggregated) with the Office of the Associate Dean of/for Students. If requested ISA data are not available, enter N/A as appropriate. Add rows as needed for additional survey questions relevant to the topic.

	Year 1	Year 2	Year 3	Year 4
Accessibility	97.5	97.6	94.0	93.3
Awareness of student concerns	87.6	98.8	81.8	85.4
Responsiveness to student problems	85.2	94.0	86.4	84.0

Table 2.4-3 | Office of the Associate Dean for Educational Programs/Medical Education

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of students who were satisfied/very satisfied (aggregated) with the Office of the Associate Dean for Educational Programs/Medical Education.

	GQ 2017		GQ 2018	
	School %	National %	School %	National %
Accessibility	83.9	74.3	64.9	72.5
Awareness of student concerns	82.2	70.1	64.3	68.1
Responsiveness to student problems	78.3	68.4	58.9	65.9

Table 2.4-4 | Office of the Associate Dean for Educational Programs/Medical Education

Provide data from the independent student analysis (ISA), by curriculum year, on the percentage of students who were *satisfied/very satisfied* (aggregated) with the Office of the Associate Dean for Educational Programs/Medical Education. If requested ISA data are not available, enter N/A as appropriate. Add rows as needed for additional ISA survey questions relevant to the topic.

	Year 1	Year 2	Year 3	Year 4
Accessibility	82.8	92.9	84.8	91.8
Awareness of student concerns	76.6	92.9	83.4	88.0
Responsiveness to student problems	75.3	89.2	78.8	78.7

Table 2.4-5 | Department Chair Staffing

Provide the requested information regarding current department chairs. For each interim/acting appointment, provide the date the previous incumbent left office. Add rows as needed.

Name of department	Name of incumbent	Date appointed	For acting/interim chairs, date previous incumbent left
Biomedical Sciences	Gary Rankin, PhD	07/01/2016	
Cardiovascular Services	Mark Studeny, MD	10/16/2002	
Dermatology	Charles Yarbrough, MD	08/01/2014	
Dentistry & Oral Maxillofacial Surgery	Raj Khanna, MD	07/01/2016	
Family and Community Health	Stephen Petrany, MD	02/16/2014	
Internal Medicine	Mehair El-Hamdani, MD	07/01/2018	
Neurology	Paul Ferguson, MD	07/01/2016	
Neurosurgery	Anthony Alberico, MD	07/01/2015	
Obstetrics and Gynecology	David Jude, MD	07/01/2011	
Ophthalmology	Mark Hatfield, MD	07/01/2014	
Orthopedic Surgery	Ali Oliashirazi, MD	10/01/2004	
Pathology	Krista Denning, MD	01/01/2018	
Pediatrics	Joe Evans, MD	08/21/2012	
Psychiatry & Behavioral Medicine	Suzanne Holroyd, MD	01/02/2014	
Radiation Oncology	Sanjeev Sharma, MD	02/15/2015	
Surgery	David Denning, MD	02/01/1992	

Table 2.4-6 | Number of Department Chair Vacancies

Indicate the number of *vacant/interim* department chair positions for each of the listed academic years (as available). Use January 1st of the given academic year.

AY 2016-17	AY 2017-18	AY 2018-19
1 (interim)	1 (interim)	0

Table 2.4-7 | Dean's Office Administrative Staffing

Provide the requested information regarding members of the dean's office staff. For each interim/acting appointment, provide the date the previous incumbent left office. Add rows as needed.

Name of incumbent	Title	% Effort dedicated to administrative role	Date appointed	For acting/interim dean's office staff, date previous incumbent left
Bobby Miller, MD	Vice Dean for Medical Education	75%	07/01/2013	
Uma Sundaram, MD	Vice Dean of Biomedical Sciences Education and Clinical and Translational Services	25%	01/14/2014	
Paulette Wehner, MD	Vice Dean of Graduate Medical Education	75%	01/02/2009	
Larry Dial, MD	Vice Dean of Clinical Affairs	50%	07/01/2016	
James Becker, MD	Vice Dean for Government Relations, Health Care Policy, and External Affairs	40%	07/01/2016	
Gary Rankin, PhD	Vice Dean for Basic Sciences	40%	07/01/2016	
Joe Werthammer, MD	Special Advisor to the Dean	80%	07/01/2016	
Ali Oliashirazi, MD	Vice Dean for Business Development and External Affairs	37.5%	03/01/2014	
Marie Frazier, MD	Assistant Dean of Academic Affairs	20%	8/01/2018	
Nitin Puri, MD, PhD	Associate Dean of Pre-Clinical Education	100%	09/01/2017	
Darshana Shah, PhD	Associate Dean of Faculty Affairs and Professional Development	80%	01/01/2005	
Shelvy Campbell, PhD	Assistant Dean of Diversity and Inclusion	100%	03/18/2013	
David Bailey, MBA	Assistant Dean for Continuing Medical Education	100%	07/01/1990	
Jennifer Plymale, MA	Associate Dean of Admissions	50%	11/01/2011	
Cindy Warren, MA	Assistant Dean of Admissions	100%	07/01/1977	
Todd Gress, MD	Assistant Dean of Clinical Research	25%	11/01/2009	
Amy Smith, BSN, MEd	Assistant Dean of Student Affairs	100%	08/01/2014	
Leonard White, MD	Associate Dean, Diversity	10%	01/01/2014	
Jeffrey Breaux, MD	Associate Dean, Veterans Affairs	10%	10/01/2012	
Beth Hammers, MBA	Chief Executive Officer	100%	01/01/2012	
Matt Straub, MBA	Chief Financial Officer	100%	01/01/2012	
Michael McCarthy, MA	Chief Information Officer	100%	08/01/1997	
Nathan Ward, Esq.	Chief Operating Officer	100%	07/01/2017	

NARRATIVE RESPONSE

a. If any members of the dean's staff hold interim/acting appointments, describe the status and timeline of recruitment efforts to fill the position(s).

There are no interim/acting positions among the dean's staff.

b. If there are any department chair vacancies, including interim/acting chairs, describe the status and timeline of recruitment efforts to fill the position(s).

Due to a retirement on January 1, 2018, the current chair of pathology is acting in an interim position. A search committee has been formed and recruitment is ongoing. The timeline to fill this vacancy is July 2019.

SUPPORTING DOCUMENTATION

1. Organizational chart of the dean's office.

See Appendix *2.4-1 Dean's Office Org Chart.pdf*

2.5 RESPONSIBILITY OF AND TO THE DEAN

The dean of a medical school with one or more regional campuses is administratively responsible for the conduct and quality of the medical education program and for ensuring the adequacy of faculty at each campus. The principal academic officer at each campus is administratively responsible to the dean.

Note: Only schools operating one or more regional campus(es) should respond to element 2.5. See the *Glossary of Terms for LCME Accreditation Standards and Elements* at the end of this DCI for the LCME definition of regional campus.

MUJCESOM does not have any campuses outside of the Huntington campus.

SUPPORTING DATA

Table 2.5-1 | Regional Campus(es)		
Provide the requested information for each regional campus. Add rows as needed.		
Campus	Location	Name and Title of Principal Academic Officer

NARRATIVE RESPONSE

a. Describe the role of the medical school dean/designated chief academic officer in overseeing the conduct and quality of the medical education program at all regional campuses. Provide examples of how the dean/CAO monitors the adequacy of faculty at regional campus(es) and works with the principal academic officer(s) at each campus to remedy any deficiencies.

b. Describe the reporting relationship between the medical school dean/chief academic officer and the principal academic officer at each regional campus.

c. Describe the reporting relationships of other campus administrators (e.g., student affairs).

d. Describe the ways in which the principal academic officer(s) at regional campus(es) are integrated into the administrative structures of the medical school (e.g., the Executive Committee).

SUPPORTING DOCUMENTATION

1. Position description for the role of principal academic officer at a regional campus.

2.6 FUNCTIONAL INTEGRATION OF THE FACULTY

At a medical school with one or more regional campuses, the faculty at the departmental and medical school levels at each campus are functionally integrated by appropriate administrative mechanisms (e.g., regular meetings and/or communication, periodic visits, participation in shared governance, and data sharing).

Note: Only schools operating one or more regional campus(es) should respond to element 2.6. See the *Glossary of Terms for LCME Accreditation Standards and Elements* at the end of this DCI for the LCME definition of regional campus.

MUJCESOM does not have any campuses outside of the Huntington campus.

NARRATIVE RESPONSE

a. Describe how faculty members in each discipline are functionally integrated across regional campuses, including activities such as faculty meetings/retreats and visits by departmental leadership. Provide examples of the occurrence of such activities in the past two years.

b. Describe how institutional policies and/or faculty bylaws support the participation of faculty based at regional campuses in medical school governance (e.g., committee membership).

c. List the rank of the faculty member(s) or the title of the senior administrative staff member(s) based at regional campuses serving on the following medical school committees:

    1. Curriculum committee
    2. Admission committee
    3. Executive committee

SUPPORTING DOCUMENTATION

1. Organizational chart(s) illustrating the relationship of pre-clerkship course site directors to course directors (if relevant).

2. Organizational chart(s) illustrating the relationship of clerkship site directors to clerkship directors (if relevant).

STANDARD 3: ACADEMIC AND LEARNING ENVIRONMENTS

A medical school ensures that its medical education program occurs in professional, respectful, and intellectually stimulating academic and clinical environments, recognizes the benefits of diversity, and promotes students' attainment of competencies required of future physicians.

3.1 RESIDENT PARTICIPATION IN MEDICAL STUDENT EDUCATION

Each medical student in a medical education program participates in one or more required clinical experiences conducted in a health care setting in which he or she works with resident physicians currently enrolled in an accredited program of graduate medical education.

SUPPORTING DATA

Table 3.1-1 | Resident Involvement in Required Clinical Clerkships

List each clinical facility at which one or more medical students take a required clinical clerkship (other than ambulatory, community-based sites). For each clerkship, place a "Y" to indicate that residents in an accredited program are involved in medical student education or an "N" to indicate that residents are not involved in medical student education in that discipline. If there is no clerkship in that discipline at that site, leave the cell blank. Add rows as needed.

Facility name	Family medicine	Internal medicine	Ob-Gyn	Pediatrics	Psychiatry	Surgery
Cabell Huntington Hospital	Y	Y	Y	Y	Y	Y
Mildred Bateman Hospital	N	N	N	N	Y	N
River Park Hospital	N	N	N	N	Y	N
St. Mary's Medical Center	N	Y	N	N	Y	Y
Veteran's Administration Medical Center	N	Y	N	N	Y	Y
Logan Regional Medical Center	N	N	N	N	N	N

NARRATIVE RESPONSE

a. Provide the percentage of medical students in the current academic year who will complete one or more required clerkships at an inpatient or outpatient site where residents participate in medical student teaching/supervision. For schools with regional campuses, provide these data by campus.

100% - All students will complete one or more required clerkships at an inpatient or outpatient site where residents participate in medical student teaching/supervision.

b. If some or all students do not have the opportunity to complete one or more required clerkships where residents participate in medical student teaching/supervision, describe other required clinical experiences where students would have the opportunity to interact with residents.

Not applicable. All students will complete one or more required clerkships where residents participate in medical student teaching/supervision.

c. If residents are not present at any of the sites where required clinical experiences are conducted for some or all students (e.g., at a longitudinal integrated clerkship site, a rural clerkship site, or a regional campus), describe how medical students learn about the expectations and requirements of the next phase of their training.

Students may opt to complete a rural experience in Family Medicine as part of their clerkship but return to Huntington to complete one required week of Family Medicine hospital service with the residents. A student may also opt to spend four weeks at a rural site as part of the Surgery Clerkship experience but return to Huntington to complete at least four weeks of surgery service with residents.

3.2 COMMUNITY OF SCHOLARS/RESEARCH OPPORTUNITIES

A medical education program is conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars and provides sufficient opportunities, encouragement, and support for medical student participation in the research and other scholarly activities of its faculty.

SUPPORTING DATA

Table 3.2-1 | Student/Faculty Collaborative Research

Provide school and national data from the AAMC Graduation Questionnaire (GQ) on the percentage of students reporting participation in a research project with a faculty member.

GQ 2015		GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %	School %	National %
58.5	69.4	77.5	74.1	81.8	77.3	88.1	78.8

Table 3.2-2 | Research Opportunities

Provide the total number and percentage of medical students involved in each type of research opportunity for the indicated academic years.

	AY 2016-17	AY 2017-18
MD/PhD program	5	5
Summer research program	48 MS1 Students (64%)	71 MS1 Students (85.5%)
Year-out for research	0	0
Research elective	37 MS4 Students	47 MS4 Students
Other (describe)		

NARRATIVE RESPONSE

a. Are medical students required to complete a scholarly/research project at some point in the curriculum? If yes, please describe how and by whom students are assisted in identifying a research topic and finding a mentor.

Students are not required to complete a scholarly/research project during their curriculum.

b. If students are not required to complete a research project, briefly describe the opportunities for medical students to participate in research, including how medical students are informed about research opportunities.

All medical students have the option of participating in the MS1 Summer Research Stipend Program offered in the summer between MS1 and MS2 years. Medical students are informed of the opportunity through a one hour meeting with the Assistant Dean for Clinical Research during the fall semester of the MS1 year. School of Medicine faculty are surveyed and asked to submit their research projects. Research projects are put into a report and sent to the MS1 students in the middle of the spring semester. Students submit their top three choices to the Assistant Dean for Clinical Research, who meets with the students to match them to a project. All MS1 students requesting research have been successfully matched since the initiation of this program.

Since 2012, working in collaboration with the West Virginia Higher Education Policy Commission and through our Rural Health Initiative grant, 38 medical students have received 27 rural research grants for a total of $440,518.84. This initiative on rural health research places medical students in rural communities.

Conducting research on rural topics gives students opportunities to learn about study design and methodology while becoming immersed in a rural community or health issue. Students, with faculty mentors, apply for rural research grants to support projects which could enhance rural health care, lead to more effective health promotion and disease prevention programs, and address barriers to care. The student is the Project Investigator on the grant. This includes completing the proposal, compiling a budget, literature review and research design. The student is also required to present their results at a local, regional or national conference.

c. Describe the funding, personnel, and other resources available to support medical student participation in research.

Medical students participating in the MS1 Summer Research Program receive a stipend over a 6 week period to help support them during the research program. All students are supported by the faculty mentor during the research experience, including assistance with presentations and publications. Students have access to all research support services at the School of Medicine in the Appalachian Clinical Translational Science Institute (ACTSI) which include Biostatistics and Study Design Clinic, Clinical Informatics Clinic, IRB Clinic, IACUC Clinic, and Manuscript Development Clinic to assist them with various aspects of their research project.

Since 2012, working in collaboration with the Higher Education Policy Commission and through our Rural Health Initiative grant, 38 medical students have received 27 rural research grants for a total of $440,518.84. Funding is from a Rural Health Initiative grant through the West Virginia Higher Education Policy Commission.

JCESOM partnered 2015-2017 with the West Virginia Department of Health and Human Services & Association of State Territorial Health Officials (ASTHO) on the Breast Cancer Taskforce working on the upcoming Breast Cancer State Data Report. Medical Students working in the Department of Translational and Clinical Sciences will work closely with ASTHO Taskforce to develop the Breast Cancer State Data report.

d. Describe how faculty scholarship is fostered in the medical school. Is there a formal mentorship program to assist faculty in their development as scholars? Describe the infrastructure and resources available to support faculty scholarship (e.g., a research office, support for grant development, seed funding for research project development).

The Appalachian Clinical Translational Science Institute (ACTSI) at the Joan C. Edwards School of Medicine offers several research support services to faculty. The Biostatistics and Study Design Clinic led by Dr. Todd Gress offers guidance on study design, biostatistics, and study results interpretation. The IRB Clinic (led by Mary Beth Cordle) and IACUC Clinic (led by Dr. Monica Valentovic) provide guidance on all issues related to the IRB and IACUC application, respectively. The School of Medicine has a rich data warehouse containing all clinical information from the electronic patient health record from the clinical practice, and all faculty can apply for access to this information and receive expert consultation in the Clinical Informatics Clinic led by Dr. Alfred Cecchetti. Dr. Usha Murughiyan leads a manuscript development clinic to provide faculty support for all aspects of the publication process, from finding the appropriate journal for the work to guidance on writing the manuscript and assistance with submission. Finally, the ACTSI also has an active clinical trials program with research coordinators that can provide needed help to coordinate investigator-initiated clinical trials.

Please also see relevant responses in Standard 4 regarding support of faculty scholarship.

3.3 DIVERSITY/PIPELINE PROGRAMS AND PARTNERSHIPS

A medical school has effective policies and practices in place, and engages in ongoing, systematic, and focused recruitment and retention activities, to achieve mission-appropriate diversity outcomes among its students, faculty, senior administrative staff, and other relevant members of its academic community. These activities include the use of programs and/or partnerships aimed at achieving diversity among qualified applicants for medical school admission and the evaluation of program and partnership outcomes.

SUPPORTING DATA

Table 3.3-1 | Diversity Categories and Definitions

Provide definitions for the diversity categories identified in medical school policies that guide recruitment and retention activities for medical students, faculty, and senior administrative staff. Note that the medical school may use different diversity categories for each of these groups. If different diversity categories apply to any of these groups, provide each relevant definition.

Medical Students	Faculty	Senior Administrative Staff*
Underrepresented Minority**	Underrepresented Minority**	Underrepresented Minority**
All Minorities***	All Minorities***	All Minorities***
Females	Females	Females
From Appalachia	From Appalachia	From Appalachia
Rural Hometowns – WV Residents Only	Rural Hometowns – WV Residents Only	Rural Hometowns – WV Residents Only

*See the *Glossary of Terms for LCME Accreditation Standards and Elements* at the end of this DCI for the LCME definition of senior administrative staff.
**Underrepresented Minority includes African American/Black, American Indian and Latino/Hispanic
***All minorities includes all in Underrepresented Minority in addition to Pacific Islanders and Asians.

Table 3.3-2 | Offers Made to Applicants to the Medical School

Provide the total number of offers of admission to the medical school made to individuals in the school's identified diversity categories for the indicated academic years. Add rows as needed for each diversity category.

	2017 Entering Class			2018 Entering Class		
School-identified Diversity Category	# of Declined Offers	# of Enrolled Students	Total Offers	# of Declined Offers	# of Enrolled Students	Total Offers
Underrepresented Minority	3	6	9	8	7	15
All Minorities	9	16	25	3	14	17
Females	13	33	46	20	35	55
From Appalachia	25	76	101	35	56	91
Rural Hometowns – WV Residents Only	12	26	38	13	49	62

Table 3.3-3 | Offers Made for Faculty Positions

Provide the total number of offers of faculty positions made to individuals in the school's identified diversity categories. Add rows as needed for each diversity category.

	AY 2016-17			AY 2017-18		
School-identified Diversity Category	# of Declined Offers	# of Faculty Hired	Total Offers	# of Declined Offers	# of Faculty Hired	Total Offers
Underrepresented Minority	1	2	3	2	2	4
All Minorities*	1	5	6	2	13	15
Females	1	8	9	2	17	19
From Appalachia	0	18	18	0	8	8

Rural Hometowns – WV Residents Only	1	8	9	0	5	5
All Applicants for Faculty Positions (Total Diversity and Non-Diversity)	7	26	33	4	55	59

Table 3.3-4 | Offers Made for Senior Administrative Staff Positions

Provide the total number of offers of senior administrative staff positions made to individuals in the school's identified diversity categories. Add rows as needed for each diversity category.

	AY 2016-17			AY 2017-18		
School-identified Diversity Category	# of Declined Offers	# of Staff Hired	Total Offers	# of Declined Offers	# of Staff Hired	Total Offers
Underrepresented Minority	0	0	0	0	0	0
All Minorities*	0	1	1	0	2	2
Females	0	0	0	0	0	0
From Appalachia	0	4	4	0	1	1
Rural Hometowns – WV Residents Only	0	2	2	0	0	0
All Applicants for Senior Administrative Staff Positions (Total Diversity and Non-Diversity)	0	6	6	0	3	3

Table 3.3-5 | Students, Faculty, and Senior Administrative Staff

Provide the requested information on the number and percentage of enrolled students, employed faculty, and senior administrative staff in each of the school-identified diversity categories (as defined in table 3.3-1 above). If the diversity categories differ among the groups, include the category for each group in a separate row and provide the data in the corresponding row.

School-identified Diversity Category	First-Year Students	All Students	Employed/ Full-time Faculty	Senior Administrative Staff
Underrepresented Minority	7% (6/83)	9% (27/311)	3.8% (2/52)	12.1% (2/17)
All Minorities*	19% (16/83)	21% (64/311)	9.6% (5/52)	29.4% (5/17)
Females	40% (33/83)	39% (120/311)	15.4% (8/52)	29.4% (5/17)
From Appalachia	93% (73/83)	82% (256/311)	1.9% (1/52)	12.1% (2/17)
Rural Hometowns – WV Residents Only	36% (26/73 residents)	34% (83/329 residents)	13.5% (7/52)	12.1% (2/17)

Table 3.3-6 | Pipeline Programs and Partnerships

List each current program aimed at broadening diversity among qualified medical school applicants. Provide the average enrollment (by year or cohort), target participant group(s) (e.g., college, high school, other students), and a description of any partners/partnerships, if applicable. Add rows as needed.

Program	Year Initiated	Target Participants	Average Enrollment	Partners
JCESOM High School Pipeline Program	2016	High School	25	Charleston Family Resource Center
Genesis Program	2016	6-12	125	Charleston Community and Family Development Corporation
Project P.R.E.M.E.D	2011	Underrepresented minorities, College students	16	Marshall University Office of Intercultural Affairs; Southern West Virginia Area Health Centers (SWVAHEC)
Neonatal Clerkship	2012	College students who have completed one year (biology and chemistry with lab)	5	Marshall University Office of Diversity; Marshall Health Chief Medical Officer; Marshall Health Pediatric Department
High School Pipeline Initiative	2012	Underrepresented minorities entering grades 9-12	20	Army Educational Outreach Program (AEOP) /UNITE/TSA; Robert C. Byrd Center for Rural Health, Marshall University Joan C. Edwards School of Medicine GME; Walgreens; West Virginia Higher Education Policy Commission; West Virginia High Schools; West Side Genesis Program; West Virginia Office of Minority Affairs; Charleston East End Family Resources Center
BS/MD Program	2014	High School	10	Detailed below
Hampton University Mentoring Program	2013	College/Graduate students	5-10	Hampton University
Biomedical Research Program	2017	Graduate students	15-25	

NARRATIVE RESPONSE

a. Describe the programs related to the recruitment and retention of medical students, faculty, and senior administrative leadership from school-defined diversity categories. In the description, include the following:

1. The funding sources that the medical school has available
2. The individual personnel dedicated to these activities
3. The time commitment of these individuals
4. The organizational locus of the individuals involved in these efforts (e.g., the medical school dean's office, a university office)

The Office of Diversity & Inclusion staff attends minority recruitment fairs to speak with students and faculty in an effort to recruit underrepresented students to Marshall University. Office of Diversity staff also works with the historically black institutions in the state; West Virginia State University and Bluefield State College, scheduling visits to speak to campus organizations and/or to connect to the School of Medicine programs. Funding for this Pipeline programming comes from Marshall University JCESOM, Marshall Health, external grants, and partnership funding.

Funding for programming is provided by Marshall University School of Medicine, Marshall Health, external grants, and partnership funding and support.

The personnel in the Office of Diversity & Inclusion include a 1.0 FTE Assistant Dean for Diversity & Inclusion and a .50 FTE Diversity & Inclusion Coordinator and a .50 FTE Administrative Outreach Assistant. These personnel operate under the Office of Diversity & Inclusion reporting to the School of Medicine Dean's Office.

Project PREMED (Providing Real World Experiences for Marshall Educated Doctors)
Interventions in the healthcare educational pipeline have been successful by increasing minority entrants into the health professions. Interventions at the college and post-baccalaureate levels have been particularly high-yield short-term strategies for increasing health professions diversity; however, tending to the educational pipeline programs has been our success and one of the keys to increasing diversity in the health professions. Project P.R.E.M.E.D. has attracted students from colleges and universities around the nation. Accepted students visit the Marshall University Joan C. Edwards School of Medicine to participate in the Project P.R.E.M.E.D. Program (Providing Real World Experiences for future Marshall Educated Doctors). Participants take part in an immersion program aimed at providing them a glimpse into the "real-life" of a medical school student.

The Project P.R.E.M.E.D. program (Providing Real World Experiences for Marshall Educated Doctors) is in its 7th year and the number of students attending has increased since the program's inception. The Project P.R.E.M.E.D. program has exposed over 100 students to careers in medicine. The program allows undergraduate students of color to explore and experience the medical school and includes mock medical school interview sessions, robotic surgery demonstrations and discussions with current medical students and residents about life as a medical student and as a physician. Project P.R.E.M.E.D. is organized by the JCESOM Office of Diversity & Inclusion and sponsored by Joan C. Edwards School of Medicine, Marshall Health, and Marshall University Office of Intercultural Affairs. Marshall University Office of Intercultural Affairs sponsors the opening welcome reception.

Project P.R.E.M.E.D. was established to create opportunities for future doctors of color and to implement additional efforts to address major barriers for students who are underrepresented in the health professions.

Project P.R.E.M.E.D's participants have come from many states including: WV, KY, OH, CA, CT, DC, FL, GA, IL, LA MD, MO, NC, NY, OK, PA, SC, TN, TX, VA, WI. In 2011, 7 students were chosen to participate in the inaugural Project PREMED class. One student from the inaugural class was accepted to JCESOM. In 2012, another student from the inaugural class was accepted to the Biomedical Sciences graduate program and is now in the 3rd year at JCESOM. In 2012, there were 20 student participants chosen to participate in the Project P.R.E.M.E.D. program, four of these students were accepted and enrolled in other allopathic or osteopathic medical schools. In 2013, there were 26 Project P.R.E.M.E.D. participants; two of the 2013 participants are now enrolled in other medical schools. In 2014 there were 15 P.R.E.M.E.D. participants and 4 are attending medical school. In 2015 - 2016, there were 17 participants, one participant from both years are attending other medical schools and one is scheduled to interview for class of 2023. In 2017 there were 15 participants, one student applied, was accepted and is in her first year, presently attending the Marshall University. In 2018 there were 20 P.R.E.M.E.D. participants. Two of the 2018 participants, in order to strengthen their medical school applications, have applied to the Marshall University Biomedical Sciences program. All P.R.E.M.E.D. program participants were assigned a Marshall University medical student mentor and the Office of Diversity and Inclusion staff are in constant contact with the Project P.R.E.M.E.D. mentees. A Project P.R.E.M.E.D. online logging and tracking system was created so that medical student mentors are able to log their contact with mentees.

Neonatal Clerkship Program The Neonatal Clerkship has been in existence since 2005 and was revised in April 2012 to give focus to those individuals who are underrepresented in medicine. In 2016, there was one female African American participant who was a West Virginia resident. In addition to these programs relationships with two historically Black universities: West Virginia State University in Institute, and Bluefield State University in Bluefield, West Virginia. Since 2012 there been 23 program participants. Eight of the past participants are attending medical school.

Health Care Pipeline Initiative The Health Care Pipeline Initiative (HCPI) is sponsored by the Joan C. Edwards School of Medicine and Marshall University School of Pharmacy. Other partners include Marshall University Center for Rural Health, the Marshall University Office of Intercultural Affairs, Southern West Virginia Area Health Education Center, West Virginia Higher Education Policy Commission (diversity grant), Walgreens (diversity grant), and The Army Educational Outreach (AEOP) UNITE program grant. The HCPI program showcases careers ranging from medicine and pharmacy to health informatics and bioengineering.

Selected high school students entering grades 9-12 who are historically underrepresented in the health care, science, technology and engineering (H-STEM) fields and who are residents of West Virginia, Kentucky and Ohio participate in a four-week immersion experience which showcases career opportunities in H-STEM. Students participating in the HCPI program participate in interactive hands-on activities that highlight the skills, equipment, technology and resources used by professionals in the H-STEM. Medical students, faculty, administrators and staff assist in teaching sessions which include ACT Math Preparation, Financial Literacy, and Study Skills. Students also gain exposure to university staff, administrators, faculty, graduate assistants and students. Informational sessions, on topics such as rural health, aging and health, computer science, engineering, safety technology, health informatics and health disparities are also scheduled. Students obtain hands-on experiences including computer mapping, pharmacy compounding, suturing, heart sounds and ear exams. As part of the immersion experience, student participants live in the residence halls, participate in field trips, a career day, and interact with professionals from the healthcare, business, industry, civil, as well as the Army and Department of Defense sectors.

During the 2012-2018 academic years, the Health Care Pipeline Initiative program (HCPI) information has reached high school students in every West Virginia high school. Evaluative measures have been instituted to ensure that the HCPI program is making a positive difference with both interest in, and knowledge of,

medicine as a career. The chart 3.35-5 lists the programs, program years, number of program enrollees, those attending JCESOM, those attending other medical schools or Marshall undergraduate (for high school pipeline) and the partners (monetary and non-monetary) that support the programming.

The BS/MD Program is an accelerated seven-year program for West Virginia high school students with the goal of providing high quality undergraduate and postgraduate training programs to foster a skilled physician workforce to meet the unique healthcare needs of West Virginia and Central Appalachia. Students who successfully complete the requirements of the undergraduate portion are guaranteed a seat in the class; they are not required to take the MCAT and they receive tuition waivers for four years of their medical education. Funding for this program comes from the Dean's Office and the JCESOM Practice Plan. The individual personnel include a 1.0 FTE Director of Rural Health Outreach and Development, who is located in southern West Virginia and a 0.5 FTE Associate Dean for Admissions and Director of the Center for Rural Health located at the JCESOM. These personnel operate under the Office of Admissions and the Center for Rural Health. In many cases the medical school partners with other organizations in order to reach more students and to maximize the total resources of the partners. The following are examples of these partnerships:

Health Occupations Students of America in the state to reach students from rural areas interested in health care professions.
Upward Bound programs at both Marshall University and Concord University to target minority, underserved, economically disadvantaged, and first generation college going students.
West Virginia Health Sciences and Technology Academy (HSTA), based at West Virginia University, in order to reach minority and underrepresented students who are interested in health care and are participating in the HSTA four-year academic enrichment program.
GEAR-UP (Gaining Early Awareness and Readiness for Undergraduate Programs) program, a federally funded six-year program targeting high povery and at-risk students to encourage them to pursue higher education.
Project Lead the Way, a national organization targeting high school students interested in science-related careers.

The partnerships listed above are part of a larger high school initiative as described in part b below.

The inaugural class of thirteen began in the fall of 2015 with all of the class matriculating in 2018. The program currently has twenty-eight students. One student has withdrawn from the program.

Hampton University Mentoring Program – Marshall University Joan C. Edwards School of Medicine (JCESOM) and Hampton University, a historically Black University in Hampton, VA, entered into a Memorandum of Understanding in 2013. This program provides mentoring, onsite workshops of application preparation and interview skills. In addition, five slots per year are allocated for Hampton students to participate in a residential Summer Academy program at Marshall University. In addition, non-residents who meet the minimum requirements and who have completed pipeline programs identified in the Admissions Procedural document may be offered interview preference.

Funding for this program comes from the Office of Admissions. The individual personnel include a 1.0 FTE Director of Rural Health Outreach and Development and a 0.5 FTE Associate Dean for Admissions and Director of the Center for Rural Health. These personnel operate under the Office of Admissions and the Center for Rural Health.

The Biomedical Research (BMR) Program offers a two-year MS degree in the Medical Sciences area of emphasis. Students take classes with and have many of the same exam questions as the first and second year

medical students. In the pipeline program, any student who applies in their second year with a minimum program GPA of 3.4 is not required to take the MCAT for admission to the JCESOM. Historically students from the program who enter medical school at Marshall with a 3.4 GPA or higher do well in their preclinical courses and pass Step 1, thus obviating the need to have an MCAT score.

There is no funding dedicated to the program. Students who wish to do research in one of the basic science labs can receive a stipend to do so. Students who wish to do research in one of the basic science labs can receive a stipend to do so during their first two years in the program. Personnel report to the Vice Dean for Research and Graduate Education.

b. Describe the following for activities related to the administration and delivery of programs (e.g., "pipeline programs") aimed at developing a diverse pool of medical school applicants, both locally and nationally:

1. The funding sources that the medical school has available
2. The individuals dedicated to support these activities
3. The time commitment of these individuals
4. The organizational locus of the individuals involved in these efforts (e.g., the medical school dean's office, a university office)

Center for Rural Health high school pipeline program - The Medical School has continued to build upon the high school pipeline program that has been in place for over 14 years that initially focused on the southern part of the state but has now expanded throughout the state. Many of the counties in the pipeline program have some of the lowest college attendance rates, the worst health outcomes, and some of the lowest family incomes of the state, and, indeed, in the country. These students face both real and perceived barriers to pursing health care careers, and the pipeline serves to educate them about these careers, to remove barriers and to increase interest in the se careers. The Medical School also takes every opportunity to educate teachers and counselors about health care careers, including speaking at a number of state and national conferences about the pipeline program each year, and placing articles in both state and national publications.

Funding for this comes from state funding and a Rural Health Initiative Grant from the West Virginia Higher Education Policy Commission. The goal of this grant is to create a workforce for West Virginia ensuring access to healthcare for rural communities. In order to maximize resources, the JCESOM partners with a variety of agencies and programs, primarily those that serve the underserved and minority student populations, including Upward Bound, GEAR-UP, Health Sciences Technology Academy, Health Occupations Students of America, Project Lead the Way and a Federally Qualified Health Center in one of the most rural counties we serve. Where appropriate, the field of medicine is featured as a very viable and possible option for these young people.

The very broad pipeline program as described above is intended to create interest in medicine as a career and remove perceived or real barriers to that pursuit. Typically, it involves over 2500 students per year from 40 counties and over 75 events per year. Embedded in the larger initiative is a smaller more targeted part of the initiative which includes health care club formation, trips to the medical school, medical and other speakers, suturing clinics and other activities for the schools that wish to pursue the more intensive approach. The school and community connections formed as a result of these activities have been directly responsible for identifying and recruiting a large percentage of the BS/MD candidates.

Personnel devoted to recruiting initiatives overlap with the Office of Admissions and the Center for Rural Health. We feel these roles are complementary as the focus of our recruitment and mission of the medical school is to identify students who may have an interest in working in this Appalachian region.

The individual personnel include a 1.0 FTE Director of Rural Health Outreach and Development and a 0.5 FTE Associate Dean for Admissions and Director of the Center for Rural Health. These personnel operate under the Office of Admissions and the Center for Rural Health. A large portion of the funding for this initiative is the Rural Health Initiative grant from the WV Higher Education Policy Commission. The HEPC has identified pipeline programs beginning in the high schools and beyond as one of the key priorities of their grant initiative.

Hampton University Programs – Marshall University Joan C. Edwards School of Medicine (JCESOM) and Hampton University, a historically Black University in Hampton, Virginia entered into a Memorandum of Understanding in 2013. Two visits are conducted annually to Hampton's campus located in Hampton, Virginia. During these visits presentations are made to both undergraduate and graduate classes regarding the admissions process, application and MCAT preparation and mock interviews. During the year staff corresponds with and mentors interested students regarding questions about processes and provides suggestions as to how to make their application competitive.

Each year five slots are made available for Hampton students to participate in the Marshall University Joan C. Edwards School of Medicine Summer Academy (detailed below).

Funding for this program comes from the Office of Admissions. Personnel devoted to this initiative is overlap with the Office of Admissions and the Center for Rural Health. The individual personnel include a 1.0 FTE Director of Rural Health Outreach and Development and a 0.5 FTE Associate Dean for Admissions and Director of the Center for Rural Health. These personnel operate under the Office of Admissions and the Center for Rural Health.

Summer Academy - Activities to recruit West Virginia college students to the academy include annual visits to colleges and universities within the state, including pre-professional events, individual meetings with faculty advisors, and individual and group meetings with interested students. In addition, a hands-on residential immersion program is held annually for undergraduate students who aspire to become physicians. The Academy began in the summer of 2013. Activities during this residential immersion experience include interviewing skills, how to maximize study skills, participating in hands-on exercises in clinical skills, wound care and building splints in a "wilderness" environment and the opportunity to interact with medical students, physician residents and faculty. This program allows premed students to begin to build a network of professionals and other students in their area of interest, and very importantly allows for a process of discernment as to whether medicine is the appropriate career choice for the student before making the commitment to medical school.

Funding from this program comes from a Rural Health Initiative Grant from the West Virginia Higher Education Policy Commission. The goal of this grant is to create a healthcare workforce for West Virginia ensuring access to care for rural communities. This weeklong event is a collaboration of personnel from the Center for Rural Health, Office of Diversity, Office of Admissions, Office of Medical Education and other faculty from multiple departments. The Summer Academy's primary oversight is out of the Center for Rural Health.

Biomedical Research Program - The pipeline program is promoted at the Annual Biomedical Research Conference for Minority Students. The costs for attending are paid for by the STEM Fellows grant from the West Virginia Higher Education Policy Commission. One of the Co-Directors of the BMR graduate program, based at the Byrd Biotechnology Science Center in Huntington, advises the Medical Sciences students during their two years in the program.

The following activities, chiefly located within the Office of the JCESOM Assistant Dean for Diversity and Inclusion, have also substantially contributed in efforts of overall diversity with the School of Medicine in all categories:

National Office of Minority Health – Memorandum of Understanding (MOU) in 2015 between the Office of Minority Health (OMH-National)/Atlas Research and Marshall University Joan C Edwards School of Medicine was established. The MOU's purpose was to create a partnership agreement between JCESOM and OMH to integrate training on health disparities, the social determinants of health, and health equity into JCESOM/MUSOP's pipeline programs, as part of the "Youth National Partnership for Action to End Health Disparities (yNPA)" initiative under the National Partnership for Action to End Health Disparities (NPA). Subsequently, the Assistant Dean for Diversity has served as a peer reviewer for the OMH Youth Health Equity Model of Practice Toolkit. She has also granted support for an intern within her office whom she mentored through a program in teaching the "Stanford Public Health Curriculum" within a local community.

Tri-State Diversity & Inclusion Conference – The JCESOM Office of Diversity hosted the 2nd Annual Tri-State Diversity & Inclusion Conference; the JCESOM Assistant Dean for Diversity and Inclusion served as the 2015 conference chair. The Annual Tri-State Conference on Diversity and Inclusion was created to bring seven colleges to include: Marshall University (Main Campus; Schools of Medicine & Pharmacy); Ohio University (Athens & Ironton); Morehead State University; Mountwest Community & Technical College; Shawnee State University; Ashland Community & Technical College; Lindsey Wilson College School of Professional Counseling' and university students, faculty, staff and community members together to broaden the conversation around equity, opportunity and diversity. The conference provides participants the opportunity to exchange thoughts, ideas and innovative practices that encourage individuals and organizations to build productive and collaborative work environments in which all of our communities of people are included.

West Virginia Office of Minority Health – The JCESOM's Assistant Dean for Diversity& Inclusion served on the 2013-2016 West Virginia Office of Minority Health Advisory Board. The West Virginia Office of Minority Health was responsible for helping to eliminate health disparities through assertive leadership, advocacy support, and visible interaction with minority communities in West Virginia.

U.S. Department of Health & Human Services National Partnership for Action to End Health Disparities – Regional Health Equity Council – The Assistant Dean for Diversity is an advisory board member of the Region III - Regional Health Equity Council (RHECs) Atlantic Region. The RHECs' primary role is to initiate action to implement the goals of the NPA and therefore, advance the agenda to eliminate health disparities from the grassroots.

West Virginia State University Trio Programs (Upward Bound/Upward Bound Math & Science) – Twice a month (On Saturdays) during 2012-2017, the Assistant Dean for Diversity and Inclusion instructed students who were enrolled in the West Virginia State University (WVSU is an Historically Black College) Upward Bound/Upward Bound Math & Science program on the "Public Health Curriculum". The Upward Bound/Upward Bound Math & Science program engages youth from the end of their 8th grade year throughout high school to groom them to be the first in their families to attend college. Youth engage in a rigorous course curriculum that is designed to prepare them to compete on a global stage. There are two separate programs – a classic one that focuses on critical thinking and analytic skills and one more oriented to STEM disciplines. Both programs encourage these students to pursue programs in math, science and ultimately careers in the health care professions. Overall, The WVSU Upward Bound programs serve 110 ninth through twelfth grade students from the West Virginia counties of Kanawha, Fayette, Putnam and Logan Counties.

Charleston Family Resource Center – The Mission of the East End Family Resource Center (CFRC) "is building bridges of opportunities", by giving residents of the East End of Charleston the opportunity to achieve. The mission is accomplished by coordinating, facilitating, and/or initiating activities and programs that respond to the needs of families. In August 2016, the JCESOM Office of Diversity & Inclusion YHEMOP (see below) intern began working with 25 underserved minority youth in Kanawha County by expanding the reach and impact of the yNPA (Public Heath Curriculum) and increasing the awareness of youth about health disparities, health equity, the social determinants of health, and ways to reduce health disparities through action on the social determinants of health.

Charleston Community and Family Development Corporation – In 2016-2017, the JCESOM Office of Diversity & Inclusion partnered with the Charleston Community and Family Development Corporation's Genesis Program, a school model program at Mary C. Snow West Side Elementary, Stonewall Jackson Middle and Capital High. The program calls for community engagement and provides families support to "systematically improve the educational, social, emotional, physical and cultural outcomes of youth." The JCESOM Office of Diversity & Inclusion staff works with the students throughout the school year, through "development sessions" that provide extra focus on skill building. This program served as a feeder for the Health Care Pipeline Initiative and other Marshall University career, college planning and other student exploration programs

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National Partnership Office of Minority Health & Atlas Research YHEMOP (The Youth Health Equity Model of Practice) – In 2014, the Marshall University Joan C. Edwards School of Medicine partnered with National Office of Minority Health (OMH). OMH, the partnering organization, and the Health Equity Fellow engage in health equity work that produces a short-term deliverable and aims to strengthen the health and human services infrastructure and public health workforce. This partnership resulted in the intern program within the Charleston Family Resource Center outlined above.

National Association of Medical Minority Educators, Inc. (NAMME) – In 2015, the Marshall University Joan C. Edwards School of Medicine partnered with the National Association of Medical Minority Educators, Inc. (NAMME). This partnership serves and will serve as a continuing resource for a variety of the School of Medicine's concerns about underrepresentation in its ranks

Extramural Funding (2016-2018)

The JCESOM Office of Diversity and Inclusion has secured over $100,000 in grants and sub-awards to support JCESOM Pipeline Programming:

- Army Educational Outreach (AEOP) UNITE, Technology Student Association /UNITE/TSA $125,000
- Army Educational Outreach Research and Engineering Apprenticeship Program AEOP/REAP $8000
- West Virginia Higher Education Policy Commission $ 21,000
- West Virginia Bureau for Senior Services (Falls Prevention Programming Grant Partnership) $15,000

c. Describe how the medical school monitors and evaluates the effectiveness of its pipeline programs and of its other programs to support school-defined diversity among its student body, faculty, and senior administrative staff. Provide evidence of program effectiveness, including the number of participants and program outcomes.

Center for Rural Health Pipeline Program monitors and evaluates the high school pipeline program using the following:

- Conducts pre and post-tests of selected high school students involved in program to determine increase in knowledge of and interest in health care careers.
    - Pre and post testing of high school students indicated a 75.9% increase in knowledge of health care careers after participation in this program during the academic year of 2016-2017 and a 75% increase in same measures during the 2015-2016 academic year.
- Conducts bi-yearly surveys of teachers, counselors and partners involved in the program to determine satisfaction and effectiveness
    - Pre and post surveys in both 2014, 2016 and 2018 showed 100% satisfaction on the part of the teachers and counselors affiliated with the programs, and a 100% that agreement that the program is having a positive influence on their student's plans to pursue a career in rural health care.
- Tracks students applying to accelerated program from counties involved in pipeline
    - In 2017, 92% of the students interviewed, and 92% of those accepted into the program were identified through the pipeline initiative. In 2018, 83% of those interviewed were identified through the pipeline initiative.
- Recognition of program- Opportunities to publish and present about the program at the state, regional and national level
    - The medical school has participated in state and national conversations about pipelines by presenting at both state and national conferences. Faculty and staff published articles about the pipeline programs in the national *Health Occupations Students of America* e-magazine (2016), the national *Explore Health Careers* website (2016) and *West Virginia Executive* on the BS/MD (2017). Presentations were made at the West Virginia Health Occupations Students of America State Conference (2016), the West Virginia Science Teachers Annual Conference in Morgantown (2016 and 2017), National Rural Health Association Conference (2017 and 2018).

Hampton University Mentoring Program

Each year, in accordance with a formal Memorandum of Understanding with Hampton University, staff members make two trips to the Hampton University campus to meet with premed faculty and to talk with over 100 students each time. Their visit often includes interviewing workshops and individual meetings with students on the verge of applying to medical school. After the trips, approximately 5-10 students stay in touch regularly, sometimes for years as part of a more intensive mentoring process, which may include attendance at the annual summer academy as outlined below. Several of these students have gone on to other institutions in the field of dentistry and medicine. Of the students who interviewed with Marshall, two have been accepted here into medical school. One student declined the offer in order to attend a medical school in her home state.

Summer Academy

- Email follow ups with participants bi-yearly
    - Twenty-two percent of past participants have been accepted to medical school (self-reported)
    - Ten percent of past participants have chosen other allied health careers (Physician's Assistant, Public Health, Emergency Medical Technician)

The Biomedical Research (BMR) Program – There is currently no evaluation and monitoring of the effectiveness of this program. Two Medical Sciences students matriculated into the JCESOM this fall through the Pathway Program; one is a URM. One current second year Medical Sciences student is a URM, but she is ineligible for admission via the Pathway Program. Three first year students are URMs.

Inclusion workgroup

As a means of monitoring progress towards diversity and inclusion and as a way to gather fresh ideas and options in this area, the admissions office has convened an inclusion work group, with members from main campus admissions, medical school admissions, diversity office personnel, and outside community/education members. The purpose of the group is to review current methods and programs for inclusion and to suggest additional actions/options to move the school forward in this area.

The Office of Diversity & Inclusion also evaluates programs using the following:

- Conducts pre- and post-tests of selected high school students involved in the pipeline programs to determine increase in knowledge of academic subjects taught during the programming and to determine continued interest in health care careers.
- Tracks students who have participated in pipeline programs applying to JCESOM program and other medical school programs.
- Recognition of the program – Opportunities to present information regarding the minority pipeline programs at the state, regional, and national level also validates the content, the outreach and the impact of all of these programs.
- Presentations have included:

    1. West Virginia NAACP Annual program
    2. Upward Bound Career Days
    3. High School student College Days
    4. NAMME (National Association of Medical Minority Educators) National and Regional conferences and Recruitment Fairs.
    5. SNMA (Student National Medical Association)

SUPPORTING DOCUMENTATION

1. Formal institutional policies specifically aimed at insuring a diverse student body, faculty, and senior administrative staff.

    Appendix 3.3-1 Social Justice.pdf
    Appendix 3.3-2 Diversity and Inclusion Policy.docx

3.4 ANTI-DISCRIMINATION POLICY

A medical school does not discriminate on the basis of age, creed, gender identity, national origin, race, sex, or sexual orientation.

NARRATIVE RESPONSE

a. Describe how the medical school's anti-discrimination policy is made known to members of the medical education community.

JCESOM adheres to the Marshall University Board of Governor's Policy GA-1 regarding anti-discrimination. This policy is distributed annually as an online learning module. This module, in conjunction with the non-harassment module, is required to be completed by all faculty, residents, staff, and students.

SUPPORTING DOCUMENTATION

1. The medical school's anti-discrimination policy (or the university policy that applies to the medical school).

Appendix 3.4-1 Anti-Discrimination.pdf

3.5 LEARNING ENVIRONMENT/PROFESSIONALISM

A medical school ensures that the learning environment of its medical education program is conducive to the ongoing development of explicit and appropriate professional behaviors in its medical students, faculty, and staff at all locations and is one in which all individuals are treated with respect. The medical school and its clinical affiliates share the responsibility for periodic evaluation of the learning environment in order to identify positive and negative influences on the maintenance of professional standards, develop and conduct appropriate strategies to enhance positive and mitigate negative influences, and identify and promptly correct violations of professional standards.

SUPPORTING DATA

Table 3.5-1 | Professional Attributes

List the professional attributes (behaviors and attitudes) that medical students are expected to develop, the location in the curriculum where formal learning experiences related to these attributes occur, and the methods used to assess student attainment of each attribute. Add rows as needed.

Attribute	Location(s) in Curriculum	Assessment Method(s)
Demonstrate honesty and integrity in all interactions with patients, their families and colleagues	Required and expected activities in all parts of the curriculum, including classroom activities, lab work and patient care	Citations for professionalism violation in an event of departure from expected behavior; standardized patient feedback in CCE; clinical evaluations during clerkships—midpoint and summative
Identify and apply theories and principles that govern ethical decision-making to the practice of medicine	Introduction and Advanced Clinical Skills courses in MS1 and MS2, respectively; all clerkships and electives in MS3 and MS4	Rubric-based assessments in the ICS and ACS course; clinical evaluations during clerkships—midpoint and summative
Protect patient privacy and confidentiality	Introduction and Advanced Clinical Skills courses in MS1 and MS2, respectively; all clerkships and electives in MS3 and MS4	Rubric-based assessments in the ICS and ACS course; clinical evaluations during clerkships—midpoint and summative
Demonstrate personal accountability and admit professional mistakes to promote professional development	Team activities in all blocks of MS1 and MS2 curriculum; Introduction and Advanced Clinical Skills courses in MS1 and MS2, respectively; all clerkships and electives in MS3 and MS4	Peer-peer feedback; faculty feedback on professional behavior; formative feedback during CCEs; formative feedback during patient-care in the clinics; clinical evaluations during clerkships—midpoint and summative
Provide culturally sensitive care to patients of diverse cultures and belief systems.	Introduction and Advanced Clinical Skills courses in MS1 and MS2, respectively; all clerkships and electives in MS3 and MS4	Rubric-based assessments in the ICS and ACS course; feedback and evaluation of CCEs; clinical evaluations during clerkships—midpoint and summative
Participate in patient care that is compassionate and empathic	Introduction and Advanced Clinical Skills courses in MS1 and MS2, respectively; all clerkships and electives in MS3 and MS4	Rubric-based assessments in the ICS and ACS course; feedback and evaluation of CCEs; clinical evaluations during clerkships—midpoint and summative

NARRATIVE RESPONSE

a. Describe how these professional attributes are made known to faculty, residents, and others in the medical education learning environment.

The professionalism domains are distributed annually via email to all faculty, residents, and staff. The professionalism domain checklist is incorporated into all syllabi for all the preclinical blocks and the clinical clerkships. JCESOM defines the professional attributes that students are expected to develop. These attributes are communicated to students, faculty, residents, and others through orientation, handbooks, and publication on the JCESOM website. Students are assessed related to these attributed through a variety of means including direct observation, OSCE's, narrative assessments, and standardized exams.

b. Describe the methods used to evaluate the learning environment in order to identify positive and negative influences on the development of medical students' professional attributes, especially in the clinical setting. Include the timing of these evaluations, what specifically is being evaluated, and the individuals or groups who are provided with the results.

In December 2014, data for JCESOM were received from our Diversity and Engagement Survey, which was completed in cooperation with the University of Massachusetts Medical School. These data assisted in assessing our current diversity status and reaffirmed our commitment to diversity though our policies and programs.

The JCESOM Curriculum Committee is responsible for the management and monitoring of the learning environment. Throughout the curriculum, medical students have the opportunity to complete evaluations at the conclusion of courses and clinical clerkships to express any concerns. Students may report any mistreatment in person or in writing and anonymously. Results of the AAMC Graduate Questionnaire and data collected through internal methods may be compared to identify any discrepancies in climate or reporting.

c. Provide examples of strategies used to enhance positive elements and mitigate negative elements identified through this evaluation process.

JCESOM does an annual internal survey to assess the learning environment by both clerkship and by training location. These data are used in conjunction with the Graduation Questionnaire to address both positive and negative influence. Positive attributes are rewarded with public accolades, as well as financial incentives. Negative attributes are discussed with the appropriate individuals and an action plan developed. Additionally, negative attributes result in a loss of financial incentives.

d. Identify the individual(s) responsible for and empowered to ensure that there is an appropriate learning environment in each of the settings used for medical student education.

In the preclinical environment, the block leaders are empowered to monitor the learning environment and must report both positive and negative attributes as part of their annual course review to the Curriculum

Committee. In the clinical environment, the clerkship directors are directly responsible for monitoring the learning environment and reporting both positive and negative attributes to the Curriculum Committee as part of the roll review process for all required clerkships.

SUPPORTING DOCUMENTATION

1. The instrument(s) used to evaluate the learning environment.

   3.5-1 Compact between Teachers and Learners
   3.5-2 MS1-MS2 Course Eval Form
   3.5-3 MS1-MS2 Faculty Eval Form
   3.5-4 MS3-MS4 Clerkship Eval Form
   3.5-5 MS3-MS4 Clerkship Faculty Eval Form

3.6 STUDENT MISTREATMENT

A medical education program defines and publicizes its code of professional conduct for the relationships between medical students, including visiting medical students, and those individuals with whom students interact during the medical education program. A medical school develops effective written policies that address violations of the code, has effective mechanisms in place for a prompt response to any complaints, and supports educational activities aimed at preventing inappropriate behavior. Mechanisms for reporting violations of the code of professional conduct are understood by medical students, including visiting medical students, and ensure that any violations can be registered and investigated without fear of retaliation.

SUPPORTING DATA

Table 3.6-1 | Awareness of Mistreatment *Procedures* Among Students

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of medical students who reported *knowing school procedures for reporting the mistreatment of medical students* for each listed year.

GQ 2017		GQ 2018	
School %	National %	School %	National %
73.8	86.1	57.9	88.1

Table 3.6-2 | Awareness of Mistreatment *Policies* Among Students

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of medical students who reported *awareness of school policies regarding the mistreatment of medical students* for each listed year.

GQ 2017		GQ 2018	
School %	National %	School %	National %
93.4	97.0	89.5	97.5

Table 3.6-3.a | Student Mistreatment Experiences

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) for the listed year on respondents' experiences with each of the following behaviors during medical school.

	GQ 2017							
	Never		Once		Occasionally		Frequently	
	School %	National %	School %	National %	School %	National %	School %	National %
Publicly embarrassed	67.7	57.0	19.4	21.0	12.9	21.1	0.0	0.9
Publicly humiliated	91.9	78.5	4.8	12.8	3.2	8.3	0.0	0.5
Threatened with physical harm	100.0	98.6	0.0	1.0	0.0	0.3	0.0	0.0
Physically harmed	100.0	98.3	0.0	1.4	0.0	0.3	0.0	0.0
Required to perform personal services	98.4	93.8	1.6	4.2	0.0	1.8	0.0	0.2
Subjected to unwanted sexual advances	95.2	95.7	3.2	2.8	1.6	1.4	0.0	0.1
Asked to exchange sexual favors for grades or other rewards	100.0	99.8	0.0	0.1	0.0	0.1	0.0	0.0
Denied opportunities for training or rewards based on gender	96.8	94.1	3.2	2.9	0.0	2.7	0.0	0.4
Subjected to offensive, sexist remarks/names	93.5	85.2	3.2	7.1	3.2	7.0	0.0	0.7

Received lower evaluations/grades based on gender	100.0	94.2	0.0	3.9	0.0	1.6	0.0	0.3
Denied opportunities for training or rewards based on race or ethnicity	98.4	97.1	1.6	1.2	0.0	1.3	0.0	0.5
Subjected to racially or ethnically offensive remarks/names	98.4	92.8	1.6	3.8	0.0	3.0	0.0	0.4
Received lower evaluations or grades solely because of race or ethnicity rather than performance	100.0	97.2	0.0	1.5	0.0	1.0	0.0	0.3
Denied opportunities for training or rewards based on sexual orientation	100.0	99.5	0.0	0.2	0.0	0.2	0.0	0.1
Subjected to offensive remarks, names related to sexual orientation	95.2	97.9	1.6	1.0	3.2	1.0	0.0	0.1
Received lower evaluations or grades solely because of sexual orientation rather than performance	100.0	99.6	0.0	0.2	0.0	0.2	0.0	0.0

Table 3.6-3.b | Student Mistreatment Experiences

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) for the listed year on respondents' experiences with each of the following behaviors during medical school.

	GQ 2018							
	Never		Once		Occasionally		Frequently	
	School %	National %	School %	National %	School %	National %	School %	National %
Publically embarrassed	66.1	56.7	17.9	21.8	16.1	20.6	0.0	1.0
Publicly humiliated	78.6	77.6	10.7	13.7	10.7	8.2	0.0	0.5
Threatened with physical harm	98.2	98.6	1.8	1.1	0.0	0.2	0.0	0.1
Physically harmed	100.0	98.3	0.0	1.5	0.0	0.2	0.0	0.0
Required to perform personal services	98.2	94.1	1.8	4.1	0.0	1.7	0.0	0.1
Subjected to unwanted sexual advances	93.0	95.1	5.3	3.0	1.8	1.8	0.0	0.2
Asked to exchange sexual favors for grades or other rewards	100.0	99.8	0.0	0.1	0.0	0.1	0.0	0.0
Denied opportunities for training or rewards based on gender	87.7	93.1	5.3	3.4	7.0	3.1	0.0	0.3
Subjected to offensive, sexist remarks/names	82.5	83.5	3.5	7.5	10.5	8.3	3.5	0.7
Received lower evaluations/grades based on gender	91.2	93.6	7.0	4.3	1.8	1.8	0.0	0.3
Denied opportunities for training or rewards based on race or ethnicity	94.7	96.7	1.8	1.3	1.8	1.6	1.8	0.4
Subjected to racially or ethnically offensive remarks/names	93.0	91.3	0.0	4.4	5.3	3.9	1.8	0.4
Received lower evaluations or grades solely because of race or ethnicity rather than performance	96.4	97.0	0.0	1.6	1.8	1.1	1.8	0.3

Denied opportunities for training or rewards based on sexual orientation	98.2	99.4	1.8	0.2	0.0	0.3	0.0	0.1
Subjected to offensive remarks, names related to sexual orientation	98.2	97.7	0.0	1.1	1.8	1.1	0.0	0.1
Received lower evaluations or grades solely because of sexual orientation rather than performance	98.2	99.4	1.8	0.3	0.0	0.2	0.0	0.0

Table 3.6-4 | Student Mistreatment Experiences by Curriculum Year

Provide data on student mistreatment from the ISA by curriculum year on student satisfaction (satisfied/very satisfied) with the following. Add rows for each additional question on the student survey.

Survey Question	Year 1	Year 2	Year 3	Year 4
Adequacy of the school's mistreatment policy	81.5	90.5	87.9	90.7
Adequacy of the mechanisms to report mistreatment	82.8	91.6	89.4	86.6
Adequacy of the school's activities to prevent mistreatment	61.8	89.2	90.9	86.7

NARRATIVE RESPONSE

a. Describe how medical students, residents, faculty (full-time, part-time, and volunteer), and appropriate professional staff are informed about the medical school's standard of conduct in the relationship between medical students and those with whom medical students interact during the medical education program and about medical student mistreatment policies.

All medical students, residents, and faculty are informed of the student mistreatment policy during their respective orientations and annually via email. Additionally, the mistreatment policy has been printed as poster sized wall charts and hung in all departments as a visual reminder of the policy.

b. Describe how medical students, including visiting students, are informed about the procedures for reporting incidents of mistreatment.

Medical students are informed of reporting guidelines and options during orientation to each phase of the curriculum. Visiting students are informed of reporting guidelines and options during the first day of their clinical experience as part of their orientation to the clerkship

c. Summarize the procedures used by medical students, faculty, or residents to report individual observed incidents of mistreatment and unprofessional behavior in the learning environment. Describe how reports are made and identify the individuals to whom reports can be directed. Describe the way in which the medical school ensures that allegations of mistreatment can be made and investigated without fear of retaliation. Describe the process(es) used for follow-up when reports of unprofessional behavior have been made.

Any student, resident, or faculty member can report concerns for mistreatment or unprofessional behavior through the critical incident report process available as on online resource. These reports can be submitted to the Assistant Dean of Student Affairs, the Assistant Dean of Academic Affairs, the Associate Dean of Medical Education, the Vice Dean of Medical Education, or the Dean. The medical school maintains a zero tolerance policy for retaliation. All incident reports are confidential to protect the identity of any one making a report. All reports are thoroughly investigated and outcomes are discussed with the person who originated the complaint.

d. How, by whom, and how often are summative data on the frequency of medical students experiencing negative behaviors (mistreatment) collected and reviewed? How are these data used in efforts to reduce medical student mistreatment? Note recent actions that have been taken in response to the data from the AAMC GQ or student surveys related to the incidence of mistreatment.

All courses and clerkship evaluations ask specifically about mistreatment. These evaluations are reviewed by the Associate Dean of Medical Education every eight weeks at minimum. These data are used by the curriculum committee, the clinical clerkship committee and the department chairs to address concerns within the educational program. Recently, it was brought to the attention of the administration that several faculty members in the Department of Surgery were making sexist comments. The Dean and the Vice Dean of Medical Education met with the Chairman of Surgery and the surgery clerkship director to discuss the concerns. The Vice Dean of Medical Education attended a special surgery faculty meeting to reinforce the student mistreatment policy and to give examples of unacceptable behavior.

All Title IX concerns are handled through the Office of Diversity and Inclusion and reported to the main campus.

e. Refer to data from the independent student analysis related to mistreatment, including knowledge of and satisfaction with policies and procedures for reporting. Compare the findings from the independent student analysis with those from the AAMC GQ, illustrating any areas of consistency or inconsistency.

The independent student analysis indicates that 87.6% of students are satisfied or very satisfied with the adequacy of the medical school's student mistreatment policy. Again 87.6% were satisfied or very satisfied the adequacy of mechanisms to report student mistreatment. In the question regarding adequacy of medical school activities to prevent mistreatment, 81.7% were satisfied or very satisfied. The Graduation Questionnaire for 2018 confirmed that 89.5% of students were aware that the medical school had a policy regarding the mistreatment of medical students. However, only 57.9% of graduates reported they were aware of the procedure for reporting the mistreatment of medical students.

For medical education programs with regional campuses, provide data on item "e" above for each campus and comment on any differences among campuses.

f. Describe recent educational activities for medical students, faculty, and residents that were directed at preventing student mistreatment.

After the results of the 2018 Graduation Questionnaire were made available, the institution chose to re-evaluate and update the student mistreatment policy. The new policy was vetted by the curriculum committee, the academic and professionalism standards committee and the administration. The resulting new mistreatment policy was sent via email to all students, faculty and residents for comments. The new policy was eventually approved by the curriculum committee.

The new policy including reporting mechanisms were dicussed and reviewed with each class at mandatory class meetings. Faculty were updated at a mandatory faculty meeting as well.

SUPPORTING DOCUMENTATION

1. Formal medical school or university policies policies addressing the standards of conduct in relationships among students, faculty, residents and other health professionals, including student mistreatment policies.

   Appendix *3.6-1 Honor Code.pdf*,
   Appendix *3.6-2 Nepotism.pdf*
   Appendix *3.6-3 Standards of Behavior.pdf*
   Appendix *3.6-4 Student Mistreatment.pdf*

2. Formal policies and/or procedures for responding to allegations of medical student mistreatment, including the avenues for reporting and mechanisms for investigating reported incidents.

   Appendix *3.6-4 Student Mistreatment.pdf*

STANDARD 4: FACULTY PREPARATION, PRODUCTIVITY, PARTICIPATION, AND POLICIES

The faculty members of a medical school are qualified through their education, training, experience, and continuing professional development and provide the leadership and support necessary to attain the institution's educational, research, and service goals.

4.1 SUFFICIENCY OF FACULTY

A medical school has in place a sufficient cohort of faculty members with the qualifications and time required to deliver the medical curriculum and to meet the other needs and fulfill the other missions of the institution.

SUPPORTING DATA

Table 4.1-1 | Total Faculty

Provide the total number of full-time, part-time, and volunteer faculty in the basic science and clinical departments for each listed academic year (as available).

	Full-time faculty		Part-time faculty		Volunteer faculty	
Academic Year	Basic science	Clinical	Basic science	Clinical	Basic science	Clinical
2014-15	40	200	0	51	40	399
2015-16	37	221	3	50	40	287
2016-17	25	236	1	48	27	292
2017-18	27	253	0	40	19	238
2018-19	31	268	1	50	8	228

Table 4.1-2 | Basic Science Faculty

List each of the medical school's *basic science (pre-clerkship)* departments and provide the number of faculty in each. Only list those departments (e.g., pathology) included in the faculty counts in table 4.1-1. Schools with one or more regional campus(es) should also provide the campus name. Add rows as needed.

		Full-time faculty					Part-Time Faculty
Campus	Department	Professor	Associate Professor	Assistant Professor	Instructor/ Other	Vacant	
	Biomedical Science	10	14	4	3	5	1

Table 4.1-3 | Basic Science Teaching Responsibilities

List each of the medical school's *basic science (pre-clerkship)* departments and indicate whether required courses are taught for each listed student-type ("Y" for yes, "N" for no). Only list courses for which departmental faculty have primary and ongoing responsibilities (e.g., reporting final grades to the registrar). Only include interdisciplinary courses once per department. Add rows as needed.

		Student Type					
Campus	Department	Medical	Graduate	Dental	Nursing	Allied health	Undergraduate
	Biomedical Science	Y	Y	N	N	N	N

Table 4.1-4 | Clinical Faculty

List each of the medical school's *clinical departments* and provide the number of faculty in each. Only list departments included in the faculty counts in table 4.1-1. Schools with one or more regional campus should provide the campus name in each row. Add rows as needed.

		Full-time faculty					Other / Not full-time	
Campus	Department	Professor	Associate professor	Assistant professor	Instructor/ Other	Vacant	Part-time faculty	Volunteer
	Cardiovascular Services	4	3	7	0		4	14
	Clinical & Translational Sciences	1	0	4	3		0	2
	Dermatology	1	0	0	0		0	0
	Family & Community Health	9	4	20	5		17	24
	Internal Medicine	11	15	26	1		11	13
	Neurology	0	2	7	0		0	5
	Neurosurgery	3	2	1	0		0	4
	Obstetrics & Gynecology	4	3	6	2		0	19
	Ophthalmology	0	1	4	0		1	0
	Orthopaedic Surgery	3	8	11	0		4	13
	Pediatrics	5	13	23	0		4	13
	Psychiatry & Behavioral Medicine	2	2	6	1		1	5
	Radiation Oncology	1	0	2	0		2	0
	Radiology						3	22
	Surgery	5	10	9	0		2	90
	Pathology	1	7	3	0		1	0
	Dentistry	1	2	1	0		0	4
	Urology	2	0	1	0		0	0

Table 4.1-5 | Clinical Teaching Responsibilities

List each of the medical school's *clinical* departments and indicate whether required courses are taught for each listed student-type ("Y" for yes, "N" for no). Only list courses for which departmental faculty have primary and ongoing effort (e.g., reporting final grades to the registrar). Only include interdisciplinary courses once per department. Only report Pathology data if Pathology is included as a clinical department in table 4.1-1. Add rows as needed.

		Student Type					
Campus	Department	Medical	Dental	Nursing	Allied health	Public health	Other (specify)
	Pathology	Y	N	N	N	N	Graduate Program-Clinical Translational Science
	Cardiovascular Services	Y	Y	N	N	N	
	Clinical & Translational Sciences	Y	N	N	N	Y	
	Dermatology	Y	N	N	N	N	
	Family & Community Health	Y	N	N	N	Y	
	Internal Medicine	Y	N	N	N	Y	
	Neurology	Y	N	N	N	N	
	Neuroscience	Y	N	N	N	N	
	Neurosurgery	Y	N	N	N	N	
	Obstetrics & Gynecology	Y	N	N	N	N	
	Ophthalmology	Y	N	N	N	N	
	Orthopedic Surgery	Y	N	N	N	N	
	Pediatrics	Y	N	N	N	N	
	Psychiatry & Behavioral Medicine	Y	N	N	N	N	
	Radiation Oncology	Y	N	N	N	N	
	Radiology	Y	N	N	N	N	
	Surgery	Y	N	N	N	N	

Table 4.1-6 | Protected Faculty Time

Provide the amount of protected time (i.e., time with salary support) that the following individuals have for their educational responsibilities (include a range if not consistent within each group). Add rows as needed.

	Amount
Pre-clerkship/preclinical course directors, including directors of clinical skills courses	25%
Clerkship directors	25%
Chair of the curriculum committee	25%

NARRATIVE RESPONSE

List all faculty with substantial teaching responsibilities who are on site at their teaching location fewer than three months during the academic year.

There are no faculty with substantial teaching responsibilities who are on site at their teaching location for fewer than three months during the academic year except for immunology as explained below.

Describe any situations where there have been recent problems identifying sufficient faculty to teach medical students (e.g., to provide lectures in a specific content area, to serve as small group facilitators).

Two years ago, our neuroanatomy faculty member retired. We have been actively recruiting a replacement. To fill this gap, we hired an instructor from Vanderbilt who came and taught neuroanatomy for approximately three weeks. A replacement has been recruited and joined the faculty in July of 2018.

Three years ago, our immunology faculty member retired after more than 30 years of service. To ensure that students got adequate exposure to immunology, we asked a colleague from the University of Kentucky to teach approximately three weeks of intense immunology. Recruitment is ongoing for a permanent replacement

Describe anticipated attrition in the basic science and clinical faculty over the next three years, including faculty retirements. Note if attrition will involve faculty who participate in the medical education program.

JCESOM has on average a 4-5% attrition rate per year. In the StandPoint™ faculty survey conducted in 2017, only 3% of faculty reported they would be considering retirement and only 3% report they were likely or highly likely to leave the medical school. Recruitment has outpaced retirement and attrition, as the clinical faculty numbers have demonstrated slow but progressive growth and basic science faculty have remained adequate for educational requirements. Basic science faculty has had a slightly larger number of retirements occur over a period of approximately two years and one recent unexpected death which has presented that large department with a few more challenges. Recruitment activities always remain a priority for the Dean of the Medical School, the Chair of Biomedical Science and the clinical Department Chairs when needed.

Describe faculty recruitment activities, by discipline, planned over the next three academic years and provide the anticipated timing of these activities. Note if these are new recruitments or to replace faculty who have retired/left the institution.

Faculty recruitment is initiated in the clinical and biomedical science departments as vacancies arise, faculty announce their retirement, or the department chair identifies a specific need or end of need, as the case may be. Almost invariably, faculty give a full year's notice before their anticipated retirement. When other voluntary separations occur, there is usually adequate notice given by the faculty member and terminal responsibilities can frequently be negotiated. When this has not been possible, there has always been enough planned overlap and redundancy within our faculty to meet all medical education responsibilities. This means that recruitment is a somewhat decentralized process and may be taking place frequently within the medical school. This makes predictions for a three-year period difficult and fluid. However, this is all coordinated by the Chairs with the Dean and Dean's staff, consistent with the School's strategic plan, the budgeting process and available resources and acutely identified opportunities.

Currently, the Chair of the Biomedical Sciences Department is actively recruiting for five (5) faculty positions. There are three positions open in microbiology/immunology and one in anatomy/histology. These are replacement or open positions. The fifth is for a newly funded position of addiction researcher.

The following clinical departments are expecting to recruit this coming year or fill positions in the next 1-2 years in the following positions. About half are new positions that will service expanding clinical service commitments and the others to fill existing or anticipated vacancies. However, all will be expected to qualify for faculty appointments and become part of the growing cadre of teaching resources for undergraduate medical education.

Ophthalmology
1 additional Glaucoma subspecialist
1 additional Corneal subspecialist
1 additional Oculoplastic subspecialist
1 or 2 Pediatric subspecialists
2 General ophthalmologists

Internal Medicine
1 associate professor or professor in gastroenterology
2 gastroenterology faculty at entry level as assistant professor
2 endocrinology faculty
1 infectious disease faculty, currently in fellowship, hired and committed to start 7/20
2 pulmonary and critical care faculty, one in fellowship hired and committed to start 7/21
1 rheumatology faculty
2 nephrology faculty, both in fellowship, hired and committed to start in 7/19
2 heme/onc faculty, one in fellowship, hired and committed to start 7/19

Cardiology
1 assistant professor, fellowship trained in advanced imaging (CMR)

Ob/Gyn
1-2 general obstetrician/gynecologists
1 gyn/oncology

Orthopaedics
1 Hand and upper extremity surgeon
1 Foot and ankle orthopedic surgeon
1 Joint replacement surgeon
1 Sports medicine surgeon

Neurology
1 Epileptologist- clinical or tenure track at the assistant or associate professor level
1 General adult neurology clinical or tenure track at the assistant or associate professor level
1 General adult neurology for VAMC- clinical or tenure track at the assistant or associate professor level
1 Pediatric neurology- full time Clinical Neuropsychologist-tenure track- associate or full professor.

Surgery
2 assistant professors of vascular surgery
2 assistant professors of plastic surgery
1 assistant professor of surgical critical care
1 assistant professor of breast surgery
2 assistant professors of otolaryngology
1 assistant professor of general surgery

Urology
2 assistant professors of urology

Dermatology
1 general Dermatologist Assistant Professor, Dermatology
1 program Director for Residency Assistant Professor, Dermatology

Department of Dentistry, Oral & Maxillofacial Surgery
1 oral maxillofacial surgeon
1 dentist

Pediatrics
4 General Pediatrics
1 Pediatric Infectious Disease Specialist
3 NICU specialists
1 behavior/development specialist
1 allergy/immunologist
1 pediatric oncologist

Neurosurgery
2 general Assistant or Associate Professor Neurosurgeons

Family Medicine
3 Instructors or Assistant Professors - Primary care practitioners assigned to rural sites
1 Assistant Professor within main campus Family Medicine program
1 Assistant Professor – with additional OB/GYN credentials
1 Assistant Professor to work within the Global Health Program

4.2 SCHOLARLY PRODUCTIVITY

The faculty of a medical school demonstrate a commitment to continuing scholarly productivity that is characteristic of an institution of higher learning.

SUPPORTING DATA

Table 4.2-1 | Scholarly Productivity

Provide the total number of each type of scholarly work, by department (basic science and clinical), from the most recently completed year (academic or calendar year, whichever is used in the medical school's accounting of faculty scholarly efforts). Only count each article/book chapter once per department.

Department	Articles in peer-review journals	Published books/ book chapters	Faculty co-investigators or PI's on extramural grants#	Other peer-reviewed scholarship*
Anatomy & Pathology	6	0	0	0
Biomedical Sciences	63	7	16	65
Clinical Translational Sciences	5	0	18	7
Family Medicine	16	0	45**	25
Internal Medicine	116	0	4	79
Obstetrics & Gynecology	20	0	0	8
Pathology	16	0	0	1
Pediatrics	23	0	4	22
Psych, Neuro, Neurosurgery	23	0	0	17
Radiology	3	0	0	2
Surgery/Anesth/Ortho/Ophth	31	15	1	19
Totals (articles counted once)	**171 total**	**15 total**	**29 faculty on 88 grants**	**145**

*Provide a definition of "other peer-reviewed scholarship," if this category is used: Peer-reviewed national and international presentations are included under "Other peer-reviewed scholarship."

Does not include pharmaceutical trials or cancer registries

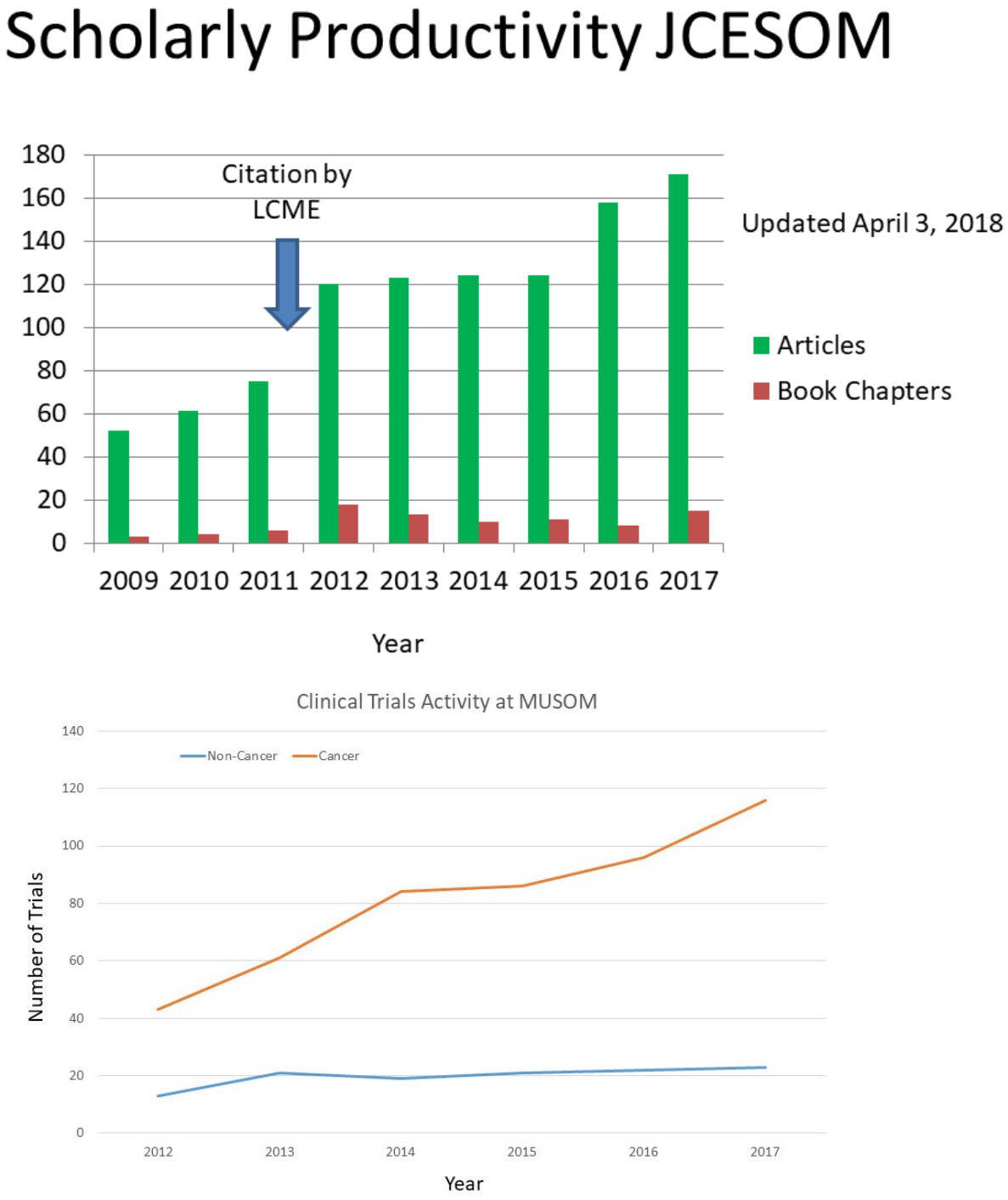
**Includes some Rural Care Contracts

& Departments credited for multiple author papers along department row, but total is only the total number of manuscripts, book chapters, etc.

As per MUJCESOM Promotion and Tenure Regulation "Evidence of scholarship should be manifested in a publication or comparable communication." MUJCESOM subscribes to Boyer's definition of scholarship. MUJCESOM defines scholarship in medicine as those activities that systematically advance teaching, research, and practice of medicine through rigorous inquiry that 1) is significant to the profession, 2) is creative, 3) can be documented and peer-reviewed, and 4) can be disseminated through various methods.

Provide the year used for these data: Calendar Year 2017

FIGURE 4.2-1 LONGITUDINAL TREND IN SCHOLARLY ACTIVITY



NARRATIVE RESPONSE

a. Describe the institution's expectations for faculty scholarship, including whether scholarly activities are required for promotion and retention of some or all faculty.

All faculty, from Instructors through Professors, and from the time of appointment, are expected to demonstrate appropriate behaviors in the areas of scholarly activity, education, and service. These expectations are quantified in each yearly letter of appointment. These qualities are also used in the yearly evaluation of faculty by their chairs to satisfy probationary status and to achieve another yearly contract or letter of appointment (retention). The quality, amount and extent of these same qualities are evaluated in consideration for promotion by the JCESOM Personnel Advisory Committee in a very detailed fashion spelled out by the JCESOM Faculty Promotion and Tenure guidelines. If a faculty member is on a Tenure Track appointment, granting of tenure is similarly dependent on progress in scholarly activity that is more research-focused and more dependent on publications. This is also spelled out in school tenure policy. This process is available to faculty through initial orientation processes, policies available on the website, through a faculty handbook and through their Annual Faculty Evaluation process with Chair and Dean.

In a faculty StandPoint™ survey, 63% of faculty responded that they understand the expectation of research and scholarship for promotion compared to peer institution's 61%.

4.3 FACULTY APPOINTMENT POLICIES

A medical school has clear policies and procedures in place for faculty appointment, renewal of appointment, promotion, granting of tenure, remediation, and dismissal that involve the faculty, the appropriate department heads, and the dean, and provides each faculty member with written information about his or her term of appointment, responsibilities, lines of communication, privileges and benefits, performance evaluation and remediation, terms of dismissal, and, if relevant, the policy on practice earnings.

NARRATIVE RESPONSE

a. Describe how and when faculty members are notified of the following:

1. Terms and conditions of employment, including privileges
2. Benefits
3. Compensation, including policies on practice earnings
4. Assignment to a faculty track

Faculty members are notified of the terms and conditions of employment including responsibilities, expectations of privileging, benefits, and assignment of tracks in their memo of intent or offer letter. Each department has its own policy on incentives and/or the sharing of practice earnings, which is also shared at the time of hire. Faculty have all these issues subsequently spelled out in a Notice of Appointment once terms for employment are agreed upon. Clinical privileging, itself, is coordinated with our Academic Medical Center and other affiliated hospitals and clinical settings. Achieving and maintaining certain privileges is often a requirement spelled out in the appointment letter, as well.

b. Describe how and when faculty members are initially notified about their responsibilities in teaching, research and, where relevant, patient care and whether such notification occurs on an ongoing basis.

All basic responsibilities as outlined above are also enumerated in the faculty member's first Notice of Appointment (contract). Each faculty member's contract is renewed annually. This is done after the annual review and approval of the Faculty Evaluation Form by each faculty's chair and approval of the Dean. There is a new contract generated yearly, signed by the Dean, the President of the University and faculty member with all responsibilities and terms reiterated.

SUPPORTING DOCUMENTATION

1. Medical school or university policies describing the qualifications required for each faculty track, and procedures for initial faculty appointment, renewal of appointment, promotion, granting of tenure (if relevant), and dismissal. Note when these policies and procedures were last reviewed and approved.

4.3-1 JCESOM Faculty Handbook
4.3-2 P & T Policies and Procedures – revised May 2018
4.3-3 Chair's Administrative Guide
4.3-4 Memo of Intent/Offer Letter Template
4.3-5 MUBOG Faculty Promotion
4.3-6 MUBOG Facutly Tenure

4.4 FEEDBACK TO FACULTY

A medical school faculty member receives regularly scheduled and timely feedback from departmental and/or other programmatic or institutional leaders on his or her academic performance and progress toward promotion and, when applicable, tenure.

NARRATIVE RESPONSE

a. Describe how and when faculty members receive formal feedback from departmental leaders (i.e., the department chair or division/section chief) on their academic performance, progress toward promotion and, if relevant, tenure.

All Faculty members receive formal feedback during their annual performance evaluation, which is conducted yearly by their department chair/division or section chief during the spring semester. Any evaluation process considers the nature of the assigned duties and the quality of the faculty member's performance of those duties. JCESOM faculty members are aware that the annual evaluations will be conducted and that they will be requested to provide a report of evidence of performance (with any interpretive comments or supporting data) regarding their teaching, research and scholarly activities, service, and other pertinent information. At the end of this process, a Faculty Activity Summary Report is electronically submitted, documenting their performance and progress toward relevants goals, and signed by Chair and faculty member. It is reviewed and approved by the Dean.

Additional informal opportunities to receive feedback are also available to faculty. Department chairs, section chiefs and administrative staff are always available to provide a variety of support and guidance. Faculty on tenure tracks must also have an official mid-tenure review.

Chairs and Division Chiefs are provided with professional development materials and other opportunities to develop their feedback skills. Much of this comes through the efforts and programs provided by the Office of Faculty Advancement.

Standpoint survey results indicated JCESOM faculty showed higher global satisfaction (74%) compared to their peer group (69%) and national standpoint survey institutions (68%). Regarding survey questions related to receiving feedback, 82% of faculty reported they are satisfied with the feedback they received from their unit head and it is useful.

SUPPORTING DOCUMENTATION

1. Medical school or university policies that require faculty to receive regular formal feedback on their performance and their progress toward promotion and, if relevant, tenure, including the date when these policies were last reviewed and approved.

4.4-1 MUBOG Faculty Evaluation
4.4-2 JCESOM Faculty Evaluation Policy
4.4-3 JCESOM Faculty Evaluation Form

4.5 FACULTY PROFESSIONAL DEVELOPMENT

A medical school and/or its sponsoring institution provides opportunities for professional development to each faculty member in the areas of discipline content, curricular design, program evaluation, student assessment methods, instructional methodology, and or research to enhance his or her skills and leadership abilities in these areas.

NARRATIVE RESPONSE

a. Describe the availability and organizational placement (e.g., faculty development office, medical school dean's office, university office) of knowledgeable individuals who can assist faculty in improving their teaching and assessment skills. Note if faculty development is the primary responsibility of each of these individuals. If not, do they have sufficient time for this responsibility?

The Office of Faculty Advancement (OFA) is dedicated to supporting faculty in achieving their highest ambitions as educators, investigators, and clinicians. The office is headed by an Associate Dean, whose primary responsibility is to design, develop, and implement professional development programs and activities for medical school faculty. The office has significant, but not exclusive, support from the other Vice and Associate Deans and, in particular, from the OME. The Associate Dean for Faculty Development reports to the Vice-Dean for Clinical Affairs. The Associate Dean for Faculty Development is the only individual whose time is nearly fully devoted to these activities – 80% of the effort. This Dean is supported by one FTE support staff. To this point, the time commitments have seemed satisfactory to the mission of the office, but the Dean of JCESOM and other advisory groups closely monitor this resource because of its critical mission to overall success.

Programs such as Promoting a Community of Excellence (PACE) in teaching have been developed and are geared toward teaching faculty. Several senior faculty from various departments also collaborate with the OFA to offer one-on-one peer mentoring and workshops in PACE program activities.

The OFA, in partnership with the Office of Medical Education, is also available to assist faculty in assessment and evaluation. Faculty leaders, including the Associate Dean for Medical Education, Associate Dean for Faculty Advancement, and Director of Biomedical Education, have participated in the Harvard Macy System-Based Course.Online faculty development through NBME assessment modules are also made available for faculty leaders such as course and clerkship directors.

Furthermore, there are several online webinars and modules offered to faculty on a variety of topics including wellness, assessment, leadership, and mentoring. Faculty participating in this volunteer program are awarded Academic Citizenship Points (ACPs).

b. Describe how faculty members are informed about the availability of faculty development programming. How does the medical school ensure that faculty development is accessible at all instructional sites, including clinical affiliates and regional campuses?

A multi-pronged approach is used to inform faculty of faculty development opportunities. Flyers (printed and digital) and announcements are sent via campus mail and emails. Web postings (including Social Media) keep faculty informed, as well as personalized email messages delivered through Mail Chimp. Faculty who sign up for an event are sent friendly reminders through Outlook. Faculty development opportunities are open to all

faculty, including volunteer faculty. Sessions are recorded and posted on the faculty advancement website for later viewing by all interested faculty.

c. Describe how problems identified with an individual faculty member's teaching and assessment skills are remediated.

All faculty and courses are evaluated anonymously by the students. These evaluations are reviewed after every course and clerkship by the Office of Medical Education (OME). Any concerns are reported by the OME to the block leader or clerkship director. The OME assists those individuals in counseling the affected faculty member and formulating a plan to possibly adjust their educational approach. The next step would be to involve the department chair in assisting faculty who may need additional help, including involvement of the OFA.

d. Describe the availability of funding to support faculty members' participation in professional development activities related to their respective disciplines (e.g., attendance at professional meetings) and to their roles as teachers (e.g., attendance at regional/national medical education meetings).

Each department supports faculty members' participation in professional development activities with funds and protected time for travel to regional and national medical education meetings. Department Chairs encourage participation in both discipline-specific and strictly educator-content courses. The dean's administrative staff is also well supported to attend regional and national conferences in their area of oversight.

e. Provide examples of formal activities at the departmental, medical school, and/or university level used to assist faculty in enhancing their skills in research methodology, publication development, and/or grant procurement. List the personnel available to assist faculty in acquiring and enhancing such skills.

JCESOM offers many programs, such as:

1. The Research in Progress Conference Series
2. A Biostatistics and Research Study Design course
3. An IRB Clinic
4. An individualized program on publication
5. An Institutional Animal Care and Use Committee (IACUC) clinic
6. Marshall University Research Cooperation (MURC) offers programs on Grantsmanship 101, proposal writing, and a JCESOM specific session on finding funding
7. A PACE Research Certificate program is offered for those faculty who are interested in pursuing research and scholarship.

The Vice Dean for Biomedical Research, Vice Dean for Clinical Translational Research, Associate Dean for Faculty Advancement, Assistant Dean for Clinical Research, and Director of Research Development and Medical Informatics work in alignment to support all of the above programs. These persons are also available to provide individualized help and support to faculty in their research projects.

f. Describe the specific programs or activities offered to assist faculty in preparing for promotion.

The Office of Faculty Advancement maintains resources for faculty on its website to assist with promotion and tenure, which includes tools such as an online CV builder, online tracking for faculty scholarly activity, and a template for the academic portfolio. The OFA offers bi-annual sessions on P & T boot camp.

Additionally, individualized mentoring and guidance is offered by the Associate Dean for the Office of Faculty Advancement.

A personnel advisory representative of each department provides additional support to their respective departmental faculty in preparing for promotion and/or tenure.

Additional resources offered:

- FAQ sheet for Faculty: How do I get promoted?
- FAQ sheet for Chairs: How do I promote my faculty?
- Faculty development for department chairs and section chief: Annual session on "Best practice conducting an annual evaluation for faculty."
- New Member onboarding and Orientation to– P & T committee

SUPPORTING DOCUMENTATION

1. Provide a list of the faculty development programs (e.g., workshops, lectures, seminars) that were provided during the most recent academic year, including general topic and attendance, and the locations where these programs were offered.

4.5-1 Faculty Development 2017-2018

4.6 RESPONSIBILITY FOR EDUCATIONAL PROGRAM POLICIES

At a medical school, the dean and a committee of the faculty determine the governance and policymaking processes of the program.

NARRATIVE RESPONSE

a. Describe the membership of the medical school executive committee, its charge or purpose and how often it meets. Provide examples of the committee's priority areas during the most recent academic year and how those priorities are set.

As per JCESOM faculty bylaws, the faculty determines all matters of educational policy with respect to educational programs including degree requirements, recommendations for honorary degrees, academic standards, student conduct and welfare, and general School of Medicine development.

The Faculty Council, as established and described in the bylaws, serves in the capacity of the Medical School Executive Committee. It reviews the recommendations pertaining to the governance and policymaking surrounding JCESOM educational programs and several other purposes outlined in the bylaws. These recommendations may come from the standing committees or other duly instituted bodies within JCESOM. After providing oversight, these recommendations are approved and sent to the Dean for implementation. The committee may, itself, also institute policy and other governance issues related to medical education. The size of the committee and source of members may vary and are described in bylaws and operating rules. However, the committee must be made up of full-time faculty. They are elected for 2 year terms, and the committee elects its chair.

Finally, the Faculty Council Chair is also invited by the Dean to sit in on two monthly meetings, Department Chairs and Dean's Staff, for the purposes of allowing a faculty representative to engage with senior management, providing oversight and input from the faculty, and advocating for policies and strategies that support the overall educational mission of the organization.

Based on faculty engagement Standpoint™ survey data, the following priorities were established by the faculty council for 2017-2018:

- Faculty Wellness
- Faculty Mentoring
- Faculty Recruitment and Retention

Faculty Bylaw updates and changes identified as needed by LCME activities were also recognized as a need and added as a priority this past year.

STANDARD 5: EDUCATIONAL RESOURCES AND INFRASTRUCTURE

A medical school has sufficient personnel, financial resources, physical facilities, equipment, and clinical, instructional, informational, technological, and other resources readily available and accessible across all locations to meet its needs and to achieve its goals.

SUPPORTING DATA

Table 5.0-1 | Medical School Revenue Sources[1]

Provide the requested revenue totals from the LCME Part I-A Annual Financial Questionnaire (AFQ) for each indicated fiscal year (FY) and the *percentage of total revenues* represented by each amount. Use the "total revenues" from the AFQ for this calculation.

	FY 2016		FY 2017	
	$	% of Total Revenues	$	% of Total Revenues
Total tuition and fees	7,825,199	4.2	9,130,025	4.2
Medical students	7,433,939	4.0	8,673,524	4.0
Other students Revenues from T&F assessed to grad. students in medical school programs Revenues from continuing medical education programs Other tuition and fees revenues)	0	0.0	456,501	0.2
Total government and parent support	18,031,233	9.8	18,469,650	8.5
Federal appropriations	0	0	0	0.0
Adjusted state and parent support	18,031,233	9.8	18,469,650	8.5
Local appropriations	0	0	0	0.0
Total grants and contracts	10,945,611	5.9	10,098,195	4.6
Federal direct	4,456,617	2.4	4,875,998	2.2
State and local direct	2,093,320	1.1	1,319,927	0.6
Other direct	3,685,266	2.0	3,081,930	1.4
Total facilities and administration (indirect)	710,418	0.4	820,340	0.4
Practice plans/Other medical services	83,896,059	45.4	98,244,245	45.2
Total hospital revenues	67,725,891	33.9	76,760,185	35.3
University-owned	0	0.0	0	0.0
Department of Veterans Affairs	5,161,440	2.8	6,959,261	3.2
Other affiliated hospitals	57,564,451	31.1	69,800,924	32.1
Total gifts Restricted gift funds Revenues from unrestricted gift funds	286,532	0.2	243,986 51,983	0.1 0.0
Endowment income Restricted endowment funds Income from unrestricted endowment funds	171,311	0.1	268,021 29,346	0.1 0.0
Other revenues	975,225	0.5	21,254,623	9.8
Total revenues	184,857,362	100	217,566,566	100.0
Total expenses and transfers	182,788,652	98.9	212,661,739	97.7

[1] 11/30/17: Table 5.0-1 has been reformatted to clarify its relationship to the LCME Part I-A Annual Financial Questionnaire (AFQ).

5.1 ADEQUACY OF FINANCIAL RESOURCES

The present and anticipated financial resources of a medical school are derived from diverse sources and are adequate to sustain a sound program of medical education and to accomplish other programmatic and institutional goals.

NARRATIVE RESPONSE

a. Summarize trends in each of the funding sources available to the medical school, including an analysis of their stability. Describe any substantive changes to the medical school budget during the three fiscal years prior to the date of the upcoming full survey visit in the following areas:

1. Total revenues
2. Operating margin
3. Revenue mix
4. Market value of endowments
5. Medical school reserves
6. Debt service
7. Outstanding debt
8. Departmental reserves

Major Funding Sources:

Overview – The School of Medicine (JCESOM) has maintained a strong financial position for many years allowing it to absorb the growth experienced in recent years across the school's various missions. Over the past five years (FY 2013-2017), the JCESOM has grown in Total Revenues from $150M to $218M, a growth of 45%. This growth has allowed the JCESOM to record positive Gross Margins regardless of a 49% growth in Expenditures and Transfers in that same time. Following are narratives specific to a few of the material or primary funding sources for the JCESOM.

Tuition and Fees – Total Tuition and Fees for the JCESOM over the past five years have been somewhat consistent, ranging from $8.4M to as high as $9.1M. The minimal variation is related to the mix of students, resident versus non-resident, over the past few years but also reflects efforts made by the JCESOM to limit drastic increases in total tuition and fees. We were able to freeze tuition rates for a few years and have just now adjusted them 5% for the upcoming fiscal year (FY2018). With the current mix of students, we do not project a material impact on student debt. Overall, while not material in total, we believe that our Tuition and Fees Revenue will remain consistent over the next few fiscal years.

Government/State Support – While the past five years show an overall increase in State Support, we did see a slight decrease in State Appropriations in FY 2018. However, current projections for FY 2019 budgets show us recovering a good portion of this lost support. Although additional years are uncertain at this point, there are no material concerns that any change will have a serious negative impact on our overall financial strength. A 5% decrease in State Appropriations would result in less than 0.3% decrease in Total Revenues. We Plan to offset any decrease with Practice Plan support, either through direct support or through planned cost savings.

Grants and Contracts – Over the past five years, we have seen a decrease in Total Grants and Contracts at the JCESOM by $1.5M, with a decrease of $1.2M in Federal Direct Grants. This material decrease can be attributed to a decline in Federal Grants relating to our Forensic Science

Department, which was recently shifted to the College of Science by the University. We have been able to offset the Federal Grants with an increase in Private Direct grants but also project that recent recruiting efforts will yield additional Federal Funding and bring us back to prior year funding levels and hopefully above.

Practice Plan Revenue – The Practice Plan has experienced consistent success and growth over recent years due to expanding services to new locations, increasing the number of providers in existing and successful practices, and adding new subspecialties to practices. In relation to Total Charges, the Practice Plan has increased from $147M in FY2013 to over $194M in FY2017, a growth of 32%. During the same period, Collections increased 30%, from $58M to just under $75M.

Hospital Revenues – Total Hospital Revenue has increased from $42M to $77M over the past five fiscal years. This tremendous growth is directly related to the steady growth of support for new providers, increased resident positions, increased services, increased medical directorships, and increased educational support that is available to the Dean to support research and educational objectives.

Trends for Areas of Interest:

1. Total Revenues – Total Revenues for the JCESOM have grown by $67M from FY2013 to FY2017, with material growth in revenue from both the Practice Plan and Hospital Sources. While the JCESOM is projecting a decrease in State Appropriations in coming years, continued growth in Practice Plan and Hospital revenues should offset the decrease.

2. Operating Margin – Recent margin has ranged from 1-3% and will likely remain in that range. Continued growth will limit projections relating to an increase in Operating Margin, with a slight chance Utilization Reserves will be temporarily required.

3. Revenue Mix – Based on previous comments and projections, it is expected that the mix will change slightly in the coming years as Practice Plan and Hospital support continue to grow while offsetting slight decreases in State Support. It is not projected that this will result in material changes in the near future.

4. Market Value of Endowments – Endowments for the JCESOM are held in the Marshall University Foundation and the Marshall University Research Corporation. The balances have remained over $30M over the past few years with earnings utilized for research expenditures. In addition to the earnings from the JCESOM endowments, the JCESOM has been a recipient of earnings from an additional endowment held by the Joan C. Edwards Charitable Trust. These earnings, ranging from $800,000 to $1M annually, have been utilized for scholarships in order to assist in decreasing student indebtedness.

5. Medical School Reserves – Total Reserves, including the Practice Plan, continue to grow and surpassed $62M at the end of FY2017. From FY2014, this is nearly a $2M annual growth. With conservative growth and continued contributions to the Reserve Balances, this will climb to just under $65M by the end of FY2018. In addition to the Invested Reserve Balances, the Practice Plan maintains an Operating Cash Balance that has ranged from $5M to $10M over the past 6 months. The current policy of the Practice Plan requires that each department maintain a reserve balance equal to 2 months average expenditures (60 days cash on-hand), with the Corporate Reserve adding an additional 2 months.

6. Debt Service – The JCESOM's Debt Service increased in FY2017. Initially, the Debt Service was limited to the Practice Plan's primary location but increased due to the acquisition and remodel of a

new 51,000 square feet clinical facility. The Debt Service now covers two practice plan locations. This amount is roughly $1,500,000 per year. The debt related to the primary location runs through FY2025 while the new debt was financed over 10 years. There has been no issue funding this in the past and should not be an issue moving forward.

7. Outstanding Debt – Related to the Practice Plan's recent acquisition and remodeling of a new 51,000 square foot clinical facility, the JCESOM will have a new debt of roughly $10M that will be financed and paid over the next 10 years. This will be financed from new revenues generated from the facility and should not impact the JCESOM's financial performance in a negative way.

8. Departmental Reserves – This is included in the Medical School Reserves Narrative (**5**).

b. Describe any substantive changes anticipated by the medical school in the following areas during the three fiscal years following the upcoming full survey visit, and explain the reasons for any anticipated changes.

1. Total revenues
2. Revenue mix
3. Obligations and commitments (e.g., ongoing commitments based on prior chair searches)
4. Reserves (amount and sources)

Anticipated Changes – As mentioned previously, the JCESOM is projecting a slight reduction in state support but is also projecting other revenues that will offset this decrease. As a result, the revenue mix may change slightly but should not change materially over the next few years. Continued growth and focus on research will include commitments to start-up funding and additional support positions within the JCESOM. While some of the commitments should be covered through additional Federal Grants/Funding, we do expect a portion of the commitments to be funded either by additional support received from the Practice Plan or through utilization of a small portion of Reserves. Regardless, we are still projecting an overall increase in Reserve Balances over the next 2-3 years.

c. Describe the medical school's annual budget process and the budgetary authority of the medical school dean.

The annual budget process begins each year in March or April and runs through early June when the final budget is adopted and approved by the respective Boards, the JCESOM is included as part of Marshall University's budget and the Practice Plan's budget is approved by their separate Board. The State portion of the budget begins with identifying the appropriate revenue/funding sources, then allocating as appropriate. Tuition revenues are based on actual projections based on the most recent acceptance information and applying projected tuition rates, net of waivers, and other non-cash assistance. State appropriations are made available by the State once approved by the Governor. Notifications are sent to each Department Chair as to what their allocation will be for the year based on current and projected staffing levels and spending needs based on the Department's changes projected for the year. The Practice Plan Budget includes Practice Plan support and Hospital support components. The Plan budget is a consolidation of the various departmental budgets that are reviewed and approved at budget hearings. The hearings are attended by the Department's Chair and Administrator and received or reviewed by members of the Plan's Executive Management Team. Budgets are presented at a detailed level projecting all revenue and expenses at a provider level when available but at a department level, at a minimum. Departments discuss any variances from current FYTD annualized but provide details as to what drives the variances. After consolidated, there is an initial review with the Dean to assure that all initiatives and objectives have been included to develop a final product to present to the Practice Plan's Board, of which the Dean is the Chairman. The Dean ultimately has complete budgetary authority for the JCESOM and Practice Plan.

d. Describe the ways in which the medical school's governance, through its board of directors and its organizational structure, supports the effective management of its financial resources. Describe how lines of authority are defined, the internal controls that are in place, the degree of oversight provided by the state/parent/governing board in managing medical school resources, and the relationship between the medical school dean and department chairs in managing departmental resources.

Effective Management of Financial Resources:

Basic Banner Reporting – Negative fund balances are identified immediately by Purchasing or the Budget Office and the responsible party is contacted. Appropriate action is requested, usually resulting in a transfer from an appropriate fund or correcting the coding on the expense.

Internal Audit Process – The JCESOM adheres to all University policies and guidelines relating to financial resources. This includes annual audits of bank accounts and cash-handling processes. The Practice Plan has a similar set of processes and employs a control process that requires the separation of duties relating to cash receipts, cash deposits, and cash disbursements. Cash disbursements, both at the JCESOM and Practice Plan have identified levels (relating to the amount of a specific expenditure) of authority relating to specific individuals (i.e. – multiple signatures are required for checks over $5,000).

Organization – The Board of Governors oversees the President of Marshall University, who in turn directly supervises the Dean of the JCESOM. The Dean oversees the Chairs of the many departments in the JCESOM and the Practice Plan and is also Chairman of the Board for the Practice Plan. Therefore, the Dean has authority for all missions and activities relating to both the JCESOM and the Practice Plan. At the Department level, the Chairs supervise all those in their Department responsible for JCESOM and Practice Plan related activities within that Department.

e. Describe the ways that funding for the current and projected capital needs of the medical school is being addressed. Describe the medical school's policy with regard to the financing of deferred maintenance of medical school facilities (e.g., roof replacement).

Funding for projected capital needs of the medical school is addressed annually in the JCESOM's budget process, or as needed, by consistently allocating a portion of revenue to Deferred Maintenance and/or Capital Equipment Reserves. While some of the allocated funds may be utilized to cover current fiscal year needs, any remaining amounts are retained in that account and are added to the Corporate Reserve balance. Any material project over a certain dollar threshold is first presented to the Board for approval. The sponsor of the project, either a Department Chair or Chief Operating Officer in the case of most maintenance items, presents the project specifics. If funded through State funds, the State purchasing guidelines are adhered to, including a formal RFP process. Marshall University's Purchasing Office manages this process to ensure all guidelines are satisfied. Current projects in the planning or operating phase include a lab renovation and completion of a new clinical facility. While the lab renovation will be funded through Cash Reserves, the cost of the new facility and renovations will be financed over a 10 year period, with very manageable monthly and annual expenses.

f. Describe the extent to which financial reserves have been used to balance the operating budget in recent years.

Financial Reserve and Uses – Overall, the JCESOM and Practice Plan have been fortunate and able to utilize current revenues to finance capital expenditures and other material expenses. However, there have been individual departments that have had to utilize their individual departmental reserves to finance capital expenditures. A few examples of material expenditures in recent years include:

Douglass Centre – The JCESOM purchased the Douglass Centre, a former high school in the area, for roughly $800,000. The Douglass Centre currently houses a clinic for underinsured patients and business offices for the Practice Plan. Rental revenues are used to cover ongoing utility and maintenance costs.

Surgery – In FY2016, the Department of Surgery spent roughly $255,000 in Departmental Reserves to purchase a Cool Sculpting machine to place in their Plastic and Reconstructive Surgery Office. With a ROI of roughly 2 years, this was projected to provide a non-surgical alternative to their Department and increase revenue.

Eye Surgery – In FY2016, the Eye Surgeons spent $165,000 on additional office equipment and a new Electronic Medical Record system custom to their subspecialty. The equipment and software was funded through Departmental Reserves in an attempt to improve the patient experience and patient flow, both resulting in an increase in revenue

g. Summarize the key findings resulting from any external financial audits of the medical school (including medical school departments) performed during the most recently completed fiscal year.

Although the JCESOM is not audited separately from Marshall University, there have been no material/key findings in the respective audits relating to any activities involving the JCESOM.

SUPPORTING DOCUMENTATION

1. The school's responses to the most recent LCME Part I-A Annual Financial Questionnaire, consisting of the following

    a. Signature Page
    b. Current Funds Revenues, Expenditures, and Transfers - Data Entry Sheet
    c. Schedules A-E inclusive
    d. Revenues and Expenditures History

    See Appendix *5.1-1 LCME Part I-A Annual Financial Questionnaire.docx*

2. The school's responses to the web-based companion survey to the LCME Part I-A Annual Financial Questionnaire, the "Overview of Organization and Financial Characteristics Survey."

    See Appendix 5.1-2 LCME Part I-A AFQ Web Survey Responses.docx

3. A revenue and expenditures summary for the fiscal year in which the full survey takes place (based on budget projections) and for each of the prior three fiscal years. Use the format and row labels from the "Revenues and Expenditures History" from the school's completed LCME Part I-A Annual Financial Questionnaire (it is the last page of the AFQ).

See Appendix *5.1-3 Revenue & Expenditure Summary.docx*

4. A copy of the most recent audited financial statements for the medical school and/or the medical school's parent organization or company. For medical schools owned or operated by a parent organization or company, submit audited financial statements for the parent organization or company that encompass all related component units and entities controlled by the parent organization or company. Provide the most current information in the material submitted three months prior to the survey visit.

   See Appendix 5.1-4 Audited Financial Statements.docx

5.2 DEAN'S AUTHORITY/RESOURCES

The dean of a medical school has sufficient resources and budgetary authority to fulfill his or her responsibility for the management and evaluation of the medical curriculum.

NARRATIVE RESPONSE

a. Provide the name and title of the individual with formal responsibility for the medical education program, referred to here as the chief academic officer (CAO).

Joseph Shapiro, MD, Dean of the School of Medicine

b. If the dean is not the CAO, and responsibility for the medical education program is delegated to an associate dean or other individual serving as CAO, provide the name and title of this individual, as well as the percentage of time he or she devotes to this administrative responsibility.

Name	Title	% Time (if applicable)
N/A	N/A	N/A

c. Describe how the CAO participates in institution-level planning to ensure that the resource needs of the medical education program (e.g., funding, faculty, educational space, other educational infrastructure) are considered.

The Dean meets weekly with the Vice Dean of Medical Education to review the medical education program. All Vice Deans of the JCESOM meet as a group with the Dean on a biweekly basis to review the progress of the individual missions of the medical school. The Dean is updated monthly by the Assistant and Associate Deans at the Dean's Staff meeting.

d. Describe how and by whom the budget to support the medical education program is developed and approved, and how it is allocated to departments and administrative units.

The budget for the medical education program is developed by a committee consisting of the Dean, the Vice Dean of Medical Education, the Chief Financial Officer, and the Chief Executive Officer. Once developed, the budget and its allocations are presented to the Chairs for their review, comments, and approval.

e. Briefly describe the organizational locus (e.g., an office of medical education) of administrative and/or academic support for the planning, implementation, evaluation, and oversight of the curriculum and for the development and maintenance of the tools (such as a curriculum database) to support curriculum delivery, monitoring, and management. Note the reporting relationships of the director(s) of any such office(s)/unit(s).

Curriculum Management – The Curriculum Committee (CC) is charged with planning, implementation, evaluation, and oversight of the curriculum and for the development and maintenance of the tools to support curriculum monitoring and management. The Dean has ultimate responsibility for the implementation of the educational program, following the recommendations of the CC, which designs and manages the educational program. In general, the CC forwards policy decisions to the Office of the Dean for publication and dissemination. The Dean may question or modify a policy, but typically only for matters related to the financial implications. The Dean has oversight of the curriculum and delegates operational responsibility for

curriculum management to the Vice Dean of Medical Education who serves as the senior officer in the Office of Medical Education. The Vice Dean of Medical Education provides leadership for the faculty in developing and implementing the education program. At a minimum, the Vice Dean of Medical Education, working with the JCESOM executive leadership, is responsible for ensuring the medical education program meets or exceeds the LCME requirements for accreditation in the following areas:

- Implements curricular initiatives recommended by the CC and approved by the Dean
- Establishes institutional educational objectives and measures to document achievement and monitor those measures to ensure the institutional objectives are being met
- Promotes integration of clinical subject material into years one and two and basic science material into years three and four
- Develops teaching modalities and methods of instruction to promote integrative and interactive learning by students and facilitate their preparation for Steps 1 and 2 of the USMLE
- Promotes methods of evaluation and testing that are linked to institutional, course, and session objectives
- Facilitates development of means and systems for evaluating student professionalism across the four years of the curriculum
- Fosters the development of initiatives facilitating research and scholarly activity in the area of medical education
- Collects curricular material from block and clerkship directors and organizes the input of curricular materials into the database
- Oversees the collection, analysis, and appropriate distribution of web-based student course evaluations
- Develops job descriptions for block directors and clerkship directors and enables JCESOM flexibility for them to define their roles and amount of time necessary to meet the responsibilities of their respective positions, maintaining a minimum of 20% protected time

f. Provide the names and titles of the staff leadership (e.g., director of assessment, institutional computing) of groups/units responsible for providing administrative or academic support for the planning, implementation, and evaluation of the curriculum and for student assessment. Include the percentage of time contributed by each individual to this effort. Add rows as needed.

Name of staff leader	Title	% Time (if applicable)	# of staff reporting to leader
Bobby Miller, MD	Vice Dean of Medical Education	80%	7
Nitin Puri, MD, PhD	Associate Dean of Medical Education	80%	0
Mike McCarthy, MA	Chief Information Officer	50%	16 (+2 Part time)
Paul Ferguson, MD	Director of Clinical Education	20%	0
Michelle Ruppert, MA	Registrar	100%	0

5.3 PRESSURES FOR SELF-FINANCING

A medical school admits only as many qualified applicants as its total resources can accommodate and does not permit financial or other influences to compromise the school's educational mission.

SUPPORTING DATA

Table 5.3-1 | Tuition and Fees			
Percentage of total revenue from tuition and fees as reported on the LCME Part I-A Annual Financial Questionnaire (AFQ) for the indicated years. Note: This is derived using data from the AFQ section titled "Current Funds Revenues, Expenditures and Transfers – Data Entry Sheet". Please divide "TOTAL TUITION AND FEES REVENUES" by "TOTAL REVENUES REPORTED".			
FY 2014	FY 2015	FY 2016	FY 2017
5%	5%	4%	4%

NARRATIVE RESPONSE

a. Describe how and at what institutional level (e.g., the medical school administration, the university administration, the board of trustees) the size of the medical school entering class is set. How does the school/university leadership ensure that the number of medical students does not exceed available resources (i.e., faculty and educational facilities)?

The medical school entering class is determined by the Dean in consultation with the department chairs and the appropriate associate and assistant deans. Before the class size can be changed the Dean must seek approval from the Marshall University President. The class size is influenced by the resources available to the school, e.g., classrooms, laboratory space and capacity, faculty, and staff. All change is initially and fully implemented over a four year period. Basic and clinical science department chairs provide the Dean information about future resource needs, if any, in preparation for a class size change.

b. Describe how and by whom tuition and fees are set for the medical school.

Tuition and fees are evaluated and determined by the JCESOM and the University leadership. The JCESOM recommends and justifies changes to tuition and fees annually, if any, to the President's Office. Tuition and fees are established and approved by the Board of Governors. Annually, at a designated Board of Governors' meeting, typically the December meeting, the Governors review and approve the tuition and fees for the upcoming academic year based upon the recommendations of the Marshall University President.

c. If tuition and fees or any other revenue source comprises more than 50% of the medical school's total annual revenues, describe any plans to diversify revenue sources.

There is no single source of revenue comprising more than 50% of the medical school's total annual revenues. This is not expected to change in the foreseeable future.

d. Describe how pressures to generate funding from clinical care, research, and/or tuition are being managed to ensure that the ongoing quality of the medical education program is not compromised.

There is no current institutional pressure for the medical school to generate revenue from tuition, clinical care, and/or research. As stated in 5.0, the JCESOM has experienced consistent yearly increases in contractual revenue and clinical revenue to support the mission areas. Extramural research funding and expenditures have experienced a gradual increase (in most years). The JCESOM supports the recruitment of funded investigators particularly as they align with the school's research cores, recruitment of teachers, and clinicians to ensure the ongoing quality of the medical education program.

Some faculty will raise concerns about the need to generate clinical revenue from time-to-time. Likewise, in some departments that pressure will be greater than others. The Dean provides financial resources to these departments when needed to manage this concern and ensure the ongoing quality of the medical education program. Overall, the faculty indicated in the 2017 AAMC StandPoint™ survey a high level of satisfaction with the JCESOM, leadership, and support they receive. The following StandPoint™ questions and responses demonstrate the overall level of satisfaction of the JCESOM faculty, perhaps indicating there is little broad-based pressure to generate revenue (cohort school responses are in the parenthesis):

- I am satisfied with my autonomy at work. 85% (79%)
- My role here is clear to me. 84% (77%)
- My day-to-day activities give me a sense of accomplishment. 84% (81%)
- I feel appreciated by my supervisor. 83% (74%)
- Senior leadership's transparency regarding clinical finances. 72% (39%)
- All things considered, how satisfied or dissatisfied are you with your medical school as a place to work? 74% (68%)

5.4 SUFFICIENCY OF BUILDINGS AND EQUIPMENT

A medical school has, or is assured the use of, buildings and equipment sufficient to achieve its educational, clinical, and research missions.

SUPPORTING DATA

Table 5.4-1 | Year 1 Classroom Space

Provide the requested information on the types of classroom space (e.g., lecture hall, laboratory, clinical skills teaching/ simulation space, small group discussion room, etc.) used for each instructional format during *year one* of the medical curriculum. Only include space used for regularly-scheduled medical school classes, including laboratories. Add rows as needed.

Room Type/Purpose	# of Rooms of this size/type	Seating capacity (provide a range if variable across rooms)	Building(s) where rooms are located
Auditorium	1	225	Marshall University Medical Center
Lecture Hall	2	75-94	Byrd Biotechnology Science Center
Gross Anatomy Lab	1	80	Coon Education Building
Histology Lab	1	48	Coon Education Building
Clinical Skills Lab	1	50	Byrd Clinical Center
Small Group Discussion Rooms	6	8-15	Byrd Clinical Center

Table 5.4-2 | Year 2 Classroom Space

Provide the requested information on the types of classroom space (e.g., lecture hall, laboratory, clinical skills teaching/ simulation space, small group discussion room, etc.) used for each instructional format during *year two* of the medical curriculum. Only include space used for regularly-scheduled medical school classes, including laboratories. Add rows as needed.

Room type/Purpose	# of Rooms of this size/type	Seating capacity (provide a range if variable across rooms)	Building(s) where rooms are located
Auditorium	1	225	Marshall University Medical Center
Lecture Hall	1	125	Byrd Clinical Center
Clinical Skills Lab	1	50	Byrd Clinical Center
Small Group Rooms	4	20	Byrd Clinical Center
Conference Rooms	6	8-20	Byrd Clinical Center

Table 5.4-3 | Faculty Offices and Research Labs

Provide the number of faculty offices and research laboratories in each academic department of the medical school. Add rows as needed.

Department name	# of Full-time faculty	# of Offices	# of Research laboratories to which departmental faculty have access*
Biomedical Sciences	26	34	56
Cardiovascular Services	11	8	0
Clinical & Translational Sciences	7	9	7
Dentistry & Oral Surgery	4	2	0
Dermatology	1	1	0
Family Medicine	23	18	0
Internal Medicine	47	48	0
Neuroscience	14	12	0
Obstetrics & Gynecology	14	3	0
Ophthalmology	6	6	0
Orthopedics	20	18	0
Pathology	9	1	1
Pediatrics	37	29	0
Psychiatry	8	18	0
Surgery	31	18	1

* Include "open" and shared laboratories (count each laboratory space only once per department for shared departmental space)

NARRATIVE RESPONSE

a. If educational spaces used for required classes in years one and two of the medical curriculum (e.g., lecture halls, laboratories, small group rooms) are shared with other schools/programs, provide the office or individual responsible for scheduling the spaces and note if the medical education program has priority in any scheduling decisions. If classrooms or lecture halls are shared by students in years one and two of the curriculum, describe how and by whom the space is allocated.

The first year lecture hall is located in the Byrd Biotechnology building on the main campus. It is reserved for first year medical student activities from 7 am until 1 pm every day; then is utilized by undergraduate/graduate students from the main campus. The master schedule for this room is managed by the Director of Preclinical Education whose office is located in that building. The second year lecture hall is in the Byrd Clinical Center which is for second year lectures. There are 4 small group rooms across the hall. The second year auditorium and small group room are scheduled by the Assistant Director of Academic and Career Support Services whose office is located in the same building on the same floor.

b. Describe any recent challenges in obtaining access to needed teaching space and how these have been/are being resolved.

Some laboratory space previously used for histology the lab was repurposed for research labs. The third floor of the Coon Education Building underwent $200,000 worth of renovation to turn it into a well-designed space for a histology lab. The lab holds 48 students at a time.

c. Describe any recent or current teaching space renovations or construction. If there has been a recent increase in class size, note whether teaching space has also expanded (e.g., increases in room size and/or number).

There are no recent or current teaching space renovations or construction. The class size has remained stable at between 75 and 83 students for at least the last five years.

d. Describe the facilities used for teaching and assessment of students' clinical and procedural skills. Note if this space is also used for patient care or research. Identify if students from other health professions programs or residents also use these facilities, and describe how scheduling conflicts are resolved.

The clinical skills lab is located in the Byrd Clinical Center. It is a dedicated area with no other secondary uses. It has 6 exam rooms that are identical to the real exam rooms used in the clinical clerkships. Each exam room is equipped with a computer and recording equipment. Along one side of the exam rooms is a lecture room for student use. The other side of the exam rooms is a small kitchen/staging area where standardized patients can wait between students.

e. Describe how research space is organized within the medical school. Are research laboratories allocated to departments and/or organized as open-plan/interdepartmental laboratories.

Research laboratories have been allocated as open plan/interdepartmental space to meet the needs of multiple investigators working on collaborative research grants and projects.

f. Describe any substantive changes in facilities for education and/or research anticipated by the medical school over the next three years. Note if any renovation or new construction is planned.

The medical school, through joint venture between government and a private entity, is building a housing complex with 280 beds configured into 1, 2, or 3 bedroom units for students to rent. This building will contain a workout area and additional study space and will be physically located close to the current core of our medical school campus.

Additionally, the School of Pharmacy is building a new building on the medical school campus. When this new building is completed, it will create vacated space at the Coon Education building that is located adjacent to the Veteran Affairs Medical Center. The JCESOM plan on re-obtaining right of use to this space and repurposing it for medical education, laboratory and research space, as needed.

5.5 RESOURCES FOR CLINICAL INSTRUCTION

A medical school has, or is assured the use of, appropriate resources for the clinical instruction of its medical students in ambulatory and inpatient settings and has adequate numbers and types of patients (e.g., acuity, case mix, age, gender).

SUPPORTING DATA

Table 5.5-1 | Clinical-site Patient Volume

Provide the requested information for each hospital used for the inpatient portion of one or more required clinical clerkships (or longitudinal integrated clinical clerkships). Schools with regional campuses should include the campus name for each facility. Add rows as needed.

Facility name/Campus (if applicable)	# of beds in use	Average daily occupancy	# of admissions per year	# of outpatient visits per year
Cabell Huntington Hospital	303	276	27,445	723,624
St. Mary's Medical Center	393	253	15,807	255,828
VAMC	80	32.4	4639	418576
River Park Hospital	165	143	92	N/A
Mildred Mitchell Bateman	95	90	510	N/A
Logan Regional Medical Center	129	65	4897	N/A

Table 5.5-2 | Inpatient Teaching Facilities

Provide the requested information for each required clinical clerkship (or longitudinal integrated clinical clerkship) taking place at an inpatient facility. Only provide information for services used for required clinical clerkships at each hospital. Schools with regional campuses should include the campus name for each facility. Add rows as needed.

Facility name/Campus (if applicable)	Clerkship	Average daily inpatient census	Average # of students per clerkship (range)	
			School's medical students	Medical students from other schools
Cabell Huntington Hospital	Family Medicine	23	1-2	1-2
	Internal Medicine	26	2-3	0
	Surgery	25	2-3	0
	Psych/Neuro	15-20	2-3	0
	Ob/Gyn	41	2-3	0
	Pediatrics	20	2-3	0
St. Mary's Medical Center	Internal Medicine	15-20	4 (2 per team)	0
	Ob/Gyn	3	1-2	0
	Surgery	25	2-3	0
VAMC	Internal Medicine	27.7	2-3	0
	Psych	NA	2 (outpatient)	0
	Surgery	4.7	2-3	0
River Park	Psych	25	2-3	0
Mildred Mitchell Bateman	Psych	20	2-3	0
Logan Regional Medical Center	Surgery	5-6	1-2	0

Table 5.5-3 | Inpatient Teaching Sites by Clerkship

List all *inpatient teaching sites* where medical students take one or more required clerkships. Indicate the clerkship(s) offered at each site by placing an "X" in the appropriate column. List other major core clerkships offered in different subjects (e.g., Interdisciplinary Primary Care, Women's and Children's Health). Schools with regional campuses should include the campus name for each facility. Add rows as needed.

Facility name/ Campus (if applicable)	Family medicine	Internal medicine	Ob-Gyn	Pediatrics	Psychiatry	Surgery	Other (list)
Cabell Huntington Hospital	X	X	X	X	X	X	Neurology
St. Mary's Medical Center		X	X			X	
VAMC		X			X	X	
River Park					X		
Mildred Mitchell Bateman					X		
Logan Regional Medical Center						X	

Table 5.5-4 | Ambulatory Teaching Sites by Clerkship

For each *type of ambulatory teaching site* used for one or more required clerkships, indicate the clerkship(s) offered at this type of site by placing an "X" in the appropriate column. Add other major required clerkships offered in different subjects (e.g., Interdisciplinary Primary Care, Women's and Children's Health). Add rows and columns as needed.

Facility Type	Family medicine	Internal medicine	Ob-Gyn	Pediatrics	Psychiatry	Surgery	Other (list)
University hospital clinic							
Community hospital clinic	X	X	X	X	X	X	Neurology
Community health center							
Private physician office	X	X	X	X	X	X	Neurology
Rural clinic/AHEC	X	X	X	X	X	X	
Other Type of Site (list)							

NARRATIVE RESPONSE

a. Describe how the medical school determines that the mix of inpatient and ambulatory settings used for required clinical clerkships provides adequate numbers and types of patients in each discipline.

Students are required to log their patient encounters into New Innovations. There is a list of required patients that students should see based on the recommendations of the MS3/MS4 committee that is approved by the curriculum committee. This list is reviewed and updated annually. An example of a recent change was adding a patient with drug addiction as a required experience for the students in the clinical years.

b. Describe any substantive changes anticipated by the medical school over the next three years in hospital and other clinical affiliations.

Our main teaching hospital is Cabell Huntington Hospital (CHH). St. Mary's Medical Center (SMMC) is another tertiary facility where students may have some clinical responsibilities. The Order of Pallottine Sisters that owned St. Mary's was aging and decided to sell the hospital. SMMC is the largest inpatient facility in proximity to the JCESOM. Indeed, it is one of the largest in this state. It has been a non-profit, faith

based hospital; however in March 2018, after receiving approval from the appropriate state regulating agencies, the Federal Trade Commission, and the Vatican, CHH is moving forward with the acquisition of SMMC. It is anticipated that it will take several years for these changes to be fully implemented and incorporated into the community-based hospital affiliation arrangements that the JCESOM has continuously maintained. However, CHH is currently more closely aligned with the school's operation and mission. Thus, it is anticipated that many aspects of the school's educational mission may be enhanced in a variety of ways in the future because of this new, important resource.

5.6 CLINICAL INSTRUCTIONAL FACILITIES/INFORMATION RESOURCES

Each hospital or other clinical facility affiliated with a medical school that serves as a major location for required clinical learning experiences has sufficient information resources and instructional facilities for medical student education.

SUPPORTING DATA

Table 5.6-1 | Inpatient Hospital Clerkship Resources

List each hospital used for the inpatient portion of one or more required clinical clerkships. Indicate whether the indicated resource is available for medical student use by placing an "X" in the appropriate column heading. Schools with regional campuses should include the campus name for each facility. Add rows as needed.

Facility name/ Campus (if applicable)	Lecture/ Conf. rooms	Study areas	Computers
Cabell Huntington Hospital	X	X	X
St. Mary's Medical Center	X	X	X
VAMC	X	X	X
River Park	X	X	X
Mildred Mitchell Bateman	X	X	X
Logan Regional Medical Center	X	X	X

Table 5.6-2 Clerkship Resources by Curriculum Year

As available, provide data from a single, recent academic year from either the independent student analysis, clerkship evaluations, or other source, on student satisfaction with the adequacy of educational/teaching spaces at inpatient and outpatient clinical sites used for the inpatient and outpatient portions of required clinical clerkships. Add rows for each relevant question, and indicate the year and source of these data.

Survey question	Year 3	Year 4
Adequacy of lecture halls and large group classroom facilities (Satisfied + Very Satisfied) (92.8% response rate among MS3 & MS4)	90.9%	93.3%
Adequacy of small group teaching spaces on campus (Satisfied + Very Satisfied) (92.8% response rate among MS3 & MS4)	80.3%	82.7%
Adequacy of educational / teaching spaces at hospitals (Satisfied + Very Satisfied) (92.8% response rate among MS3 & MS4)	89.4%	82.7%
Adequacy of student study space at the medical school campus (Satisfied + Very Satisfied) (92.8% response rate among MS3 & MS4)	68.2%	68.0%
Adequacy of student study space at hospitals / clinical sites (Satisfied + Very Satisfied) (92.8% response rate among MS3 & MS4)	75.7%	66.7%
Data year and source: 2017 Independent Student Analysis		

NARRATIVE RESPONSE

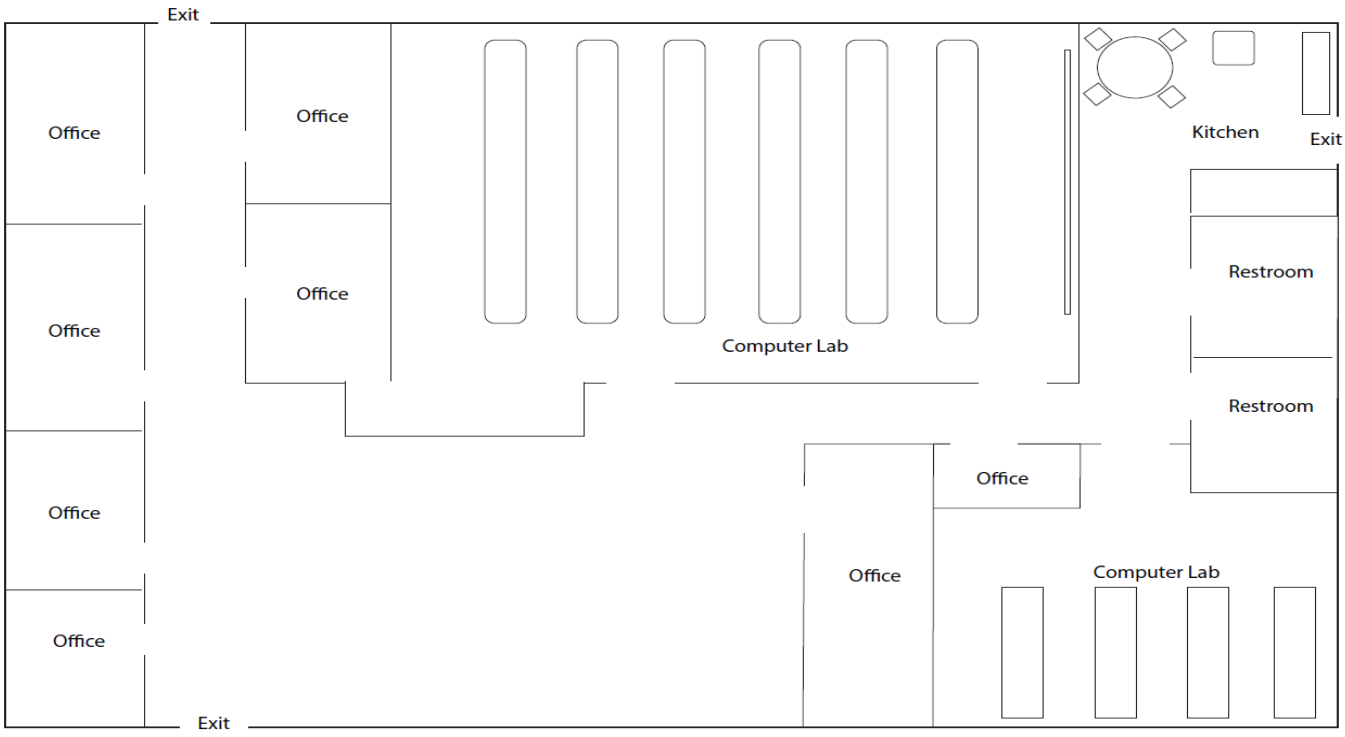
a. Comment on the adequacy of resources to support medical student education at each inpatient and outpatient site used for required clinical clerkships, including space for clinical teaching(conferences/rounds, access to library resources, and information technology (computers and internet access).

All inpatient and outpatient facilities where clinical experiences are required to take place have adequate resources (clinical teaching space, library access either directly and/or via the internet, information technology, and study space) to support the medical education program.

b. If problems with the availability of resources were identified at one or more inpatient or outpatient sites, provide the data by site and describe the steps being taken to address the identified problems.

There was a reduction in call and study space for students when Cabell Huntington Hospital underwent some renovations. Subsequently, secure swipe card access to a student lounge on the third floor of CHH was established. This lounge is stocked with snacks and beverages, has a charging station for electronic devices, a computer work station and a television. An additional call room designated for students has been opened as well.

Additionally, in 2019, an IT building will be converted into a student wellness and relaxation space (see rendering below). The building is centrally located between the Marshall University Medical Center and the Byrd Clinical Center for convenience to the students. The large computer lab with be converted into a recreation area with a pool table, ping pong, and a video gaming system. The smaller computer lab will remain as additional study space in addition to the offices that will be designated student study space.



1321 Hal Greer Boulevard
Huntington, West Virginia
3500 sqft

5.7 SECURITY, STUDENT SAFETY, AND DISASTER PREPAREDNESS

A medical school ensures that adequate security systems are in place at all locations and publishes policies and procedures to ensure student safety and to address emergency and disaster preparedness.

SUPPORTING DATA

Table 5.7-1 | Student Safety and Security by Curriculum Year

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with safety and security at all instructional sites. Add rows for each relevant question on the student survey, and/or for instructional sites.

Instructional Site/Survey Question	Year 1	Year 2	Year 3	Year 4
Adequacy of safety and security at instructional sites	95.0	98.8	92.4	96.0

NARRATIVE RESPONSE

a. Describe the security system(s) in place and the personnel available to provide a safe learning environment for medical students during the following times/situations. If the medical school has regional campuses, describe the security systems in place at each campus.

1. During regular classroom hours on campus

Main Campus – 10 officers
Byrd Clinical Center – 2 officers
VAMC – 4 VA police officers

2. Outside of regular classroom hours on campus

Main Campus – 6 officers
Byrd Clinical Center – 1 officer
VAMC—2 VA police officers

3. At clinical teaching sites

Security for all employees and students is the responsibility of the school leadership and the various facilities that students rotate through for their clinical experiences. Students are expected to wear the appropriate identification cards at all times. Students and residents are told during orientation that security will escort them to their vehicles after hours.

- Marshall University – The main campus at Marshall University is staffed by Marshall University Police and include 22 sworn police officers. All campus areas, including JCESOM, are patrolled 24 hours a day 7 days a week.
- Cabell Huntington Hospital has security guards on duty 24 hours a day 7 days a week.
- St. Mary's Medical Center has security guards on duty 24 hours a day 7 days a week.
- VA Medical Center has VA Police who patrol the facility 24 hours a day 7 days a week

b. Describe the protections available to medical students at instructional sites that may pose special physical dangers (e.g., during interactions with patients in detention facilities).

The students at JCESOM do not rotate through any correctional or detention facilities or any other locations that would pose special risks to the students.

c. Describe how medical students and faculty are informed of institutional emergency and disaster preparedness policies and plans and how they are notified in the case of emergency situations.

There is a red-highlighted link to the MUMC Emergency Response Protocol on the main JCESOM website. In addition, the main campus has an Emergency Protocol website available to our students which covers a wide variety of emergency situations (https://www.marshall.edu/emergency/emergency-management/) . However, it must be noted that during our self-study and review during this past year, it has been identified that overall disaster planning and documentation may not be as strong as it should be. In the coming year, administrators will work with the MUMC Safety Officer and core leadership to strengthen these plans, their documentation and their implementation as it relates to overall medical student safety. The Emergency Texting system, which JCESOM can utilize through Main Campus security, is currently the strongest, the quickest and most helpful tool to communicate with our medical students should there be a significant institutional threat.

SUPPORTING DOCUMENTATION

1. Copies of medical school or university emergency and disaster preparedness policies, procedures, and plans, as they relate to medical students, faculty, and staff.

See Appendix *5.7-1 Disaster Preparedness.docx*
Appendix *5.7-2 MUMC Emergency Response.pdf*

5.8 LIBRARY RESOURCES/STAFF

A medical school provides ready access to well-maintained library resources sufficient in breadth of holdings and technology to support its educational and other missions. Library services are supervised by a professional staff that is familiar with regional and national information resources and data systems and is responsive to the needs of the medical students, faculty members, and others associated with the institution.

SUPPORTING DATA

Table 5.8-1 | Student Satisfaction with the Library

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied (*aggregated) with the library.

GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
52.7	85.9	70.5	86.3	70.4	86.3

Table 5.8-2 | Student Satisfaction with the Library by Curriculum Year

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with the library and library resources. Add rows for each additional question on the student survey.

Survey Question	Year 1	Year 2	Year 3	Year 4
Ease of access to library resources and holdings	83.9	76.1	78.8	93.3
Quality of library support and services	77.7	70.2	77.2	89.4

Table 5.8-3 | Medical School Library Resources and Space

Provide the following information for the most recent academic year. Schools with regional campuses may add rows for each additional library.

Library/Campus (as appropriate)	Total current journal subscriptions (all formats)	# of book titles (all formats)	# of databases	Total user seating	# of public workstations
Health Science Library (MU Medical Center)	4661	2700	4	50	10

Table 5.8-4 | Medical School Library Staffing

Provide the number of staff FTEs in the following areas, using the most recent academic year. Schools with regional campuses may add rows for each additional library/campus.

Professional staff	Technical and paraprofessional staff	Part-time staff (e.g., student workers)
Recent retirement	2.0 FTE	3 (1.5 FTE)

NARRATIVE RESPONSE

a. List any other schools and/or programs served by the main medical school library.

There are no other schools or programs served by the main medical school library.

b. Describe whether members of the library staff are involved in curriculum planning, curriculum governance (e.g., by participation in the curriculum committee or its subcommittees), or in the delivery of any part of the medical education program.

Members of the library staff assist students trying to utilize electronic journals and databases that may be new to the student. Library staff are essential to the interlibrary loan process for obtaining journals we may not have in our collection. Library staff do not sit on the curriculum committee.

c. Describe medical student and faculty access to electronic and other library resources across all sites, including regional campuses. Are the library collections listed above available to medical students and faculty at sites separate from the medical school campus?

Students and faculty do have access to electronic journals and data-bases across all sites. All of the major clinical teaching sites provide access to the library's electronic journals and databases.

At sites separate from the medical campus, students and faculty do have access to electronic journals and databases through a link to an external portal.

d. Briefly summarize any partnerships that extend the library's access to information resources. For example, does the library interact with other university and/or affiliated hospital libraries?

The library does access other informational resources via an interlibrary loan process.

e. List the regular library hours. If there are additional hours during which medical students have access to all or part of the library for study, provide these as well.

Regular library hours are: Monday through Thursday 7 am to 9 pm, Friday 7 am to 3:30 pm, Saturday 10 am to 5 pm, and Sunday 1 pm to 10 pm.

Students and faculty have 24 hour/7 days per week swipe card access.

5.9 INFORMATION TECHNOLOGY RESOURCES/STAFF

A medical school provides access to well-maintained information technology resources sufficient in scope to support its educational and other missions. The information technology staff serving a medical education program has sufficient expertise to fulfill its responsibilities and is responsive to the needs of the medical students, faculty members, and others associated with the institution.

5.9 SUPPORTING DATA

Table 5.9-1 | Student Satisfaction with Computer Resource Center

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on percentage of respondents who were *satisfied/very satisfied* (aggregated) with the computer resource center.

GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
51.5	83.4	72.9	84.7	74.1	84.5

Table 5.9-2 | Student Satisfaction with IT Resources by Curriculum Year

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with computer/IT resources. Add rows for each additional question area on the student survey. Schools with regional campuses should specify the campus in each row.

Survey Question (Campus as applicable)	Year 1	Year 2	Year 3	Year 4
Accessibility of computer support	90.0	84.6	90.5	89.3
Adequacy of computer learning resources	87.7	77.4	83.1	90.7

Table 5.9-3 | Medical School IT Resources

Provide the following information based on the most recent academic year. Schools with regional campuses should specify the campus in each row.

Campus (if applicable)	How many computer classrooms are accessible to medical students?	How many computers or workstations are in each computer classroom?	Is there a wireless network on campus? (Y/N)	Is there a wireless network in classrooms and study spaces? (Y/N)	Are there sufficient electrical outlets in educational spaces to allow computer use? (Y/N)
MUMC	Lewis Tech HSL	11 10	Y	Y	Y
Byrd Clinical	Room 1009	20	Y	Y	Y
Byrd Biotechnology Science Center	Room 203 334 433	10 1 1	Y	Y	Y
Coon Education Building	Library Room 325 A Room 325 B Room 325 C Room 216 Histology Lab	5 1 1 1 1 1	Y	Y	Y

Table 5.9-4 | Medical School IT Services Staffing			
Provide the number of IT staff FTEs in the following areas, using the most recent academic year. Schools with regional campuses may add rows for each additional campus.			
Total # of IT Staff FTEs	Professional staff	Technical and support staff	Part-time staff (e.g., student workers)
17.5 FTE	8.0 FTE	8.0 FTE	2 (0.75 FTE)

NARRATIVE RESPONSE

a. If a wireless network is not available in classrooms and study spaces, describe the adequacy of internet access points in educational spaces (e.g., in large classrooms, small classrooms, student study space).

All large classrooms, small classrooms, student study space, and clinical setting have wireless access to the internet.

b. Describe the availability of telecommunications technology that links all instructional sites/campuses and how Information Technology (IT) services support the delivery of distributed education. Describe how medical students, residents, and faculty access educational resources (e.g., curriculum materials) from off-campus sites.

As we have no regional or distance learning campuses there is no need to provide distributed education. Students, residents, and faculty have access to our in house learning management system that we call the 'Curriculum Map'. The Curriculum Map is password protected but can be accessed via the internet from any location with internet access. The Curriculum Map contains the PowerPoint presentation, a video of the lecture, and any additional notes or instructions provided by the instructor. We also include a 'One Minute Feedback' option that allows students to evaluate an educational session in real time. This feature is managed and distributed via the Curriculum Map.

c. List any other schools or programs served by the IT services unit(s).

School of Pharmacy – 2 FTEs of Technical Staff and 0.2 FTEs of Professional Staff

d. How does the medical school assess the adequacy of information technology resources to support the educational program?

The Chief Information Officer (CIO) is very engaged with faculty, residents, and students. He provides educational sessions to the students and residents. He or a designee from IT attend all curriculum committee and subcommittee meetings. We assess IT resources via feedback from faculty and students on a regular basis. Approximately twice a year, the CIO will take the class officers to dinner in order to receive feedback directly.

e. Describe the ways that staff members in the IT services unit are involved in curriculum planning and delivery for the medical school. For example, do IT services staff assist faculty in developing instructional materials, developing or maintaining the curriculum database or other curriculum management applications, or learning to use the technology/A-V resources for on-site or distance education?

The CIO is considered an important part of the curriculum committee and frequently provides real time data that is used to modify and enhance the curriculum. He has designed a very robust in-house curriculum management system that is password protected and can be accessed remotely when needed. He maintains several 'dashboards' that provide real time data to the administration and faculty that is password protected. We also employ a graphic artist who provides teaching resources to faculty and students on an as needed basis.

5.10 RESOURCES USED BY TRANSFER/VISITING STUDENTS

The resources used by a medical school to accommodate any visiting and transfer medical students in its medical education program do not significantly diminish the resources available to already enrolled medical students.

5.10 SUPPORTING DATA

Table 5.10-1 | Visiting/Transfer Students

Provide the number of visiting and transfer students for each indicated academic year.

	2016-17	2017-18	2018-19
Transfer students into the second year (or into the preclerkship phase for a three-year program)	0	0	0
Transfer students into the third year (or into the beginning of the clerkship phase for a three-year program)	0	0	0
Transfer students into the fourth year (or the third year of a three-year program)	0	0	0
Visiting students completing required core clerkships*	11	16	5
Visiting students completing clinical electives and/or other courses	49	48	65

*These student were part of a partnership with St. George's, University of London that has seen been dissolved.

NARRATIVE RESPONSE

a. Describe how and by whom the following decisions are made:

1. The number of transfer students accepted into each year of the curriculum
2. The number of visiting students accepted for electives by departments

1. The number of transfer students accepted each year into the curriculum

The Executive Committee of the Admissions Committee addresses requests for transfers. We receive very few transfer requests and have not accepted a transfer student in a number of years.

2. The number of visiting students accepted for electives by departments

The number of visiting students who are accepted for electives is determined by the departments based on volume of JCESOM students who are utilizing these electives.

b. Describe how the medical school ensures that resources are adequate to support the numbers of transfer and visiting students who are accepted.

As described above, individual Departments may decide to offer visiting student experiences. However, the OME makes it clear that there must be clearly identified resources available within the Department above and beyond those necessary for our own students. The OME relies on student feedback regarding their own educational experiences to monitor the adequacy of this process.

SUPPORTING DOCUMENTATION:

See Appendix 5.10-1 *Notification of dissolution of partnership with St. George's, University of London*

5.11 STUDY/LOUNGE/STORAGE SPACE/CALL ROOMS

A medical school ensures that its medical students at each campus and affiliated clinical site have adequate study space, lounge areas, personal lockers or other secure storage facilities, and secure call rooms if students are required to participate in late night or overnight clinical learning experiences.

SUPPORTING DATA

Table 5.11-1 | Student Satisfaction with Study Space

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with study space.

GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
50.0	78.5	66.1	79.3	54.6	78.7

Table 5.11-2 | Student Satisfaction with Study Space by Curriculum Year

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with study space. Add rows for each additional question area on the student survey.

Survey Question	Year 1	Year 2	Year 3	Year 4
Adequacy of student study space	79.0	63.1	68.2	68.0
Adequacy of student study space at hospitals/clinical sites	54.3	52.4	75.7	66.7

Table 5.11-3 | Student Satisfaction with Relaxation Space

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with relaxation space.

GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
47.1	67.0	67.9	67.1	72.7	66.1

Table 5.11-4 | Student Satisfaction with Relaxation Space by Curriculum Year

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with available relaxation space. Add rows for each additional question on the student survey.

Survey Question	Year 1	Year 2	Year 3	Year 4
Adequacy of student relaxation space	81.4	70.2	74.2	80.0

Table 5.11-5 | Study Space

Place an "X" under each type of study space available at the listed locations. If a type of study space is not available at all affiliated hospitals or regional campuses, describe the locations where study space is available for these students.

	Library	Central campus classroom building(s)	Affiliated hospitals	Regional campus(es)
Small room used only for group study		X	X	
Classroom that may be used for study when free		X	X	
Individual study room	X			
Individual study carrel				
Individual open seating	X	X	X	

Table 5.11-6 | Call Room Availability		
List each hospital used for a required clinical clerkship at all locations, including regional campuses. Place a "Y" under each column as appropriate.		
Hospital	Call in one or more clerkships?	Call rooms available for medical students?
Cabell Huntington Hospital	Y	Y
St. Mary's Medical Center	Y	Y
Veteran's Affairs Medical Center	Y	Y
Mildred Mitchell Bateman Hospital	N	N
River Park Hospital	N	N

Table 5.11-7 Satisfaction with Secure Storage Space				
As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with the availability of secure storage space for students' belongings. Add rows for each additional question area on the student survey.				
Survey Question	Year 1	Year 2	Year 3	Year 4
Access to secure storage space for personal belongings at the medical school campus	98.8	98.9	92.4	81.4
Access to secure storage space for personal belongings at hospital/clinical sites	58.0	64.3	74.3	61.4

NARRATIVE RESPONSE

a. Describe the locations of lounge/relaxation space and personal lockers or other secure storage areas for student belongings on the central campus, at each facility used for required clinical clerkships, and on each regional campus (if applicable) for students in the pre-clerkship and clerkship portions of the curriculum. Note if the space is solely for medical student use or if it is shared with others.

In the pre-clerkship curriculum, the Byrd Biotechnology Science Center (BBSC), the Byrd Clinical Center (BCC), and the VAMC all have lockers available for storing personal belongings. First years share the space at the BBSC with undergraduate and graduate level science students. The BBC is for second year medical students only. At the VAMC, some space is shared with the pharmacy students. There is lounge and relaxation space in all three buildings. Additionally, in 2019, a separate 3,500 square foot building (detailed above) will be converted into a student wellness/relaxation center that will not be shared space.

In the clinical portions of the curriculum, all institutions have lounge and relaxation space. At the VAMC, there is a lounge on 2nd floor with seating/couch, eating table, a refrigerator stocked with snacks/meals (along with a smaller refrigerator for personal items), microwave oven and television which is shared with the residents and fellows. The lounge also contains a computer, telephone and desk. Library space including computer access are present within the main buildings. Locker/storage is provided in the team work room located on the 4th floor.

At CHH and SMMC, students share lounge space and secure storage with the residents of the team they are assigned to for each rotation. For example, at CHH, the pediatric service has a large resident working/conference room with a refrigerator and microwave. The space is connected to 3 call rooms, one of which is designated for students.

b. Describe the availability and accessibility of secure call rooms, if needed for overnight call, at each site used for required clinical clerkships.

While students usually work 12-hour shifts (either day or night) similar to the residents at our institution, some call rooms remain available as follows:

CHH – two call rooms are available one on the 3rd floor and one on 5th floor. These rooms are accessed by combination keypad locks and are adjacent to bathrooms with shower facilities.

SMMC – two call rooms are available for student use. They are accessed by combination keypad locks and are also adjacent to bathrooms with shower facilities.

VAMC – There is one secure call room reserved for students if needed for overnight call which is located on a patient care floor at this time. The room has an adjoined bathroom with shower that is accessible only from within the call room which is accessed by swipe card.

5.12 REQUIRED NOTIFICATIONS TO THE LCME

A medical school notifies the LCME of any substantial change in the number of enrolled medical students; of any decrease in the resources available to the institution for its medical education program, including faculty, physical facilities, or finances; of its plans for any major modification of its medical curriculum; and/or of anticipated changes in the affiliation status of the program's clinical facilities. The program also provides prior notification to the LCME if it plans to increase entering medical student enrollment on the main campus and/or in one or more existing regional campuses above the threshold of 10 percent, or 15 medical students in one year or 20 percent in three years; or to start a new or to expand an existing regional campus; or to initiate a new parallel curriculum (track).

SUPPORTING DATA

Table 5.12-1 | New Medical Student Admissions				
Provide the number of new medical students (not repeating students) admitted in each of the indicated academic years.				
AY 2014-15	AY 2015-16	AY 2016-17	AY 2017-18	AY 2018-19
79	75	83	75	83

SUPPORTING DOCUMENTATION

1. Provide any notifications made to the LCME of changes in medical student enrollment, curriculum, finances, clinical affiliations, and/or other institutional resources since the last full survey.

   JCESOM has not increased the class size above the threshold of 10% or 15 medical students in one year or 20% in three years.

STANDARD 6: COMPETENCIES, CURRICULAR OBJECTIVES, AND CURRICULAR DESIGN

The faculty of a medical school define the competencies to be achieved by its medical students through medical education program objectives and is responsible for the detailed design and implementation of the components of a medical curriculum that enable its medical students to achieve those competencies and objectives. Medical education program objectives are statements of the knowledge, skills, behaviors, and attitudes that medical students are expected to exhibit as evidence of their achievement by completion of the program.

SUPPORTING DOCUMENTATION

1. Provide a schematic or diagram that illustrates the structure of the curriculum for the year of the self-study. The schematic or diagram should show the approximate sequencing of, and relationships among, required courses and clerkships in each academic period of the curriculum. If the structure of the curriculum has changed significantly since the DCI and self-study were completed (i.e., a new curriculum or curriculum year has been implemented), include a schematic of the new curriculum, labeled with the year it was first introduced.

   See Appendix *6.0-1 Curriculum-at-a-Glance.pdf*

2. A schematic of any parallel curricula (tracks).

   Not Applicable

SUPPORTING DATA

Table 6.0-1 | Year/Academic Period 1 Instructional Formats

Using the most recently completed academic year, list each course from *year/academic period one* of the curriculum and provide the total number of instructional hours for each listed instructional format. Note that "small group" includes case-based or problem-solving sessions. Provide the total number of hours per course and instructional format. If "other" is selected, describe the other format in the text. Add rows as needed.

	Number of Formal Instructional Hours Per Course					
Course	Lecture	Lab	Small Group	Patient Contact*	Other	Total
MDC 710 – Elements of Medicine	77	2	15	0	59	153
MDC 711 – Structure and Function I	47	36	4	0	22	109
MDC 712 – Structure and Function II	86	16	9	0	53	164
MDC 713 – Structure and Function III	61	22	20	0	27	130
MDC 714 – Structure and Function IV	52	40	32	0	21	145
IDM 715 – Introduction to Clinical Skills	17	2	28	54	47	148
Total						849

Other includes: large group discussion, independent learning, case-based instruction, and peer teaching.

* Includes interactions with simulated patients

Table 6.0-2 | Year/Academic Period 2 Instructional Formats

Using the most recently-completed academic year, list each course from year/academic period two of the curriculum and provide the total number of instructional hours for each listed instructional format. Note that "small group" includes case-based or problem-solving sessions. Provide the total number of hours per course and instructional format. If "other" is selected, describe the other format in the text. Provide a definition of "other" if selected. Add rows as needed.

	Number of Formal Instructional Hours Per Course					
Course	Lecture	Lab	Small Group	Patient Contact*	Other	Total
MDC 750 – Principles of Disease	82	1	10	0	38	131
MDC 751 – Diseases & Therapeutics I	39	4	5	3	36	87
MDC 752 – Diseases & Therapeutics II	67	5	6	0	45	123
MDC 753 – Diseases & Therapeutics III	75	0	30	0	48	153
MDC 754 – Diseases & Therapeutics IV	66	0	14	0	35	115
MED 755 – Advanced Clinical Skills	11	0	4	55	49	119
Total						728

Other includes: practice-based learning, large group discussion, independent learning, case-based instruction, peer teaching, workshops, games, homework, videos, guided self-learning, and self-directed learning.

* Includes interactions with simulated patients

Table 6.0-3 | Year/Academic Period 3-4 Weeks/Clerkship Length and Formal Instructional Hours per Clerkship

Provide data from the most recently-completed academic year on the total number of weeks and formal instructional hours (lectures, conferences, and teaching rounds) for each required clerkship in years three-four of the curriculum. Provide a range of instructional hours if there is significant variation across sites. Note that hours devoted solely to patient care activities should NOT be included.

Clerkship	Total Weeks	Typical Hours per Week of Formal Instruction
Family Medicine	8	8 hours
Internal Medicine	8	8 hours
Obstetrics & Gynecology	8	8 hours
Neurology	4	4 hours
Pediatrics	8	8.5 hours
Psychiatry	4	8 hours
Surgery	8	4-10 hours
Emergency Medicine	2	0 hours
Choose one Sub internship		
Family Medicine	4	1.5 hours
Internal Medicine	4	10 hours
Obstetrics	4	10 hours
Orthopedics	4	5 hours
Pediatrics	4	5.5 hours
Psychiatry	4	9 hours
Surgery	4	4-10 hours
Choose one ICU rotation		
Medicine ICU	2	27 hours
Pediatric Critical Care	2	4.5 hours
Clinical Neonatology	2	4.5 hours
Surgical ICU	2	6-8 hours

NARRATIVE RESPONSE

a. Describe the general structure of the curriculum by year.

Our pre-clerkship curriculum is organ-system based, intentionally designed for double-pass over. In the first year, students complete a study of normal structure and functions of the human body with emphasis on anatomical sciences and the accompanying biochemical and physiological processes. A special emphasis is also placed on introduction to genetic basis of disease, biostatistics and approach to a patient (in the clinical skills course). In the second year curriculum, students focus on the pathophysiology of the disease process and appropriate therapeutics for common disorders of the organ-systems. Students also learn the organ-system physical exams, steps in differential and a comprehensive whole-body exam in the longitudinal Clinical Skills course.

Year 1—Year 1 consists of 1 block of Elements of Medicine (9 weeks), 4 blocks of Structure and Function (SF I – 5 weeks, SF II – 8 weeks, SF III – 6 weeks, SF IV – 6 weeks), and 4 credit hours of Introduction to Clinical Skills across the academic year. Summer electives are available between Years 1 and 2.

Year 2 – Year 2 consists of 1 block of Principles of Disease (11 weeks), 4 blocks of Disease and Therapeutics (D&T I – 6 weeks, D&T II – 7 weeks, D&T III – 8 weeks, D&T IV – 9 weeks), and 6 credit hours of Advanced Clinical Skills across the academic year.

Year 3 – Year 3 consists of five 8-week clerkships in Family Medicine, Internal Medicine, Obstetrics/Gynecology, Pediatrics, Surgery, and two 4-week clinical rotations in Psychiatry and Neurology.

Year 4 – Year 4 consists of a required 2-week Emergency Medicine rotation, 4 weeks of a Sub-internship in Family Medicine, Internal Medicine, Obstetrics, Orthopedics, Pediatrics, Psychiatry, or Surgery, one 2 week rotation of a selective ICU rotation in the Medical, Neonatal, Pediatric, or Surgical ICU, and 28 weeks of clinical rotation electives.

b. Provide a separate, brief description of each parallel curriculum ("track"). Include the following information in each description, and highlight the difference(s) from the curriculum of the standard medical education program:

1. The location of the parallel curriculum (main campus or regional campus)
2. The year the parallel curriculum was first offered
3. The focus of the parallel curriculum, including the additional objectives that students must master
4. The general curriculum structure (including the sequence of courses/clerkships in each curriculum year/phase)
5. The number of students participating in each year of the parallel curriculum

Not Applicable

6.1 PROGRAM AND LEARNING OBJECTIVES

The faculty of a medical school define its medical education program objectives in outcome-based terms that allow the assessment of medical students' progress in developing the competencies that the profession and the public expect of a physician. The medical school makes these medical education program objectives known to all medical students and faculty. In addition, the medical school ensures that the learning objectives for each required learning experience (e.g., course, clerkship) are made known to all medical students and those faculty, residents, and others with teaching and assessment responsibilities in those required experiences.

SUPPORTING DATA

Table 6.1-1 | Competencies, Program Objectives, and Outcome Measures

List each general competency expected of graduates, the related medical education program objectives, and the outcome measure(s) specifically used to assess students' attainment of each related education program objective. Add rows as needed.

General Competency	Medical Education Program Objective(s)	Outcome Measure(s) for Objective
Interpersonal and Communication Skills	Communicate effectively with patients, patients' families, colleagues, and other health care professionals.	MS1: Clinical Competency Exam (CCE) MS2: CCE, Peer to peer evaluations, MS3: CCE, Faculty/resident evaluation in clerkships MS4: Faculty/resident evaluation in clerkships
	Demonstrate collaborative teamwork skills and the ability to work effectively with other members of the healthcare team.	MS1: Interprofessional Education exercises (IPE) MS2: IPE exercises, MS3: CCE, Faculty/resident evaluation in clerkships MS4: Faculty/resident evaluation in clerkships
Medical Knowledge	Describe the normal structure and function of the human body and each of its major organ systems, across the lifespan.	Multiple choice questions in formative quizzes and in house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK
	Explain various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, behavioral, and traumatic) of major diseases and the ways in which they operate on the body (pathogenesis).	Multiple choice questions in formative quizzes and in house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK
	Describe how the altered structure and function (pathology and pathophysiology) of the body and its major organ systems are manifest through major diseases and conditions.	Multiple choice questions in formative quizzes and in house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK
	Describe the scientific principles underlying laboratory and radiologic diagnostic methodologies.	Multiple choice questions in formative quizzes and in house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK

	Identify the proximate and ultimate factors that contribute to the development of disease and illness, and, that contribute to health status within and across populations regionally, nationally, and globally.	Multiple choice questions in formative quizzes and in house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK
	Demonstrate knowledge of the basic principles of human behavior throughout the life cycle, including development during infancy, childhood, adolescence, adulthood, and end of life.	Multiple choice questions in formative quizzes and in-house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK Faculty/resident evaluations in the clinical years.
	Recognize the medical consequences of common societal problems.	Multiple choice questions in formative quizzes and in-house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK Faculty/resident evaluations in the clinical years.
	Apply the principles of pharmacology, therapeutics, and therapeutic decision-making to the care of an individual patient.	Multiple choice questions in formative quizzes and in house summative exams Multiple choice questions on subject and customized examinations for the NBME® Successful passage of USMLE® Step 1 and Step 2 CK Faculty/resident evaluations in the clinical years.
Patient Care / Clinical Skills	Obtain an accurate, age-appropriate medical history.	MS1: Note assessment in Introduction to Clinical Skills MS2: Note assessment in Advanced Clinical Skills MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
	Demonstrate proper technique in performing both a complete and symptom-focused examination, addressing issues of patient modesty and comfort.	MS1: Note assessment in Introduction to Clinical Skills MS2: Note assessment in Advanced Clinical Skills MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
	Perform routine technical procedures and tests under supervision and with minimal discomfort to the patient.	MS1: Note assessment in Introduction to Clinical Skills MS2: Note assessment in Advanced Clinical Skills MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
	Justify each diagnostic test ordered and management strategy proposed with regard to cost, effectiveness, risks, and complications, and the patient's overall goals and values.	MS1: Note assessment in Introduction to Clinical Skills MS2: Note assessment in Advanced Clinical Skills MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
	Apply clinical reasoning and critical thinking skills in developing a differential diagnosis and management plan.	MS1: Note assessment in Introduction to Clinical Skills MS2: Note assessment in Advanced Clinical Skills MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
	Apply the principles of pharmacology, therapeutics, and therapeutic decision-making to the care of an individual patient.	MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years

	Identify and incorporate into the care of patient's appropriate prevention strategies for common conditions.	MS1: Note assessment in Introduction to Clinical Skills MS2: Note assessment in Advanced Clinical Skills MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
	Identify when patients have life-threatening conditions and institute appropriate initial therapy.	MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years, Advanced Cardiac Life Support certification
	Sensitively address end-of-life issues with patients and their families, including do-not-resuscitate orders and pain management.	MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
Practice-Based Learning and Improvement	Demonstrate skills in retrieving, critically assessing, and integrating biomedical information into clinical decision-making.	MS1/MS2: CCE's MS3: Faculty/resident evaluation of students in clerkships MS4: Faculty/resident evaluation of student Successful passage of USMLE® Step 2 CS
	Discuss the basic principles of basic, clinical, and translational research and how this research is applied to patient care.	Research theme in the preclinical years
	Apply principles of patient safety and quality improvement to enhance patient care.	MS3/MS4: CCEs, Faculty/resident evaluation in the clinical years
Professionalism	Demonstrate honesty and integrity in all interactions with patients, their families, and colleagues.	Professionalism domains evaluated biannually in the preclinical curriculum, same domains evaluated on each clinical rotation
	Identify and apply theories and principles that govern ethical decision-making to the practice of medicine.	MS1/MS2: Ethics exams MS3/MS4: Faculty/resident evaluation in the clinical years
	Recognize and discuss the implications of conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine and in medical education and research.	MS1/MS2: Ethics exams MS3/MS4: Faculty/resident evaluation in the clinical years
	Protect patient privacy and confidentiality.	MS1/MS2: Ethics exams MS3/MS4: Faculty/resident evaluation in the clinical years
	Demonstrate personal accountability and admit professional mistakes openly and honestly with one's colleagues and instructors and critically evaluate these mistakes to promote professional development.	MS1/MS2: Ethics exams MS3/MS4: Faculty/resident evaluation in the clinical years
	Recognize unprofessional behaviors in one's self as well as in peers and their health professionals with whom one interacts and address these in a constructive manner.	Professionalism domains evaluated biannually in the preclinical curriculum, same domains evaluated on each clinical rotation

	Maintain personal health and well-being and achieve a balance between priorities of patient care and personal and professional development.	Professionalism domains evaluated biannually in the preclinical curriculum, same domains evaluated on each clinical rotation
	Provide culturally sensitive care to patients of diverse cultures and belief systems.	Professionalism domains evaluated biannually in the preclinical curriculum, same domains evaluated on each clinical rotation
	Develop empathetic, caring relationships with patients.	Standardized patient evaluations, demonstrates in clinical rotations
	Identify gaps in medical knowledge, clinical skills (including communication skills), and professionalism, and develop a strategy for self-improvement.	Professionalism domains evaluated biannually in the preclinical curriculum, same domains evaluated on each clinical rotation
	Actively seek and respond to feedback about professional performance.	Professionalism domains evaluated biannually in the preclinical curriculum, same domains evaluated on each clinical rotation
Systems-Based Practice	Use electronic and other information tools (e.g., including electronic health records and computer order entry) for systems-based patient care.	MS1/MS2: CCEs MS3/MS4: Faculty/resident evaluation in the clinical years
	Identify necessary elements for coordinated care of patients with complex and chronic diseases.	MS1/MS2: CCEs MS3/MS4: Faculty/resident evaluation in the clinical years
	Advocate for enhanced access to health care for members of underserved populations.	MS3/MS4: Faculty/resident evaluation in the clinical years
	Describe the principles underlying the delivery of high quality patient care and effective patient systems.	MS1/MS2: CCEs MS3/MS4: Faculty/resident evaluation in the clinical years
	Outline the roles of the various members of the healthcare team and describe how these roles can be integrated for optimal patient care.	MS1/MS2: IPE exercises MS3/MS4: Faculty/resident evaluation in the clinical years

NARRATIVE RESPONSE

a. Provide the year in which the current medical education program objectives were last reviewed and approved.

Program objectives were reviewed and approved in 2017.

b. Describe the process used to develop the most recent version of the medical education program objectives and link them to relevant competencies. Identify the groups that were responsible for development, review and approval of the most recent version of the medical education program objectives.

The current version of the program objectives were initially developed in 2012. The curriculum committee formed an ad hoc committee that included clerkship directors, preclinical block leaders, residency program directors and medical students. This committee used the six core competencies of the Accreditation Council on Graduate Medical Education as the framework upon which to build the program objectives. Upon completion of the ad hoc committee's work, program objectives were sent out to faculty and students for review and comment. Ultimately the program objectives were approved by the curriculum committee.

For the program objectives review in 2017, the curriculum committee used a large amount of student outcome data including national exam performance, program directors' feedback, feedback from recent graduates, current medical student input. All of these data were shared with faculty and students for their review. Very few areas were found to need improvement. The curriculum committee ultimately approved the medical education program objectives in their current form.

c. Describe how the medical school has identified specific outcome measures and linked them to each medical education program objective. How does the medical school ensure that the outcome measures selected are sufficiently specific to allow a judgment that each of the medical education program objectives has been met?

A significant proportion of the curriculum and of the assessment methods in Years 1 and 2 are designed to assess the medical knowledge of students. Student performance is monitored closely to identify students who may need additional assistance in achieving success at this time in the curriculum. Assessment methods include both formative and summative methodologies and the use of faculty-written and National Board of Medical Examiners subject and customized examinations, which permit the assessment of both student acquisition of knowledge and application of knowledge in complex experimental or clinical scenarios. Each block also explicitly assesses student professional behavior in small group settings such as case-based discussions or simulation activities. Expectations for student behavior are specifically stated in course syllabi and course guides and students who fail to meet these expectations may face disciplinary action, particularly if the inappropriate behavior is repetitive. Small group sessions also provide an opportunity for assessing students interpersonal and communication skills. Interprofessional groups and formative narrative assessments provide students with actionable suggestions for implementing behavioral change. The ultimate goal of these assessment methods is to ensure all students are aware of the behavioral expectations of the profession and to prepare them for experiences in the clinical setting. The Introduction to Clinical Skills course in Year 1 and Advanced Clinical Skills in Year 2 are designed to provide students with opportunities to learn and practice specific clinical skills, such as history-taking, physical examination, writing a clinical note, and interacting with patients (including both standardized patients and patients in outpatient and inpatient settings). Each student completes 18 formal Standardized Patient Encounters within the first two years and receives feedback on specific aspects of the encounter to again prepare them for these activities in clinical rotations.

Methods for student assessment in the clinical years are designed to ensure students attain all of the objectives included with each of the competencies. Medical knowledge is assessed both through direct observation within clerkships and by requirements for exceeding a minimum passing percentile on subject exams from the National Board of Medical Examiners (NBME®). Clinical skills are assessed through direct observation and on formal Standardized Patient Encounters at the end of each clerkship. Student behavior and attitudes, including professional behavior, are assessed on an ongoing basis throughout each year and in specific educational activities such as interprofessional events with the School of Pharmacy in which each student participates in Year 3. Interpersonal and communications skills are continuously assessed throughout Years 3 and 4, and student use of educational and system resources is assessed in formal and informal clinical settings. The Academic and Professionalism Standards Committee has set minimum expectations for student performance in each of the clerkships and develops individuals plans for the remediation of any component of the assessment system should that be necessary. For example, students who underperform on either Standardized Patient Encounters or NBME® examinations are required to repeat these activities to

demonstrate attainment of goals, and more severe outcomes, including repetition of clerkships, or an academic year, or dismissal, which may be implemented if circumstances require. National standards, such as those available for subject examinations from the NBME®, are used where available to establish guidelines for completion of expectations. These standards are regularly revisited to ensure students are maintaining a level of performance expected of medical school graduates.

d. Describe how medical education program objectives are disseminated to each of the following groups:

1. Medical students
2. Faculty with responsibility for teaching, supervising, and/or assessing medical students
3. Residents with responsibility for teaching, supervising, and/or assessing medical students

1. Medical students

Educational program objectives are available on the Office of Medical Education webpage. They are incorporated into the syllabus for every course or clerkship. Course directors and clerkship directors review educational program objectives with the students at the beginning of each course or clerkship.

2. Faculty with responsibility for teaching, supervising, and/or assessing medical students

Faculty have access to the program objectives on the Office of Medical Education webpage and in copies of the syllabus of courses in which they participate. Additionally, medical education program objectives are discussed frequently at general faculty meetings, department faculty meetings, Curriculum Committee meetings, and meetings of the subcommittees of the Curriculum Committee.

3. Residents with responsibility for teaching, supervising, and/or assessing medical students

Medical education program objectives are reviewed with all residents during their orientation. Program objectives are available to all residents on the Office of Medical Education webpage. They are also reviewed with the residents by the clerkship director annually.

e. Describe how learning objectives for each required course and clerkship are disseminated to each of the following groups:

1. Medical students
2. Faculty with responsibility for teaching, supervising, and/or assessing medical students in that course or clerkship
3. Residents with responsibility for teaching, supervising, and/or assessing medical students in that course or clerkship

Also see the response to element 9.1

1. Medical students

Course and clerkships learning objectives are included in the syllabus of each course or clerkship. Syllabi are available online through the medical school's academic portal. All courses and clerkships review the specific learning objectives and the beginning of the course.

2. Faculty with responsibility for teaching, supervising, and/or assessing medical students in that course or clerkship

Course and clerkship objectives are reviewed with faculty annually at a department meeting and reviewed on an as needed basis throughout the remainder of the year. The course or clerkship syllabus is available to faculty online through the academic portal. The link to course or clerkship specific objectives is included in the evaluation form in the electronic New Innovations evaluation system.

3. Residents with responsibility for teaching, supervising, and/or assessing medical students in that course or clerkship

Course and clerkship directors review course specific objectives with the residents on an annual basis. Course and clerkship syllabi are available to residents through the academic portal. The link to course or clerkship specific objectives is included in the evaluation form in the electronic New Innovations evaluation system.

6.2 REQUIRED CLINICAL EXPERIENCES

The faculty of a medical school define the types of patients and clinical conditions that medical students are required to encounter, the skills to be performed by medical students, the appropriate clinical settings for these experiences, and the expected levels of medical student responsibility.

SUPPORTING DATA

Table 6.2-1 | Required Clinical Experiences

For each required clinical clerkship or clinical discipline within a longitudinal integrated clerkship, list and describe each patient type/clinical condition and required procedure/skill that medical students are required to encounter, along with the corresponding clinical setting and level of student responsibility.

Clerkship/Clinical discipline	Patient type/ Clinical condition	Procedures/Skills	Clinical setting	Level of student responsibility*
Family Medicine	Chronic Pain Management Common Skin Rashes Diabetes Mellitus Fatigue Gastroesophageal Reflux Disease - GERD Headache Hip Fracture / Falls Hypertension Hyperthyroidism Hypothyroidism Obesity Osteoarthritis Osteoporosis Sexually Transmitted Disease Sinusitis Sleep Disorders Tobacco Abuse / Smoking Cessation Urinary Disorders Urinary Tract Infection Well Adult Visit	Breast exam Electrosurgery/Cryo of skin lesion Intradermal injection Subcutaneous injection Intramuscular injection Joint aspiration KOH prep Skin biopsy	Hospital/ Clinic	Knows How: Joint Aspiration Skin Biopsy Shows How: Breast Exam Electrosurgery/Cryo of Skin Lesion Intradermal Injection Subcutaneous Injection Intramuscular Injection KOH Prep
Internal Medicine	Abdominal Pain Acute Renal Failure Altered Mental Status Anemia - Adult Back Pain Cerebrovascular Accident - CVA Chest Pain Chronic Obstructive Pulmonary Disease - COPD Common Cancers Congestive Heart Failure Cough Dyslipidemia Dysrhythmia Dysuria End of Life	Blood Culture and Sensitivity Interpretation Coagulation Studies (PT, PTT, INR) Complete Chemistry Profile Urinalysis, Dipstick, Urine Culture and Sensitivity Peripheral Blood Smear Complete Blood Count and Differential EKG lead placement, performance, and interpretation Abdominal Paracentesis	Hospital/ Clinic	Knows how: Abdominal Paracentesis Echocardiography Exercise stress test Flexible Bronchoscopy Thoracentesis Spirometry Ventilator Management Shows how: Blood Culture and Sensitivity Interpretation Coagulation Studies (PT, PTT, INR) Complete Chemistry Profile

	Health Promotion HIV Infection Hyperkalemia Hypernatremia Hypokalemia Hyponatremia Joint Pain Myocardial Infarction Pneumonia Seizures - Adult Shock - Adult Thromboembolic Disease	Echocardiography Exercise stress test Flexible Bronchoscopy Thoracentesis Spirometry Ventilator management		Urinalysis, Dipstick, Urine Culture and Sensitivity Peripheral Blood Smear Complete Blood Count and Differential
Obstetrics & Gynecology	Abnormal Uterine Bleeding Annual Exam – No Disease Antepartum Bleeding (not First Trimester) Placenta Previa & Placental Abruption Cervical Dysplasia and/or Neoplasia Chronic Pelvic Pain: Endometriosis & Dysmenorrhea PID (STDs) Contraception & Sterilization First Trimester Bleeding – Spontaneous Abortion & Ectopic Pregnancy Gynecological Exam (new patient) Hypertensive Disorders in Pregnancy Intrapartum with Delivery Menopause Normal Antepartum OB Exam (new patient) Vulvovaginitis	Breast exam Antepartum & Intrapartum Fetal Assessment Cesarean Section Hysterectomy Hysteroscopy w/ Dilation & Curettage Laparoscopy Newborn Circumcision Pelvic Exam with Pap Smear Pelvic Exam with Wet Pap Pelvic Exam with Cervical Culture Pelvic Exam, Obstetrical Perineal Laceration Repair Tubal Sterilization Ultrasound, Obstetrical Vaginal Delivery, Normal Spontaneous	Hospital/ Clinic OR	Knows how: Cesarean Section Hysterectomy Hysteroscopy w/ Dilation & Curettage Laparoscopy Newborn Circumcision Perineal Laceration Repair Tubal Sterilization Ultrasound, Obstetrical Vaginal Delivery, Normal Spontaneous Shows how: Breast Exam Antepartum & Intrapartum Fetal Assessment Pelvic Exam with Pap Smear Pelvic Exam with Wet Prep Pelvic Exam with Cervical Culture Pelvic Exam, Obstetrical
Pediatrics	Developmental and Behavioral: Failure-to-Thrive Normal and Abnormal Puberty School problems (ADD/LD) Enuresis, Encopresis Sleep disturbances Chronic illness Family dysfunction Genetics/Environment: Chromosomal (Down, Turner) Congenital Heart Disease Lead, TB Cystic Fibrosis	Newborn examination Newborn hip examination Throat swab	Hospital/ Clinic	Shows how: for all required procedures/skills

	Immune deficiencies Social Morbidities: Accidents (MVA, head injuries) Child, sexual abuse Substance abuse Eating disorders Suicide/depression Sexually transmitted diseases AIDS Homelessness Emergencies: Distress The airway (foreign body, Epiglottis, Croup, Bronchiolitis, and Asthma) Dehydration Seizures Neonatology: Prenatal factors (fetal alcohol, prenatal drug exposure) Genetic disorders (Down, Turner) PKU, Galactosemia, Hypothyroidism Infections (Sepsis and Meningitis)			
Psychiatry	Attention-Deficit Hyper Active Disorder Intellectual Disability Autism Spectrum Disorder Bipolar Disorder Anxiety Disorders: Generalized Anxiety Disorder Panic Disorder Social Anxiety Disorder Obsessive-Compulsive Disorder: Obsessive-Compulsive Disorder Hoarding Disorder (OCD) Disruptive, Impulse-Control, and Conduct Disorders: Conduct Disorder Oppositional Defiant Disorder Antisocial Personality Disorder Somatic Symptom and Related Disorders: Somatic Symptom Disorder Illness Anxiety Disorder Conversion Disorder Delirium Personality Disorders (any subtype) Neurocognitive Disorders (any subtype) Schizophrenia Spectrum Disorders: Schizophrenia Schizoaffective Disorder Maltreatment and Neglect: Child abuse or neglect Elder abuse or neglect Spouse or Partner abuse or neglect	Addiction Group Observation Psychotherapy Observation Mental Status Examination Performance Psychological Testing Observation Suicide Assessment Radiology Exposure	Hospital/ clinic	Shows how: Addiction Group Psychotherapy Psychological Testing Knows how: Mental Status Examination Suicide Assessment

	Opioid Use Disorder Trauma and Stressor Related Disorders: Post-Traumatic Stress Disorder Acute Stress Disorder Alcohol Use Disorder Depressive Disorders: Major Depressive Disorder Persistent Depressive Disorder Premenstrual Depressive Disorder Disruptive Mood Dysregulation Disorder Tic Disorders: Persistent Motor or Vocal Tic Disorder Tourette's Disorder			
Neurology	Cerebrovascular Disease, Cerebral Infarction Nutritional deficiencies Toxic injuries Occupational disorders Infection involving the nervous system, eyes, and ears Degenerative and demyelinating disorders	Comprehensive Neurological Exam Neurologic Examination with Altered Level of Consciousness	Clinic/Hospital	Shows how: Comprehensive Neurological Exam Neurologic Examination with Altered Level of Consciousness
Surgery	Hernia Bowel Obstruction Biliary Tract Disease Pancreatitis Acute Surgical Abdomen Lower Colon Cancer/GI Bleeding Breast Disease/Cancer Trauma Vascular Shock Malnourished GERD Anorectal Disease Hematemesis (Upper) Endocrine Disorder	Arterial Blood Drawing Nasogastric Tubes Laceration Repair Rectal Physical Examination Thoracentesis Urologic Catheterization Peripheral Venous Cannulation	Hospital/ Clinic OR	

* Select the specific level of student responsibility that is expected of all students.

NARRATIVE RESPONSE

a. Provide a definition for the terms used under "Levels of student responsibility" in table 6.2-1. That definition should clearly describe what the students are expected to do in that situation (e.g., observe).

The levels of responsibility are defined several ways. The easiest dichotomy is either observed or performed. Another mechanism for student responsibility would be Miller's pyramid Know, Knows How, Shows How,
or Does to represent increasing levels of responsibility. When you combine the two the observed would be Knows or Knows How while performed would be Shows How or Does.

b. Describe how and by what individuals/groups the list of required clinical encounters and procedural skills was initially developed, reviewed, and approved and how the clinical setting and level of student responsibility for each encounter and skill were determined. Note if the curriculum committee or other central oversight body (e.g., a clerkship directors' committee) played a role in reviewing and approving the list of patient types/clinical conditions and skills across courses and clerkships.

The list of required clinical encounters and procedural skills originates with the MS3/MS4 Clinical Clerkship committee. Clerkship directors draw upon their discipline specific medical student educator groups (e.g. Committee on Medical Student Education in Pediatrics-COMSEP) for guidance. Those data combined with the local patient population mix were used to determine the list of required clinical encounters. As far as the required procedure list, similar data from the specialty specific student educator groups were used to recommend the final list. The MS3/MS4 Clinical Clerkship Committee reviewed and approved the final list which was ultimately approved by the curriculum committee. Both lists are reviewed and updated annually. An example of a recent change was the requirement for a clinical encounter with a drug addicted patient in the face of the national opiate crisis.

c. Describe which individuals and/or groups developed the list of alternatives designed to remedy gaps when students are unable to access a required encounter or perform a required skill. How was the list developed? Which individuals and groups approved the list?

The alternatives list was developed by evaluating the availability of various procedures in our patient population. Given the opportunistic nature of patient encounters, procedures that were considered to be absolutely necessary were selected to have alternative modalities available to ensure each student had to the opportunity to watch a video demonstration or perform the procedure in a simulated environment. The list of alternative modalities was recommended and approved by the same process as the list of required procedures

d. Describe how medical students, faculty, and residents are informed of the required clinical encounters and skills.

Medical students are informed about the required clinical encounters and skills during orientation to the clinical years at the beginning of the third year. Students are reminded of the list at the beginning of each clerkship as part of the review of the syllabus. Clinical encounter and procedure lists are reviewed at the mid-point evaluation on each clerkship and again at completion of the clerkship. The list is also available on the Year 3 resource webpage.

Faculty are informed about the required clinical encounters annually at department faculty meeting by the clerkship directors. The list is available on line on the Year 3 resource webpage.

Residents are informed at orientation to residency. The clerkship director reminds the residents of the requirements annually at departmental resident meetings. The list is available online on the Year 3 resource webpage.

6.3 SELF-DIRECTED AND LIFE-LONG LEARNING

The faculty of a medical school ensure that the medical curriculum includes self-directed learning experiences and time for independent study to allow medical students to develop the skills of lifelong learning. Self-directed learning involves medical students' self-assessment of learning needs; independent identification, analysis, and synthesis of relevant information; and appraisal of the credibility of information sources.

SUPPORTING DATA

Table 6.3-1 | Self-Directed Learning				
Provide data from the independent student analysis by curriculum year on student satisfaction (satisfied/very satisfied) with the following. Add rows for each additional question on the student survey.				
Survey Question	Year 1	Year 2	Year 3	Year 4
Opportunities for self-directed learning in the first/second years	81.0	94.1	96.9	72.3
Overall workload in the first/second years	82.5	91.7	86.1	92.0

NARRATIVE RESPONSE

a. Describe the learning activities, and the courses in which these learning activities occur during the pre-clerkship phase of the curriculum, in which students engage in <u>all</u> of the following components of self-directed learning as a unified sequence (use the names of relevant courses from Tables 6.0-1 and 6.0-2 when answering):

1. Identify, analyze, and synthesize information students believe is relevant to their learning needs
2. Assess the credibility of information sources
3. Share the information with their peers and supervisors
4. Receive feedback on their information-seeking skills

#	Y	Course	Learning Activity (s)	Identify, analyze, and synthesize information students believe is relevant to their learning needs	Assess the credibility of information sources	Share the information with their peers and supervisors	Receive feedback on their information-seeking skills
1	MS-1	MDC710-Elements of Medicine	Four, case assignments	The students must decide among their group what aspects of patient care need to be researched regarding the disease during the first session for presentation at the second session. They must also assign these tasks among the group.	During the process of diagnosis and acquisition of disease-related information, the students will have access to Pubmed,	During the second session the students present information with the peers of the group and the facilitator	The facilitator will provide feedback during the second session and make suggestions during the first session. Feedback during the first session will consist of suggestions regarding the diagnosis and a clinical perspective to patient

					Uptodate and widely available data sources to compare credibility		presentation. Feedback during the second sessions will consist of assessment of information gathering skills.
2	MS-1	MDC710-Elements of Medicine	Stem cell case exercise	The students must identify the objectives of the case to be able answer the attached questions. The report has 4 questions that are to be answered	The students did a PubMed search to find one article on Hurler's syndrome that described the use of stem cells to treat the disease. The citation was included in the report.	Students shared their findings with the instructor	Instructor grades the exercise and provides feedback to the students on their information gathering skills.
3	MS-1	MDC711- SFI	Neurophysiology self-directed learning exercises	Each of these exercises includes a set of clinical problems. The problems include either a case, disease, or drug description. The exercises are designed so that they include scenarios related to, but not actually covered in prior course work. The intent is to challenge students with material that reinforces their learning in the	Students have free access to any and all available online resources and discuss the credibility of their recourse amongst their group. The students are instructed to provide	Students shared their findings with the instructor and their peers in the small group setting	The instructor grades the answers, checks the sources and provides written feedback to all the students in each group (by email). Grading is based on both the answers submitted (90% of points) and the sources given (10% of point)

				course, while also requiring them to seek out additional knowledge on their own. The students are given the problem set and instructions prior to the exercise. During the exercise, the students meet in small groups and prepare a set of answers to questions about the clinical problems	a source for each of the answers.		
4	MS -1	MDC71 1- SFI	Synapse as a therapeutic target	Students, in groups, work through a series of problems to identify the synaptic targets and mechanisms of action of various neuropharmacolog ical agents. They must also identify most common application of these drugs and reasons for their efficacy in these disorders.	Students have free access to any and all available online resources and discuss the credibility of their recourse amongst their group.	Students shared their findings with the instructor and their peers in the small group setting	The instructor facilitates the in-class discussions on these problems and provides feedback on the information gathering skills of the students.
5	MS -1	MDC71 4- SFIV	GI case assignments	The students must decide among their group what aspects of patient care need to be researched regarding the diseases. Students must research aspects of each disease to answer the accompanying questions and	During the process of diagnosis and acquisitio n of disease-related informatio n, the students will have access to Pubmed,	Students will answer the attached questions and share their conclusions with the instructor	Students receive feedback from the instructor regarding the clarity and quality of information gathered and the credibility of the references

				must provide references.	Uptodate and widely available data sources to compare credibility		
6	MS-1	MDC715- ICS	Dermatology Student Initiative	Students complete a punch biopsy on a clinically suspicious lesion following a didactic on the skin exam and a demonstration and simulation of a punch biopsy. Once the biopsy is obtained, students decide on a clinical diagnosis. Once the diagnosis is determined, the students develop a case. The case includes the history, physical exam, assessment, diagnosis, treatment, and medical facts about the skin lesion.	The students must determine what facts are needed and use different sources to obtain the information. The sources and case must be submitted for grading and feedback	The students will present a condensed version of the case to their peers, the dermatologist, and dermatopathologist for feedback	Students receive feedback from the instructor regarding the clarity and quality of information gathered and the credibility of the references
7	MS-2	MDC750- Principles of disease	Modern cancer chemotherapy	In their small groups, students choose ONE of three therapies and use resources at their disposal to discover how the therapy works to treat cancer, the results of the clinical trials that provided evidence that it was effective or not effective, and what the potential	Students have free access to any and all available online resources and discuss the credibility of their resources amongst their group.	The collective report is shared with the instructor and the course director(s)	Students receive feedback from the instructor on five criteria: completeness of information; correctness of information; clarity and quality of the written report; credibility of the references; and thoughtful application of background material to the question

				drawbacks and side effects to this therapy are. Students must provide references for their report.			
8	MS-2	MDC750- Principles of disease	Viral immunology cases	In their small groups, students analyze clinical scenarios and explore treatment options for the diseases	Students have free access to any and all available online resources and discuss the credibility of their resources amongst their group.	The collective report is shared with the instructor and the course director(s)	Students are graded on the correctness of the information (quiz) and receive feedback on their information gathering skills
9	MS-2	MDC751- DTI	Ortho-Videos	Students record a 90 seconds video on ONE of the four cases in orthopedics. They must explore all facets of the case and record the video as if they were explaining it to a patient.	Students have free access to any and all available online resources and must assess the credibility of their sources.	The video is shared with the instructor and the course director(s)	Students receive a grade and feedback from the instructor on the completeness of the study and the credibility of their resources
10	MS-2	MDC752- DTII	Sleep hygiene study	Students write a sleep hygiene plan for the patient described in a case. Students must find at least 10 patient behaviors which do not overlap that you would recommend changing. Students must list their references.	Students have free access to any and all available online resources and must assess the credibility of their sources.	The collective report is shared with the instructor and the course director(s)	Students receive feedback from the instructor on the completeness of the study and the credibility of their references

11	MS-2	MDC752- DTII	Cases on sexual disorders	Students work through a series of cases on sexual disorders and address patient concerns along following lines: Partner factors (partner's sexual problems; partner's health status) Relationship factors (communication; discrepancies in desire for sexual activity) Individual vulnerability factors (body image; history of sexual or emotional abuse) Psychiatric comorbidity (depression; bipolar disorder; anxiety) Stressors (job loss; bereavement) Cultural or religious factors (prohibitions against sexual activity or pleasure; attitudes toward sexuality) Medical factors (medical comorbidities; acute illness)	Students have free access to any and all available online resources and must assess the credibility of their sources.	The collective report is shared with the instructor and the course director(s)	Students receive feedback from the instructor on the completeness of the study and the credibility of their references.
12	MS-2	MDC752- DTII	Cases on eating disorders	Students work through a series of cases on eating disorders and answer the attached set of questions, ranging from differential diagnosis to management strategies	Students have free access to any and all available online resources and must assess the credibility of their sources.	The collective report is shared with the instructor and the course director(s)	Students receive feedback from the instructor on the completeness of the study and the credibility of their references.

13	MS-2	MDC752- DTII	Self-study alcohol use disorder(s)	Students select ONE of nine alcohol-related conditions, including brain development, social impact, and withdrawal complications and prepare a 500-word study on the selected topic	Students have free access to any and all available online resources and must assess the credibility of their sources.	The collective report is shared with the instructor and the course director(s)	Students receive feedback from the instructor on the completeness of the study and the credibility of their references.
14	MS-2	MDC753-DTIII	Self-study in cardiovascular, renal and respiratory medicine	Students, in groups of 2, pick one of the three cases, ARDS, diabetic nephropathy or obstructive sleep apnea and cardiovascular diseases. Their assignment is to research and discuss: 1. Epidemiology of the disease at the state, national and global level. 2. Pathobiology of the disease process, including discussion of alterations of normal structure or function, molecular mechanisms of the disease process, and therapeutic targets. 3. Briefly discuss presenting symptoms and signs of the disease and	Students have free access to any and all available online resources and discuss the credibility of their recourse amongst their group	The collective report is shared with the instructor and the course director(s)	Students receive feedback from the instructor on four criteria: completeness of information; correctness of information; clarity and quality of the written report; credibility of the references. This is required, formative exercise that is not graded.

				comment on the likely differential. 4. Briefly discuss traditional management strategies for the disease. 5. On a separate page, construct a model summarizing all the above steps. 6. Write one formative, multiple choice question on the subject. The question stem must include a clinical vignette and have five appropriate choices to choose from. Provide rationale for each choice, including the correct and incorrect choices(s). *None of these conditions are comprehensively covered in the curriculum and are only referenced in other talks.			
15	MS-2	MDC75 4-DTIV	Self-study in the differential of abdominal pain	Students, in groups, will explore and elaborate various aspects of "approach to a patient with	Students have free access to any and all available online resources	The collective report is shared with the instructor and the course director(s)	Students receive feedback from the instructor on four criteria: completeness of information; correctness of

			abdominal pain". Following a case-study, the students will work together to: List at least ten differential diagnoses for abdominal pain. Divide your diagnoses by typical location in the abdomen and by anatomical system involved. Choose four diagnoses from at least three different systems. For each diagnosis explain how the diagnosis is distinguished from other causes of abdominal pain. Consider epidemiology and typical findings in the presentation and history, physical exam, laboratory test results, and imaging. Give the most common treatment or treatments for each diagnosis. List your references. You may not reference Power Points or course handouts.	and discuss the credibility of their recourse amongst their group		information; clarity and quality of the written report; credibility of the references.

b. Referring to the sample weekly schedules requested below, describe the amount of unscheduled time in an average week available for medical students to engage in self-directed learning and independent study in the pre-clerkship phase (first two years) of the curriculum.

Unscheduled time: students, on average, are rarely in-class for more than 28 hours/week during the preclinical phase of their education. More commonly, students participate in didactic (lecture), independent learning, labs/clinical skills, and assessment activities for about 20-22 hours/week averaged over the length of the course. This leaves about 18-20 hours/week for self-directed study. This does not include evening time or weekends.

c. Note if medical students in the pre-clerkship phase of the curriculum have required activities outside of regularly-scheduled class time, such as assigned reading or online modules that include information to prepare them for in-class activities. Do not include time for regular study or review. Estimate the average amount of time students spend in such required activities and how this "out-of-class" time is accounted for in calculating student academic workload.

All required activities, outside of the regularly scheduled class time, must have appropriate time blocked on the curriculum MAP (8:00 AM-5:00 PM) to allow for student preparation and prevent double scheduling. On average, students spend about 4-6 hours/week, averaged over the length of the course, in these required, out of class activities. This time is lower in the MS1 academic year and greater in the MS2 academic year. Most of the required, out-of-class activities entail review of relevant content from the MS1 year.

d. Summarize the content of any policies/guidelines covering the amount of time per week that students spend in required activities during the pre-clerkship phase of the curriculum. Note whether the policy addresses only in-class activities or also includes required activities assigned to be completed outside of scheduled class time. How is the effectiveness of the policy/guideline(s) evaluated?

There are no specific policies addressing student workload in the PreClerkship curriculum however it is mentioned in the student workload policy. The Curriculum Committee does provide oversight and guidelines on the matter. Time spent in required activities, either in or out of class, are clearly documented on the Academic Dashboard and submitted to the CC during annual course reviews. The CC provides feedback on pedagogy and assessments in the course and on the amount of time spent/week on required activities, averaged over the length of the course.

e. Describe the frequency with which the curriculum committee and/or its relevant subcommittee(s) monitor the academic workload of medical students and their time for independent study in the pre-clerkship phase of the curriculum.

The Associate Dean of Medical Education monitors the curriculum MAP and ensures adherence to student workload guidelines. MS1 and MS2 subcommittees routinely monitor student workload during the preclinical years. The Curriculum Committee review student workload during course reviews, annually.

SUPPORTING DOCUMENTATION

1. Sample weekly schedules that illustrate the amount of time in the pre-clerkship years of the curriculum that medical students spend in scheduled activities.

See Appendix 6.3-1 MS1-MS2-Week-5-Fall-2018.pdf

2. Formal policies or guidelines addressing the amount of scheduled time during a given week during the pre-clerkship phase of the curriculum.

See Appendix *6.3-2 Scheduled Time During Pre-Clerkship.docx*

6.4 INPATIENT/OUTPATIENT EXPERIENCES

The faculty of a medical school ensure that the medical curriculum includes clinical experiences in both outpatient and inpatient settings.

SUPPORTING DATA

Table 6.4-1 | Percent Total Clerkship Time

Provide the percentage of time that medical students spend in inpatient and ambulatory settings in each required clinical clerkship. If clerkship names differ from those in the table, substitute the name used by the medical school. If the amount of time spent in each setting varies across sites, provide a range.

	Percentage of Total Clerkship Time	
	% Ambulatory	% Inpatient
Family medicine	87.5%	12.5%
Internal medicine	50%	50%
Neurology	75%	25%
Ob-Gyn	60%	40%
Pediatrics	40%	60%
Psychiatry	40%	60%
Surgery	25-30%	70-75%

NARRATIVE RESPONSE

a. Describe how the curriculum committee or other authority for the curriculum reviews the balance between inpatient and ambulatory experiences to ensure that medical students spend sufficient time in each type of setting to meet the objectives for clinical education and the expectations for required clinical encounters.

In patient and ambulatory experiences to ensure that medical students spend sufficient time in each type of setting to meet the objectives for clinical education and the expectations for required clinical encounters.

Monitoring Clinical Encounters: the student record of the required clinical encounters is monitored at the time of the mid-rotation formative assessment and again before completion of the eight-week rotation. Any deficiencies are addressed and remediated with alternative instructional methods such as simulation, cases, and/or online modules. The outcomes may be the removal of the required encounter (if it is inappropriate), additional instruction to the student, increase in exposure to the clinical setting, and/or a change in the instructional method, perhaps from a live clinical encounter to simulation or a module.

Monitoring Balance of Inpatient/Outpatient Experiences: this has been monitored by the Curriculum Committee during annual review of the clerkship (course report). It is now being included in the clerkship review by Curriculum Evaluation Committee, reported to the Curriculum Committee.

6.5 ELECTIVE OPPORTUNITIES

The faculty of a medical school ensure that the medical curriculum includes elective opportunities that supplement required learning experiences and that permit medical students to gain exposure to and deepen their understanding of medical specialties reflecting their career interests and to pursue their individual academic interests.

SUPPORTING DATA

Table 6.5-1 | Required Elective Weeks

Provide the number of required weeks of elective time in each year of the curriculum.

Year	Total required elective weeks
1	0
2	0
3	0
4	28

NARRATIVE RESPONSE

a. Describe the policies or practices that require or encourage medical students to use electives to pursue a broad range of interests.

It is a graduation requirement of JCESOM that all students complete 28 weeks of elective clerkships during the fourth year.

6.6 SERVICE-LEARNING

The faculty of a medical school ensure that the medical education program provides sufficient opportunities for, encourages, and supports medical student participation in service-learning and community service activities.

SUPPORTING DATA

Table 6.6-1 Satisfaction with Opportunities for Service Learning				
As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with the availability of service learning. Add rows for each additional question area on the student survey.				
Survey Question	Year 1	Year 2	Year 3	Year 4
Opportunities to participate on service learning	95.1	92.9	93.9	96.0

NARRATIVE RESPONSE

a. Summarize the opportunities, as available, for medical students to participate in the following categories of service learning, including the general types of service-learning and community service activities that are available. See the Glossary of Terms for LCME Accreditation Standards and Elements at the end of this DCI for the LCME definition of service-learning.

1. Required service learning
2. Voluntary service learning/community service

1. Required service learning

There is no requirement for service learning at JCESOM.

2. Voluntary service learning/community service

There are many opportunities for students to participate in community service. Students have volunteered at the local Ronald McDonald House and Hospice House, along with working at the Huntington City Mission. The students have also volunteered at community-sponsored health fairs. Multiple times throughout the academic year, students contribute to food and clothing drives that support various rehabilitation service agencies. The Marshall Medical Outreach (MMO) Program is a medical student-led free mobile health clinic that takes place one Saturday per month on the Trinity Episcopal Church property in Huntington. Under the supervision of Family Medicine physician, Dr. Charles Clements, the MMO goal is to establish primary care, as well as care for other minor medical problems, for patients that present each month.

Students have the opportunity to volunteer in a free clinic in Honduras either during their summer of MS1 or MS3 year. Last year, the team, which included 66 medical and pharmacy students, clinical faculty, residents, undergraduate students and other health care professionals, treated 2,133 patients during five days of clinics in and around La Esperanza, Honduras. The group came prepared with 55 boxes of supplies, provided by Cabell Huntington Hospital and other community partners, to treat a vast array of conditions—from sexually transmitted diseases to seizures to severe glaucoma to a machete wound—for patients of all ages. Now in its ninth year, Herd for Honduras, is made possible through an endowed fund in the honor of late Dr. Paul Ambrose.

b. Describe how medical student participation in service-learning and community service activities is encouraged. How are students informed about the availability of these activities?

The Community Service Organization (CSO) is a student run organization. Each incoming class elects 2-3 members to be a part of the Community Service Organization. These members serve as liaisons between their respective classes and the organization's president. Community Service Liaisons are responsible for making their peers aware of opportunities as well as taking leadership roles in the development and implementation of service learning. The medical students are made aware of community service opportunities by announcements from their class liaisons, posting to their class Facebook pages and fliers distributed to the medical school student body.

c. Describe how the medical school supports service-learning activities through the provision of funding or staff support.

The Office of Student Affairs serves as the administrative body for the Community Service Organization. Student Affairs offers funding as they do for other student run organizations. The staff also relays community service opportunities to the students from various outside sources. Each Fall a banquet, sponsored by the Office of Student Affairs, is held to acknowledge those students who have completed their community service hours for the previous year. In the Spring, during our Senior Awards Ceremony, students who have completed their community service hours for all four years of the medical education program are presented with a certificate of graduating with Honors in Community Service.

6.7 ACADEMIC ENVIRONMENTS

The faculty of a medical school ensure that medical students have opportunities to learn in academic environments that permit interaction with students enrolled in other health professions, graduate and professional degree programs, and in clinical environments that provide opportunities for interaction with physicians in graduate medical education programs and in continuing medical education programs.

SUPPORTING DATA

Table 6.7-1 | Master's and Doctoral Degree Students Taught by Medical School Faculty

List the number of students enrolled in master's and doctoral degree programs taught by medical school faculty. Include degree programs in the where students are taught by medical school faculty. Add rows as needed.

Department/Program	# of Master's students	# of Doctoral students
Biomedical Sciences	22	27
Clinical Translational Science	4	0

Table 6.7-2 | Residents in Graduate Medical Education Programs

Provide the total number of residents and clinical fellows on duty in ACGME-accredited programs who are the responsibility of the medical school faculty for the indicated academic years. If the medical school has one or more regional campuses, provide the campus in the first column. Also see the response to element 3.1.

Campus (if more than one)		AY 2015-16	AY 2016-17	AY 2017-18	AY 2018-19
	Fellows:	27	31	31	31
	Residents:	156	163	169	186

Table 6.7-3 | Continuing Medical Education

If the medical school and/or its clinical affiliates are accredited by the ACCME to sponsor continuing medical education for physicians, use the table below, adding rows as needed, to indicate each sponsoring organization's current accreditation status, the length of accreditation granted, and the year of the next accreditation review.

Program sponsor	Accreditation status	Length of accreditation term
Marshall University Joan C. Edwards School of Medicine	Full Accreditation	4 years; next review 2020

NARRATIVE RESPONSE

a. List the health professions/professional degree programs located at the same campus as the medical school.

1. MD
2. Master of Science in Clinical Translational Science
3. Master of Social Work
4. Master of Arts Psychology
5. Doctor of Psychology
6. Master of Science in Nursing
7. Master of Public health
8. MD/PhD
9. Master of Science in Exercise Science
10. Master of Science in Biomedical Research
11. Doctor of Philosophy in Biomedical Research
12. Doctor of Pharmacy
13. Doctor of Physical Therapy
14. Master of Science in Speech Language Pathology
15. Master of Science in Health Informatics
16. Master of Science in Dietetics
17. Master of Science/Arts in Pharmaceutical Sciences

b. Describe examples of formal and informal opportunities available for medical students to interact with students in graduate/professional Master's and doctoral programs and how the medical school encourages such interactions. Also see the response to element 7.9 for required experiences with students in other health professions programs.

Shared classroom—some classroom sessions are attended by both, MD and Medical Sciences students providing an excellent opportunity for students to work together and share experiences.

Peer-peer education—there are opportunities for our medical students to work collaboratively with students from other health professions, including small group activities with Master of Science in Medical Sciences, MD/PhD and Master of Science in Clinical Translational Sciences.

Classroom facilitators—graduate, doctoral students help facilitate certain small group sessions in the first year medical school curriculum.

Summer research—the majority of our MD students pursue summer research projects, often in basic science labs. This is an excellent opportunity for medical and graduate students to work collaboratively and learn from one another.

Research day—all medical students are required to attend the Marshall Annual Research Day. At this event, not only do students interact with one another, they often present their collaborative work together.

Quarterly mixer—hosted every year, this is an excellent opportunity for medical and graduate students to interact in an informal setting.

MMO—medical students work closely with psychology, pharmacy, and social work students during Marshall's Medical Outreach Program—a medical student-led free mobile health clinic on one Saturday/month.

IPE sessions—During MS1, MS2, and MS3, medical students participate in IPE exercises with students from the School of Pharmacy, Nursing, Physical Therapy, Social Work and Nutritional Sciences.

c. Describe how medical students are exposed to continuing medical education activities for physicians.

a. Attend grand rounds in every rotation
b. Required to attend Annual Research Day in the spring semester (all talks are CME eligible)
c. Opportunities to present at local, regional, national meetings. About 10% of our students from each class typically get an opportunity to participate in such meetings.
d. Educational webinars opportunities specific to clerkships or hosted by the Office of Faculty Advancement
e. Tumor boards
f. Homecoming
g. Risk management seminars

6.8 EDUCATION PROGRAM DURATION

A medical education program includes at least 130 weeks of instruction.

SUPPORTING DATA

Table 6.8-1 | Number of Scheduled Weeks per Year	
Use the table below to report the number of scheduled weeks of instruction in each academic year of the standard medical curriculum (do not include vacation time). Refer to the Supporting Documentation section for Standard 6 if the medical school offers one or more parallel curricula (tracks).	
Curriculum Year/Phase	Number of scheduled weeks
Year 1	38 weeks
Year 2	47 weeks
Year 3	48 weeks
Year 4	36 weeks
Total weeks of scheduled instruction	169 weeks

STANDARD 7: CURRICULAR CONTENT

The faculty of a medical school ensure that the medical curriculum provides content of sufficient breadth and depth to prepare medical students for entry into any residency program and for the subsequent contemporary practice of medicine.

SUPPORTING DATA

Table 7.0-1 | General Medical Education - Preparation for Residency

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who *agree/strongly agree* (aggregated) that they are prepared in the following ways to begin a residency program.

	GQ 2016		GQ 2017		GQ 2018	
	School %	National %	School %	National %	School %	National %
Acquired an understanding of common conditions and their management.	95.0	93.2	96.8	93.3	96.6	93.7
Acquired basic skills in clinical decision-making and application of evidence-based information.	92.5	94.0	98.4	94.0	95.0	94.4

7.1 BIOMEDICAL, BEHAVIORAL, SOCIAL SCIENCES

The faculty of a medical school ensure that the medical curriculum includes content from the biomedical, behavioral, and socioeconomic sciences to support medical students' mastery of contemporary scientific knowledge and concepts and the methods fundamental to applying them to the health of individuals and populations.

SUPPORTING DATA

Table 7.1-1 | Curricular Content

For each topic area, place an "X" in the appropriate column to indicate whether the topic is taught separately as an independent required course and/or as part of a required integrated course. Place an "X" under each column to indicate the year(s) in which the learning objectives related to each topic are taught and assessed.

Topic Areas	Course Type		Years Topic Areas Are Taught and Assessed		
	Independent course	Integrated course(s)	Year 1	Year 2	Year 3 and/or 4
Biochemistry		X	X		X
Biostatistics and epidemiology		X	X	X	X
Genetics		X	X	X	X
Gross Anatomy		X	X		X
Immunology		X		X	X
Microbiology		X		X	X
Pathology		X		X	X
Pharmacology		X		X	X
Physiology		X	X	X	X
Behavioral science		X	X	X	X
Pathophysiology		X		X	X

Table 7.1-2 | Basic Science Education

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who rated preparation for clinical clerkships and electives as *excellent or good* (aggregated) in the following sciences basic to medicine.

	GQ 2016		GQ 2017		GQ 2018	
	School %	National %	School %	National %	School %	National %
Biochemistry	31.8	62.4	65.7	62.9	69.0	62.3
Biostatistics and epidemiology	52.4	69.4	65.2	69.6	40.7	68.6
Genetics	52.4	71.6	77.3	72.3	72.4	71.4
Gross anatomy	92.9	87.7	98.5	86.6	96.7	86.2
Immunology	78.0	80.6	98.4	82.0	45.8	81.1
Microbiology	69.1	82.9	86.2	83.9	86.2	83.7
Pathology	88.1	86.8	95.4	85.6	88.0	85.0
Pharmacology	92.9	77.7	90.6	76.9	93.1	75.7
Physiology	87.1	90.9	90.7	90.8	89.9	89.8
Behavioral Science	78.6	85.5	86.0	86.3	77.6	86.2
Pathophysiology	90.2	93.9	97.0	93.5	93.2	93.4

Table 7.1-3 | Curricular Content

For each topic area, place an "X" in the appropriate column to indicate whether the topic is taught separately as an independent required course and/or as part of a required integrated course. Place an "X" under each column to indicate the year(s) in which the learning objectives related to each topic are taught and assessed.

	Course Type		Years/Phases Topic Areas are Taught and Assessed		
	Independent course	Integrated course(s)	Year 1	Year 2	Year 3 and/or 4
Biomedical informatics		X	X	X	
Complementary/alternative health care		X		X	
Evidence-based medicine		X			X
Global health issues		X	X	X	X
Health care financing		X			X
Human development/life cycle		X	X		X
Human sexuality		X	X		X
Law and medicine		X	X	X	X
Medication management/compliance		X			X
Medical socioeconomics		X	X	X	X
Nutrition		X	X		X
Pain management		X	X	X	X
Palliative care		X			X
Patient safety		X	X	X	X
Population-based medicine		X			X

Table 7.1-4 | General Medical Education - Preparation for Residency

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who *agree/strongly agree* (aggregated) that they are prepared in the following area to begin a residency program: *Fundamental understanding of the issues in social sciences of medicine (e.g., ethics, humanism, professionalism, organization, and structure of the health care system).*

GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
92.5	93.3	96.8	93.6	91.6	93.6

Table 7.1-5 Satisfaction with the Quality of the First and Second Years of the Curriculum

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with the quality of the first two years of the curriculum. Add rows for each additional question area on the student survey.

	Year 1	Year 2	Year 3	Year 4
Quality of the first-year/first academic period	87.5	91.7	79.7	81.4
Quality of the second year/second academic period	20.1	67.4	89.1	90.6

7.1 NARRATIVE RESPONSE

a. Summarize any recent changes (e.g., in the last two academic years) in the extent or curricular placement of any of the content areas included in the tables above.

1. Pathophysiology of disease: The Curriculum Committee (CC) and its subcommittees review and coordinate the curricular content and address gaps and unplanned redundancies. These committees are supported by the OME, specifically the Associate and Vice Dean of Medical Education. The CC has recently identified a need to improve integration and refocus on the pathophysiology of disease in the cardio-renal-respiratory blocks. Student feedback, USMLE STEP1 performance indicators, and comparative analysis of block-assessments with STEP 1 scores pointed to the potential of improvement in this content-area. Subsequently, pathophysiology of cardiovascular, renal, and pulmonary diseases has been addressed to improve content integration and student comprehension. To this end, sessions targeting pathophysiology of common cardiovascular, renal and pulmonary conditions are added to this block (MDC753), in addition to 4 team-based learning exercises targeting these conditions:

1. TBL 1 covers the application of principals of autonomic physiology and pharmacology, especially as it pertains to the cardiovascular system.
2. TBL 2 covers the pathophysiological basis of hypertension, ischemic heart disease and heart failure.
3. TBL 3 covers pathophysiology and management of chronic kidney disease
4. TBL 4 covers pathophysiology and differential of acute and chronic hypoxia

2. Law in Medicine: The CC has identified the need to improve coverage of this content area. This is being addressed by incorporating talks/workshops by Dr. Mohammed Ranavaya (MD, JD) in the clinical skills courses (ICS and ACS) in the first two years of the MD curriculum.

7.2 ORGAN SYSTEMS/LIFE CYCLE/PRIMARY CARE/PREVENTION/WELLNESS/ SYMPTOMS/SIGNS/DIFFERENTIAL DIAGNOSIS, TREATMENT PLANNING, IMPACT OF BEHAVIORAL AND SOCIAL FACTORS

The faculty of a medical school ensure that the medical curriculum includes content and clinical experiences related to each organ system; each phase of the human life cycle; continuity of care; and preventive, acute, chronic, rehabilitative, end-of-life, and primary care in order to prepare students to:

- Recognize wellness, determinants of health, and opportunities for health promotion and disease prevention
- Recognize and interpret symptoms and signs of disease
- Develop differential diagnoses and treatment plans
- Recognize the potential health-related impact on patients of behavioral and socioeconomic factors
- Assist patients in addressing health-related issues involving all organ systems

Organization of the curriculum: the curriculum is designed to first introduce students to basic principles of normal human structure and function and to become familiar with general skills (such as history taking and physical examination skills) throughout the first-year curriculum. The second-year curriculum is designed to promote understanding of the pathophysiology of human disease and to develop detailed methods for assessing and treating these conditions. The third-year curriculum is designed to provide students with relevant clinical experiences in the main six clerkships, but more importantly to enable them to achieve higher level learning in the multiple competencies explicitly covered and assessed in each clerkship. Finally, the Year 4 curriculum is designed to provide students with a flexible schedule to complete their attainment of the program objectives (as defined by the Clinical Clerkship Committee and by the CC)

Recognize wellness, determinants of health, and opportunities for health promotion and disease prevention: MS1 of our MD-program is primarily focused on the structure and function of each organ system. Clinical correlates of the provided information are tied into the curriculum through clinical, case-discussions and presentations. Information presented within the blocks is complemented in the Introduction of Clinical Skills (ICS) course in the first year where students learn how to interpret physical examination results using standardized patients. This course also includes training in effective means of communication and data gathering used to advise patients about methods for maintaining good health. Several sessions in the ICS course cover non-biological determinants of health, including the impact of cultural, social, economic, and environmental factors on patient wellness. These topics form the longitudinal themes continued into the MS2 and clinical years of our MD-curriculum. For e.g., several of our clerkships include learning objectives addressing the topic of substance abuse in our community and its effect on the general health of the population. Our students are expected to develop skills in the counseling and education of patients and families about acute illness, chronic illness, harmful personal behaviors/habits, and health maintenance strategies. Additionally, learning objectives in the Family Medicine clerkship also address population health, including the expectation that students can “Describe community-based interventions to modify or eliminate identified risks for disease or injury.” Additional activities in clerkships cover topics such as health screening, identification of health risk factors across the human lifespan and accounting for the impact of psycho-social factors in patient wellness. The Pediatrics clerkship includes learning objectives on preventive care, including timelines for wellness checks in newborns, screening for disease risk, immunizations and vaccinations and avoidance of accidents. The Obstetrics and Gynecology clerkship provides detailed coverage of wellness issues related to childbirth, including pre-natal care and screening for disease risk. Finally, the impact of nutrition on maintaining health is a specific learning objective within the Family Medicine, Internal Medicine, Pediatrics, and Surgery clerkships.

Recognize and interpret symptoms and signs of disease: pedagogy targeting signs and symptoms of disease is initiated in the organ-system block of MS1, during sessions on clinical correlates. This activity is the focus of almost all pedagogies in the second-year curriculum, starting with the Principles of Disease (POD) block. Case-studies, small and large group discussions, take-home assignments, application exercises of TBLs, traditional lectures and workshops are used to train students in recognizing symptoms and signs of common disorders. These skills are further exercised and developed in the longitudinal course, Advanced Clinical Skills (ACS). Sessions within these MS2 blocks also emphasize the differences between acute and chronic presentations in each of the organ systems and provide instruction on mechanisms for recognizing differences in presentations of acute and chronic disorders, and for designing treatments for these conditions. The effects of aging on normal physiological processes and on the burden of chronic disorders is also addressed in each of systems-blocks in the second year (DTI-DTIV). Each of the required clerkships provides advanced instruction in acute and chronic care by designing presentations/patient-interactions to include an appropriate balance between inpatient and outpatient settings and including disorders that present as acute or chronic conditions in the required clinical experiences lists. End of rotation CCEs include examples of acute and chronic conditions to assess student acquisition of these concepts.

Develop differential diagnoses and treatment plans: the organ-system based blocks in the second year of the MD-curriculum specifically cover differential diagnosis and treatment plans for common disorders. For e.g. in the DTIII block, students are taught about differential diagnosis of acute chest pain along with management strategies of each of the top differentials. Through case-based discussions students are given an opportunity to participate in the process of creating a differential and are given verbal feedback by the faculty/clinician moderating the session. Pharmaco-genetic, surgical, interventional and palliative therapeutic options for relevant disorders are integrated into each block and are employed by students in case-discussions, application exercises and group discussions. In addition, standardized patient encounters, formative and summative, assess students' ability to accurately diagnose patients in clinical scenarios and to develop appropriate treatment plans. Practices of rehabilitative care are introduced in the first two years, including interprofessional (IPE) activities that involve students from allied health professions emphasizing rehabilitative care. These skills are honed in the clinical years of our MD-curriculum as students observe and participate in patient care, including rehabilitation and end-of-life care.

Recognize the potential health-related impact on patients of behavioral and socioeconomic factors: significant parts of our preclinical curriculum are involved in covering these aspects of patient care. For e.g. in the ICS and ACS courses students explore how social and cultural issues impact patient outcomes, covering topics such as poverty, educational status, access to healthcare, cultural competence, public health, ethical decision-making, and implicit bias. These topics are routinely revisited in the clinical years as students participate in clinical decision making and patient care.

Assist patients in addressing health-related issues involving all organ systems: patient interviewing and education skills are covered and assessed in the ICS course in Year 1 where students receive instruction on motivational interviewing techniques and practice these techniques on standardized patients. These skills are developed further throughout the remainder of the Clinical Skills courses in both years and are enhanced during clinical years of the MD-curriculum.

SUPPORTING DATA

Table 7.2-1 | General Medical Education				
Provide data from the independent student analysis on the percentage of students in each class who were satisfied with the adequacy of their education in the following content areas.				
	Year 1	Year 2	Year 3	Year 4
Education to diagnose disease	32.5	35.8	93.8	98.7
Education to manage disease	32.5	34.6	93.8	96.0
Education in disease prevention	35.1	36.9	92.2	98.7
Education in health maintenance	37.6	35.7	90.7	98.7

NARRATIVE RESPONSE

a. Describe the location(s) in the pre-clerkship and clinical curriculum in which objectives related to the subjects listed below are taught and assessed. Refer to the Supporting Data and Documentation for Standard 6 in the responses.

1. Normal human development
2. Adolescent medicine
3. Geriatrics
4. Continuity of care
5. End-of-life care

1. Normal Human Development

Pre-Clerkship Years – The normal development of the human body is taught in each of the Structure and Function blocks. An introduction to early embryo development through formation of the neural tube is given in Structure and Function I. Subsequent Structure and Function blocks present information about each organ system related to the specific block. Development of the nervous system and head and neck structure are covered in Structure and Function II. Development of the heart and lungs are covered in Structure and Function III. Development of the gastrointestinal, urinary, and reproductive systems are covered in Structure and Function IV. The stages of cognitive and behavioral development from childhood through adolescence to adulthood are covered in Structure and Function I and II. These presentations include discussion of aging and end of life issues relating to power of attorney and medical decision making. Disorders pertaining to the human development, behavioral, anatomical and physiological are addressed in the complementary Disease and Therapeutics Blocks of the MS2 curriculum. For e.g. pathophysiology of sexual developmental disorders are covered in the DTIV block of the second-year curriculum. In all cases assessment of objectives takes place via block and/or customized NBME examinations.

Clerkship Years – In the clinical clerkships, objectives regarding human development and life cycle are specifically addressed. The OB/GYN clerkship further explores issues related to embryology and gestation. The Pediatric clerkship focuses on physical, physiologic, and psychosocial development from birth through adolescence. Likewise, the Family Medicine clerkship objectives articulate the expectation that students be able to care for the patient across the continuum of the life cycle, identifying appropriate health maintenance recommendations by age and gender. In all cases, assessment of objectives takes place via clinical observation and shelf examinations.

2. Adolescent Medicine

Pre-Clerkship Years – Adolescent medicine is introduced in the Neurosciences block (SFII) during the first year in the context of human development and the life cycle. These are further addressed in topics related to diagnosis and management of psychiatric and behavioral disorders in adolescents during the second-year block, DTII. In all cases assessment of objectives takes place via block and/or customized NBME examinations.

Clerkship Years – Adolescent medicine is addressed during the Psychiatry, Neurology, Obstetrics and Gynecology, Family Medicine, and the Pediatric clerkships. During the Psychiatry rotations students are expected to demonstrate the ability to communicate with adolescent patients and diagnose personality disorders common in adolescents. During the Obstetrics and Gynecology rotation students are expected to be able to discuss puberty and apply recommended prevention strategies to women throughout the lifespan. During the Pediatric rotation students are expected to adequately assess adolescent behavior, conduct physical examinations, demonstrate familiarity with issues related to puberty, and communicate effectively with adolescents. There is also a lecture on adolescent medicine in the Pediatrics clerkship covering this key aspect of human development. In all cases, assessment of objectives takes place via clinical observation, OSCEs, and shelf examinations. Fourth year electives are available in Adolescent Medicine through Pediatrics, and in Assessing Children and Adolescents through Psychiatry. Family Medicine also addresses some aspects of adolescent medicine, especially sports injuries in adolescents.

3. Geriatrics

Pre-Clerkship Years – The Clinical Skills courses (ICS and ACS) provide teaching and practice in skills involving communicating with elderly patients. This also includes addressing ethical issues and introduces the students to systems based practice when treating the elderly population. A case based presentation focuses on challenges with the geriatric population and advance directives. The clinical case includes elements of communication, patient care, health care systems, and law. The Neurosciences blocks, SF and DTII, address normal and abnormal changes common to the elderly patient, including age-related changes in the structure and function of the nervous system, dementia, and stroke and neurodegenerative disorders. In the spring semester of MS2, students attend a required session on Geriatric Medicine addressing how to discriminate between physiologic aging and disease, how diseases can present atypically in the elderly, and communication barriers with the elderly. Similarly, all first and second year courses cover the normal physiological and associated pathophysiological changes expected as a result of aging. This includes age-related infectious diseases, neoplasia, nutritional disorders, and pharmacology in the elderly. In all cases, assessment of objectives takes place via block and/or customized NBME examinations.

Clerkship Years – Family Medicine, Internal Medicine, Obstetrics and Gynecology, and Psychiatry clerkships each include content related to the care of the older adults or conditions common in the elderly. For example, Ob/Gyn objectives address menopause and other changes common in older women. In each clerkship assessment of objectives takes place via clinical observation, OSCEs, and shelf examinations. Year 4 students can also choose to complete an elective in Rural Geriatrics, which addresses the unique health-needs of the elderly in rural areas. Topics covered include the pathophysiology of aging, commonly used geriatric evaluation scales, and evaluation of function in the aged. Students are expected to demonstrate respect for the heterogeneity among older people by promoting and advocating patients' and caregivers' welfare while adhering to ethical principles of medicine, demonstrating understanding of normal and pathological aspects of aging, applying primary, secondary, and tertiary prevention interventions, and recognizing, evaluating, and initiating appropriate management of geriatric conditions within primary care settings. Assessment of objectives takes place via faculty observation.

4. Continuity of care

Family and Internal Medicine clerkship objectives include the expectation that students be able to care for the patient across the continuum of the life cycle. Included in this series of objectives are topics related to continuity of care, education about disease prevention and health maintenance, dealing with chronic illness, and promoting wellness across the continuum of the life cycle. Additional objectives focus on managing chronic disease over time. Similarly, in pediatrics, clerkship objectives address continuity issues important to children, including well-child care, immunizations, health promotion, nutrition, and preventive health. The Obstetrics and Gynecology clerkships require students to participate in care of patients at various stages of pregnancy where they participate in the continuity of care necessary for a successful outcome to each pregnancy. In all cases assessment of objectives takes place via clinical observation, OSCE, and shelf examinations.

5. End-of-life care

Discussions addressing the end-of-life care begin in the clinical skills courses of the Pre-Clerkship curriculum. Topics addressed include, aging, palliative care, death, and bereavement. The clinical skills course addresses end of life care and how ethical principles are applied. We discuss different issues that may arise at the end of life including physician assisted suicide and patient autonomy. We encourage group discussion in which students can share their own experiences or attitudes towards these controversial issues. End of life is also addressed in our advanced directives lecture where we discuss do not resuscitate orders and common decisions necessary such as life-support and parenteral feeding. These objectives are continued in the clerkships, especially in the Family and Internal Medicine clerkships. Learning settings within the rotations include long-term care, home visits, hospice, and palliative care sites. Independent learning on end-of-life care is also included in the required reading lists.

7.3 SCIENTIFIC METHOD/CLINICAL AND TRANSLATIONAL RESEARCH

The faculty of a medical school ensure that the medical curriculum includes instruction in the scientific method (including hands-on or simulated exercises in which medical students collect or use data to test and/or verify hypotheses or address questions about biomedical phenomena) and in the basic scientific and ethical principles of clinical and translational research (including the ways in which such research is conducted, evaluated, explained to patients, and applied to patient care).

NARRATIVE RESPONSE

a. List the hands-on or simulated exercises in which medical students collect or use data to test and/or verify hypotheses or to experimentally study biomedical phenomena. Do NOT include laboratory sessions where the main purpose is observation or description (such as gross anatomy or histology). For each listed experience, include the course in which it occurs and describe the format used for the exercise (e.g., hands-on laboratory sessions, simulations).

Academic Year	Course	Learning Event	Format/Assessment
MS1	MDC710	Coagulopathy	Small Group Team Based Learning/ Group Quiz
MS1	MDC710	Team Learning: Disorders of Amino Acid Metabolism	Gallery Walk/ Ranking
MS2	MDC752	Adrenergic Lab	Independent Learning/Quiz
MS2	MDC752	Cholinergic Lab	Independent Learning/Quiz
MS2	MDC750	Team Learning: Clinical Pharmacokinetics	Peer Teaching/Quiz
MS2	MDC750	Team Learning: Transplant Rejection	Small Group Discussion/ Group Quiz
MS2	MDC750	Team Learning: Immunodeficiency	Small Group Discussion/ Group Quiz
MS2	MDC750	Team Learning: Analysis and Discussion of Modern Cancer Therapies	Small Group Discussions/report
MS2	MDC750	Team Learning: Viral Immunology Case Study	Small Group Discussions/Group Quiz
MS2	MDC750	Team Learning: Opportunistic Infections in Immunocompromised Host	Small Group Discussion/Group Quiz
MS2	MDC750	Klebsiella Outbreak at NIH Clinical Center	Small Group Discussion/Group Quiz
MS2	MDC755	Heart Sounds Exercise	Hands on Simulation
MS2	MDC753	Team Learning-Differential of Chest Pain	Small Group Team Based Learning/Group Quiz
MS2	MDC753	Team Learning-Management of CKD	Small Group Team Based Learning/Group Quiz
MS2	MDC753	Team Learning-Differential of Hypoxia	Small Group Team Based Learning/Group Quiz

MS2	MDC753	Team Learning: Differential and Management of Hypertension	Small Group Discussion
MS2	MDC753	Team Learning: Thoracic Radiology	Small Group Discussion
MS2	MDC753	Team Learning: Glomerular Diseases	Small Group Discussion
MS2	MDC755	Measures of Disease	Independent Learning
MS2	MDC754	Team Learning: Men's & Women's GU health	Small Group Team Based Learning/Group Quiz
MS2	MDC754	Team Learning: Management and Complications of Diabetes	Small Group Team Based Learning/Group Quiz
MS2	MDC754	Team Learning: Management and Complications Hepatitis C	Small Group Team Based Learning/Group Quiz
MS2	MDC754	Team Learning: Population Genetics and Risk Assessment	Small Group Hands of Problem Solving

b. Describe the opportunities in the curriculum for medical students to learn and be assessed on the basic scientific and/or ethical principles of clinical and translational research and the methods for conducting such research. Note the required courses/clerkships in which medical students learn how such research is conducted, evaluated, explained to patients and applied to patient care, and how students' acquisition of this knowledge is assessed.

Since the summer of 2013, students have had the opportunity to participate in the MS1 Summer Research Stipend Program. These projects have been supported by both the clinical and basic science departments. The MS1 Summer Research Stipend Program is available to all MS1 students who have successfully completed the MS1 year and is offered during the summer between the MS1 and MS2 years. The program provides students with the opportunity to work directly with faculty mentors on clinical translational research. The research projects are collected from faculty via electronic survey during the first half of the MS1 spring semester and then provided to the MS1 students for review. The MS1 students then select their top three choices of projects via electronic survey and are matched to a project at a meeting with the students. Once matched, students are asked to meet with their respective mentor to begin the project. Students are provided a $2000.00 stipend over a six-week period to support their work. The participation in this Summer Research Program topped 85% in the academic year 2017-2018.

Students are expected to be involved in all aspects of the research, including background literature review, internal review board application, research design, investigative experiment (if applicable), data collection and analysis, result review and interpretation, presentation of the results at a local, regional, or national meeting, and manuscript development and publication.

Participation in the program has been strong since inception in 2013 with the majority of the MS1 classes participating in the program.

Year	Number of Students Participating	Class Size	Percent Participating
2013	45	71	63
2014	52	78	67
2015	48	75	64
2016	50	69	72
2017	71	82	87

Since 2012, working in collaboration with the Higher Education Policy Commission and through our Rural Health Initiative grant, 38 medical students have received 27 rural research grants for a total of $440,518.84. This initiative on rural health research places medical students in rural communities. Conducting research on rural topics gives students opportunities to learn about study design and methodology while becoming immersed in a rural community or health issue. Students, with faculty mentors, apply for rural research grants to support projects which could enhance rural health care, lead to more effective health promotion and disease prevention programs, and address barriers to care. The student is the Project Investigator on the grant. This includes completing the proposal, compiling a budget, literature review and research design. The student is also required to present their results at a local, regional or national conference (http://crh.marshall.edu/research.asp)

Required Courses and Clerkships in which medical students learn how such research is conducted, evaluated, explained to patients and applied to patient care, and how students' acquisition of this knowledge is assessed:

Course	Year	Learning Activity	Format	Assessment
IDM715	MS1	Sample size, Power, and Probability	Didactic	Quiz
IDM715	MS1	Distribution and Descriptive Statistics	Journal Club	Participation
IDM715	MS1	Measures of Disease	Journal Club	Participation
IDM715	MS1	Biostatistics and Epidemiology	Journal Club	Participation
IDM715	MS1	Measures of Test Performance	Journal Club	Participation
IDM715	MS1	Case Control Studies, Chi Square, Student's T Test	Journal Club	Participation
IDM715	MS1	Cohort Studies, ANOVA, Correlation and Regression	Journal Club	Participation
IDM715	MS1	Randomized Clinical Trials	Journal Club	Participation
IDM715	MS2	Observational Studies vs. Clinical Trials	Journal Club	Participation
IDM755	MS2	Clinical Translational Research Exercise	Team Learning	Project Completion
IDM755	MS2	Biostats Board Review	Group Discussion	
Pediatric Clerkship	MS3	Manuscript Review	Journal Club	Participation
Pediatric Clerkship	MS3	Grand Rounds	Group Discussion	Participation
Ob/Gyn Clerkship	MS3	Manuscript Review	Journal Club	Participation
Ob/Gyn Clerkship	MS3	Grand Rounds	Group Discussion	Participation
Neuro/Psych.	MS3	Grand Rounds	Presentation	Participation

7.4 CRITICAL JUDGMENT/PROBLEM-SOLVING SKILLS

The faculty of a medical school ensure that the medical curriculum incorporates the fundamental principles of medicine, provides opportunities for medical students to acquire skills of critical judgment based on evidence and experience, and develops medical students' ability to use those principles and skills effectively in solving problems of health and disease.

SUPPORTING DATA

Table 7.4-1 | Critical Judgment and Problem Solving

For each topic area, place an "X" in the appropriate column to indicate whether the topic is taught separately as an independent required course and/or as part of a required integrated course. Place an "X" under each column to indicate the year(s) in which the learning objectives related to each topic are taught and assessed.

Topic Areas	Course Type		Location in the curriculum where the listed skill is taught/assessed			
	Independent course	Integrated course(s)	Year 1	Year 2	Year 3	Year 4
Skills of critical judgment based on evidence		X	X	X	X	X
Skills of medical problem solving		X	X	X	X	X

NARRATIVE RESPONSE

a. Provide two detailed examples from the pre-clerkship phase of the curriculum of where students learn, demonstrate, and are assessed on each of the following skills. In each description, include the courses/clerkships where this instruction and assessment occurs and provide the relevant learning objectives.

1. Skills of critical judgment based on evidence and experience
2. Skills of medical problem solving

1. Skills of critical judgment based on evidence and experience

In the Pre-Clerkship courses on Clinical Skills (ICS and ACS), the students are provided with the fundamentals in the skills for critical judgment based on evidence. For e.g. during year 2, students participate in three workshops in the Advanced Clinical Skills course. These workshops present the students with a clinical case and standardized patient. The students are expected to first determine a differential diagnosis. They are then presented with additional history and physical findings and are expected to refine their diagnosis based on the additional evidence from the history and physical and to determine what the next steps would be for the patient. Students work in groups of 4 with a MS4 facilitator and are assessed by the facilitator on their ability to process information and ask for additional studies. Three workshops are given each year: cardiology, pulmonary, and neurology.

2. Skills of medical problem solving

In MDC 711 Structure and Function 1, first year students are exposed to problem solving through three sessions relating to ion channel, muscle and nerve function. Students work in small groups to solve problems related to the topic. They submit a group answer to the instructor and are assessed on whether they have identified the correct answer as well as the sources they use to arrive at the answer.

Session objectives are:

1. Be able to apply knowledge of ion channel function to describe causes of abnormal function in channelopathies.
2. Be able to apply knowledge of ion channel and muscle function to describe muscle disorders.
3. Be able to apply knowledge of axon and nerve function to describe peripheral nerve disorders.

7.5 SOCIETAL PROBLEMS

The faculty of a medical school ensure that the medical curriculum includes instruction in the diagnosis, prevention, appropriate reporting, and treatment of the medical consequences of common societal problems.

NARRATIVE RESPONSE

a. Describe five common societal problems that are taught and assessed in the curriculum. For each of the five:

1. Describe the process used by faculty to select the problem.
2. Describe where and how content related to the societal problem is taught in the curriculum.
3. Provide the relevant course and clerkship objectives that address the diagnosis, prevention, appropriate reporting (if relevant), and treatment of the medical consequences of this societal problem.

1. Describe the process used by faculty to select the problem.

Faculty representatives to the MS1, MS2, MS3 and MS4 subcommittees discussed social issues that were having an impact on the community served by JCESOM. The selection process focused on a number of key variables, including incidence and prevalence of the problem in our society, the seriousness of the problem, chances that our student will encounter a population affected directly or indirectly by the problem on a regular basis, community awareness and involvement in the problem, faculty training and expertise in addressing curricular content relating to the problem. After discussing a number of options, the members agreed on the following five societal problems:

1) Opioid and substance abuse
2) Obesity
3) Domestic violence
4) Tobacco use and smoking cessation
5) Poverty and health care access

2. Describe when and how content related to the societal problem is taught in the curriculum.

1) Opioid abuse: abuse of opiates is gripping our nation and the world. The states of West Virginia, Ohio, and Kentucky are among the most affected in the nation. WV has one of the highest opioid-related mortality rates and Huntington is the epicenter of this national health crisis. Accordingly, substance abuse disorders are addressed in our curriculum at multiple points using a variety of pedagogies and assessments:

Course	Year	Course/Session Learning Objective	Pedagogy	Assessment
IDM 710	MS1	Discuss depression, alcoholism, and other addictive disorders in the context of a medical professional	Lecture	
MDC 715	MS1	1. Recognize the role of stigma as a barrier to treatment in Substance Use Disorders (SUD). 2. Identify appropriate non-stigmatizing language in SUD.	Lecture	Quiz

		3. Define SBIRT and its role in substance treatment. 4. Recognize the role of behavioral health issues in SUDs		
MDC 752	MS2	1. Discuss the problem of drug abuse during pregnancy and the effect on the neonate 2. Identify the major drugs abused during pregnancy 3. Review the appropriate treatment options for pregnant drug abusers	Lecture	Quiz
MDC 752		1. Recognize the magnitude of drug abuse as a local, national and international problem and the role of Physicians in this global epidemic 2. Discuss the neurological basis of drug abuse 3. Distinguish between the major drugs of abuse and their effects on the patient 4. Describe the appropriate treatment options for emergent and non-emergent drug abuse	Lecture	Quiz
MDC 752		Substance Use Disorders in Children and Adolescents	Lecture	Quiz
MDC 752		Substance Use Disorders in Adults	Lecture	Quiz
MDC 752		1. Review the neurophysiological concepts of pain 2. Describe the mechanism of action for the classes of analgesics. 3. Know the side effects, drug-drug interactions, contraindications and cautions for each drug discussed. 4. Discuss the appropriate and ethical choice of analgesic	Lecture	Quiz
MDC 711	MS1	Common Issues of Adolescence	Lecture	Quiz

Substance Use Disorders are addressed throughout the MS3 clerkships with explicit coverage in the psychiatry, pediatrics, OB/Gyn., and family medicine clerkships. For e.g. Family Medicine lecture on chronic pain and opioid management and opioid addiction: diagnosis and management. Students commonly encounter patients, including drug-seeking behavior, alcohol or opiate dependence, maternal substance abuse disorder, fetal alcohol syndrome, and patients recovering from substance abuse disorders.

2. Obesity: obesity as an epidemic is covered across several integrated preclinical courses and is addressed throughout the clerkship curriculum.
    1. Students are introduced to the concepts of obesity and obesity-related disorders in their first course in first year (MS1, MDC710). This is large group discussion, which includes pre-readings and discussion guides. The session objectives are to identify links between obesity and chronic disease and to develop mechanisms to explain to a patient how obesity contributes to chronic disease. Students' active participation in the ensuing discussion is expected and required. This session is followed by Clinical Correlates in Obesity, a large group discussion surrounding etiology and epidemiology of adult and childhood obesity. This session also includes pitfalls of the Western diet and recent

dietary recommendations. This course covers foundational concepts in metabolism and links to obesity are tied into a number of other sessions. Students are frequently reminded of the socioeconomic costs of obesity and obesity-related disorders.

2. Apart from obesity, this course also covers nutrition with a series of sessions dedicated to adult nutrition. The objectives for these sessions include, understand fundamental principles of nutrition, explain how energy requirements can be measured and estimated, and discuss how protein requirements are determined. In addition, students are required to complete a nutrition project and present to their peers.
3. Obesity and associated nutritional imbalance are addressed in the MS2 curriculum (MDC 754) in the independent exercise "Nutrition Vitamin Deficiency and Excess". The session objectives include, discuss the pathology associated with vitamin and other nutrient deficiency, and discuss the pathology associated with vitamin and other nutrient excess.
4. In MS2, in the ACS course, During the MS2 year students are asked to use motivational interviewing techniques to discuss specific lifestyle intervention in an obese patient with newly diagnosed hypertension.
5. Finally, management of the obesity is discussed in the session "Obesity Treatments: Dietary, Medical and Surgical' in the MDC 754 course of the MS2 curriculum. Additional teaching activities focus on patient education about healthy eating and fast food choices.
6. Additional teaching activities related to obesity and associated disorders is addressed in sessions targeting diabetes mellitus, hypertension, ischemic heart disease, dyslipidemias, and obstructive sleep apnea. These sessions are integrated across the two years of the preclinical curriculum.
7. Obesity as a societal problem is further addressed during the MS3 Family Medicine and pediatric clerkships when didactic and small group discussions address the causes and consequences of obesity and strategies for communicating with patients and families about how to encourage physical activity and healthy eating.

2) Domestic violence: domestic abuse is first addressed in the Introduction to Clinical Skills course. A community panel of social workers, policemen, victims of domestic abuse, lawyers and doctors introduces students to the problem of domestic violence. Panelists share their experiences with the students and teach them how to suspect domestic violence. Discussion also revolves around role of societal and environmental factors in domestic violence and how to approach a victim of domestic violence. Domestic violence as a learning objective is readdressed in the Family Medicine Clerkship, which includes patient encounters and curricular content addressing this societal problem. This is reinforced during the final CCEs where one of the patients is a victim of domestic violence and students are graded on and given feedback on their approach to a patient with domestic violence.

3) Tobacco use and smoking cessation: Tobacco use disorders as a societal problem is first addressed in the MS1 Major Organ Systems block as part of the block coverage of cardiovascular physiology. This is reemphasized during the MS2 year in the Neurosciences block, which further addresses the epidemiology of nicotine use, nicotine withdrawal, and treatment for nicotine dependence. Tobacco addiction and its contributions to cardiovascular and pulmonary disease is covered in the MS2 Cardio-Renal-Pulmonary block; including its role in atherosclerosis, ischemic heart disease, hypertension, heart failure, restrictive and obstructive lung diseases, lung carcinoma, and end stage renal disease. In the ICS course, students are instructed and assessed on obtaining a tobacco use history. They are required to assess for tobacco use during each clinical encounter. Students must learn the five stages of quitting as well as medical options for cessation

and community resources. They will be able to discuss the success rates of different cessation strategies and make a recommendation for their standardized patient. Students identify smoking as a risk- factor for multiple diseases within each system as applicable. During the MS2 Advanced Clinical Skills course (MED 755), student's exposure to patients with tobacco use disorder is continued in the form of workshops and clinical skills examinations. During the latter they are assessed on their ability to provide cessation counseling. Smoking cessation is frequently discussed in the clerkships and students are taught counseling methods for cessation of smoking during Family and Internal Medicine Clerkships. Students are tested on their ability to communicate with patients regarding the impact of smoking on health during their annual CCEs, and receive feedback from the faculty on the same.

4. Poverty and health care access: West Virginia is one of the poorest states in the country with limited access to health care. The mission of our school is to improve health and health care access for our community by training excellent physicians to serve the 'unique health care needs of West Virginia and central Appalachia". Almost every course and clerkship touches on the impact of health care access on the health and disease of their patients. Specifically: during the MS2 Advanced Clinical Skills course (MED 755), students are given a scenario of a patient without health insurance and asked to choose OTC medications to treat symptoms based on the patient's budget. During the activity, students' partner with MS4's and travel to pharmacies within the community to choose their treatment plan before returning to have a large group discussion on the medications chosen; additionally during the MS2 year, there is a panel discussion held on ethical implications a relationship with the pharmaceutical industry may have on patient care. During this discussion, considerations are made for patients with limited access to care and how prescribing habits made be altered based on a personal relationship with the pharmaceutical industry; the final CCE for introduction to clinical skills addresses homelessness and access to care. A homeless alcoholic patient develops acute pancreatitis. His lack of resources and health care literacy leads to delay in care and thus a more severe presentation of symptoms. Students must obtain his history and assess his medical conditions and social situation. They must also demonstrate ethical and professional behavior throughout the encounter; as a part of training in access to health care student often work, during their clerkships, with social and caseworkers to find resources for families. In addition, students participate in a required session on "Managed Care and Patient Advocacy" during ACS. This talk introduces students to, among other things, basic insurance concepts, managed care, and moral hazard.

3. Provide the relevant course and clerkship objectives that address the diagnosis, prevention, appropriate reporting (if relevant), and treatment of the medical consequences of this societal problems.

See table in answer 2 above

7.6 CULTURAL COMPETENCE AND HEALTH CARE DISPARITIES

The faculty of a medical school ensure that the medical curriculum provides opportunities for medical students to learn to recognize and appropriately address gender and cultural biases in themselves, in others, and in the health care delivery process. The medical curriculum includes instruction regarding the following:

- The manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments
- The basic principles of culturally competent health care
- The recognition and development of solutions for health care disparities
- The importance of meeting the health care needs of medically underserved populations
- The development of core professional attributes (e.g., altruism, accountability) needed to provide effective care in a multidimensional and diverse society

SUPPORTING DATA

Table 7.6-1 | Cultural Competence

Provide the names of courses and clerkships that include objectives related to cultural competence in health care. For each, list the specific topic areas covered. Schools using the AAMC Tool for Assessing Cultural Competence Training (TACCT) may use the "Domains" table as a source for these data.

Course/Clerkship	Topic area(s) covered
Introduction to Clinical Skills (MS1) Advanced Clinical Skills (MS2)	Cultural Awareness Community Panels LGBTQ Community Communication Barriers: Vision and hearing impairment Substance Use Disorders (EMS, Police, Patients in Recovery, Parents of Addicts) Medical Humanities Assignments

Table 7.6-2 | Health Disparities, Demographic Influences, and Medically Underserved Populations

Provide the names of courses and clerkships that include explicit learning objectives related to the listed topics areas.

Course/Clerkship	Topic Area(s) Covered		
	Identifying and providing solutions for health disparities	Identifying demographic influences on health care quality and effectiveness	Meeting the health care needs of medically underserved populations
FCH 742 Family Medicine MS3 Clerkship	Y	Y	Y
PSY 742 Psychiatry MS3 Clerkship	Y	Y	Y

Table 7.6-3 | General Medical Education - Preparation for Residency					
Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who *agree/strongly agree* (aggregated) that they are prepared in the following area to begin a residency program: *Prepared to care for patients from different backgrounds.*					
GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
90.0	95.5	93.7	95.4	93.3	95.9

Table 7.6-4 Adequacy of Education			
Provide the percent of respondents to the ISA who were satisfied with *the adequacy of education in caring for patients from different backgrounds*.			
Year 1	Year 2	Year 3	Year 4
42.5	53.5	92.3	94.6

NARRATIVE RESPONSE

a. Describe and provide two examples of how the curriculum prepares medical students to be aware of their own gender and cultural biases and those of their peers and teachers.

1. Gender and Cultural Bias Reflection – Students from the MS1 (ICS – IDM 715) and MS2 (ACS – IDM 755) courses perform a written reflection (anonymized) on their own gender and cultural biases relating to their peers, educators, and future patients. Students are asked to discuss ways in which they have begun to address them or plan to do so in the future. Students must cite any sources utilized in the exercise. Reflections are compiled and themes identified. A large group discussion is then held during which the biases of the class as a whole are shared along with those of their instructors, a session moderated by a trained psychologist who is not involved in student assessment and evaluations. Students are given feedback on sources utilized and resources for further knowledge in the future. During their fourth year, students will reflect again on their original assignment and consider changes in their attitudes and how these might change further going forward. Academic year 2018-2019 is the first time the exercise was completed.
2. Introduction and Advanced Clinical Skills (MS1 and MS2): the impact of gender and cultural biases on medical outcomes for patients, and the community, is primarily addressed in these longitudinal courses. ICS and ACS provide students with opportunities to explore and engage in discussions regarding the impact of cultural parameters on patient and population health. These include cultural awareness community panels:

    a. LGBTQ
    b. Communication Barriers. Vision and Hearing Impaired
    c. Domestic violence
    d. Substance Use Disorders (EMS, Police, Patients in Recovery, Parents of Addicts)

7.7 MEDICAL ETHICS

The faculty of a medical school ensure that the medical curriculum includes instruction for medical students in medical ethics and human values both prior to and during their participation in patient care activities and requires its medical students to behave ethically in caring for patients and in relating to patients' families and others involved in patient care.

SUPPORTING DATA

Table 7.7-1 | Medical Ethics

For each topic area listed below, indicate whether the topic is taught separately as an independent required course and/or as part of a required integrated course and when in the curriculum these topics are included by placing an "X" in the appropriate columns.

	Course type		Years the topic areas are taught/assessed			
	Independent course	Integrated course(s)	Year 1	Year 2	Year 3	Year 4
Biomedical ethics		X	X	X	X	X
Ethical decision-making		X	X	X	X	X
Professionalism		X	X	X	X	X

Table 7.7-2 | General Medical Education - Preparation for Residency

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who *agree/strongly agree* (aggregated) that they are prepared in the following area to begin a residency program: *I understand the ethical and professional values that are expected of the profession.*

GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
100.0	98.0	98.4	98.0	100.0	98.2

NARRATIVE RESPONSE

a. Describe the methods used to assess medical students' ethical behavior in the care of patients and to identify and remediate medical students' breaches of ethics in patient care.

Students are first introduced to medical ethics in the Introduction to Clinical Skills Course during MS1. This large group discussion centers around the primary bioethics principles of autonomy, beneficence, non-maleficence, and justice; application of foundational principles of medical ethics to common clinical ethical dilemmas; and, identifying the current status of debate and consensus about ethical issues relevant to medical practice.

In ICS, students are required to complete a case-based exercise on "Applications of Medical Ethics in Everyday Practice". They are given feedback on their responses by the course director.

In ICS, students are taught and patriciate in a large group discussion on "Ethical Dilemmas". Session objectives include; define the terms "fundamental presupposition", "ethical theory" and "practical decision" as used to describe the "anatomy" of an ethical decision; list the commonly held principles governing the ethical decisions in medicine; discuss two different fundamental presuppositions re: the value of individual human life: "instrumental" vs. "intrinsic"; and, Define the terms "decision-making capacity", "appropriate

surrogate decision-maker", "medical futility" and "double effect" as they apply to the ethics of medical decision making.

In ICS, students also explore euthanasia and physician assisted suicide in a large group discussion moderated by one of the Family Medicine faculty.

First year students are assessed on their ethical treatment of patients during their CCEs. Within Introduction to Clinical Skills (ICS) course students are introduced to ethical principles and behavior through didactic sessions and case based discussion. Students are required to apply these principles and behavior to each clinical scenarios. During ICS the students complete eight clinical competency exams. The students are assessed on professional domains during each encounter, including ethical standards such as autonomy and non-maleficence. Students receive feedback on these encounters from the faculty and the standardized patients. Students with a concerning performance are reviewed and meet with the course director to identify and clarify the concern and develop a plan for improvement.

During the MS2 Advanced Clinical Skills course (MDC-755), students continue with didactic education in medical ethics and are assessed formally with written examinations and during clinical competency examinations. Students who have been identified on clinical competency examinations to show patterns of concern will meet with the course directors for an individualized remediation plan.

Finally, students are evaluated on their commitment to ethical principals in patient-care for each clerkship and receive feedback from Clerkship Directors during midpoint and final evaluations.

SUPPORTING DOCUMENTATION

1. Instruments used in the formative and/or summative assessment of medical students' ethical behavior during the pre-clerkship and clinical clerkship phases of the curriculum.

   See Appendix 7.7-1 MS1-MS2 Professionalism Eval Form
   7.7-2 MS3-MS4 Clerkship Student Eval Form

7.8 COMMUNICATION SKILLS

The faculty of a medical school ensure that the medical curriculum includes specific instruction in communication skills as they relate to communication with patients and their families, colleagues, and other health professionals.

SUPPORTING DATA

Table 7.8-1 | Communication Skills

Under each heading, provide the names of courses and clerkships that include explicit learning objectives related to the listed topics areas.

Course	Topic Areas		
	Communicating with patients and patients' families	Communicating with physicians (e.g., as part of the medical team)	Communicating with non-physician health professionals (e.g., as part of the health care team)
IDM 715 – Introduction to Clinical Skills	Y	Y	Y
MED 755 – Advanced Clinical Skills	Y	Y	Y

Table 7.8-2 | General Medical Education - Preparation for Residency

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who *agree/strongly agree* (aggregated) that they are prepared in the following area to begin a residency program: *Communication skills necessary to interact with patients and health professionals.*

GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %
100.0	98.2	98.4	98.1	98.3	96.4

NARRATIVE RESPONSE

a. Describe one specific educational activity, including student assessment, and the relevant learning objectives included in the curriculum for each of the following topic areas:

1. Communicating with patients and patients' families
2. Communicating with physicians (e.g., as part of the medical team)
3. Communicating with non-physician health professionals as members of the health care team

1. Communicating with patients and patients' families

Sessions and assessments focused on communication with patients and their families are found in the two clinical skills courses: Introduction to Clinical Skills for MSI students and Advanced Clinical Skills for MSII students.

In year 1, students complete a medical humanities assignment as a large group discussion covering various scenarios in which a physician is approached by a patient on social media or in social settings.

All first and second year students are assessed on their interactions with standardized patients during each CCE. The CCEs are evaluated by faculty and peer graders and the standardized patients.

During the MS2 Advanced Clinical Skills course (MDC-755), students are taught how to break unwelcome news to patients using well described techniques. During a follow up to a clinical skills examination, students are given the opportunity to practice these skills by breaking unwelcome news to a standardized patient with his/her spouse or friend in the room.

Learning objective: Demonstrate effective oral communication skills with patients in clinical setting. (Standardized patient)

2. Communicating with physicians (e.g., as part of the medical team)

Year 2 students complete 5 case presentations in which they present a patient to a physician. They are assessed on the inclusion of relevant history and physical findings, the manner in which the presentation is made, and their diagnostic plan.

Learning objective: Effectively present the findings of a history and physical examination, diagnostic test results, and management plan.

3. Communicating with non-physician health professionals as members of the health care team

Students in year 2 participate in a 2-part session of IPE. During this session, students from the schools of medicine, pharmacy, and health professions, including dietetics, social work, communication disorders, and physical therapy, take pre- and post-session surveys exploring their attitudes toward interprofessional teams in health care. Students are given a case with profession-specific objectives and develop a treatment plan specific for their discipline. During the second part of the experience, teams compromised of students representing each discipline discuss the treatment plan for the standardized patient. Students are evaluated by the standardized patient and a faculty facilitator.

Learning objective: Apply team work skills in collaboration with other members of the health care team to provide appropriate health care to patients.

7.9 INTERPROFESSIONAL COLLABORATIVE SKILLS

The faculty of a medical school ensure that the core curriculum of the medical education program prepares medical students to function collaboratively on health care teams that include health professionals from other disciplines as they provide coordinated services to patients. These curricular experiences include practitioners and/or students from the other health professions.

SUPPORTING DATA

Table 7.9-1 | Collaborative Practice Skills in Learning and Program Objectives

Illustrate the linkage between course and clerkship learning objectives related to collaborative practice skills and the medical education program objectives.

Course/Clerkship learning objective(s) related to collaborative practice skills	Medical education program objective(s)
DTIII—present team findings during application exercise of at least one TBL Internal Medicine Clerkship—Students must demonstrate the ability to communicate effectively with patients, support personnel and consulting physicians OB/GYN Clerkship—Communicate effectively verbally and via written documentation with other members of the health care team including faculty, residents, nursing, supporting staff as well as the patient and her family ACS— Demonstrate effective oral communication skills with colleagues and other health professionals in clinical care settings (IPE).	**IC3A2** Demonstrate effective oral communication skills with colleagues and other health professionals in clinical care settings
MS1 S&F III – work with other students as a team to solve clinical case-based problems involving the cardiovascular system, the respiratory system, and the kidney. MS1 S&F IV – Work with other students as a team to solve clinical case-based problems involving the gastrointestinal, endocrine, and reproductive systems. MS2 DTIII-- work with other students as a team to solve clinical case-based problems involving the cardiovascular system, the respiratory system, and the kidney. MS2 DTIV—work with other students as a team to solve clinical case-based problems involving the gastrointestinal or the endocrine system. MS2 ACS— Work collaboratively as a member of a team to solve clinical problems (IPE). All Required Clerkship— work collaboratively as a member of a team to provide effective patient care	**IC2B1** Work collaboratively as a member of a team to solve clinical problems

All Required Clerkship—Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.	**IC3B1** Apply team work skills in collaboration with other members of the health care team to provide appropriate health care to patients
ACS— Actively request and respond to feedback from other members of the health care team (IPE).	**PR3K2** Actively request and respond to feedback from other members of the health care team
All Required Clerkship—physicians model appropriate feedback behavior during rounds and discharge planning involving all members of the health care team	**PR4K2** Provide appropriate feedback to other members of the health care team
Psychiatry Clerkship—Discuss the roles of non-physician healthcare disciplines (e.g., case managers, LPCs, social workers, psychologists, recreation therapists, etc.) Psychiatry Clerkship—Discuss the importance of working successfully with patient's families and other support systems (schools, DHHR, legal team, etc.) ICS/ACS—Discuss the role and responsibilities of health care team members in care of patients, including but not limited to physicians, EMTs, social workers, patient advocates, interpreters.	**SB1E1** Discuss the role and responsibilities of health care team members in the care of patients
OB/GYN Clerkship—Demonstrate awareness of the importance of culture, ethnicity, language and socioeconomic background in the interaction with patients and their families	**SB2E1** Recognize barriers to effective health care team function and how to overcome these barriers to provide optimal patient care
Family Medicine—Discuss leading a multidisciplinary team in effective patient care	**SB2E2** Describe how health care team members are effectively integrated to optimize patient care in the hospital and clinic setting
All Required Clerkship—develop patient care plans integrating the roles of appropriate medical and allied health professionals	**SB3E1** Develop patient care plans integrating the roles of health care team members in the hospital and clinic setting
Family Medicine—Discuss leading a multidisciplinary team in effective patient care	**SB3E2** Describe how health care team members are effectively integrated to optimize patient care across different levels of care

NARRATIVE RESPONSE

a. Provide three examples of required experiences where medical students are brought together with students or practitioners from other health professions to learn to function collaboratively on health care teams with the goal of providing coordinated services to patients. For each example, describe the following:

1. The name and curriculum year of the course or clerkship in which the experience occurs
2. The learning objective and desired outcome(s) of the experience related to students' development of collaborative practice skills/how the experience contributes to the desired outcome
3. The duration of the experience (e.g., single session, course)
4. The setting where the experience occurs (e.g., clinic, simulation center)
5. The other health profession(s) students or practitioners involved
6. The way(s) that the medical students' attainment of the objectives of the experience is assessed

Interprofessional experiences take place in conjunction with Introduction to Clinical Skills (MS1) and Advanced Clinical Skills (MS2) and during the MS3 Internal Medicine rotation.

Example 1—MS2—Advanced Clinical Skills (MDC 715) – Appendix 7.9-1

Learning Objectives:

1. Work with individuals of other professions to maintain a climate of mutual respect.
2. Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and populations served.
3. Communicate with patients, families, communities, and other health care professionals in a responsive and responsible manner that supports a team approach to the maintenance of health and the treatment of disease.
4. Apply relationship-building values and principles of team dynamics to perform effectively in different team roles to plan and deliver patient/population-centered care that is safe, timely, effective, and equitable.

Duration: One experience is conducted over two sessions.

Setting: Conference center or classroom

Professional schools involved:

1. College of Health Professions: Nursing, Dietetics, Social Work, Communication Disorders, Physical Therapy
2. School of Medicine
3. School of Pharmacy
4. Department of Psychology

Assessment: Students complete a care plan based on their discipline that includes information they need to complete the plan from the other disciplines participating in the exercise.

Example 2—MS1—Introduction to Clinical Skills (MDC-755)

Learning Objectives:

1. Introduce students to the role of various health care and allied health professionals in the effective care and management of patients.
2. Work with individuals of other professions to maintain a climate of mutual respect.
3. Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and populations served.

Duration: One, panel discussion

Setting: Conference center or classroom

Professional schools involved:

1. College of Health Professions: Nursing, Dietetics, Social Work, Communications Disorders, Physical Therapy
2. School of Medicine
3. School of Pharmacy
4. Department of Psychology

Assessment: students complete a reflection-assignment after the activity

Example 3 – MS3 IPE Event (7.9 appendix)

Learning Objectives:

1. Define Transitions of Care
2. Define issues associated with failed transitions
3. Describe the 3 most common errors in transitions of care that lead to failed transitions, especially at the time of hospital discharge.
4. Identify ways to improve transitions of care in the hospital discharge process.

Duration: Students attend 2 to 4 sessions. Sessions are 1.5-2 hours.

Setting: Classroom designed for small group work.

Professional schools involved:

1. School of Medicine
2. School of Pharmacy

Assessment: Students answers are discussed in a large group setting at the end of the session.

SUPPORTING DOCUMENTATION

1. Examples of forms used in the assessment of medical students' collaborative practice skills. For each example, list the course or clerkship in which the form is used.

   See Appendix *7.9-1 Collaborative Skills Assessment Forms.docx*

STANDARD 8: CURRICULAR MANAGEMENT, EVALUATION, AND ENHANCEMENT

The faculty of a medical school engage in curricular revision and program evaluation activities to ensure that medical education program quality is maintained and enhanced and that medical students achieve all medical education program objectives and participate in required clinical experiences.

SUPPORTING DATA

Table 8.0-1 | Overall Satisfaction

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who *agree/strongly agree* (aggregated) with the statement:
"*Overall, I am satisfied with the quality of my medical education."*

GQ 2013		GQ 2014		GQ 2015		GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %	School %	National %	School %	National %	School %	National %
86.7	89.2	88.9	87.5	96.2	90.9	85.7	90.1	95.6	89.9	91.5	89.3

SUPPORTING DOCUMENTATION

1. A summary of student feedback for each required course and clerkship for the past two academic years. Include the overall response rate for the year for each course/clerkship.

   Appendix 8.0-1 Student Feedback for Courses and Clerkships

2. An organizational chart for the management of the curriculum that includes the curriculum committee and its subcommittees, other relevant committees, the chief academic officer, and the individuals or groups with involvement in curriculum design, implementation, and evaluation.

   Appendix 8.0-2 Curriculum Management Organizational Chart

8.1 CURRICULAR MANAGEMENT

A medical school has in place an institutional body (e.g., a faculty committee) that oversees the medical education program as a whole and has responsibility for the overall design, management, integration, evaluation, and enhancement of a coherent and coordinated medical curriculum.

NARRATIVE RESPONSE

a. Provide the name of the faculty committee with primary responsibility for the curriculum. Describe the source of its authority (e.g., medical school faculty bylaws).

The faculty committee charged with primary responsibility for the curriculum is the **Curriculum Committee** (CC). The JCESOM Bylaws state: "The Curriculum Committee is responsible for the overall design, management, and evaluation of the medical school curriculum. It is expected that this will be a coherent and coordinated curriculum that fulfills the goals and objectives of the School of Medicine and will be in full compliance with LCME standards. The Curriculum Committee is responsible for a wide range of issues, including but not limited to the following.

1. Defining and adopting program objectives: the CC defines the goals and objectives of the MD-program at the JCESOM. These outcomes are reviewed every three years at the CC retreat and modified, if necessary.
2. The CC is responsible for sequencing of the various segments of the curriculum, both within and across the academic periods of study.
3. The CC also advises each course and clerkship on appropriate pedagogies and assessments.
4. Ongoing evaluation of course and program effectiveness towards meeting the overall institutional outcomes.
   1. Ongoing evaluation of the content and workload in each discipline to identify omissions and unplanned redundancies.
   2. Make such changes to the curriculum that are prudent and appropriate to fulfill the responsibilities of the Curriculum Committee.
5. Maintain careful records of the proceedings, decisions, and actions of the committee.

b. Provide the number of curriculum committee members and describe any specific categories of membership (e.g., basic science or clinical faculty members, course directors, students). Is the chair of the committee a member of the medical school administration (serving ex officio) or a faculty member with no administrative title? Note if there are terms for committee members.

As per the JCESOM Bylaws:

The CC shall consist of the following members, all with full voting rights:

Faculty:
Department of Biomedical Sciences:
5 members will be elected by the faculty members of the department. The department chair shall be responsible for determining how that election will be conducted. There should be a mixture of faculty who teach across the spectrum of basic science subspecialties.

Clinical Faculty:

There will be a rotating schedule of the clinical departments responsible for electing a member of their department to the CC. The department chair shall be responsible for determining how that election will be conducted. The clinical departments represented will include; Family Medicine, Obstetrics and Gynecology, Psychiatry, Orthopedics, Ophthalmology, Internal Medicine, Pediatrics, Surgery, Neurology and Pathology. A total of 5 members will represent the clinical departments.

Students: one member from each medical school class. Student members will be voted upon by their representative class during their first year and will serve a 4 year term. (4 members)

Academic administration: The Vice-Dean for Medical Education or his/her designee and the Associate Dean for Medical Education will serve as ex officio members of the committee. The Associate Dean for Medical Education will be nonvoting, function as the executive secretary of the committee, organize the agenda as directed by the Chair and maintain the records of the actions of the CC.

The chair of the CC will be one of the 10 faculty members and will be Elected by the full committee one month prior to expiration of the term of a current CC chair.

c. If there are subcommittees of the curriculum committee, describe the charge/role of each, along with its membership and reporting relationship to the parent committee. How often does each subcommittee meet?

MS1 Subcommittee
This committee oversees the organization and management of the first-year curriculum of the MD-program, consisting of 5 integrated pre-clinical education blocks and 1 integrated clinical-skills block. This committee is comprised of MS1 course directors, which are all voted on and approved by the committee itself. This committee meets monthly and minutes are posted online.

MS2 Subcommittee
This committee oversees the organization and management of the second-year curriculum of the MD-program, consisting of 5 integrated pre-clinical education blocks and 1 integrated clinical-skills block. This committee is comprised of MS2 course directors, which are all voted on and approved by the committee itself. This committee meets monthly and minutes are posted online.

Clinical Clerkship Committee
This committee oversees the organization and management of all required and elective clinical clerkships. The committee is comprised of the clerkship directors and clerkship coordinators. The directors are all appointed members. Student representatives from the third and fourth year sit on this committee as well. Directors, coordinators, and students are voting members. The committee meets monthly and minutes are recorded.

Curriculum Evaluation Committee (CEC)
This committee oversees programmatic evaluation and the adequacy of alignment of course & clerkship objectives with the institutional objectives. The CEC meets once a month to monitor the curriculum. This committee reviews the activities of all teaching units and determines whether or not the units are complying with the curricular goals and objectives. This subcommittee sends an annual questionnaire to block and clerkship directors who respond by describing the activities in their units of the curriculum. The subcommittee reviews these reports and makes recommendations that are reported directly to the Curriculum Committee. The Curriculum Committee discusses the report and recommendations and moves them along, intact or amended, to the block/clerkship directors for appropriate amendments of their respective courses.

All four subcommittees of the CC are supported by the OME, whose representatives are non-voting members of each subcommittee meeting. All subcommittee decisions are presented to the CC for final debate and approval.

d. Describe how the curriculum committee and its subcommittees participate in the following:

1. Developing and reviewing the educational program objectives
2. Ensuring horizontal and vertical curriculum integration (i.e., that curriculum content is coordinated and integrated within and across academic years/phases)
3. Monitoring the overall quality and outcomes of individual courses and clerkships
4. Monitoring the outcomes of the curriculum as a whole

1. The educational program objectives are set and evaluated by the CC. In 2012, the curriculum committee formed an ad hoc committee to evaluate the old program objectives and develop new educational program objectives that were in line with the ACGME core competency. This committee worked for approximately six months, getting feedback from all stakeholders including faculty, residents, and students. These six core competencies were adopted as institutional program objectives in 2013. These program objectives are reviewed and updated every three years with the most recent being 2018. The CC also oversees the alignment of the institutional objectives with the Mission Statement of the MUJCESOM, and the attainment of these objectives at individual course/clerkship level.

2. In 2013, the curriculum committee initiated an ad hoc integration committee to refine both vertical and horizontal integration. This committee worked for 2 years identifying curricular content and ensuring it was covered across all four years of the educational program in a logical, cohesive manner. The committee used the 115 diseases that were most commonly seen by students to tie the horizontal and vertical details of the curriculum into a usable table that summarized content location within the individual years and across all four years. After the initial work of the integration committee, the curriculum committee selected the top 35 disease states as a means of evaluating integration at their annual retreat. The committee has provided reports and sought approval of the revised tracking list during curriculum committee deliberations. The goal of the committee was to establish the disease and themes that would be most useful for both horizontal and vertical integration of the newly established integrated curriculum. The committee was dissolved, with the approval of the Curriculum Committee, in November of 2017, after 5-years of close monitoring of integration across the Curriculum. Currently, content integration is discussed at the subcommittee level and course modifications suggested to the CC, as needed.

3. The Curriculum Committee engages in continuous quality monitoring and improvement of the curriculum, meeting twice monthly to review course/clerkship reports provided by the department and students' course/clerkship evaluations. In 2018, the Curriculum Evaluation Committee (CEC) was formed as an independent evaluation subcommittee, which reports directly to the CC. The CEC is comprised of faculty from the clinical and basic science departments and reviews one course/clerkship each month. The CEC reports are prepared in collaboration with the course/clerkship director and include the recommendations of the CEC, which are reviewed and voted upon by the CC.

4. The Office of Medical Education established an Educational Dashboard in the spring of 2017 to assist in tracking educational outcomes, such as when institutional objectives are achieved in the medical education program and forms of pedagogy used to achieve them. The Office of Medical Education also

compiles data from the National Board of Medical Educators and shares data on exam performance, content inclusion, strengths and weaknesses of MUSOM students, and comparison of MUSOM students and levels of national performance at various meetings. Meeting minutes document when these types of discussions occur and if changes to the curriculum are recommended or implemented due to findings. Thus, performance on board exams and evaluations of deficits as well and strengths are continuously reviewed. Poor performance in certain areas are often identified, discussed and changes to the curriculum occur when needed. The final monitor of curricular-quality is the annual medical student AAMC Graduation Questionnaire. Student responses in this questionnaire indicate their perceptions of the quality of teaching they received. The Vice Dean for Medical Education provides this information to the Curriculum Committee and the appropriate Curriculum Subcommittees.

e. Provide two recent examples that illustrate effective functioning of the curriculum committee (i.e., that problem areas related to course or curriculum structure, delivery, or outcomes are being identified and needed changes are being made). Describe the steps taken by the curriculum committee and its subcommittees to address the identified problems and the results that were achieved.

1. Based on student-feedback and USMLE STEP1 strengths and opportunities report, the CC deemed content areas of biostatistics and translational sciences to be insufficiently addressed in the preclinical curriculum. As per the recommendations of the CC, Dr. Todd Gress was entrusted with developing a series of modules and group activities for Clinical Translational Sciences. These sessions will target key areas of deficiencies in the field of biostatistics and translational sciences.

2. Based on feedback from residency program directors and graduating students, the CC sought to increase the quality and quantity of research opportunities available to our students in the clerkship years. To this end, the CC increased the time available for clinical research from 2 weeks to 6. The CC also mandated clearly defined outcomes for these research electives with an expectation of significant progress towards a research manuscript and/or national/local presentation, to be approved by the Clerkship Director or the Dept. Chair.

SUPPORTING DOCUMENTATION

1. The charge to or the terms of reference of the curriculum committee, including the excerpt from the bylaws or other policy granting the committee its authority. If the subcommittees of the curriculum committee have formal charges, include those as well.

   8.1-1 Bylaws for the Curriculum Committee

2. A list of curriculum committee members, including their voting status and membership category (e.g., faculty, student, or administrator).

   8.1-2 Curriculum Committee Members.

3. The minutes of four curriculum committee meetings over the past year that illustrate the activities and priorities of the committee. Note: Have available on-site for the survey team three years of curriculum committee minutes.

   8.1-3 CC Minutes 9-6-18
   8.1-4 CC Minutes 9-20-18
   8.1-5 CC Minutes 10-18-18
   8.1-6 CC Minutes 11-15-18

8.2 USE OF MEDICAL EDUCATIONAL PROGRAM OBJECTIVES

The faculty of a medical school, through the faculty committee responsible for the medical curriculum, ensure that the medical curriculum uses formally adopted medical education program objectives to guide the selection of curriculum content, review and revise the curriculum, and establish the basis for evaluating programmatic effectiveness. The faculty leadership responsible for each required course and clerkship link the learning objectives of that course or clerkship to the medical education program objectives.

NARRATIVE RESPONSE

a. Describe and provide examples of how the medical education program objectives are being used to guide the following activities:

1. The selection and appropriate placement of curriculum content within courses/clerkships and curriculum years/phases
2. The evaluation of curriculum outcomes

1. The selection and appropriate placement of curriculum within courses/clerkships and curriculum years/phases

The SOM's Institutional Competencies (ICs) were designed by faculty, administrators, and students to describe the knowledge, skills, attitudes, and behaviors necessary for the MD degree and to transition to residency training. These competencies are aligned with the ACGME core-competencies and are integrated into our curricular structure, covering all four years of the standard curriculum.

Each course-director utilizes the ICs as the anchor for design and implementation, or revision, of a course. This ensures, where applicable, each course integrates content and assessment methods addressing multiple competencies. Course directors must link course objectives to the ICs in order to demonstrate this integration and to promote the use of assessment methods to progressively measure student attainment of the expectations described in the ICs. Based on this strategy the curriculum is designed to first introduce students to basic principles of normal human structure and function and to become familiar with general skills (such as history taking and physical examination skills) throughout the first year curriculum.

The second year curriculum is designed to promote understanding of the pathophysiology of human disease and to develop detailed methods for assessing and treating these conditions. Students utilize clinical skills first learned in Year 1 to examine patients in inpatient and outpatient settings to improve their skills in assessment and interpersonal communication. Several of the non-MK competencies are covered in these clinical skills courses to prepare our students for effective patient management.

The third year curriculum is designed to provide students with relevant clinical experiences in the main six clerkships but more importantly to enable them to achieve higher level learning in the multiple competencies explicitly covered and assessed in each clerkship. For example, students must demonstrate the ability to utilize the general physical and clinical examination skills obtained in the first two years to obtain focused information relevant to patient presentations in each clerkship. With a common assessment system used across all clerkships this provides the opportunity to progressively measure student competencies ultimately to ensure graduates can be certified as having met the program objectives and, in the near future, the Entrustable Professional Activities to be required of all beginning residents.

Finally, the Year 4 curriculum is designed to provide students with a flexible schedule to complete their attainment of the program objectives (as defined by the Clinical Clerkship Committee)

i. All courses and required clerkships report their coverage of the educational program objectives (six ACGME domains) in their annual reports to the CEC. The CEC collates additional data, including course and faculty evaluations, standardized and non-standardized assessment data, quality of midpoint evaluations (if applicable), residency match data (if applicable), course syllabi, student and faculty scholarly work, and alignment of pedagogy and assessments. The CEC, in collaboration with the course/clerkship director, compiles its report for the CC to review. The CC reviews and recommends changes/improvements for the next academic year.

ii. All sessions, within each required course and clerkship, link the session's learning objectives to the educational program objectives and the disease list accepted and adopted by the CC. Educational program objectives covered in each course and clerkship are available on the Academic Dashboard for members of the CC and the OME to review. This ensures adequate coverage of these program objectives and flags deficiencies as they arise.

2. The evaluation of curriculum outcomes

The following tools are used to evaluate curricular outcomes:

Student success rate in the USMLE STEP 1 and 2 CK and CS
Student scores on internally developed examinations
Performance-based assessment of clinical skills (e.g., OSCEs)
Student responses on AAMC Medical School Graduation Questionnaire
Student evaluation of courses and clerkships
Student advancement and graduation rates
NRMP results
Specialty choice of graduates
Assessment of residency performance of graduates
Licensure rates of graduates

b. Describe the status of linking course and clerkship learning objectives to medical education program objectives and the roles and activities of course/clerkship faculty and the curriculum committee and its subcommittees in making and reviewing this linkage.

All course/clerkship syllabi link their objectives to the Institutional Competencies. In turn, all sessions, within each required course and clerkship, link the session learning objectives to the educational program objectives and the disease list accepted and adopted by the CC. Educational program objectives covered in each course and clerkship are available on the Academic Dashboard for members of the CEC, CC and the OME to review. The CEC, supported by the Associate Dean of Medical Education, periodically review these linkages and advise the course or clerkship and the CC accordingly. This ensures adequate coverage of these program objectives and flags deficiencies as they arise.

SUPPORTING DOCUMENTATION

1. One example from a course and one example from a clerkship illustrating the linkage of all the learning objectives of the course and the clerkship to the relevant medical education program objectives.

   Appendix 8.2-1 Diseases and Therapeutics II Objectives
   Appendix 8.2-2 Ob/Gyn Objectives

8.3 CURRICULAR DESIGN, REVIEW, REVISION/CONTENT MONITORING

The faculty of a medical school are responsible for the detailed development, design, and implementation of all components of the medical education program, including the medical education program objectives, the learning objectives for each required curricular segment, instructional and assessment methods appropriate for the achievement of those objectives, content and content sequencing, ongoing review and updating of content, and evaluation of course, clerkship, and teacher quality. These medical education program objectives, learning objectives, content, and instructional and assessment methods are subject to ongoing monitoring, review, and revision by the faculty to ensure that the curriculum functions effectively as a whole to achieve medical education program objectives.

NARRATIVE RESPONSE

a. Describe the roles and activities of the course and clerkship directors and course and clerkship committees, the teaching faculty, the departments, and the chief academic officer/associate dean for the medical education program in the following areas. If other individuals or groups also play a role, include these in the description as well.

1. Developing the objectives for individual courses and clerkships
2. Identifying course and clerkship content, teaching formats, and assessment methods that are appropriate for the course/clerkship learning objectives
3. Evaluating the quality of individual faculty member teaching (e.g., through peer assessment of teaching or review of course content)
4. Monitoring the quality of individual faculty member teaching (e.g., through the review of student evaluations of courses and clerkships)
5. Evaluating the overall quality and outcomes of the course/clerkship

1. Developing the objectives for individual courses and clerkships:

PreClerkship course directors are selected by the MS1 and MS2 subcommittees and recommendations of the Chair of the Basic Science Department are taken into account during the selection process. Faculty members can also volunteer for the position. Clerkship directors are selected by respective department chairs and approved by the Clinical Clerkship Subcommittee and the CC. The selection criteria are based on faculty interest, experience and proven track-record in medical education. The process is supported by the OME. The CC must approve the selection of course and clerkship directors. These individuals are responsible for developing the objectives for their course or clerkship, a process overseen and supported by the OME. The directors, and their associate directors where available utilize national curricular guidelines for areas covered by the course or clerkship to develop learning objectives. These objectives must align with ICs, as approved by the CC, and take into considerations the disease list and USMLE content-outline.

2. Identifying course and clerkship content, teaching formats, and assessment methods that are appropriate for the course/clerkship learning objectives

The course/clerkship director works collaboratively with the Associate and Vice Dean of Medical Education to identify appropriate methods of pedagogy and assessment. The teaching faculty are guided by the course/clerkship director in the inclusion or elimination of the content they teach, in

alignment with the course/clerkship objectives. Overall, teaching faculty are responsible for selection of learning materials, assessment items, and assigning learning objectives for the content they teach. The faculty are supported by the course/clerkship director and the OME in their selection of learning objectives, materials, and assessment items. The course/clerkship director oversees the material that is provided and ensures that each learning event contains the required components. The course/clerkship director and faculty member have access to our learning management system, which requires the entry of learning objectives and the assignment, or tagging, of each teaching session to objectives defined by the CC. The course directors and faculty are supported by the OME. The role of OME is to promote content integration across courses and clerkships; promote active learning pedagogies, like flipped classroom, audience response and TBLs; enhance the quality of in-house assessments; and, determine ways to use student-feedback to improve their educational experience.

The PreClerkship curriculum is designed to provide a foundational basis of human health and disease to prepare students for their clinical experience in Years 3 and 4. This curricular phase also prepares the students for their licensure examinations, USMLE STEP 1 and 2. USMLE content outline, student-feedback, feedback from clinical faculty and clerkship directors, and input from the OME form the basis of content selection in this part of the curriculum. Additionally, guidelines published by national organizations are also used to ensure curricular content is complete and appropriate. For example, the Association of Medical School Physiology Chairs published guidelines for coverage of pharmacology topics in 2012 and this publication has been used extensively throughout courses in the first and second year to ensure physiology content is appropriate throughout the blocks. Outside resources used extensively by the students are also consulted to ensure adequate coverage of "high-yield" content. For e.g. all preclinical course directors (block directors) are provided with a copy of First-Aid to STEP 1 for identification of "high-yield" content. Recently, based on student feedback, histology content in the preclinical curriculum was scaled back to refocus on high yield and practical information, with appropriate integration of histology with pathology in the second year curriculum. Student performance on customized NBME and USMLE STEP 1 is discussed and reviewed by the subcommittees and the CC to adjust content-coverage and assessment approaches. For e.g. student performance on the immunology portion of the USMLE STEP 1 dropped in 2016, together with student-feedback, the course-directors advised the CC and OME for a need to change immunology instruction. Dr. John Yanelli, an experienced immunology educator from University of Kentucky, was hired on a subcontract to cover immunology in our MS2 curriculum as a national search for an immunology instructor was underway. Finally, the OME and the CC review coverage of Institutional Competencies at the course level and recommends change, if warranted.

Assessment methods in the PreClerkship courses are set by the course directors and overseen by the MS1 and 2 subcommittees and the OME. Course directors set the assessment standards and evaluate them frequently to ensure adequacy of alignment between session, course and institutional objectives. The OME coordinates regular evaluation of individual exams and course assessments to promote improvements in the accuracy of these assessments. For e.g., beginning this academic year, all computerized exams are required to tag individual items on the Bloom's Scale. Assessment items are tagged as Bloom's level 1 (recall), 2 (comprehension), 3 (application), or 4 (synthesis). Students receive feedback on their performance and work with course director and the Office of Academic Support to improve their performance at each level. Assessment of clinical skills, history taking and physical examination skills, in the PreClerkship curriculum is designed by directors of the Introduction to and Advanced Clinical Skills courses. Student performance on these assessments is monitored by the course directors and the OME. Non-traditional assessments (e.g. written assignments, readiness assurance of TBL, reflections) are set by the course directors and reported annually to the CC.

Clerkship content is established by faculty from each specialty and regularly monitored by clerkship directors, chairs, and the OME through the Clinical Clerkship Committee. Each clerkship has

prepared a core manual to describe the common learning objectives utilized in a single clerkship on all campuses and to describe the methods of instruction utilized to achieve the learning objectives. Guidelines from national organizations, such as the Society for Teachers of Family Medicine, Association of Professors of Gynecology and Obstetrics, Council on Medical Student Education in Pediatrics, and the Association of Directors of Medical Student Education in Psychiatry, are used within each clerkship to align objectives to national standards. Clerkship outcomes are regularly monitored by the Office of Medical Education and presented to clerkship directors and chairs. For example, student performance on end-of-clerkship NBME shelf-exams is monitored and reported back to the clerkship, the CCC and the CC. This information is used to determine if additional focus should be placed on identified areas. Clerkship faculty are offered the opportunity to review sample examinations from the NBME to ensure they are aware of the covered content and can adjust teaching activities to cover relevant information. Student performance on CCEs is tracked longitudinally by the clerkship and the OME and remedial efforts made where necessary.

Assessment methods in clerkships are designed to assess student performance across multiple competencies and have been designed to provide consistent assessment across the seven clerkships in the Year 3 curriculum. Content and assessment in Year 4 are established by faculty and course directors and coordinated by the Clinical Clerkship Committee.

3. Evaluating the quality of individual faculty member teaching (e.g., through peer assessment of teaching or review of course content)

The quality of teaching is monitored through a number of processes. The quality of individual faculty instruction is monitored by review of student evaluations of these faculty (see below) and by direct observations by block directors of faculty who teach within their block. All block directors attend individual sessions and provide feedback to faculty to develop strategies for addressing areas in need of improvement, should they exist. Additionally, the annual performance of students on each of the blocks and clinical clerkships is monitored as a proxy for quality of education. These data are summarized and presented to the appropriate Curriculum Subcommittees and as well as the CC. In addition the USMLE Step 1 and Step 2 performances are shared with the same committees, by the OME, on an annual basis and are monitored longitudinally to identify areas of deficiency in student performances. The students themselves have an opportunity in the common clerkship evaluation form as well as the common questions that bridge across the block evaluations to identify their perceptions of the quality of their teaching. The student Liaison-committee also meets with the course directors at least a few times a semester and provide constructive feedback on individual faculty and the block as a whole. The final monitor of teaching quality is the annual medical student AAMC Graduation Questionnaire. Part of the responses in this questionnaire indicate student's perceptions of the quality of teaching they received. These data are also shared and discussed at the subcommittee and the CC levels by the Vice Dean of Medical Education.

4. Monitoring the quality of individual faculty member teaching (e.g., through the review of student evaluations of courses and clerkships)

All faculty are evaluated by the students. After each block or clerkship, the evaluations of the course and the faculty members are collated and reviewed by the Associate Dean of Medical Education. Students provide feedback in two ways, via 5-point Likert scale for a set of 7-10 questions and through free text entries. These evaluations are completed online on the New Innovations platform and collated reports are prepared at the end of each course or clerkship for distribution to the faculty member or resident and to the course director for their review. The results are forwarded to the block leader or clerkship director for review and discussion with the faculty members. The OME and/or

dept. chair work with faculty members to ensure highest quality of medical education for our students.
Additionally, the Curriculum MAP allows for instant feedback on each sessions and provides a space for students to ask questions. On top of each session page in the MAP, there is a link to our "One Minute Feedback". Students can rate the session on the clarity and effectiveness of pedagogy and use the provided space to ask a question or provide feedback. All entries are anonymous and the feedback is sent to the faculty-presenter, the Block Leader and the Associate Dean for Medical Education. This forum is used to improve the curricular content and the educational-experience in real-time.

5. Evaluating the overall quality and outcomes of the course/clerkship

The overall evaluations of the courses (strengths and weakness) and students' comments are reviewed by the CEC, along with the course director, and presented to the CC for review. The course review document provides a section for the course directors to provide the feedback from students. Each year, we see modifications to the course that are based on student feedback. Other objectives measure course or clerkships effectiveness, including monitoring of student performance on institutionally developed and national examinations. Student performance on national standardized exams is carefully monitored by comparing performance of the JCESOM students to those in the national comparison cohort for that examination. For example, item analysis data provided with comprehensive Basic Science Examination has permitted the school to focus attention on areas of the curriculum where our students tended to underperform (such as Biostatistics and Immunology) and to enact modifications to courses to address these problems in a timely and directed way. Similar data are also available for clerkship NBME exams in order to identify tested areas that appear to receive insufficient coverage within the clerkship.

In addition, the Associate Dean of Medical Education along with the Curriculum Subcommittee Chairs meet with MS1 and MS2 classes every other Wednesday. This informal session is "What's Working Wednesday" and provides the students and the administration an avenue to discuss strengths and opportunities of the course and the curriculum as a whole. Student's concerns and feedback from these sessions are incorporated into curricular reform as and when feasible.

b. Describe the process of formal review for each of the following curriculum elements. Include in the description the outcomes that are evaluated, as well as the frequency with which such reviews are conducted, the process by which they are conducted, the administrative support available for the reviews (e.g., through an office of medical education), and the individuals and groups (e.g., the curriculum committee or a subcommittee of the curriculum committee) receiving and acting on the results of the evaluation.

1. Required courses in the pre-clerkship phase of the curriculum
2. Required clerkships
3. Individual years or phases of the curriculum

1. **Required courses in the pre-clerkship phase of the curriculum**: students are required to complete several questionnaires within each preclinical course. Completion of these questionnaires is considered an expectation of professional behavior for the students and completion rates are generally 100%. Evaluations of preclinical courses are collated by the staff of the OME and reported to the Associate Dean of Medical Education and the course director. Annually, the course director prepares a course report for review by the CC. All data pertaining to the preclinical course/block is collated by the course director, including:
    a. Student performance metrics for the current and previous two academic years

b. Pedagogy and assessment breakdown for the current and previous academic year
c. Description of active learning sessions in the block
d. Block/clerkship objectives in relation to the ICs
e. Pedagogy and assessment for cultural competence and health care disparities.
f. Points of formative and summative feedback
g. Course and faculty evaluations
h. Liaison committee feedback and recommendations
i. Identified gaps and redundancies
j. Plans for the next academic year.

This course report is presented to the CC for review and recommendations, at least two weeks prior to the meeting. All CC recommendations are noted in the minutes and sent back to the course for review and implementation.

2. Required clerkships: students are required to complete comprehensive course and faculty evaluation after each clerkship. Completion of these questionnaires is considered an expectation of professional behavior for the students and completion rates are generally 100%. Evaluations are collated by the staff of the OME and reported to the Associate Dean of Medical Education and the clerkship director. Annually, the course director prepares a course report for review by the CC. All data pertaining to the preclinical course/block are collated by the course director, including:
    a. Student performance metrics for the current and previous two academic years
    b. Pedagogy and assessment breakdown for the current and previous academic year
    c. Description of active learning sessions in the Clerkships
    d. Clerkships objectives in relation to the ICs
    e. Points of formative and summative feedback
    f. Student evaluations and liaison committee recommendations
    g. Identified gaps and redundancies
    h. Plans for the next academic year.

This Clerkship report is presented to the Clinical Clerkships Committee and then to the CC for review and recommendations at least two weeks prior to the meeting. All CC recommendations are noted in the minutes and sent back to the Clerkship for review and implementation.

Academic year 2018-19 and onwards, the CEC, in collaboration with the course/clerkship director, generates the course evaluation report. The CEC report is a comprehensive evaluation of the course focusing on alignment and attainment of Institutional Competencies at the course/clerkship level. The CEC report includes:

a. Course/Clerkship learning objectives across the ACGME domains.
b. Review of the syllabus for gaps and redundancies.
c. Coverage of MUSOM longitudinal themes (if any).
d. Evidence of adequate coverage and assessment of MUSOM ICs.
e. Covered core EPAs for entering residency (clerkships only).
f. Pedagogies used in the course/clerkship
g. Opportunities to participate in education sessions (actual or simulated) that involve the basic principles of clinical and translational research.
h. Pedagogy and assessment of ethics, cultural competence, and societal problems.
i. Opportunities for students to focus on communication with patients and or patients' families.

j. Opportunities for students to collaborate with non-physician health professionals and health care teams.
k. Frequency and effectiveness of formative feedback.
l. Opportunities to develop independent learning and critical thinking skills
m. Completion rate of required patient encounters (clerkships only).
n. Completion rate of required procedures (clerkships only).
o. Assessment breakdown
p. Student performance on institutional assessments, NBME, and USMLE STEP1 or 2 (pertaining to content covered in the course/clerkship).
q. Faculty and course evaluations
r. Residency match data (clerkships only).
s. GQ or Y2 survey
t. Student scholarly work (clerkships only).
u. Identified gaps and redundancies
v. Recommendations of the CEC

3. Individual years or phases of the curriculum: Individual years of the curriculum are reviewed on an ongoing basis by the respective subcommittees and reported to the CC. These reviews are based on objective data, such as student performance the Comprehensive Basic Science Examination (CBSE) and customized NBME examinations in MS2 closely predict their performance on USMLE STEP1. STEP1 performance is used to review educational strengths and opportunities in the PreClerkship curriculum. Similarly, NBME-shelf pass rate and STEP 2CK and CS scores are metrics for the quality of education in Year 3. NRMP data and student graduation rates are indicators of overall strength of the program.

c. Describe how the curriculum as a whole is evaluated, including the methods used and the data collected to determine the following:

1. The horizontal and vertical integration of curriculum content, and whether sufficient content is included and appropriately placed related to each of the medical education program objectives.
2. The outcomes of the medical education program and whether each of the medical education program objectives is being met.

Include in the description the frequency with which a review of the curriculum as a whole is conducted, the administrative support available for the review, and the individuals and groups (e.g., the curriculum committee and/or a subcommittee) receiving and acting on the results.

1. The horizontal and vertical integration of curriculum content, and whether sufficient content is included and appropriately placed related to each of the medical education program objectives: The CC, with assistance from the OME, provides the overall oversight to ensure adequate integration of curricular content across all four years. Curricular evaluation is an ongoing process and happens with each course report, subcommittee report and at the biannual CC retreat. The Academic Dashboard is an invaluable tool in this exercise. All courses and clerkships tag individual sessions to the agreed disease list and the USMLE content outline. This ensures adequate coverage of the relevant content. Each session is also tagged to ICs and this too can be monitored with the aid of the Academic Dashboard.

2. The outcomes of the medical education program and whether each of the medical education program objectives is being met: the medical education program objectives are longitudinally tracked across all courses and clerkships. This is done by collecting the following data:

Contact hours by Competencies and Longitudinal Themes across all courses (Academic dashboard)
Student success rate in the USMLE STEP 1 and 2 CK and CS
Student scores on customized NBMEs and end-of-clerkship shelf exams
Performance-based assessment of clinical skills (e.g., CCEs)
Student responses on AAMC Medical School Graduation Questionnaire
Student advancement and graduation rates
NRMP results
Specialty choice of graduates
Assessment of residency performance of graduates
Licensure rates of graduates

These data are collected by the OME and presented and discussed at the CC, annually. Clear patterns of performance, specifically below national means or changing in a negative direction, are identified by the CC. If such changes are noticed, the involved clerkship, course or block would be notified and discussions would occur as to what could be the cause and what remediation may need to be taken. In recent years, JCESOM students have shown consistent improvement but are still lower than national means. Data concerning alumni are held by the Office of Alumni Affairs and presented to the CC upon request of the Vice Dean of Medical Education.

d. Describe how and how often curriculum content is monitored. Provide examples of how monitoring of curriculum content and reviewing the linkage of course/clerkship learning objectives and education program objectives have been used to identify gaps and unwanted redundancies in topic areas. Note which individuals, committees, and units (e.g., departments) receive the results of the reviews of curriculum content.

The content of curriculum is reviewed on an ongoing basis, both on a course-by-course basis and for each curriculum year by the respective subcommittees and the CC. This process is aided by curricular mapping and the Academic Dashboard. On the Curriculum MAP, individual sessions are tagged to Institutional Competencies (IC) and milestones. Student contact hours, by pedagogy, for each competency are shown on the MAP and are tracked longitudinally by the Associate Dean of Medical Education. This view is available to all course/clerkship directors and faculty. These data are reviewed by the CC at the time of the annual course/clerkship review. The newly formed CEC specifically tracks sessions and content addressing each IC and relevant milestones in every course/clerkship. The report of the CEC is reviewed and approved by the CC.

Additionally, as previously mentioned, the USMLE Content Outline, Institutional Disease List, and recommendations from national organizations such as the Association of Medical School Physiology Chairs are used to provide guidance on content areas to be covered across the continuum of the curriculum. Student-feedback is also extensively used in this process. All identified gaps and redundancies are reported on the course/clerkship course report to the CC. OME, Block-Leaders, and Clerkship Directors receive the course report, which is also available on the JCESOM website.

For e.g., curricular mapping has shown not enough content in the PreClerkship curriculum addressing the IC, Practice-Based Learning and Improvement. Upon recommendations of the CC, multiple sessions targeting this competency are included in the MS1 and MS2 courses. These sessions are organized by Dr. Todd Gress and encompass foundations of Clinical and Translational sciences. One such session in the MS2 curriculum is "Clinical Translational Research: Observational Studies vs. Clinical Trials" by Dr. Gress on 10/18/2018. The results of the review process are shared with the CC, relevant subcommittee and the course/clerkship director.

e. Describe the tool(s) used for monitoring the content of the curriculum (i.e., the "curriculum database"). List the roles and titles of the individuals who have access to the curriculum database. List the roles and titles of the individuals who have responsibility for monitoring and updating its content.

Individual Responsibilities		
Individual	**Role**	**Review of Content**
Associate Dean of Medical Education	Management and Oversight	Review content for all years
Chief Information Officer	Design, Development and Implementation	
Director of Digital Media	Implementation and Technical Issues	
Director of Academic Information	Implementation and Technical Issues	
Course/Clerkship Directors	Monitor and Update	Individual Courses
Faculty	Populate	Individual Sessions
Staff of the Office of Student Affairs	Populate	Sessions coordinated by Student Affairs
Committee Responsibilities		
The Curriculum Committee	Oversight of Curricular Content	All Years
The Clinical Clerkship Committee	Content for Years 3 and 4	Review of content for years 3 and 4
MS2 Subcommittee	Content for Year 2	Review of content for year 2
MS1 Subcommittee	Content for Year 1	Review of content for year 1

SUPPORTING DOCUMENTATION

1. Copies of any standardized templates used for course and/or clerkship reviews.

   Appendix 8.3-1 MS1-MS2 Course Eval Form
   Appendix 8.3-2 MS3-MS4 Clerkship Eval Form

2. A sample review of a course and a clerkship.

   Appendix 8.3-3 MDC 711 Eval Fall 2018
   Appendix 8.3-4 PED 898 Eval Fall 2018
   Appendix 8.3-5 FCH 742 Eval Rotation 2 AY 18-19
   Appendix 8.3-6 MDC 751 Eval Fall AY 18-19

3. The results of a search of the curriculum database for curriculum content related to the topics of "acid-base balance" and "health care financing."

   Appendix 8.3-7 Curriculum Database Search Results

8.4 PROGRAM EVALUATION

A medical school collects and uses a variety of outcome data, including national norms of accomplishment, to demonstrate the extent to which medical students are achieving medical education program objectives and to enhance medical education program quality. These data are collected during program enrollment and after program completion.

SUPPORTING DATA

Table 8.4-1 | USMLE Requirements for Advancement/Graduation

Place an "X" in the appropriate columns to indicate if the school's medical students are required to take and/or pass USMLE Step 1, Step 2 CK, and Step 2 CS for advancement and/or graduation.

	Take	Pass
Step 1	X	X
Step 2 CK	X	X
Step 2 CS	X	X

Table 8.4-2 | Monitoring of Medical Education Program Outcomes

Provide the individuals and/or groups in the medical school that are responsible for reviewing the results of each of the indicators that are used to evaluate medical education program quality and outcomes and how often the results are reviewed.

Outcome Indicator	Individuals and groups receiving the data	How often these results are reviewed
Results of USMLE or other national examinations	Vice and Associate Dean of Medical Education	Upon completion
Student scores on internally developed examinations	Associate Dean of Medical Education	Upon completion
Performance-based assessment of clinical skills (e.g., OSCEs)	Vice and Associate Dean of Medical Education, and Chair of Curriculum Committee	Upon completion – once per year
Student responses on the AAMC GQ	Curriculum Committee, Vice and Associate Dean of Medical Education, and Asst. Dean of Student Affairs	As reported – yearly
Student advancement and graduation rates	JCESOM Registrar	As reported
NRMP match results	Assist. Dean of Student Affairs and Vice Dean of Medical Education	Yearly – as completed
Specialty choices of graduates	Assistant Dean of Student Affairs and Vice Dean of Medical Education	Yearly – as completed
Assessment of residency performance of graduates	Vice Dean of Medical Education	Yearly
Licensure rates of graduates	Vice Dean of Medical Education	Yearly
Practice types of graduates	Vice Dean of Medical Education	Yearly
Practice location of graduates	Vice Dean of Medical Education	Yearly

Table 8.4-3 | STEP 1 USMLE Results of First-time Takers						
Provide the requested *Step 1 USMLE results* of first-time takers during the three most recently completed years.						
Year	# Examined	Percent passing school (national)	Mean total score and SD		National mean total score and SD	
			Score	SD	Score	SD
2017-2018	76	92% (96%)	221	19	230	19
2016-2017	62	97% (96%)	225	21	230	20
2015-2016	75	95% (95%)	221	20	228	21

Table 8.4-4 | STEP 2 CK USMLE Results of First-time Takers						
Provide the requested *Step 2 CK USMLE* results of first-time takers during the three most recently completed academic years.						
Academic year	# Examined	Percent passing school (national)	Mean total score and SD		National mean total score and SD	
			score	SD	Score	SD
2017-2018	71	100%	238	14	243	17
2016-2017	69	95% (96%)	236	17	242	17
2015-2016	58	97% (96%)	238	16	242	17

Table 8.4-5 | STEP 2 CS USMLE Results of First-time Takers		
Provide the requested *Step 2 CS USMLE results* of first-time takers during the three most recently completed academic years.		
Academic year	# Examined	Percent passing school (national)
2017-2018	72	96% (95%)
2016-2017	69	97% (96%)
2015-2016	60	100% (97%)

NARRATIVE RESPONSE

a. Select three current educational program objectives contained in the response to Element 6.1. One example should come from each of the domains of knowledge, skills, and behaviors. For each objective, describe how the attainment of the objective has been evaluated and provide specific data illustrating the extent to which the objective is being met.

1. Patient Care/Clinical Skills: Demonstrate proper technique in performing both a complete and symptom-focused examination, addressing issues of patient modesty and comfort:-

Evaluation strategies for this objective include performance on standardized patient-OSCEs in one final CCEs in MS1 and MS2 each, 7 CCEs in MS3.

Objective Measure	2015-16	2016-17	2017-18
Percentage of MS1 students passing the year-end CCE without remediation	100%	100%	100%
Percentage of MS1 students passing the year-end CCE without remediation	100%	100%	100%
Percentage of MS3 students passing clerkship CCEs without remediation	100%	100%	100%
Percentage of students passing Step 2 CS on the first attempt	100%	97%	96%

2. Medical Knowledge: Describe how the altered structure and function (pathology and pathophysiology) of the body and its major organ systems are manifest through major diseases and conditions: -

Objective Measure	2015-16	2016-17	2017-18
Percentage of MS2 students passing all courses without remediation	97%	97%	96%
Percentage of students passing the USMLE STEP 1 in first attempt	95%	97%	92%
Percentage of students passing the USMLE STEP 2 in first attempt	97%	95%	100%
Percentage of MS3 student passing Clerkship NBME Shelf without remediation	96%	92%	85%

3. Professionalism: Demonstrate honesty and integrity in all interactions with patients, their families, and colleagues:-

All domains of professional conduct are clearly defined and made available to students and educators alike. These are also included in course/clerkship syllabi. All instances of violation are reported to the APSC and students are counseled appropriately by block/clerkship directors and the Assistant Dean for Academic Affairs. Repeat or egregious violations are brought to the APSC for institutional action, including dismissal. Evaluation strategies include peer-peer feedback in MS1 and 2, student participation in required activities, overall student conduct with peers, faculty and patients, narrative assessment of students from faculty facilitators in the required clerkships and MS4 electives, and Standardized Patient feedback in CCEs in years 1, 2 and 3.

Objective Measure	2015-16	2016-17	2017-18
Percentage of students whose behavior within MS1 or MS2 courses did not require review or action by the APSC	100%	100%	99%
Percentage of students whose behavior within MS3 or MS4 courses did not require review or action by the APSC	100%	98%	99%
Percentage of students, across all years, passing standardized-patient professionalism standards in the CCEs without remediation	100%	100%	100%
Percentage of students meeting MUSOM standards for professional behavior in clerkships as measured on Clerkship assessments	100%	98%	99%

b. Describe any efforts to address outcome measures that illustrate suboptimal performance by medical students/graduates in one or more of the educational program objectives. Provide two examples of the steps taken to address identified gaps between desired and actual outcomes.

a. Outcome measure: Clinical Skills—Following low pass rates of our students on STEP 2 CS in 2013 (90% pass rate), the Curriculum Committee mandated Clinical Competency Exams for all third year students. This is given in the spring semester of their third year and is required for all students. These CCEs are video recorded and reviewed with the students on an individual basis, prior to their scheduled CS date. This has significantly improved our students' performance on the STEP 2 CS, evidenced in our higher than national pass rate for this assessment.
b. Outcome measure: Medical Knowledge—student pass rate on clerkship shelf-exams has steadily declined over the past two years. Amongst other things, the CC has recognized insufficient exposure to NBME shelf exams and reduced weightage of these exams in students' clerkship-grades as contributory factors. The CC has advised all clerkships to provide students the opportunity to take a mid-point practice NBME and include the student's shelf-performance on the MSPE.

SUPPORTING DOCUMENTATION

1. Copies of printouts and graphs provided by the National Board of Medical Examiners that compare the performance of national and medical school first-time takers for USMLE Step 1, Step 2 CS, and Step 2 CK for the past three years (Step 1)/academic years (Step 2).

Appendix 8.4-1 Step 1 2016
Appendix 8.4-2 Step 2 CS 2015-2016
Appendix 8.4-3 Step 2 CK 2015-2016
Appendix 8.4-4 Step 1 2017
Appendix 8.4-5 Step 2 CS 2016-2017
Appendix 8.4-6 Step 2 CK 2016-2017
Appendix 8.4-7 Step 1 2018
Appendix 8.4-8 Step 2 CS 2017-2018
Appendix 8.4-9 Step 2 CK 2017-2018

2. Feedback from residency program directors and/or graduates on the graduates' attainment of the school's competencies/educational program objectives.

    Appendix 8.4-10 Resident Director Survey Form

8.5 MEDICAL STUDENT FEEDBACK

In evaluating medical education program quality, a medical school has formal processes in place to collect and consider medical student evaluations of their courses, clerkships, and teachers, and other relevant information.

NARRATIVE RESPONSE

a. Describe the methods used to collect evaluation data from medical students on course and clerkship quality. What individual(s)/office(s) have the responsibility for data collection?

MS1 and MS2: Student feedback is collected at the conclusion of each unit of the didactic blocks. The feedback is collected electronically, using the New Innovations software system administered by the staff of the OME. Students are required to complete a survey on the content of the preceding unit and the teachers who participated in the unit. The data are organized into formal reports provided to the Associate Dean for Medical Education and the block directors for review and distribution to the participating faculty and preceptors. The survey questionnaire receives input from the OME, is approved by the CC, and the block (course) directors may choose to add additional questions, targeted at unique components of their blocks.

MS3 and MS4: Students are required to complete a comprehensive survey at the completion of each clerkship period. This survey is designed to mirror the structure of the AAMC GQ as closely as possible including questions in the various categories utilized in the AAMC GQ (e.g., learning environment, clerkship management, quality of teaching, quality of feedback, exposure to and feedback on clinic skills, and overall satisfaction with the learning experience). The survey is delivered using the New Innovations software system similar to the surveys of blocks in Years 1 and 2. The results are collated every 8-weeks by the staff of the OME and reported to clerkship directors and the Associate Dean for Medical Education for review and distribution to the participating faculty and preceptors.

All survey data are also sent to the CEC and used in the course/clerkship evaluation.

b. Describe whether medical students provide evaluation data on individual faculty, residents, and others who teach and supervise them in required courses and clerkship rotations.

For all courses and clerkships, medical students are expected and required to provide feedback on the course and all instructors. This includes evaluations of individual faculty, residents, and others who teach and supervise them. These evaluations, anonymized, are completed on the New Innovations platform. Additionally, as discussed above, the Curriculum MAP (for MS1 and 2) allows for instant feedback on each session and provides a space for students to ask questions. On top of each session page in the MAP, there is a link to our “One Minute Feedback”. Students can rate the session on the clarity and effectiveness of pedagogy and use the provided space to ask a question or provide feedback. All entries are anonymous and the feedback is sent to the faculty-presenter, the course or clerkship director and the Associate Dean for Medical Education.

c. Provide data from the independent student analysis on students' satisfaction with the school's responsiveness to student feedback on courses/clerkships.

From 2017-2018 Independent Student Analysis:

Medical school responsiveness to student feedback on courses/clerkships											
Medical School Class	Number of Total Responses to this Item	Number and % of N/A Responses		Number and % of Very Dissatisfied (1)		Number and % of Dissatisfied (2)		Number and % of Satisfied (3)		Number and % of Very Satisfied (4)	
		N	%	N	%	N	%	N	%	N	%
M1	80	69	73.4	0	0.0	1	1.3	6	7.6	14	17.7
M2	84	76	71.4	0	0.0	2	2.4	13	15.5	9	10.7
M3	64	15	7.7	5	7.7	4	6.2	23	35.4	28	43.1
M4	75	2	2.7	5	6.7	7	9.3	33	44.0	28	37.3
Total	303	162	41.3	10	3.3	14	4.6	75	24.8	79	26.1

SUPPORTING DOCUMENTATION

1. Standardized forms used by students in the evaluation of courses and/or clerkships. If there are no standardized forms, provide sample forms for individual courses and clerkships. Note if the forms are completed online or on paper.

   Appendix 8.5-1 Course Evaluation Form
   Appendix 8.5-2 Clerkship Evaluation Form

8.6 MONITORING OF COMPLETION OF REQUIRED CLINICAL EXPERIENCES

A medical school has in place a system with central oversight that monitors and ensures completion by all medical students of required clinical experiences in the medical education program and remedies any identified gaps.

SUPPORTING DATA

Table 8.6-1 | Alternative Clinical Experiences

Provide all required clinical encounters/skills for each listed clerkship that were satisfied with alternative methods by 25% or more of students in the most recently-completed academic year, and describe what the alternative methods were (e.g., simulations, computer cases). Add rows as needed. Only schools with regional campuses need to specify the campus for each clerkship. Refer to element 6.2 for the list of required clinical encounters/skills.

	Campus	Clinical encounters/skills where alternative methods were used by 25% or more students	Alternative method(s) used for remedying clinical encounter gaps
Family medicine	All	None	Simulation and online modules
Internal medicine	All	None	Simulation and online modules
Ob-Gyn	All	None	Simulation and online modules
Pediatrics	All	None	Simulation and online modules
Psychiatry	All	None	Simulation and online modules
Surgery	All	None	Simulation and online modules

NARRATIVE RESPONSE

a. Describe the process(es) used by students to log their required clinical encounters and skills. Is there a centralized tool used for logging or do individual clerkships use their own systems?

Students use New Innovations to log their required clinical encounters and skills based on the Educational Objectives of each clerkship. Completion of 85% of patient encounters and 100% of procedures is a graduation requirement for our students.

b. Summarize when and how each student's completion of clerkship-specific required clinical encounters and skills is monitored by the following individuals, including whether the results of monitoring are discussed with the students, for example as part of a mid-clerkship review:

1. The student's attending physician, supervising resident, preceptor
2. The clerkship director

1. The student's attending physician, supervising resident, preceptor: Attending physicians, residents, and preceptors are aware of the required clinical encounters to which they may expose students. Completion of the clerkship specific required clinical encounters and skills is monitored through student input into New Innovations.

2. The clerkship director: Completion of the clerkship specific required clinical encounters and skills is monitored through student input into New Innovations. Data are compiled by the clerkship coordinators and reviewed by the clerkship directors at the mid-clerkship formative session and the week before completion of the rotation. Any deficits are remedied through real patient encounters, online modules, quizzes, or simulation.
3. Assistant Dean of Academic Affairs monitors the patient and procedure log and ensures that there are no red flags and no student is being overlooked.

c. Summarize when, how, and by what individuals and committees aggregate data on students' completion of clerkship-specific required clinical encounters and skills is monitored. Describe how data on completion rates are used by clerkship directors and the curriculum committee and/or a relevant curriculum subcommittee to assess the adequacy of patient volume and case mix.

Data about student completion of required encounters are collected by the clerkship coordinators at mid-rotation and before completion of the clerkship. Any abnormal patterns in the completion rate are reported to the Office of Medical Education and to the Assistant Dean of Academic Affairs. Significant non-completion rates are discussed at the monthly Clinical Clerkship Committee meetings to determine if the requirement is appropriate, if there is adequate time in the required setting, and/or whether alternative methods are available and appropriate if the educational objective is important enough to remain on the list of required encounters. These recommendations are forwarded to the CC for review and approval.

8.7 COMPARABILITY OF EDUCATION/ASSESSMENT

A medical school ensures that the medical curriculum includes comparable educational experiences and equivalent methods of assessment across all locations within a given course and clerkship to ensure that all medical students achieve the same medical education program objectives.

NARRATIVE RESPONSE

a. Describe the following for each course or clerkship offered at more than one instructional site, including regional campus(es), (also see the response to element 2.6).

1. How faculty members at each instructional site are informed of and oriented to the learning objectives, required clinical encounters and skills, assessment methods, and grading system for the course or clerkship
2. How and how often the individuals responsible for the course or clerkship communicate with site leadership and faculty at each instructional site regarding course or clerkship planning and implementation, student assessment, and course evaluation
3. The mechanisms that are used to ensure that leadership/faculty at each site receive and review student evaluations of their educational experience, data regarding students' completion of required clinical experiences and grades, and any other data reflecting the comparability of learning experiences across instructional sites. Describe the specific types of data reviewed and how the discussions of the data with site leadership and faculty occurs

1. How faculty members at each instructional site are informed of and oriented to the learning objectives, required clinical encounters and skills, assessment methods, and grading system for the course or clerkship:

MS1 and MS2: the preclinical curriculum is only taught at the Marshall Campus by our faculty who have faculty-appointments at the University. In the event of unavailability of content experts to teach specific subtopics, JCESOM has subcontracted faculty, content-experts from other Universities to temporarily fill the gap. E.g. Dr. John Yanelli is full time faculty in the Microbiology, Immunology, Molecular Genetics Department of the University of Kentucky, College of Medicine; and is subcontracted by JCESOM to teach some topics in immunology in the second-year curriculum.

MS3 and MS4: All six of our required clerkships can use a variety of learning sites. Each of these six required clinical clerkships has developed a method for advising its faculty members about the objectives and grading system for the clerkship. These include, annually updated syllabi made available to all faculty and residents, annual meetings with the clerkship directors, and education and training for new faculty and residents. Student progress is assessed across all clinical sites for a clerkship using equal assessment methods. The three major components of the grading system are a final comprehensive multiple choice examination provided by the NBME, Standardized Patient Encounter (comprehensive clinical exam), and individual assessments based on direct observations by faculty and residents using a standardized assessment form.

2. **How and how often the individuals responsible for the course or clerkship communicate with site leadership and faculty at each instructional site regarding course or clerkship planning and implementation, student assessment, and course evaluation:**

Each of the individual departments responsible for a required clerkship has developed a method for planning, implementation, student evaluation, and course evaluation. All have established open

communication models with open office hours for students and faculty. Ad hoc meetings via telephone, email and post are conducted to assure that any new information flows to the off campus teaching sites in a timely fashion. Conversely, education directors and volunteer clinical faculty have ready access to the clerkship director through these same means, assuring a conduit for important feedback from the field. All course and faculty evaluations are standardized across the clerkships and collated by the OME for distribution to the clerkship directors and the CEC. The clerkship directors are responsible for sharing and discussing individual faculty evaluations and feedback, and for addressing concerns raised in these evaluations.

3. **The mechanisms that are used to ensure that leadership/faculty at each site receive and review student evaluations of their educational experience, data regarding students' completion of required clinical experiences and grades, and any other data reflecting the comparability of learning experiences across instructional sites. Describe the specific types of data reviewed and how the discussions of the data with site leadership and faculty occurs**

   As described in element 8.3, students complete the standardized clerkship course and faculty evaluations, a multi-page survey covering numerous aspects of their clerkship experience at the conclusion of each clerkship period. The Office of Medical Education generates data from the results of these surveys at various times, specifically after each period, after each pair of clerkship periods, and as annual reports. The single period reports are reviewed by the Associate Dean of Medical Education at the administrative levels to identify any major concerns which require immediate action. Reports are disseminated to the clerkship directors for review, with a specific emphasis on cross-campus variations that might illuminate concerns about a specific location. Annual evaluation data are sent to the CEC for its review of individual clerkships. AAMC Graduation Questionnaire data are also presented on an annual basis to the CEC, CCC, and the CC to identify any areas of concern in terms of clerkship performance.

b. Describe the individuals (e.g., site director, clerkship director, department chair) and/or groups (curriculum committee or a curriculum committee subcommittee) responsible for reviewing and acting on data/information related to comparability across instructional sites.

   Clerkship activities at each site are coordinated and assured for comparability at three levels:

   1. Clerkship level coordination: each clerkship on each campus is under the direct supervision of a clerkship director. The department chair appoints the clerkship director after consultation with the Dean and the Vice Dean of Medical Education. Clerkship directors are responsible for ensuring the clerkship learning objectives are achieved and students complete required activities.
   2. Clinical Clerkship Committee: the CCC meets on a monthly basis and review data relevant to the clinical curriculum, including student performance on shelf exams, USMLE STEP 2CS and CK, AAMC GQ data and student areas of concern. The CCC is advised by the Asst. Dean of Student Affairs, and the Associate and Vice Dean of Medical Education.
   3. CEC and the CC: CEC's review of a clerkship includes data regarding comparability across instructional sites and advises the CC accordingly.

c. Provide examples of the mechanisms employed and the groups/individuals involved in addressing inconsistencies across instructional sites in such areas as student satisfaction and student grades.

Comparability between training sites begins with the standardized student evaluations of the clerkship and faculty. Any student issues or concerns regarding satisfaction with their educational experience are flagged by the Associate Dean of Medical Education and discussed with the clerkship director. The clerkship directors respond to any concerns highlighted and develop an action plan. Recurring concerns may be addressed more centrally by the CCC and the Vice Dean of Medical Education. In case of student dissatisfaction with their grades, the students have an option to appeal their final grade, which is reviewed as per policy (see attached grade appeal policy).

8.8 MONITORING STUDENT TIME

The medical school faculty committee responsible for the medical curriculum and the program's administration and leadership ensure the development and implementation of effective policies and procedures regarding the amount of time medical students spend in required activities, including the total number of hours medical students are required to spend in clinical and educational activities during clerkships.

NARRATIVE RESPONSE

a. Describe how policies relating to duty hours are disseminated to medical students, residents, and faculty.

The JCESOM policy on duty hours is provided to medical students during clerkship orientation and is inlcuded in their syllabi. Incoming residents and new teaching faculty are trained on these polcies during their orientation. The current policy on student duty hours was adopted from the GME and was reviwed in December 2018.

b. Describe how data on medical student duty hours are collected during the clerkship phase of the curriculum and to whom the data are reported.

The clerkship coordinators map and track student duty hours for each clerkship. Students are asked to report on their duty hours at two points during the clerkship. First at the mid-clerkship assessment meeting with the clerkship director, and finally at the end of clerkship review. These data are tracked by the clerkships and reported to the Clinical Clerkship Committee.

c. Describe the mechanisms that exist for students to report violations of duty hours policies. How and to whom can students report violations? Describe the steps that can be taken if duty hour limits are exceeded.

Duty hours on the clerkships are monitored by the clerkship coordinator and director and students may report violations to coordinators or clerkship directors. Students may also choose to report these violations to the Assistant Dean of Student or Academic Affairs. These procedures are outlined in each clerkship syllabus.

d. Describe the frequency with which the curriculum committee or its relevant subcommittee(s) monitor the clinical workload of medical students, in the context of formal policies and/or guidelines. How is the effectiveness of policies determined?

The Clinical Clerkship Committee and the CC review student workload once every two years and recommend changes to the clerkships, if warranted. The effectiveness of the policy is primarily determined by student feedback through the clerkship evaluations.

SUPPORTING DOCUMENTATION

1. The formally-approved policy relating to duty hours for medical students during the clerkship phase of the curriculum, including on-call requirements for clinical rotations.

Appendix 8.8-1 Workload and Duty Hours Policy

STANDARD 9: TEACHING, SUPERVISION, ASSESSMENT, AND STUDENT AND PATIENT SAFETY

A medical school ensures that its medical education program includes a comprehensive, fair, and uniform system of formative and summative medical student assessment and protects medical students' and patients' safety by ensuring that all persons who teach, supervise, and/or assess medical students are adequately prepared for those responsibilities.

SUPPORTING DATA

Table 9.0-1 | Methods of Assessment – Year 1

List all required courses in the *first year/phase of the curriculum,* adding rows as needed. Indicate the total number of exams per course. Indicate items that contribute to a grade and whether narrative assessment for formative or summative purposes is provided by placing an "X" in the appropriate column. For faculty/resident ratings, include evaluations provided by faculty members or residents in clinical experiences and small group sessions (e.g., a facilitator evaluation in small group or case-based teaching). Use the row below the table to provide specifics for each occurrence of "Other." Number each entry in that row (1, 2, etc.) and provide the corresponding number in the "Other" column.

	Number	Included in Grade							
Course Name	# of Exams	Internal Exam	Lab or practical exam	NBME subject Exam	OSCE/SP exam	Faculty/ resident rating	Paper or oral pres.	Other* (specify)	Narrative assessment provided
Elements of Medicine	4	Y	Y	N	N	N	N	Y	X*
Structure and Function I	4	Y	Y	N	N	N	N	Y	X*
Structure and Function II	3	Y	Y	N	N	N	N	Y	X*
Structure and Function III	3	Y	Y	N	N	N	N	Y	X*
Structure and Function IV	2	Y	Y	N	N	N	N	Y	X*
Intro to Clinical Skills	8	Y	N	N	Y	Y	Y	CCE	Y

* Other: The CCE is a clinical competency exam that involves assessing bedside manner, basic history taking, and important patient communication skills through the use of standardized patients and clinical scenarios. Other also include a number of low-stakes assessments, including small-group discussion, TBLs, written assignments, weekly quizzes, case presentations, oral presentations, and meeting or exceeding professionalism standards.

** Students take a comprehensive, year-end, customized NBME with 40 questions per Block. They must pass the NBME with a score greater than 70% to advance to the second year without remediation.

X* Narrative feedback for formative purposes provided during: small group sessions, clinical correlates, TBLs, large group discussions, and formal exam review.

Table 9.0-2 | Methods of Assessment – Year 2

List all required courses in the *second year/phase of the curriculum*, adding rows as needed. Indicate the total number of exams per course. Indicate items that contribute to a grade and whether narrative assessment for formative or summative purposes is provided by placing an "X" in the appropriate column. For faculty/resident ratings, include evaluations provided by faculty members or residents in clinical experiences and small group sessions (e.g., a facilitator evaluation in small group or case-based teaching). Use the row below the table to provide specifics for each occurrence of "Other." Number each entry in that row (1, 2, etc.) and provide the corresponding number in the "Other" column.

	Number	Included in Grade							
Course Name	# of Exams	Internal Exam	Lab or practical exam	NBME subject exam	OSCE/SP exam	Faculty/ resident rating	Paper or oral pres.	Other* (specify)	Narrative assessment provided
Principles of Disease	3	Y	Y		N	N	N	Y	X*
Disease and Therapeutics, I	2	Y	Y	Y	N	N	N	Y	X*
Disease and Therapeutics, II	2	Y	Y	Y	N	N	N	Y	X*
Disease and Therapeutics, III	2	Y	Y	Y	N	N	N	Y	X*
Disease and Therapeutics, IV	2	Y	Y	Y	N	N	N	Y	X*
Advanced Clinical Skills	8	Y	N		Y	Y	Y/N	CCE	Y

* Other: The ACS course has a comprehensive summative CCE exam that assesses clinical skills acumen through the use of video recorded standardized patient encounters. Each student receives feedback on his or her performance by a faculty member. . Other also include a number of low-stakes assessments, including small-group discussion, TBLs, written assignments, weekly quizzes, case presentations, oral presentations, and meeting or exceeding professionalism standards.

X* Narrative feedback for formative purposes provided during: small group sessions, clinical correlates, TBLs, large group discussions, and formal exam review.

Table 9.0-3 | Methods of Assessment – *Years 3-4*

List all required clerkships in the *third and fourth years/third and fourth phases of the curriculum*, adding rows as needed. Indicate items that contribute to a grade and whether narrative assessment for formative or summative purposes is provided by placing an "X" in the appropriate column. For faculty/resident ratings, include evaluations provided by faculty members or residents in clinical experiences. Use the row below the table to provide specifics for each occurrence of "Other." Number each entry in that row (1, 2, etc.) and provide the corresponding number in the "Other" column.

	Included in Grade						
Course or clerkship name	NBME subject exam	Internal written exams	Oral exam or pres.	Faculty/ resident rating	OSCE/SP exams	Other* (specify)	Narrative assessment provided (Y/N)
Family and Community Medicine	Y	Y	N	Y	N		Y
Internal Medicine	Y	Y	Y	Y	Y		Y
Surgery	Y	Y	Y	Y	N		Y
Pediatrics	Y	Y	N	Y	N		Y
Obstetrics and Gynecology	Y	Y	Y	Y	Y		Y
Neurology	Y	Y	N	Y	Y		Y
Psychiatry	Y	Y	N	Y	Y		Y

* Other: Each clerkship requires that students complete a subject specific mini board at the end of their rotation. These mini boards are summative, and students must meet or exceed a cut-off that has been established by that clerkship. Students receive a Pass/Fail/Honors mark in the course that includes data from evaluations, patients, internal examination, and NBME mini boards. Each student is evaluated by faculty and residents in every rotation. These evaluations, although not directly graded, do make up part of the overall grade.

9.1 PREPARATION OF RESIDENT AND NON-FACULTY INSTRUCTORS

In a medical school, residents, graduate students, postdoctoral fellows, and other non-faculty instructors in the medical education program who supervise or teach medical students are familiar with the learning objectives of the course or clerkship and are prepared for their roles in teaching and assessment. The medical school provides resources to enhance residents' and non-faculty instructors' teaching and assessment skills, and provides central monitoring of their participation in those opportunities.

SUPPORTING DATA

Table 9.1-1 | Provision of Objectives and Orientation

List each course or clerkship where residents, graduate students, postdoctoral fellows, and/or other non-faculty instructors teach/supervise medical students. Describe how the relevant department or the central medical school administration ensures that the objectives and orientation to the methods of assessment have been provided and that this information has been received and reviewed.

Course or clerkship	Types of trainees who provide teaching/supervision	How objectives are provided and teachers oriented/How receipt and review of information documented
MDC 710- Element of Medicine (EoM)-MS1	Graduate Students (PhD and MD/PhD)	Students in the Graduate program complete each course prior to participating as teaching assistants. The director of the course further orients graduate students to the objectives of the course and assessment methods utilized.
Anatomy in MDC 711-714-MS1	Surgery and Orthopedics Residents	Anatomy dissection facilitated by surgery and orthopedics residents and course faculty orients these residents to the objectives of the course and assessment methods utilized.
Clinical Skills in MDC715 (ICS, MS1) and MDC755 (ACS, MS2)	MS4 elective in Academic Medicine—forth year medical students	The director of the course further orients graduate students to the objectives of the course and assessment methods utilized.
Family Medicine	Residents/Fellows	All teaching faculty/residents/fellows and non-faculty instructors are provided with and have access to clerkship syllabus, which outlines objectives, pedagogies and assessment for each clerkship. Clerkship specific learning objectives are provided in a joint meeting with Clerkship and Residency Program Directors to residents at the start of the academic year and during resident orientation. Clerkship Directors assure additional specialty specific teaching sessions, which are provided during resident didactics. Residents are required to complete an online AMA module, "Residents as Teachers" and receive a completion certificate upon completion of a post-assessment.
Internal Medicine	Residents/Fellows	
Ob/Gyn.	Residents	
Pediatrics	Residents	
Psych/Neuro	Residents	
Surgery	Residents	

Table 9.1-2 | Resident Preparation to Teach

Briefly summarize the preparation program(s) available to residents to prepare for their roles teaching and assessing medical students in required clinical clerkships. For each program, note whether it is sponsored by the department or the institution (D/I), whether the program is required or optional (R/O), and whether resident participation is centrally monitored (Y/N), and if so, by whom. Add rows as needed.

	Program Name/Brief Summary	Sponsorship (D/I)	Required/ Optional (R/O)	Centrally Monitored? (Y/N)	Monitored by Whom?
Family medicine	Residents are required to complete an online AMA module, "Residents as Teachers", and receive a completion certificate upon completion of a post-assessment.	D	R	Y	Chairman & Program Director
Internal medicine	Five Minute Preceptor by Dr. Charles Meadows – lecture given to all new intern resident physicians during their orientation week.	D	R	Y	Chairman & Program Director
	Giving Effective Feedback by Eva Patton-Tackett – lecture given to all new intern resident physicians during their orientation week.	D	R	Y	Chairman & Program Director
	Quarterly, the clerkship director meets with all residents to reiterate medical student objectives, expectations, and the best practices to evaluate the students.	D	R	Y	Chairman & Program Director
Ob/Gyn	Residents as Teachers Session with Dr. Ed Pino	D	R	Y	Chairman & Program Director
Pediatrics	Residents as Teachers Workshop (Three one-hour sessions)	D	R	Y	Program Administrator
Psychiatry	Residents are required to complete an online AMA module, "Residents as Teachers", and receive a completion certificate upon completion of a post-assessment.	I	R	Y	GME Coordinator
Surgery	Residents are required to complete an online AMA module, "Residents as Teachers", and receive a completion certificate upon completion of a post-assessment.	D	R	Y	Chairman & Program Director
Other (list):					

NARRATIVE RESPONSE

a. Describe any institution-level (e.g., curriculum committee, GME office) policies that require the participation of residents and others (e.g., graduate students, postdoctoral fellows) in orientation or faculty development programs related to teaching and/or assessing medical students.

As part of their onboarding to JCESOM, all residents are required to complete the AMA module "Residents as Teachers." This is consistent across all programs, and individual departments may provide additional training.

b. How does the medical school ensure that all residents who supervise/assess medical students, whether they are from the school's own residency programs or other programs, receive the relevant clerkship learning objectives, the list of required clinical encounters, and the necessary orientation to their roles in teaching and assessment?

Clerkship directors coordinate with the residency program directors and ensure timely distribution of clerkship syllabi to all residents participating in the education and assessment of medical students. These syllabi include Institutional Competencies covered in the course, all methods of pedagogies and assessments, required patient encounters and breakdown of course grades. In addition, all residents are required to complete the AMA module "Residents as Teachers." This is consistent across all programs, and individual departments may provide additional training. In addition, each clerkship director coordinates regularly with the residency program director to update him/her on clerkship progress and requirements.

c. Describe how data provided by medical students on resident teaching and/or supervision skills are used to improve the quality of resident teaching and/or supervision.

Clerkship directors provide residency program directors with aggregate data on the students' assessment of resident teaching and supervision at least bi-annually. When data necessitate individual resident improvement, training and direction is provided to the resident from the program faculty. Medical students evaluate resident teaching at the end of every clerkship rotation. These data are reviewed by the Associate Dean of Medical Education and shared with the clerkship director. These evaluations are also used by the Curriculum Evaluation Committee during their annual evaluation of the clerkship.

d. Describe any institution-level and department-level programs that prepare graduate students or postdoctoral fellows to teach or assess medical students.

Although not a requirement, many graduate students in the Doctor of Philosophy program of the Department of Biomedical Sciences are assistant course directors of the preclinical curriculum in the design and implementation of these courses. As such, these students are intimately familiar with the course objectives, pedagogies and assessments. These graduate-students are mentored by teaching-faculty and course-directors of the preclinical curriculum and primarily assist in selected, small-group activities in the MS1 curriculum. In addition, Graduate Students in the Biomedical Sciences Department are offered a course in communication skills, which includes a teaching practicum and strategies in effective pedagogies and assessments (BMR 660).

9.2 FACULTY APPOINTMENTS

A medical school ensures that supervision of medical student learning experiences is provided throughout required clerkships by members of the school's faculty.

NARRATIVE RESPONSE

a. Describe how, by whom, and how often the faculty appointment status of physicians who teach and assess medical students during required clerkships is monitored.

The faculty appointment status of physicians who teach and assess medical students is monitored in two ways:

1. Faculty appointment status is reviewed annually as part of their yearly review with the chair or division chief of their department. This is done with the advice and input of clerkship directors. Each faculty is assessed regarding their teaching contribution via student evaluation. Based on the performance expectations, their continued participation as an educator may change.

2. The Dean's office twice yearly reconciles faculty appointments with those listed and assigned as medical educators within each Department's curriculum. This ensures valid faculty credentials

b. List any required core clinical clerkships where students are supervised, assessed, or graded by physicians who are not medical school faculty members (do not include residents/fellows). Describe the steps taken to provide faculty appointments to these physicians.

All physicians participating in the education of medical students must have faculty appointments in one or more departments of the JCESOM. These appointments are handled at the department level and range from full-time faculty to volunteer-faculty. Volunteer faculty have little to no involvement in required core clinical clerkships. The OME advises and supports this process.

c. Where teaching of students is carried out by physicians who do not hold faculty appointments at the medical school, describe how the teaching activities of these individuals are supervised by medical school faculty members.

N/A

9.3 CLINICAL SUPERVISION OF MEDICAL STUDENTS

A medical school ensures that medical students in clinical learning situations involving patient care are appropriately supervised at all times in order to ensure patient and student safety, that the level of responsibility delegated to the student is appropriate to his or her level of training, and that the activities supervised are within the scope of practice of the supervising health professional.

NARRATIVE RESPONSE

a. Describe how departments and the central medical school administration ensure that medical students are appropriately supervised during required clinical clerkships and other required clinical experiences so as to ensure student and patient safety.

JCESOM recognizes medical students are learners who are not licensed to practice medicine and has a policy in place to ensure medical students are appropriately supervised by physicians who are faculty members of the school of medicine. Supervising faculty or residents are expected to provide students with opportunities to participate in learning activities, including procedures, which are commensurate with the student's level of competence. These learning experiences are meant to be progressive in nature to accommodate students at different levels of training. The overall goal of this policy is to ensure an effective learning experience for the student while protecting both student and patient safety.

Supervision is defined as direct supervision with the supervisor present in the same room as the student, or indirect supervision with the supervisor available for consultation. Within each department, the clerkship director orients students to expectations for supervision and prepares supervisors for their role in the medical education program.

b. What mechanisms exist for students to express concern about the adequacy and availability of supervision and how, when, and by whom are these concerns acted upon?

In the event a student feels any part of a clerkship supervision is inadequate or unavailable, students are encouraged to reach out to the clerkship director or department chair at any time. The clerkship director then investigates the events to determine the best course of action to correct the situation. Of course, the clerkship director is empowered to seek assistance from the department chair or the vice dean of medical education.

Additionally, the students are polled regarding the adequacy of their supervision twice a year. We utilize AAMC Graduation Questionnaire for the recent graduates and an internal poll of current third- and fourth-year students in January of each year. The concerns are shared with the entire faculty. The areas that are identified as potential concerns are further investigated by the Vice Dean of Medical Education and the Assistant Dean of Student Affairs in conjunction with the Clerkship Director and Coordinator to clarify specific issues and develop action plans for improvement.

c. What mechanisms are used during required clinical experiences to ensure that the level of responsibility delegated to a medical student is appropriate to the student's level of training and experience? Is there a policy (departmental or institutional) related to the delegation of responsibility to medical students?

Each clerkship has established standard sets of expectations for medical students to include history taking, physical examination, and selected procedures on the appropriate clerkship. These selected procedures are reviewed, and the list updated annually. It is expected that with exposure and experience students will be able to gradually increase which responsibilities can be delegated to them.

d. Provide examples of how the clerkship director or the student's attending physician ensures that non-physician health professionals who teach or supervise medical students are acting within their scope of practice.

Clerkship directors and attending physicians who hold faculty appointments with the school of medicine retain ultimate responsibility for supervising medical students. There are ways that other healthcare professionals provide valuable learning opportunities and experience for medical students. The other healthcare professionals practicing within the hospital and/or ambulatory setting are approved and/or credentialed to perform duties within their scope of practice, according to facility and Joint Commission regulation.

Some specific examples of where other healthcare professionals provide teaching or supervision to medical students include:

- Nursing – Nurses are frequently part of the team that provides instruction to medical students They can also instruct students about important processes like time out procedures and washing and gowning. Additionally, nurse practitioners may assist with overnight supervision of learners in the neonatal intensive care unit. Nurses in outpatient settings may provide information and direction concerning practice-based systems mechanisms and patient-centered ambulatory management.
- Anesthesiology – Certified Registered Nurse Anesthetists can instruct and supervise students regarding airway management, anesthetic pharmacology, and ventilator management.
- Physician Assistants – Many specialties employ physician assistants within their practice who provide instruction in procedures such as suturing, suture removal, wound debridement, minor incision and drainage procedures.
- Surgical Technologists – Medical students are instructed in operating room procedures such as maintenance of the sterile field, instrument handling and passing, and the name of common surgical equipment.

SUPPORTING DOCUMENTATION

1. Policies or guidelines related to medical student supervision during required clinical activities that ensure student and patient safety (e.g., policies about timely access to, and in-house availability of, attending physicians and/or residents).

See Appendix 9.3-1 JCESOM Student Supervision Policy

9.4 ASSESSMENT SYSTEM

A medical school ensures that, throughout its medical education program, there is a centralized system in place that employs a variety of measures (including direct observation) for the assessment of student achievement, including students' acquisition of the knowledge, core clinical skills (e.g., medical history-taking, physical examination), behaviors, and attitudes specified in medical education program objectives, and that ensures that all medical students achieve the same medical education program objectives.

SUPPORTING DATA

Table 9.4-1 | Observation of Clinical Skills

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who indicated they were observed performing the following clerkship activities.

	GQ 2016				GQ 2017				GQ 2018			
	History		Physical exam		History		Physical exam		History		Physical exam	
	School %	National %	School %	National %	School %	National %	School %	National %	School %	National %	School %	National %
Family Medicine	92.9	88.9	90.5	90.9	92.2	90.0	95.3	91.7	89.8	91.0	93.2	92.7
Internal Medicine	92.9	92.7	92.9	93.8	92.2	93.4	90.6	94.3	89.8	93.9	91.4	94.8
Ob-Gyn/ Women's Health	90.5	91.8	95.1	90.1	92.2	83.3	93.8	91.0	89.8	84.4	98.3	91.2
Pediatrics	85.7	91.4	95.1	92.8	93.8	92.2	93.8	93.5	94.9	92.8	96.6	94.1
Psychiatry	80.0	91.7	85.0	90.6	92.2	92.5	92.2	91.5	96.6	93.2	94.9	92.5
Surgery	54.8	72.4	98.3	78.8	81.0	74.4	81.3	80.4	62.1	74.9	76.3	81.0

Table 9.4-2 Clinical Skills

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who agree/strongly agree (aggregated) that they are prepared in the following ways to begin a residency program.

	GQ 2016		GQ 2017		GQ 2018	
	School %	National %	School %	National %	School %	National %
Acquired the clinical skills required to begin a residency program	90.0	90.8	98.4	90.1	96.6	90.7

NARRATIVE RESPONSE

a. For each comprehensive clinical assessment (e.g., OSCE or standardized patient assessment) that occurs independent of individual courses or clerkships, describe when in the curriculum it is offered, the general content areas covered, and whether the purpose of the assessment is formative (to provide feedback to the student) or summative (to inform decision-making about grades, academic progression, or graduation).

At the JCESOM, students undergo a comprehensive Clinical Competency Exam (CCE). This is a six-station exam meant to mimic the USMLE Step 2 Clinical Skills exam administered at the end of the third year. These stations represent the required third year clerkship specialties. Students are given 15 minutes to complete a history and physical followed by 10 minutes to write the note and differential before moving on to the next station. All standardized patient interactions are video recorded. Documentation is done in a home-grown program that incorporates the standardized patients' evaluation and comments.

A core group of faculty has been selected and trained to review and critique the students' performance. Faculty members log into the CCE website and review all 90 minutes of the digital record, grade the documentation, and reviews the standardized patient's comments. The student then meets with the faculty mentor who reviews the videos with the student and provides formative feedback specifically targeting preparation for the Step 2 Clinical Skills exam. The end of the year CCE's are for formative feedback and are not in the student's grades.

b. How does the school ensure that all students are assessed performing the essential components of a history and physical examination, as defined by the school, in each required clerkship?

Note that the school can decide if students must complete an entire history and physical examination or a modified history and physical that is relevant to the specific clerkship.

Every clerkship has learning objectives related to performing a focused history and physical examination that is specific to that discipline/clerkship. These skills are on every clerkship assessment form for faculty to observe and provide feedback. Every clerkship has developed formative standardized patient encounters called CCEs during which students are assessed on focused history and physical examination skills. Each clerkship uses their specific CCE in different ways. Clerkships may use the CCE as either formative and/or summative feedback in evaluating performance as outlined in their syllabi. About half use it as formative feedback only while the other half use it as points in calculating a final grade.

SUPPORTING DOCUMENTATION

1. Provide data from school-specific sources (e.g., clerkship evaluations) on student perceptions that they were observed performing required clinical skills.

   See Appendix *9.4-1 Student Perceptions of Clinical Skill Observations*

2. Course/clerkship-specific or standardized forms that are used in the assessment of the following clinical skills. Indicate the course or clerkship where each form is used and whether the results are used for formative (feedback) or summative (grading) purposes.

   a. History taking
   b. Physical examination

   See Appendix *9.4-2 Sample of History and Physical Evaluation Forms*

9.5 NARRATIVE ASSESSMENT

A medical school ensures that a narrative description of a medical student's performance, including his or her non-cognitive achievement, is included as a component of the assessment in each required course and clerkship of the medical education program whenever teacher-student interaction permits this form of assessment.

NARRATIVE RESPONSE

a. Describe any institutional policies that include the requirement for a narrative description of medical student performance.

The Medical Student Grading and Narrative Policy states that written narrative assessments are required of all MS3 Clerkships. Narrative assessments may cover topics including but not limited to behavior, interpersonal skills, personal initiative, professionalism, dependability, and interactions with patients, peers, faculty, staff, and directors. Narrative assessments should feature both strengths and weaknesses.

Please see Appendix *9.7-1 Medical Student Grading and Narrative Policy.pdf* for more information.

b. List the courses in the pre-clerkship phase of the curriculum that include narrative descriptions as part of a medical student's final assessment where the narratives are:

1. Provided only to students as formative feedback
2. Used as part of the final grade (summative assessment) in the course

1. Provided only to students as formative feedback

None

2. Used as part of the final grade (summative assessment) in the course

Students in the preclinical years participate in group activities where they work as a group and submit a written document to the course director. The course director grades the exercise and provides the group with narrative feedback that is part of the final grade:

- MDC710-Elements of Medicine-MS1
- MDC711-Structure and Function I-MS1
- MDC712-Structure and Function II-MS1
- MDC714-Structure and Function IV-MS1
- MDC750-Principles of Disaese-MS2
- MDC751-Disease and Therapeutics I-MS2
- MDC754- Disease and Therapeutics IV-MS2

c. List the clinical clerkships that include a narrative description as part of a medical student's final assessment where the narratives are:

1. Provided only to students as formative feedback
2. Used as part of the final grade in the clerkship

1. Provided only to students as formative feedback:
    i. Family Medicine Clerkship
    ii. Internal Medicine Clerkship
    iii. Obstetrics & Gynecology Clerkship
    iv. Pediatrics Clerkship
    v. Psychiatry Clerkship
    vi. Surgery Clerkship
    vii. Neurology Clerkship
2. Used as part of the final grade in the clerkship:
    viii. Family Medicine Clerkship
    ix. Internal Medicine Clerkship
    x. Obstetrics & Gynecology Clerkship
    xi. Pediatrics Clerkship
    xii. Psychiatry Clerkship
    xiii. Surgery Clerkship
    xiv. Neurology Clerkship

d. Referring to Tables 6.0-1 and 6.0-2, describe the reasons why a narrative assessment is not provided in a course or clerkship where teacher-student interaction might permit it to occur (e.g., there is small group learning or laboratory sessions).

Not applicable

9.6 SETTING STANDARDS OF ACHIEVEMENT

A medical school ensures that faculty members with appropriate knowledge and expertise set standards of achievement in each required learning experience in the medical education program.

NARRATIVE RESPONSE

a. Describe the roles, of the body with responsibility for central management of the curriculum (i.e., the curriculum committee), other medical school committees, the chief academic officer, and departments, and course/clerkship leadership in setting the standards of achievement for the following:

1. Courses
2. Clerkships
3. The curriculum as a whole (i.e., progression and graduation requirements)

1. Courses

The grading scale for the preclinical courses is set by the Curriculum Committee. The preclinical curriculum continues to be the traditional A, B, C, F scale. The individual course directors determine the spread of possible points across exams, lab practical, small group work, and homework assignments.

2. Clerkships

The clerkship director is responsible for setting the achievement standard for their specialty. The grading scale for the clinical clerkships was changed in the 2015-2016 academic year to an honor, pass, or fail system because all students were receiving A's on the traditional scale, which prevented students with strong clinical skills from standing out from their peers. Each clerkship did its own internal hypothesis testing to determine the criteria for achieving honors. Because of the difference between the various specialties, each clerkship has a different set of rules for achieving honors that required the approval of the Curriculum Committee.

3. The Curriculum as a whole (i.e., progression and graduation requirements)

Adequate progression is followed closely by the Office of Medical Education which includes academic support, academic affairs, student affairs, and the register. This group reviews the result of every test in the preclinical curriculum and every mini board in the clinical curriculum. Any student not making adequate progress is referred to the Academic Standards and Professionalism Committee. Graduation requirements are set by the Curriculum Committee and reviewed annually.

b. Describe how the medical school ensures that faculty members with appropriate knowledge and expertise set the standards of achievement for courses and clerkships and for the curriculum as a whole.

Preclinical Curriculum

The CC has 2 subcommittees that focus on the PreClerkship Curriculum: the MS1 and MS2 Subcommittees. While led by a member of the CC, Block leaders for that particular year, as well as any additional key faculty members are invited to participate. These individuals are content experts, as evidenced by the process of their appointment and their background and have demonstrated an interest and strength in medical education. They

utilize the USMLE content outline to identify gaps and redundancies to ensure that content areas are adequately covered. They compare their outcomes to student performance on national exams and may recommend changes in curriculum content and methodology on a regular basis back to the CC as whole**.**

Clinical Curriculum

The Clinical Clerkship Subcommittee, also led by a member of the CC, is composed of the clerkship directors. Clerkship directors play a critical role in ensuring that standards of achievement in clinical clerkships are established based on guidelines relevant to national norms and expectations. The department chair appoints the clerkship director for his/her respective department with input from the Office of Medical Education and other administrators. These individuals are full-time faculty in good standing. They are selected based on expertise and interest in medical education and are expected to attend appropriate national medical education meetings and maintain clinical expertise in their subject matter. They are expected to forge and maintain liaisons with all other members of their departments as it relates to medical education efforts. They have at their disposal, as does the basic science faculty, all the resources for faculty development in educational processes and skills at the University level. Clerkship directors utilize the guidelines published by the national organizations in their responsible disciplines to develop objectives, educational experiences, and assessment methods for each clerkship.

Curriculum Evaluation Committee

This is a relatively new addition. This is a 6-member committee. It is co-chaired by a full-time faculty member of the Biomedical Sciences and one of the Clinical Departments. It is composed of three full-time faculty members from the Biomedical Sciences and two full-time clinical faculty. The Associate Dean of Medical Education is the OME representative on the committee. The members have interest and/or experience in curricular design and evaluation, data analytics and outcome analysis. The committee evaluates one course or clerkship each month and submits its finding and recommendation to the CC. In developing its evaluation report, the committee works collaboratively with the course/clerkship director and meets once a moth to finalize the report of the month.

Curriculum Committee

All four subcommittees report back to the Curriculum Committee which considers all this information and data in its deliberations and planning. This invariably ensures vertical and horizontal integration of the curriculum and ultimately validates its content and delivery. The CC and all subcommittees are continuously supported at the staff level by a highly trained and experienced expert in medical education, the Associate Dean for Medical Education. This person provides a wide range of pedagogical support for all the efforts within curriculum development and to the faculty who participate in these efforts. This person helps organize and direct many processes and initiatives and coordinates and appropriately disseminates all curricular information throughout the JCESOM.

9.7 FORMATIVE ASSESSMENT AND FEEDBACK

The medical school's curricular governance committee ensures that each medical student is assessed and provided with formal formative feedback early enough during each required course or clerkship to allow sufficient time for remediation. Formal feedback occurs at least at the midpoint of the course or clerkship. A course or clerkship less than four weeks in length provides alternate means by which a medical student can measure his or her progress in learning.

SUPPORTING DATA

Table 9.7-1 | Mid-clerkship Feedback

Provide school and national data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who indicated they received mid-clerkship feedback in the following clerkships.

	GQ 2017		GQ 2018	
	School %	National %	School %	National %
Family Medicine	96.9	95.0	94.9	95.2
Internal Medicine	98.4	98.0	96.6	98.0
Ob-Gyn/Women's Health	100.0	93.6	98.3	94.0
Pediatrics	98.4	96.3	89.8	96.6
Psychiatry	100.0	93.9	96.6	94.6
Surgery	95.3	92.0	91.5	92.4

Table 9.7-2 | Mid-clerkship Feedback

As available, provide information from clerkship evaluations for the most recently-completed academic year and/or the independent student analysis on the percentage of respondents who *agreed/strongly agreed* (aggregated) that they received mid-clerkship feedback for each listed clerkship. Specify the data source.

Family Medicine	97%; aggregate clerkship evaluation for 2017-2018
Internal Medicine	99%; aggregate clerkship evaluation for 2017-2018
Neurology	89%; aggregate clerkship evaluation for 2017-2018
Ob-Gyn/Women's Health	91%; aggregate clerkship evaluation for 2017-2018
Pediatrics	96%; aggregate clerkship evaluation for 2017-2018
Psychiatry	93%; aggregate clerkship evaluation for 2017-2018
Surgery	91%; aggregate clerkship evaluation for 2017-2018

Data Source: New Innovations, clerkship evaluations

* Clerkship evaluation form has been modified for academic year 20108-2019; specifically; for the students to comment on the learning environment and the quality of formative feedback. Above data is students affirming that they received "useful feedback".

Table 9.7-3 | Pre-clerkship Formative Feedback

Provide the mechanisms (e.g., quizzes, practice tests, study questions, formative OSCEs) used to provide formative feedback during each course in the pre-clerkship phase of the curriculum (typically years 1 and 2).

Course Name	Length of course (in weeks)	Type(s) of formative feedback provided
MDC710-Elements of Medicine	10	Small group discussions, clinical correlates, TBL, practice questions, audience response, written assignments, feedback on SDL
MDC711-SFI	5	Small group discussions, clinical correlates, practice questions

MDC712-SFII	8	Small group discussions, clinical correlates, practice questions, TBL, review sessions, written assignments, audience response
MDC713-SFIII	7	Small group discussions, clinical correlates, practice questions, review sessions, written assignments, TBL, audience response
MDC714-SFIV	6	Small group discussions, clinical correlates, practice questions, TBL, review sessions, written assignments, TBL, audience response
MDC715-ICS		Simulated patients, formative OSCEs
MDC750-Principles of Disease	9	Small group discussions, clinical correlates, practice questions, review sessions, written assignments, audience response
MDC751-DTI	5	Small group discussions, clinical correlates, practice questions, review sessions, written assignments, TBL, audience response
MDC752-DTII	7	Small group discussions, clinical correlates, practice questions, review sessions, TBL, audience response, feedback on SDL
MDC753-DTIII	7	Small group discussions, clinical correlates, practice questions, review sessions, TBL, audience response, feedback on SDL
MDC754-DTIV	9	Small group discussions, clinical correlates, practice questions, review sessions, TBL, audience response, feedback on SDL
MDC755-ACS		Simulated patients, formative OSCEs, workshops and simulations

Table 9.7-4 Formative Feedback

Provide data from the independent student analysis by curriculum year on student satisfaction (satisfied/very satisfied) with the following. Add rows for each additional question on the student survey.

Survey Question	Year 1	Year 2	Year 3	Year 4
Amount and quality of formative feedback in the first/second years	67.5%	86.9%	86.2%	84.0%
Amount and quality of formative feedback in the third/fourth years	N/A	N/A	82.8%	90.7%

NARRATIVE RESPONSE

a. Describe how and by whom the provision of mid-course/clerkship feedback is monitored within individual departments and at the curriculum management level.

Each clerkship director and clerkship coordinator is tasked with ensuring that students receive timely midpoint feedback. The Assistant Dean of Academic Affairs reviews all midpoint feedback forms in the online New Innovations system to ensure that there are no red flags and that no student was overlooked in the process. Any concerns are further discussed with the Vice Dean of Medical Education.

b. For courses and clerkships of less than four weeks duration, describe how students are provided with timely feedback on their knowledge and skills related to the course/clerkship objectives.

The only required clerkships less than four weeks in duration are the Emergency Medicine clerkships and Intensive Care Unit blocks as part of the required fourth year clerkships. Faculty and residents are encouraged to give feedback to students on a daily basis. Final feedback is provided through the New Innovations system.

SUPPORTING DOCUMENTATION

1. Any institutional policy or guideline requiring that medical students receive formative feedback by at least the mid-point of courses and clerkships of four weeks (or longer) duration.

See Appendix *9.7-1 Medical Student Grading and Narrative Policy*
9.7-2 Student Midpoint Feedback Form

9.8 FAIR AND TIMELY SUMMATIVE ASSESSMENT

A medical school has in place a system of fair and timely summative assessment of medical student achievement in each course and clerkship of the medical education program. Final grades are available within six weeks of the end of a course or clerkship.

SUPPORTING DATA

Table 9.8-1 | Availability of Final Grades

For each required clinical clerkship, provide the average and the minimum/maximum number of weeks it took for students to receive grades during the listed academic years. Also provide the percentage of students who did not receive grades within 6 weeks. Add rows as needed.

Required clerkship	AY 2015-16				AY 2016-17				AY 2017-18			
	Avg.	Min	Max	%	Avg.	Min	Max	%	Avg.	Min	Max	%
Family Medicine	2.06	0.78	12.92	1.01	2.49	0.21	11.49	2.05	1.98	1.00	4.43	0.0
Internal Medicine	3.07	1.05	5.93	0.0	4.32	2.08	29.37	2.05	5.47	3.00	23.00	6.55
Neurology	3.45	0.66	6.06	0.0	2.19	0.36	4.64	0.0	2.12	1.00	3.14	0.0
Ob/Gyn	3.41	0.23	32	5.34	5.70	0.23	20.91	15.23	3.23	2.14	19.43	4.25
Pediatrics	4.99	2.05	14.64	20.33	6.98	3.49	33.62	60.27	5.28	2.29	12.57	22.55
Psychiatry	1.86	0.61	16.04	1.01	1.71	0.51	13.51	3.11	2.38	0.71	18.00	2.06
Surgery	5.41	0.95	17.00	21.44	2.72	0.20	20.51	1.01	2.85	1.00	16.71	3.13

If the medical school has regional campus(es) that offer the clinical years of the curriculum, provide the data requested in table 9.8-1 for each campus.

NARRATIVE RESPONSE

a. List any courses in the pre-clerkship phase of the curriculum where all students did not receive their grades within six weeks during the most recently-completed academic year.

POD – individual-student narrative feedback at the end of the course was time consuming and created a bottleneck in the grading process. For the following academic year, the assignment was modified into a group-activity and the grading effort was streamlined by using a rubric.

Disease and Therapeutics, I (MDC 751) – video assignment took longer than expected to grade. The assignment will be moved to the beginning of the block for the next academic year.

b. List any specific clerkship sites that are not complying with the school's guidelines for the timeliness of grade reporting.

OB/GYN – A combination of student failures and family emergency for the Clerkship director contributed to longer than usual grading-time for this clerkship

PEDS – We had several testing site issues during the 2016-2017 Academic Year, which caused students to have incomplete, or outstanding grades until the miniboards were successfully completed. Due to limitations on testing room availability and proctor availability, some of these retakes took longer than anticipated to complete.

c. Describe how and by whom the timing of course and clerkship grades is monitored and the steps taken if grades are not submitted in a timely manner. How does the medical school ensure that course and clerkship grades are reported to students on schedule?

The Registrar monitors the submission of final composite clerkship evaluations in New Innovations. If evaluations are not submitted by the fifth week after a rotation ends, the Registrar sends a follow-up correspondence to the Clerkship Director and Coordinator for a report on when grades will be submitted. If by the sixth week an evaluation has not been submitted, the Registrar reports this information to the Vice Dean of Medical Education who will take further action if needed. The Registrar also ensure that all reported grades are entered into the university grading system at the end of the term in December and May.

d. Provide any data from the independent student analysis or course/clerkship evaluations related to students' opinions about the fairness of summative assessments in courses and clerkships.

From the 2017-2018 Independent Student Analysis:

Grading of the Clinical Competency Exams (CCE) were fair and adequate.											
Medical School Class	Number of Total Responses to this Item	Number and % of N/A Responses		Number and % of Very Dissatisfied (1)		Number and % of Dissatisfied (2)		Number and % of Satisfied (3)		Number and % of Very Satisfied (4)	
		N	%	N	%	N	%	N	%	N	%
M1	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
M2	84	1	1.2	0	0.0	3	3.6	27	32.1	53	63.1
M3	64	1	1.6	0	0.0	5	7.8	23	35.9	35	54.7
M4	71	0	0.0	0	0.0	2	2.8	32	45.1	37	52.1
Total	219	2	0.9	0	0.0	10	4.6	82	37.4	125	57.1

SUPPORTING DOCUMENTATION

1. Policy or directive that specifies the time frame for the reporting of grades.

See Appendix *9.8-1 JCESOM Medical Student Grading Policy*

9.9 STUDENT ADVANCEMENT AND APPEAL PROCESS

A medical school ensures that the medical education program has a single standard for the advancement and graduation of medical students across all locations and a fair and formal process for taking any action that may affect the status of a medical student, including timely notice of the impending action, disclosure of the evidence on which the action would be based, an opportunity for the medical student to respond, and an opportunity to appeal any adverse decision related to advancement, graduation, or dismissal.

NARRATIVE RESPONSE

a. Describe how the medical education program ensures that a single set of policies for promotion and graduation is applied across all instructional sites, including regional campuses.

All students are monitored from a central location in the institution, as we do not have regional campuses.

b. Summarize the due process protections in place at the medical school when there is the possibility of the school's taking an adverse action against a medical student for academic or professionalism reasons. Include a description of the process for appeal of an action for academic or professionalism reasons (not including grade appeal), including the groups or individuals involved at each step in the process.

When a student has been identified as struggling academically or professionally, they are asked to meet with the Assistant Dean of Student Affairs or the Assistant Dean of Academic Affairs. An action plan is created including referral to our in-house learning specialist, if needed. If the action plan does not lead to improvement, the student may be referred to the Academic and Professionalism Standards Committee (APSC).

At the APSC Committee meeting, the student's case is reviewed and discussed by the committee members. The student is given the opportunity to explain the situation. The committee then recommends dismissal or a different action plan for improvement.

If the student is not happy with the decision of the APSC Committee, they may appeal to the second-level appeals committee, which is composed of the Department Chairs. Once again, the student's case is reviewed and discussed. The student is given the opportunity to explain the situation. The committee may support the APSC decision or overturn the decision and make their own recommendations.

The third, and final, level of appeal is to the Dean. The Dean meets with the student one-on-one to discuss the situation. The Dean may uphold the decision of the lower committees or choose to dismiss the student. The decision of the Dean is final.

c. Describe the composition of the medical student promotions committee (or the promotions committees, if more than one). If the promotions committee includes course and/or clerkship directors, describe whether there is a recusal policy in place in the case that an adverse academic action against a student is being proposed.

The Academic and Professionalism Standards Committee consists of basic science and clinical faculty members and one student from each class. The Chair and the Office of Medical Education, with final approval from the Dean of the School of Medicine, appoint faculty members. Students may formally apply for the opportunity of membership. Members of the Office of Medical Education serve on the committee as ex-officio, non-voting members. Those members are:

- Assistant Dean of Academic Affairs
- Associate Dean of Medical Education

- Assistant Dean of Student Affairs
- SOM Registrar

The Assistant Dean of Academic Affairs serves as the Executive Secretary for the committee. There are no clerkship directors on the committee and in the event a member is a course director for which an academic/student issue arises, the committee member abstains from the voting process.

d. Describe how the due process policy and process are made known to medical students.

APSC promotions and standards policies are available online on the JCESOM website. Students are oriented to the website and policy pages during orientation. A l ink to the policy page is also included in course/clerkship syllabi along with course objectives, grading scheme and SOM Professionalism Domains. In the event there is an adverse finding or decision regarding a student, the student is notified in writing, and the appeals process is also outlined and fully explained at that time.

SUPPORTING DOCUMENTATION

1. The policy that specifies that there is a single standard for promotion and graduation.

See Appendix 9.9-1 *Honor System.pdf*

2. The policies and procedures for disciplinary action and due process.

See Appendix *9.9-1 Academic & Professionalism Standards Policy*

STANDARD 10: MEDICAL STUDENT SELECTION, ASSIGNMENT, AND PROGRESS

A medical school establishes and publishes admission requirements for potential applicants to the medical education program, and uses effective policies and procedures for medical student selection, enrollment, and assignment.

SUPPORTING DOCUMENTATION

Table 10.0-1 | Applicants and Matriculants

Provide data for the indicated entering classes on the total number of initial applications received in the admissions office, completed applications, applicants interviewed, acceptances issued, and new medical students matriculated for the first year of the medical curriculum. Do not include first year students repeating the year.

	AY 2013-14	AY 2014-15	AY 2015-16	AY 2016-17	AY 2017-18
Initial applications	1588	1800	1820	1782	1960
Completed applications	554	584	599	609	699
Applicants interviewed	162	162	170	218	157
Acceptances issued	127	118	124	115	125
New students matriculated	75	79	75	83	75

Table 10.0-2a | Entering Student MCAT Scores

If applicable, use the table below to provide *mean* MCAT scores, for new (not repeating) first-year medical students in the indicated entering classes.

	AY 2013-14	AY 2014-15	AY 2015-16	AY 2016-17		AY 2017-18	
				OLD	NEW	OLD	NEW
Verbal Reasoning	9.2	9.7	9.6	9.0	125	9.5	126
Physical Sciences	9.0	9.1	9.0	9.6	125	10.5	125
Biological Sciences	9.7	9.7	10.1	9.9	125	10	126

Table 10.0-2b | Entering Student MCAT Scores[2]

If applicable, use the table below to provide *mean* MCAT scores, for new (not repeating) first-year medical students in the indicated entering classes.

	AY 2015-16	AY 2016-17	AY 2017-18
Chemical and Physical Foundations of Biological Systems	N/A	125	126
Biological and Biochemical Foundations of Living Systems	N/A	125	125
Critical Analysis and Reasoning Skills	N/A	125	126
Psychological, Social, and Biological Foundations of Behavior	N/A	125	126
Total Score	N/A	500	503

[2] 8/2/17: Table 10.0-2b has been added to reflect the subscores for the new 2015 MCAT.

Table 10.0-3 | Entering Student Mean GPA					
Provide the *mean overall premedical GPA for new (not repeating) first-year medical students* in the indicated entering classes. If using a weighted GPA, please explain how the weighted GPA is calculated in the last row of the table.					
	AY 2013-14	AY 2014-15	AY 2015-16	AY 2016-17	AY 2017-18
Overall GPA	3.6	3.6	3.6	3.6	3.6
Weighted GPA calculation (if applicable):					

Table 10.0-4 | Medical School Enrollment					
Provide the total number of enrolled *first-year medical students* (include students repeating the academic year) and the total number of medical students enrolled at the school for the indicated academic years. For students in dual-degree programs, only include those participating in the medical curriculum.					
	AY 2013-14	AY 2014-15	AY 2015-16	AY 2016-17	AY 2017-18
First-year	81	84	80	88	84
Total enrollment	292	291	295	301	310

10.1 PREMEDICAL EDUCATION/REQUIRED COURSEWORK

Through its requirements for admission, a medical school encourages potential applicants to the medical education program to acquire a broad undergraduate education that includes the study of the humanities, natural sciences, and social sciences, and confines its specific premedical course requirements to those deemed essential preparation for successful completion of its medical curriculum.

NARRATIVE RESPONSE

a. List all the college courses or subjects, including associated laboratories, which are required as prerequisites for admission to the medical school.

Required Courses	Semester Hours
General Biology or Zoology (with Lab)	8
General Chemistry (with Lab)	8
Organic Chemistry (with Lab)	8
Biochemistry	3
Physics (with Lab)	8
English	6
Social or Behavioral Sciences	6

b. List any courses or subjects that the medical school recommends, but does not require, as prerequisites for admission.

Highly Recommended Courses	Semester Hours
Cell and Molecular Biology	3
Statistics/Biostatistics or Epidemiology	3

c. Describe how and when the current premedical course requirements were established and by which individuals and/or groups they were approved.

The Medical School Admissions Workgroup was established in August 2012 to review, identify, and recommend premedical course requirements that are essential for successful completion of the medical school curriculum. The workgroup reviewed the current admissions requirements and worked to identify the competencies expected for medical school applicants. In addition, the group reviewed the requirements to ensure applicants preparing for medical school were also academically prepared for the MCAT which was scheduled to change in 2015.

In preparation for evaluation, the workgroup reviewed the following:

- LCME Connections Medical Students (MS) Standards
- Scientific Foundations for Future Physicians – Report of the AAMC-HHMI Committee
- MCAT 2015 The Basics

The workgroup met on three occasions and then made recommendations to continue with the previously required courses. Biochemistry was added to the requirements and it was determined that Statistics/Biostatistics or Epidemiology and Cell and Molecular Biology be made highly recommended. The

workgroup recommended that the proposed required courses be forwarded to the Executive Committee with the recommendation for implementation for the students applying to medical school in 2014.

The Executive Committee accepted the recommendations and the full Admissions Committee voted on the changes. The policy was revised and approved on November 6, 2012 by the Admissions Committee to include newly required courses.

Medical School Admissions Workgroup members:

- Admissions Committee Members: Chuck Clements, M.D., Faculty Physician, Department of Family Medicine; Richard Egleton, PhD, Department of Pharmacology, Physiology and Toxicology; Jennifer Plymale, Associate Dean of Admissions and Director of the Robert C. Byrd Center for Rural Health; Cindy Warren, Assistant Dean of Admissions and Student Affairs
- Office of Medical Education: Aaron McGuffin, M.D., Senior Associate Dean of Medical Education
- JCESOM faculty: Jessie Shields, M.D., Department of Pediatrics
- Marshall University faculty: Harold Elmore, PhD, Marshall University Department of Biological Science/Pre-Health Advisor; Frank Gilliam, PhD, Professor, Department of Biological Science
- Administrative Staff: Christy Adkins, Robert C. Byrd Center for Rural Health

d. Describe how often and by whom premedical course requirements are reviewed. Note the data or other information (e.g., about medical student performance) that are used to make decisions about changes to premedical course requirements.

Premedical course requirements are reviewed every two years. The Executive Committee designates an ad hoc workgroup to evaluate and review course requirements, national trends and other relevant data. In addition to members of the Admissions Committee/Staff, representatives from the Office of Medical Education, and Marshall University College of Science are included.

10.2 FINAL AUTHORITY OF ADMISSION COMMITTEE

The final responsibility for accepting students to a medical school rests with a formally constituted admission committee. The authority and composition of the committee and the rules for its operation, including voting privileges and the definition of a quorum, are specified in bylaws or other medical school policies. Faculty members constitute the majority of voting members at all meetings. The selection of individual medical students for admission is not influenced by any political or financial factors.

NARRATIVE RESPONSE

a. Describe the size and composition of the medical school admission committee, including the categories of membership (e.g., faculty, students, medical school administrators, community members) and the specified number of members from each category. If there are subcommittees of the admission committee, describe their composition, role, and authority.

The Admissions Committee may be composed of full-time basic science and clinical faculty, community physicians, four medical students, medical residents, medical school administrators, undergraduate faculty members from the main Marshall University campus and community representatives.

Recommendations for new members are taken from current and former members of the Admissions Committee, and from departmental chairs. The Executive Committee reviews all recommendations for new membership, talks with the suggested members to discern interest and availability to interview and attend meetings. The available vacancies are filled by a simple majority vote of the Executive Committee using a holistic approach to determine the best members for the Admissions Committee, including considerations of diversity, judgment, clinical and administrative experience and willingness and availability to serve. As a matter of standard practice, the Executive Committee ensures faculty representation of at least fifty-one percent on the Admissions Committee. The final approval of new members to the Admissions Committee is made by Faculty Council of the Medical School. Each new member is asked to serve a three year term, although members may remain on the Admissions Committee for multiple terms at the discretion of the Chair.

For the selection of the fall 2017 entering class, the Admissions Committee was composed of: six faculty/administrators; 15 clinical faculty; four basic sciences faculty; one pharmacy faculty, two faculty from the main Marshall University campus; two community members; four medical students (two third year and two fourth year).

Subcommittees of the Admissions Committee

Executive Committee composition includes the Chair, Vice Chair and all the Vice Deans, Assistant and Associate Deans serving at that time on the Admissions Committee. The Executive Committee is responsible for forming a variety of ad hoc workgroups, such as the Interview Selection Workgroup, to study and analyze the admissions process and related issues from time to time as circumstances warrant. The members of these workgroups shall be determined by simple majority vote of the Executive Committee, and shall be dissolved upon completion of the task assigned. In addition, the Executive Committee has the formal delegated authority from the Admissions Committee to move applicants from the waitlist to the accepted list.

Interview Selection Workgroup - A standing workgroup of the Admissions Committee with a specific charge as delineated herein.

- Charge of the Interview Selection Workgroup – The Interview Selection Workgroup shall be responsible for the evaluation of applications after the admissions staff has determined which applicants meet minimum qualifications. The Interview Selection Workgroup will then forward recommendations for applicants to be interviewed directly to admissions staff for interview scheduling.

- Membership of the Interview Selection Workgroup - the Admissions Committee Chair or his/her designee will facilitate the meeting. The Interview Selection Workgroup shall be composed of representatives from the Office of Diversity, the Basic Sciences Department, the Executive Committee, and clinical faculty and all shall be members of the Admissions Committee. The members of this workgroup shall be determined by a simple majority vote of the Executive Committee and shall be dissolved upon completion of the task assigned.

- Interview Selection Workgroup members serve at the will and pleasure of the Chair, with no defined term limits. Interview Selection Workgroup members shall undergo training along with the rest of the Admissions Committee to ensure compliance with all applicable laws, regulations and policies surrounding the admissions process, and the concept of the holistic admissions approach as well as the use of personal characteristics for effective decision-making.

b. Identify the current chair of the admission committee, including his or her faculty and/or administrative title(s). How is the chair selected?

The Chair of the Admissions Committee is Charles Clements, MD. Dr. Clements is a Family Medicine physician, Associate Professor and Vice-Chair for Clinical Affairs in the Department of Family Medicine. Dr. Clements has been a member of the Admissions Committee for twenty years. The Chair and Vice Chair of the Admissions Committee are appointed by the Dean.

c. Describe how admission committee members are oriented to the admission committee policies and to the admissions process.

Admissions Committee members attend mandatory orientation and are offered specific training on admissions policies and procedures every year prior to the start of the interviewing cycle. Special speakers and training are often offered during the year. In addition, a comprehensive and detailed orientation is held each year for new members. This information includes but is not limited to, admissions policies and procedures, conflict of interest policy, and review of appropriate interview questions, as well as an overview of the holistic admissions process and discernment of characteristics that add value to the class.

d. Summarize the charge to the admissions committee and the source of the committee's authority (e.g., medical school bylaws). Does the committee as a whole, or a subset of the admission committee, have the final authority for making all admission decisions? If a subset of the admission committee makes the final admission decision, describe the source of its authority. Note the circumstances, reasons, and final outcome surrounding any admission committee decision that has been challenged, overruled, or rejected during the past three admission cycles.

The Admissions Committee is an independent body and acts free of external influence. The duties of this committee are to develop and recommend criteria for admissibility of applicants, to determine methods and

procedures for evaluating applicants and to select from among applicants those to be accepted. The authority for the final decision on applicants to the medical school, to include traditional applicants, applicants to a combined program such as the MD/PhD program, and the BS/MD program, rests with the full Admissions Committee. The Admissions Committee has developed policies and procedures to ensure admission processes and decisions are free from political and/or financial conflicts of interest, and are in compliance with non-discrimination laws and regulations.

The Executive Committee is responsible for reviewing recommendations for new membership to the Admissions Committee and the Interview Selection Workgroup, among other duties. The Executive Committee is also responsible for designating ad hoc workgroups to evaluate and study admissions related issues. The final approval of new members to the Admissions Committee is made by the Faculty Council of the Medical School. In addition, the Executive Committee has the formal delegated authority from the Admissions Committee to move applicants from the waitlist to the accepted list. Waitlist applicants are not ranked.

During the past three admission cycles Admission Committee decisions have not been challenged, overruled, or rejected.

e. Describe how the medical school ensures that there are no conflicts of interest in the admission process and that no admission decisions are influenced by political or financial factors.

It is the goal of the faculty, through the work of the Admissions Committee, to admit students who will make a positive contribution to the educational environment of MUJCESOM. In order for the admissions process to work appropriately, the process must be free of external influence and conflicts of interest. While carrying out the Committee's responsibilities, the faculty, staff, students and community members are expected to uphold the highest standards of professional integrity. To that end, the Admissions Committee members are annually required to sign the Conflict of Interest policy.

Admissions Committee members are also required to attend mandatory orientation and are offered specific training on admissions policies and procedures every year prior to the start of the interviewing cycle. Special speakers and training are often offered during the year. In addition, a comprehensive and detailed orientation is held each year for new members. This information includes but is not limited to, admissions policies and procedures, conflict of interest policy, and review of appropriate interview questions, as well as an overview of the holistic admissions process and discernment of characteristics that add value to the class.

SUPPORTING DOCUMENTATION

1. An excerpt from the medical school bylaws or other formal document that specifies the authority of, the charge to, and composition of the admission committee and its subcommittees (if any) and the rules for its operation, including voting membership and definition of a quorum at meetings.

Appendix 10.2-1 Bylaws- Admission Committee.docx
Appendix 10.2-2 Admissions Policy.docx
Appendix 10.2-3 ADMISSIONS CMTE CONFLICT OF INTEREST POLICY.PDF

10.3 POLICIES REGARDING STUDENT SELECTION/PROGRESS AND THEIR DISSEMINATION

The faculty of a medical school establish criteria for student selection and develop and implement effective policies and procedures regarding, and make decisions about, medical student application, selection, admission, assessment, promotion, graduation, and any disciplinary action. The medical school makes available to all interested parties its criteria, standards, policies, and procedures regarding these matters.

NARRATIVE RESPONSE

a. Describe when and by whom the policies, procedures, and criteria for medical student selection were developed and approved, and how they are disseminated to potential and actual applicants and their advisors.

The Admissions Committee is responsible for the development of policies, procedures and establishing the criteria for medical student selection. These policies and procedures are reviewed annually. These documents are made available to applicants and advisors during recruitment trips and are posted in their entirety on the School of Medicine's Website.

b. Describe the steps in the admissions process, beginning with the receipt of the initial application. For each of the following steps, as applicable, describe the procedures and criteria used to make the relevant decision and the individuals and groups (e.g., admission committee or subcommittee, interview committee) involved in the decision-making process:

1. Preliminary screening for applicants to receive the secondary/supplementary application
2. Selection for the interview
3. The interview
4. The acceptance decision
5. The creation of the wait list
6. The offer of admission, including how applicants are accepted from the wait list

1. Preliminary screening for applicants to receive the secondary/supplementary application

Supplemental application will be automatically forwarded to applicants with a verified AMCAS application who are residents of West Virginia or an adjoining state. Nonresident applicants from non-bordering states with ties to West Virginia or to the School of Medicine are required to demonstrate a strong tie to the state of West Virginia, such as previous residency, family currently residing in the state, attending a West Virginia college/university, etc. Once ties are verified, the supplemental application will be made available.

2. Selection for the Interview

Admissions staff ascertains if applicants meet the minimum qualifications as set in the admissions policy; the applications are reviewed and selected for interview by the Interview Selection Workgroup. The Interview Selection Workgroup is a subcommittee of the Admissions Committee and shall be composed of a representative from the Office of Diversity and Inclusion, the Basic Sciences Department, the Executive Committee, and clinical faculty, and all shall be members of the Admissions Committee.

The Interview Selection Workgroup shall be responsible for the evaluation of applications after the admissions staff has determined which applicants meet minimum qualifications. The workgroup will forward recommendations for applicants to be interviewed directly to admissions staff for interview scheduling. These applicants are invited to participate in two individual interviews with members of the Admissions Committee.

Criteria:

- As a State of West Virginia medical school, MUJCESOM gives interview preference to West Virginia residents.

- A limited number of interviews will be available to well-qualified nonresidents in the following categories: residents from Kentucky, Maryland, Ohio, Pennsylvania, and Virginia; nonresidents who can demonstrate strong ties to West Virginia; and nonresidents who meet the minimum requirements and who have completed one of the following pipeline programs will also receive interview preference:

    - Project P.R.E.M.E.D. (Providing Real world Experiences for future Marshall Educated Doctors) - An information and exploration program designed for college students of color. Selected students will participate in an immersion program that exposes them to life as a medical student and life in medical school.
    - The Hampton University Mentoring Program-This is a pipeline program with MUJCESOM and Hampton University to provide mentoring, onsite workshops of application preparation and interview skills. Five slots per year are allocated for Hampton students to participate in a residential Summer Academy program at Marshall University.
    - Marshall University Biomedical Research Program –This is a rigorous two-year non-thesis master's degree program with a medical sciences area of emphasis. Students take many classes with first and second year medical students. Students enrolled in this graduate program are eligible to participate in the pipeline program. A student who has a 3.4 or higher GPA at the end of their first year is not required to take the MCAT for admission to the MUJCESOM. Matriculation is contingent upon completion of the master's program with a 3.4 or higher GPA and passage of the comprehensive exam on the first attempt.

    - Regardless of their state of residency, applicants are considered only if they are U.S. citizens or have permanent resident visas.

    - The Admissions Committee takes a holistic admissions approach that incorporates screening, interviewing and selection. Selection is based on the consensus of the Admissions Committee and the evaluation of the following items:

        a) Academic Background – Both quantity and quality are assessed with a four-year program of study suggested. Exceptionally well-qualified applicants may be considered after ninety semester hours of academic work if other requirements are met. Specific entrance requirements include one year each of English, zoology or biology with lab, general chemistry with lab, organic chemistry with lab, physics with lab and social or behavioral sciences. Three semester hours of biochemistry lecture are also required. Recommended

courses include cell and molecular biology, statistics or biostatistics or epidemiology. A major criterion is the overall grade point average for undergraduate studies with particular emphasis in correlating the grade point average in science and science related courses. A minimum undergraduate GPA of a 3.0 is preferred. Scholastic performance in graduate studies and other professional courses is also taken into consideration.

b) Medical College Admission Test (MCAT) – The value of the MCAT is to: evaluate an applicant's ability to retain knowledge acquired from the undergraduate curriculum; assess his/her ability to apply acquired knowledge through a comprehensive testing program; and equate the applicant's performance with a nationwide ranking from which some correlation may be established from applicants of varying undergraduate backgrounds. An MCAT score of 498 is preferred. A review of students who demonstrate an exceptional balance of experiences, attributes and academics that are in line with the school's mission may be considered with a minimum MCAT score of 496. Applicants are required to take the MCAT within three calendar years of enrollment unless they meet the requirements for exclusion. Applicants from the BS/MD and Marshall Biomedical Research pipeline program who meet respective program specific criteria will be exempt.

c) Letters of evaluation/recommendation - Three written recommendations from professors and/or a premedical advisory committee must be provided. If submitting individual letters, two of these references must be from science faculty who have taught the applicant and one from the applicant's major department. Additional pertinent letters of recommendation are welcomed, but not required.

d) Interviews – Interviews are arranged only by invitation and upon recommendation by the Interview Selection Workgroup. The purpose of the interview is to assess personal characteristics that are pertinent to the admissions decision. These characteristics include communication skills, work ethic, community service, honesty/ethics and resilience. Additional attributes assessed include leadership and teamwork. In addition, the applicant has a chance to become acquainted with the medical campus in a general way, and at the same time provide the Admissions Committee better insight into his/her personal interests and attitudes. Equally important and to add value to our learning environment is the infusion of students from a variety of cultural and ethnic backgrounds to ensure our students are prepared for life and practice in an expanded environment.

e) Highly-qualified West Virginia applicants who are eligible for first round acceptance may be immediately notified of acceptance without having his/her application reviewed by the full Admissions Committee if space in the class is available. Eligibility requirements include:

- 3.5 or better GPA in all sections: science, non-science, and overall
- A total score of 500 or above on the MCAT (no individual section below 125)
- Strong letters of recommendation
- Recommendation of "Accept" by both interviewers
- Verification of state residency

f) MD/PhD applicants - Criteria for applicants to the MD/PhD program will include those listed herein for MD applicants. In addition, prior significant research experience as evidenced by authorship in peer reviewed publications is necessary. Further, applicants for the MD/PhD program will undergo a series of interviews specific to the clinician scientist

training portion of the program, focusing on research experience, among other qualifications. As with all applicants, final approval of the selection for the MD/PhD program rests with the Admissions Committee. Applicants who are not accepted into the MD/PhD program may be considered for the MD program in that application cycle.

3. The Interview

Interviews are arranged only by invitation and upon recommendation by the Interview Selection Workgroup. The purpose of the interview is to assess communication skills, work ethic, community service, honesty/ethics, and resilience. Additional attributes assessed include leadership and teamwork. In addition to the interview process, the applicant has a chance to become acquainted with the medical campus in a general way, and at the same time provide the Admissions Committee better insight into his/her personal interests and attitudes. Equally important and to add value to our learning environment is the infusion of students from a variety of cultural and ethnic backgrounds to ensure our students are prepared for life and practice in an expanded environment. Interviews are typically conducted on Saturday mornings. Additionally, weekday interviews may be arranged. Saturday interviews include the opportunity to meet socially for breakfast, a scheduled time to meet with current students and a tour of the educational floor of the Byrd Clinical Center and a driving tour around the main Marshall University campus area. Weekday interviewees have the opportunity to tour the education floor of the Byrd Clinical Center and to talk with a current medical student, if available. As far as it is feasible, applicants are given the choice of days for interviews. Note that interviews for the MD/PhD program may follow a slightly different format and will include additional interviews specific to the PhD portion of the program.

Applicants are invited to participate in two individual interviews with members of the Admissions Committee.
The interview need not be formally structured. The report to the committee will be on the interview data form and this written summary of the interview is held in the applicant's folder until a final decision is rendered. The purpose of the interview is to:

- Corroborate and/or supplement data present in the application folder
- Explain and potentially upgrade data
- Identify personal characteristics pertinent to the admissions process and as allowed by law and policy
- Permit strengthening, weakening, or confirming (no change) the application.

An applicant has the right to request an additional interview if he/she feels that one of his/her interviewers presented a conflict of interest or a perceived bias. The additional interview could be held on the same day as the two primary interviews or the applicant can elect to come back at a later date to re-interview.

4. The Admissions Decisions

Following presentation, discussion and evaluation of each application, the Admissions Committee by majority vote will make a recommendation to ACCEPT, REJECT or HOLD each applicant. Applicants who are in the ACCEPT or REJECT category are notified by the Admissions Office. Accepted applicants are provided information explaining and specifying the mechanism for executing and confirming intent to matriculate.

- **Accept:** Committee action of acceptance is immediately forwarded to the Admissions Office with the committee vote included.
- **Hold:** Applicants in this category present qualifications that are less competitive than applicants in the ACCEPT category. Applicants in the HOLD category will be re-evaluated and are considered to remain in an active category. Applicants may also be placed in Hold by the committee in anticipation of the receipt of additional information.
- **Reject:** A rejected applicant's application is immediately forwarded to the Admissions Office with the committee vote included.

A majority vote of those present will be necessary to designate the application as accepted or rejected. If a majority vote for acceptance or rejection is not reached, then the application shall remain on active status as a HOLD. Following committee recommendation of either ACCEPT or REJECT, Admissions Committee activity regarding the applicant ceases unless important additional information is received that should be reviewed and considered by the Admissions Committee.

Those applicants remaining in the HOLD category will undergo a second discussion and vote by the Admissions Committee. This process is defined as second-round evaluation. Those applicants typically will not undergo second-round evaluation until all applicants have undergone the initial first-round discussion and voting procedure, although an interviewer may request recall of an applicant prior to this timeframe based on additional information received.

At the second-round evaluation of applicants in the HOLD category, the applicant must be recommended as either an ACCEPT or REJECT. Second-round evaluations are conducted in a similar manner to the first-round process including presentation by interviewers; one interviewer should be present. Once the class is filled, applicants deemed acceptable by vote of the Admissions Committee will be placed on the waitlist.

5 and 6. The Offer of Admission and Waitlist

Applicants who are in the ACCEPT or REJECT category are notified by the Admissions Office. Accepted applicants are provided information explaining and specifying the mechanism for executing and confirming intent to matriculate.

The Admissions Committee will extend acceptances to approximately 85 applicants. Once all slots have been filled, the remainder of the applicants acceptable for admission will go on the waitlist. In addition, the Admissions Committee will finalize decisions about applicants who have previously been placed on HOLD, and those will either be REJECTED, or will be moved from HOLD to the waitlist. The waitlist is not ranked. The Executive Committee has the formal delegated authority from the Admissions Committee to move applicants from the waitlist to the accepted list. The Executive Committee will use the following criteria to move a student from the waitlist to the accepted list:

- West Virginia residents
- Underrepresented Minorities in Medicine
- Applicants from rural communities
- Applicants who have had experiences or indicate interest in serving in a rural community

Once a final decision has been made, applicants are notified in writing regarding their status. Applicants who are placed on the waitlist are encouraged to provide updated grades and information. The Executive Committee will make a selection from the waitlist to fill any openings per admissions policy and procedures.

Accepted applicants may request delayed/deferred matriculation into the school of medicine for a period of one year. To request delayed/deferred matriculation, the applicant must forward a letter addressed to the Admissions Committee describing the reason for the request. The request must be received by June 1 prior to matriculation. It is the responsibility of the Admissions Committee to review and approve all requests. Requests for delayed/deferred matriculation received after June 1 prior to matriculation, will be considered for medical reasons only. Deferred applicants are directed to contact the Office of Admissions for instructions on this process.

The Admissions Office will provide the Admissions Committee a report of the finalized class which will include how many waitlist individuals were admitted and on what general basis the admission decisions were made.

Marshall University JCESOM follows the AAMC Application and Acceptance Protocols defined below:

- *In fairness to other applicants, if you have decided before April 30 not to attend a medical school or program that has offered you an acceptance, promptly withdraw your application from that school(s) or program(s).*
- *Out of respect for other applicants, if you receive an offer of acceptance from more than one school or program:*
  - *Withdraw your acceptance from any school or program you do not plan to attend as soon as you have made that decision;*
  - *On or before April 15, narrow your selection(s) to no more than three schools or programs, and withdraw your acceptance(s) from all other schools or programs; and*
  - *On or before April 30, choose the school or program to which you plan to matriculate and promptly withdraw your acceptances from all other schools or programs.*
- *If you receive additional acceptances following April 30, it is your responsibility to promptly notify any school(s) you have decided to not attend. Your decision should be made by the deadline established by the medical school(s).*

MUJCESOM **strongly encourages** applicants currently on the accepted roster to finalize decisions no later than May 15.

c. Describe the role of the medical school admission committee in the selection of applicants for joint baccalaureate-MD program(s) or dual degree program(s) (e.g., MD-PhD), if these are present.

BS/MD Applicants

This program allows students to complete the requirements for both the Bachelor of Science and Doctor of Medicine program in an accelerated seven-year program. Admissions staff ascertains if applicants meet the minimum qualifications as set out in the BS/MD admissions policy, the applications are reviewed and

selected for interview by the Interview Selection Workgroup, which is a subcommittee of the Admissions Committee with a specific charge as delineated herein:

Charge of the Interview Selection Workgroup – The Interview Selection Workgroup shall be responsible for initial review of applications after the admissions staff has determined which applicants meet minimum qualifications, and for selection of those applicants who will be scheduled for an interview. The Interview Selection Workgroup will forward recommendations for applicants to be interviewed directly to admissions staff for interview scheduling. The Admissions Committee and others, as directed, will conduct interviews, evaluate applicants, and make final determination of those accepted into the BS/MD program. Members of the Admissions Committee and any of those conducting interviews will receive annual training and will understand the special requirements and criteria for the BS/MD program.

SPECIAL NOTE – Applicants in the BS/MD program at Marshall may be subject to different procedures as outlined in the BS/MD policies and procedures specific to their program.

MD/PhD Applicants

Criteria for applicants to the MD/PhD program include those listed for MD applicants. In addition, applicants for the MD/PhD program will undergo a series of interviews specific to the clinician scientist training portion of the program, focusing on research experience, among other qualifications. As with all applicants, final approval of the selection for the MD/PhD program rests with the Admissions Committee. Applicants who are not accepted into the MD/PhD program may be considered for the MD program in that application cycle.

See MD/PhD Program URL: https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/graduate-education-programs/mdphd/

d. Describe how the policies for the assessment, advancement, and graduation of medical students, and the policies for disciplinary action are made available to medical students and to faculty.

The policies for the assessment, advancement, graduation of medical students, and disciplinary action are made available online and may be accessed by faculty or students at any time. These policies are also reviewed during orientation sessions for the upcoming class year. The Academic and Professionalism Standards Committee (APSC) Policies are also reviewed when promotion and student progress is discussed. If any updates are made to existing policies or new policies are published, an icon is used next to the policy to indicate as such.

e. Describe how and by which individual(s) or group(s) the following decisions are made:

1. The advancement of a medical student to the next academic period
2. A medical student's graduation

1. The advancement of a medical student to the next academic period

Medical students' academic progress is monitored closely by the Office of Medical Education as well as the APSC. The APSC reviews student performance annually or when a deficiency has been reported to the Office

of Medical Education. The APSC will then make decisions related to the academic deficiencies, promotions, and/or unprofessional behaviors which have been reported. The committee reviews the academic and professional progress of students and decides appropriate action for students earning one or more academic and/or professional deficiencies. The APSC will act upon any student who is not meeting the minimum requirements to be advanced to the next academic class year.

The following benchmarks must be achieved for the advancement of the medical student to the next academic year:

- **Year 1 to Year 2:** Students must successfully complete all MS1 courses with a grade of "C" or better. They must also meet all professional standards.
- **Year 2 to Year 3:** Students must successfully complete all MS2 courses with a grade of "C" or better. They must also meet all professional standards and pass USMLE Step 1 before they are allowed to start work on MS3 Clerkships.
- **Year 3 to Year 4:** Students must successfully complete all MS3 clerkships, including the NBME Shelf Exams and final CCE before they are promoted to Year 4.

2. A medical student's graduation

As described in the MUJCESOM Honor System & Policy Regarding Academic and Professionalism Standards, Leaves, and Appeals, student progress towards graduation is tracked throughout the curriculum by the Office of Medical Education and the APSC. The Office of Medical Education is responsible for ensuring all student requirements have been met prior to graduation. The MUJCESOM Registrar is tasked to ensure all curricular requirements have been met, and *Ellucian DegreeWorks* is used to help facilitate this task. This software links the student's transcripts to set curricula within the timeframe of when the student matriculated.

SUPPORTING DOCUMENTATION

1. Policies and procedures for the selection, assessment, advancement, graduation, and dismissal of medical students.

   Appendix 10.3-1 Admissions Procedures.pdf
   Appendix 10.3-2 Promotion, Graduation, and Dismissal.pdf
   Appendix 10.3-2b Program-PolicybsmdDEC6.18.docx
   Appendix 10.3-2c Selection-ProceduresbsmdDec6.18.docx
   Appendix 10.3-3 Interview Form.docx
   Appendix 10.3-4 Technical Standards.pdf

2. The charge to or the terms of reference of the medical student promotions committee(s).

   Appendix 10.3-5 Bylaws-Academic Standards Committee.pdf

10.4 CHARACTERISTICS OF ACCEPTED APPLICANTS

A medical school selects applicants for admission who possess the intelligence, integrity, and personal and emotional characteristics necessary for them to become competent physicians.

NARRATIVE RESPONSE

a. Describe the personal attributes of applicants considered during the admission process. How was this list of personal attributes developed? By which individuals and groups was the list reviewed and approved?

The purpose of the interview is to assess personal attributes such as communication skills, work ethic, community service, honesty/ethics and resilience. Additional attributes assessed include leadership and teamwork. In 2017, the Admissions Committee was requested to identify the personal attributes that should be considered in medical school applicants. The attributes identified were discussed, reviewed and approved by the Executive Committee, and then reviewed and approved by the full Admissions Committee in May 2017. They were implemented in the following admissions cycle.

b. Describe the methods used during the admission process to evaluate and document the personal attributes of applicants. Refer to the admission procedures as outlined in element 10.3 to illustrate where, how, and by whom these attributes are assessed.

Assessment of the personal attributes begins with the application information. Admissions Committee members assess the information contained in the following sections of the application:

- **Personal Statement –** All applicants must complete a personal statement as part of their application, and these are studied by the interviewers and then the full committee for evidence of community service, commitment to service of others, maturity, honesty, and ability to overcome barriers.
- **Recommendation Letters –** Each applicant must submit at least three reference letters, and these are studied by interviewers and then the full committee as to personal attributes noted by the person who completed the recommendation. Often the person completing the recommendation can speak to personal growth during college, some of the outside activities of the applicant, ability to exercise leadership and teamwork, and other important personal attributes.
- **Extracurricular Activities –** Each applicant must complete an exhaustive list of extracurricular and volunteer activities, and these are also analyzed by the interviewers and the full committee. Activities are studied for evidence of leadership, ability to work with a team, commitment to service, interest in health care, and even time management capabilities.

In addition to a careful review of the application, the interview serves as an important tool to surface personal characteristics. From their arrival, applicants are assessed for their ability to interact with others in the interview process – other applicants, faculty and staff they meet during the tour and interviews, medical students, and others. Attributes observed include interpersonal ease of communication, confidence, any differentiation of communication based on perceived levels of power or status, timeliness, respect for the process (appropriateness of dress, turning off cell phone, etc.), and general demeanor.

Questions meant to elicit personal characteristics have been added to the interview process as well. Scenario-based questions that target ethics, critical thinking, integrity, compassion, mission of service, and others are included in the interview, and then answers are discussed with the full committee during the discussion of the applicant.

The Admissions Committee has been trained in how to analyze personal attributes, and this has included training on how to eliminate interviewer bias in this category.

c. Describe how the members of the admission committee and the individuals who interview applicants (if different from members of the admission committee) are prepared and trained to assess applicants' personal attributes.

Admissions interviewers are all members of the Admissions Committee. Ongoing training for interviewers to assess personal attributes is provided by the Admissions staff and guest speakers for each annual admissions cycle. First, committee members are reminded of the relevant and appropriate personal attributes that may be considered as part of the selection process. These attributes have been identified by the committee. Then admissions staff and speakers provide additional information to assist in this process.

Additional training and seminars are offered to faculty and staff on an ongoing basis. Over the last several years training has been provided by professionals in the fields of psychology, law, diversity and inclusion, and academics. Topics of training have included:

- An overview of the holistic process and methods of surfacing relevant personal attributes
- Identifying and eliminating personal biases in admissions
- Identifying personal attributes of applicants from the resources in the entire admissions process
- Seminars on diversity and inclusion in the applicant pool
- Appropriate use of personal attributes and other more subjective factors while interviewing and how to document

Interviewers are provided a template that has been reviewed by legal counsel, and approved by the Admissions Committee to provide guidance in properly navigating the balance between academic and non-academic characteristics of medical school applicants.

SUPPORTING DOCUMENTATION

1. Any standard form(s) used to guide and/or to evaluate the results of applicant interviews.

Appendix 10.4.1 Applicant Interview Form.docx

10.5 TECHNICAL STANDARDS

A medical school develops and publishes technical standards for the admission, retention, and graduation of applicants or medical students in accordance with legal requirements.

NARRATIVE RESPONSE

a. Describe when and by whom the technical standards were last reviewed and approved.

Technical Standards are reviewed by campus legal counsel annually. Any changes are reviewed and approved by the full Admissions Committee.

b. Describe how the technical standards for admission, retention, and graduation are disseminated to potential and actual applicants, enrolled medical students, faculty, and others.

Technical standards are available on the MUJCESOM website: https://jcesom.marshall.edu/admissions/

Applicants invited to interview are emailed technical standards in advance of the interview.

c. Describe how medical school applicants andor students are expected to document that they are familiar with and capable of meeting the technical standards with or without accommodation (e.g., by formally indicating that they have received and reviewed the standards).

Applicants for admission to MUJCESOM who are invited for an on-campus interview are required to certify on the day of their interview that they understand and are able to meet the technical standards described herein with or without reasonable accommodations. A description of any actual disability and the need for accommodations should not be disclosed at this time.

Accelerated BS/MD applicants are often minors at the time of their initial interview for the program as high school seniors. For that reason, these applicants are asked to sign indicating that they have read and understood the technical standards but are not asked to certify that they meet the standards at that time. BS/MD students are again given the copy of the standards at the end of their second undergraduate year in the program and are asked to read and certify at that time that they are familiar with the standards and are able to meet the standards as described with or without reasonable accommodation.

SUPPORTING DOCUMENTATION

1. The medical school's technical standards for the admission, retention, and graduation of applicants and students.

Appendix *10.5-1 Technical Standards for Admission.pdf*
Appendix *10.5-2 Technical Standards for Graduation.pdf*
Appendix 10.5-3 Technical Standards for Interviewing BS/MD applicants.docx

10.6 CONTENT OF INFORMATIONAL MATERIALS

A medical school's catalog and other informational, advertising, and recruitment materials present a balanced and accurate representation of the mission and objectives of the medical education program, state the academic and other (e.g., immunization) requirements for the MD degree and all associated joint degree programs, provide the most recent academic calendar for each curricular option, and describe all required courses and clerkships offered by the medical education program.

NARRATIVE RESPONSE

a. Describe how often informational materials about the medical education program are updated. How does the leadership of the medical education program ensure that the materials are accurate and timely?

The Office of Admissions works directly with the Office of Public Affairs to ensure that informational, advertising, and recruitment materials are aligned with admissions policies and the mission of the medical school. Materials are reviewed annually and edited to reflect changes in the policies and admission requirements.

b. Describe how recruitment materials about the medical education program are made available (e.g., online, in the media, in hard-copy) to potential and actual applicants, career advisors, and/or the public.

Recruitment materials are made available online and in hard-copy. The Office of Admissions staff work with career advisors, faculty, and teachers from feeder colleges and high schools through recruiting visits during the spring and fall semesters. Informational packages are provided in hard copy to interested students, advisors, faculty, and teachers. Information is also shared via email for students who have contacted the Office of Admissions.

SUPPORTING DOCUMENTATION

1. Any recruitment materials related to the medical school.

Appendix 10.6-1 2018 Accelerated BS/MD-Rackcard.pdf
Appendix 10.6-1 som_admissionsbooklet_diverse.pdf
Appendix 10.6-1 som_admissionsbooklet_FINAL.pdf

2. The current medical school academic bulletin or catalog. Indicate where in the bulletin/catalog, or other informational materials available to the public, the following information can be accessed:

   a. Medical education program mission and objectives
   b. Admission and completion requirements (academic and other) for the MD degree and joint degree programs
   c. Academic calendar for each curricular option
   d. Required course and clerkship descriptions

Appendix 10.6-2 Current Academic Bulletin.pdf
See website at www.jcesom.marshall.edu

10.7 TRANSFER STUDENTS

A medical school ensures that any student accepted for transfer or admission with advanced standing demonstrates academic achievements, completion of relevant prior coursework, and other relevant characteristics comparable to those of the medical students in the class that he or she would join. A medical school accepts a transfer medical student into the final year of a medical education program only in rare and extraordinary personal or educational circumstances.

SUPPORTING DATA

Table 10.7-1 | Transfer/Advanced Standing Admissions

Provide the number of transfer students and students with advanced standing admitted from the program types listed below into the first, second, third, and fourth-year curriculum during the indicated academic years.

	Year 1		Year 2		Year 3		Year 4	
	AY 2016-17	AY 2017-18	AY 2016-17	AY 2017-18	AY 2016-17	AY 2017-18	AY 2016-17	AY 2017-18
LCME-accredited, MD-granting medical school	0	0	0	0	0	0	0	0
AOA-accredited, DO-granting medical school	0	0	0	0	0	0	0	0
Non-LCME or AOA-accredited international medical school	0	0	0	0	0	0	0	0
Non-MD-granting graduate or professional degree program	0	0	0	0	0	0	0	0

NARRATIVE RESPONSE

a. Describe the procedures used for selecting applicants for transfer or for admission with advanced standing, including the procedures by which the medical school determines the comparability of the applicants' educational experiences and prior academic achievement to those of medical students in the class that they would join. List the criteria (e.g., GPA, USMLE scores, MCAT scores) that are considered in making the determination of comparability.

Transfer students will be considered for admission at the Marshall University Joan C. Edwards School of Medicine (MUJCESOM) as advanced standing students for compelling personal circumstances with good academic performance. Transfer spaces are limited by attrition, and shall be filled at the sole discretion of the Admissions Committee. Transfer students must be in good academic and professional standing at an LCME-accredited medical school.

In order to transfer into MUJCESOM with advanced standing, applicants must meet the following criteria:

Eligibility:

- Must have a "good standing" status (eligible to return) to their previous medical school, which must be a Liaison Committee on Medical Education (LCME) accredited school

- Must be a United States citizen or have a permanent visa
- Must be a legal resident of West Virginia, Kentucky, Maryland, Ohio, Pennsylvania, or Virginia, or have strong ties to the State of West Virginia as determined by the Admissions Office
- Must complete at least the last two years of the MUJCESOM curriculum
- Must provide an official United States Medical Licensing Examination (USMLE) Step 1 score report with a passing score in the 50th percentile or better. Board scores must be received by July 15th of the year in which the transfer student would be enrolled at MUJCESOM
- Must have met the course requirements as listed in the application materials
- Must be accepted and eligible to enter no later than the second 3rd year rotation

Requirements:
All applicants must provide the following for consideration:

- Completed application for Transfer with Advanced Standing or an updated AMCAS application, if available
- Official transcripts from all schools attended
- Letter of "good standing" status from previous medical school
- Letters of reference
    - References which must be provided:
        - Three written recommendations from professors who have taught the applicant in class are required. Two of these three references must be from professors in the area of basic science and one from a clinical faculty member who can attest to the applicant's clinical and/or diagnostic skills.
        - Applicants should select professors who are familiar with them and can provide substantive comments regarding their academic career. Additional pertinent references are acceptable.
- Personal interview may be requested
- A $100.00 nonrefundable application fee is required
- A Criminal Background Check will be required on all applicants

b. Describe the role of the admission committee, members of the medical school administration, and others: (1) in determining if space and resources are available to accept transfers and (2) in making the decision to accept applicants for transfer or for admission with advanced standing.

Transfer spaces are limited by attrition and shall be filled at the sole discretion of the Admissions Committee.

- All application materials will be gathered and reviewed by the Office of Admissions.
- Applicants deemed acceptable may be invited for an interview by the Office of Admissions.
- Final decisions regarding admission will be made by the Admissions Committee.
- Accepted applicants are required to begin orientation by approximately mid-August.

c. Describe how policies and procedures related to transfer/admission with advanced standing are made available to potential applicants for transfer and advanced standing and their advisors.

Students are made aware of the transfer/admission with advanced standing by instructing students to review the Transfer Student Policy that is on the Admissions/MD Program webpage under the title "Resources."

d. If the medical school admitted one or more transfer students to the final year of the curriculum during the past three years, describe the circumstances surrounding that admission decision.

Not applicable.

SUPPORTING DOCUMENTATION

1. Medical school policies and procedures related to transfer and admission with advanced standing.

Appendix 10.7-1 Transfer Student Policy.pdf

10.8 VISITING STUDENTS

A medical school does all of the following:

- Verifies the credentials of each visiting medical student
- Ensures that each visiting medical student demonstrates qualifications comparable to those of the medical students he or she would join in educational experiences
- Maintains a complete roster of visiting medical students
- Approves each visiting medical student's assignments
- Provides a performance assessment for each visiting medical student
- Establishes health-related protocols for such visiting medical students
- Identifies the administrative office that fulfills these responsibilities

NARRATIVE RESPONSE

a. Describe the procedures and criteria used by the medical school to determine if a potential visiting medical student has qualifications, including educational experiences, comparable to those of the medical students he or she would join in a clinical experience. Identify the medical school, university, or other office that is responsible for reviewing and making the decision about comparability.

Visiting Medical Student Qualifications – Medical students who wish to participate in elective rotations at MUJCESOM must attend and be in their final year at a Liaison Committee on Medical Education (LCME) accredited medical school or an osteopathic college of medicine accredited by the Commission on Osteopathic College Accreditation (COCA). Applications for a visiting student elective rotation will only be considered when all of the following application requirements have been submitted:

1. Letter of good academic standing signed by the Dean of Student Affairs or Academic Affairs
2. Provide a complete immunization form (AAMC Standardized Immunization Form) with proof of immunizations.
3. Provide proof of malpractice insurance. Coverage must extend for the entire period of the student's rotation at MUJCESOM.
4. Provide proof of personal health insurance. Coverage must extend for the entire period of the student's rotation at MUJCESOM.
5. Provide proof of complete HIPAA and OSHA training.
6. Provide a copy of their state issued ID or passport showing photo, expiration date, and a number (Driver's License number or passport number).
7. Transcript of medical education – Student must have successfully completed all core clerkships prior to the scheduled elective period.
8. Drug Screen completed within one year of the start date of the elective rotation.
9. Background Check completed within one year of the start date of the elective rotation.
10. Transcript documenting passage of USMLE Step 1 or COMLEX.
11. CV/Resume.

The above requirements must be met by all domestic visiting students via the AAMC Visiting Student Learning Opportunities Service (VSLO) (formerly VSAS). For international students, the required documentation is submitted in paper format, directly to the Office of Medical Education and reviewed in conjunction with the clinical department for which the visiting student is applying to.

Review of Credentials – Credentials submitted to VSLO by students requesting clinical experiences at JCESOM are reviewed by the Office of Academic Affairs and the clinical department for which the visiting student is applying to.

b. Describe the procedures by which the medical school grants approval for medical students from other medical schools to take electives at the institution. Include the following information in the description:

1. How the academic credentials and immunization status of visiting students are verified
2. How the medical school ensures that there are adequate resources (including clinical resources) and appropriate supervision at the site for both the visiting student and any of the medical school's own students
3. How the medical school ensures that a performance assessment is provided for each visiting student

1. How the academic credentials and immunization status of visiting students are verified

For domestic students using VSLO, the home institution must certify the eligibility requirements within the VSLO system. For international visiting students, a letter from the Dean of the student's school must certify that requirement eligibility information to be accepted.

Immunization status for both domestic and international visiting students are reviewed by the Clinical Coordinator in the Division of Occupational Health and Wellness.

2. How the medical school ensures that there are adequate resources (including clinical resources) and appropriate supervision at the site for both the visiting student and any of the medical school's own students

Clerkship and elective coordinators from each clinical department determine the maximum number of students that may be accommodated during the elective period. The number of students per elective rotation may vary throughout the academic year based on clinical volumes and faculty resources and availability. Clerkship and elective coordinators have the final approval to determine availability for visiting student rotations. If the clinical department offers an elective rotation to a domestic visiting student, the coordinator markets the elective as approved in VSLO. Once approved by the department, the Office of Academic Affairs will notify the visiting student of the offer via the VSLO Service. The same applies if the application is denied.

3. How the medical school ensures that a performance assessment is provided for each visiting student

The clinical department which the visiting student rotates in is responsible for collecting the student's home school evaluation form from either the student or VSLO. If no form is available from the student, a paper evaluation will be sent at the request of the home school institution.

c. Identify the medical school or university staff member(s) who is/are responsible for maintaining an accurate and up-to-date roster of visiting medical students.

The Office of Academic Affairs is responsible for maintaining an accurate roster of visiting students. The Registrar for JCESOM maintains an actively updated roster of all visiting students who have applied and been offered elective rotations via VSLO. The Registrar has access to the electronic files uploaded to VSLO, as well as the Program Assistant to the Office of Medical Education. International students are added to a roster maintained by the Program Assistant to the Office of Medical Education and hard copy files are maintained in

the Office of Medical Education. International students will be added to the roster maintained by the Registrar as needed.

All visiting students are added to the JCESOM student database under the category of "Visiting Students" and then scheduled in our JCESOM Student Scheduling system. The Student Scheduling system is maintained by the Registrar and Chief Information Officer.

SUPPORTING DOCUMENTATION

1. List the types of information included in the roster of visiting medical students (provide a standardized template for the roster, if available).

Appendix 10.8-1 Visiting Student Profile 2018-2019.pdf
Appendix 10.8-1 Visiting Student Roster De-Identified 2017-2018.xlsx

10.9 STUDENT ASSIGNMENT

A medical school assumes ultimate responsibility for the selection and assignment of medical students to each location and/or parallel curriculum (i.e., track) and identifies the administrative office that fulfills this responsibility. A process exists whereby a medical student with an appropriate rationale can request an alternative assignment when circumstances allow for it.

NARRATIVE RESPONSE

a. Describe the timing and process for medical student assignment to an instructional site or parallel curriculum in the following circumstances, as relevant. In the description, include when, how, and by whom the final decision about assignment is made. Note the ability of students to select or rank options.

1. A clinical site (e.g., a hospital) for an individual clerkship
2. A regional campus that includes only the clerkship (clinical years) phase of the curriculum
3. A regional campus that includes the pre-clerkship phase of the curriculum or all years of the curriculum
4. A parallel curriculum ("track") located on the central medical school campus or at a regional campus

1. A clinical site (e.g., a hospital) for an individual clerkship

Students are expected to complete the entirety of the third-year curriculum at their assigned clinical rotations at our affiliated clinical sites.

Students are expected to complete the entirety of the Year 3 curriculum at their assigned clinical rotations at our affiliated clinical sites, all of which are in a fairly tightly defined geographic area near the core campus and within the Huntington area. During the registration process, students are able to indicate preferences in clerkship sites.

2. A regional campus that includes only the clerkship (clinical years) phase of the curriculum

Not applicable – MUJCESOM does not have regional campuses.

3. A regional campus that includes the pre-clerkship phase of the curriculum or all years of the curriculum

Not applicable – Students complete the entirety of the first and second year curriculum on the Huntington campus.

4. A parallel curriculum ("track") located on the central medical school campus or at a regional campus

Not applicable – No parallel track/curriculum

b. Describe if, in any of the circumstances above, medical students have the opportunity to negotiate with their peers to switch assignment sites or tracks after an initial assignment has been made but before the experience has begun.

Not applicable – MUJCESOM does not have regional campus sites/tracks.

c. Describe the procedures whereby a student can formally request an alternative assignment through a medical school administrative mechanism either before or during his or her attendance at the site / in the track. Describe the criteria used to evaluate the request for the change and the individual(s) tasked with making the decision. Describe how medical students are informed of the opportunity to request an alternative assignment.

Not applicable – MUJCESOM does not have regional campus sites/tracks.

SUPPORTING DOCUMENTATION

1. Medical school policy/procedure allowing a medical student to formally request an alternative educational site or curriculum assignment.

See Appendix *10.9-1 Alternative Site-Assignment Request.docx (Not Apprlicable)*

STANDARD 11: MEDICAL STUDENT ACADEMIC SUPPORT, CAREER ADVISING, AND EDUCATIONAL RECORDS

A medical school provides effective academic support and career advising to all medical students to assist them in achieving their career goals and the school's medical education program objectives. All medical students have the same rights and receive comparable services.

SUPPORTING DATA

Table 11.0-1 | Attrition and Academic Difficulty

Provide the number and percentage of *first-year medical students* and the number and percentage of *all medical students* who withdrew or were dismissed from the medical school in the indicated academic years.

	AY 2014-15	AY 2015-16	AY 2016-17	AY 2017-18
First-year students	1 (1.27%)	4 (5.33%)	1 (4.82%)	1 (1.33%)
All medical students	3 (1.00%)	1 (0.33%)	2 (0.64%)	1 (1.33%)

Table 11.0-2 | Attrition and Academic Difficulty by Curriculum Year

Provide the number of medical students in each of the following categories during the listed academic years. *Count each student only once.*

	AY 2016-17					AY 2017-18				
	Year 1	Year 2	Year 3	Year 4	Total	Year 1	Year 2	Year 3	Year 4	Total
Withdrew or were dismissed	4	2	0	0	6	1	1	0	0	2
Transferred to another medical school	0	0	0	0	0	0	0	0	0	0
Were required to repeat the entire academic year	2	0	0	0	2	2	1	0	0	3
Were required to repeat one or more required courses or clerkships	0	0	0	0	0	0	0	2	0	2
Moved to a decelerated curriculum	0	0	0	0	0	0	0	0	0	0
Took a leave of absence as a result of academic problems	0	0	0	0	0	0	1	0	0	1
Took a leave of absence for academic enrichment (including research or a joint degree program)	0	0	2	0	2	0	0	2	0	2
Took a leave of absence for personal reasons	6	3	3	0	12	3	4	2	0	9

Table 11.0-3 | Average Graduation Rates Over Five Years	
Provide the overall graduation rate, and the percentage of medical students who graduated in four years *averaged over the past five years*. *Note: these data should be updated immediately prior to submission of the data collection instrument.*	
Four-year graduation rate	Overall graduation rate
83.20%	90.23%

Table 11.0-4 | Residency Match Rates				
Provide the number and percentage of participating medical students who initially matched to PGY-1 programs in the National Resident Matching Program without entering the Supplemental Offer and Acceptance Program (SOAP), as well as the percentage of participating students who remained unmatched at the end of the SOAP.				
	AY 2014-15	AY 2015-16	AY 2016-17	AY 2017-18
Percent initially matched (prior to SOAP)	67 (89%)	61 (91%)	65(89%)	63(94%)
Percent unmatched (after SOAP)	5 (6%)	5 (8%)	6 (8%)	3(5%)

Table 11.0-5 | Graduates Not Entering Residency		
Provide the number of medical school graduates who did not enter residency training in the following graduating classes for each of the listed reasons (provide a brief description of the reason for students counted under "other"). Provide the total number of students and the percentage of students who did not enter residency in each graduating class. Count each graduate only once and do not include students who graduated late.		
Reason	Class of 2017	Class of 2018
Family responsibilities/maternity/child care	0	0
Change of careers	0	0
Did not gain acceptance to a residency program	5	1
Preparation for the USMLE	1	0
Research/pursuing additional degree or training	0	2
Other: (add rows as required)	0	0
Describe "Other":	0	0
Total number of students in each graduating class who did not enter residency training.	6	3
Percent of students in each graduating class who did not enter residency training.	8%	5%

Table 11.0-6 | Academic/Career Advising at Regional Campuses					
Indicate how the following services are made available to students at each regional campus by placing an "X" in the appropriate columns(s). Select all that apply for each service. Add additional rows for each service/campus. *Note: this question only applies to schools with regional campus(es).*					
Services	Campus	Available to Students via			
		Personnel located on campus	Visits from central campus personnel	E-mail or tele/videoconference	Student travel to central campus
Academic counseling	N/A				
Tutoring	N/A				
Career advising	N/A				

11.1 ACADEMIC ADVISING

A medical school has an effective system of academic advising in place for medical students that integrates the efforts of faculty members, course and clerkship directors, and student affairs staff with its counseling and tutorial services and ensures that medical students can obtain academic counseling from individuals who have no role in making assessment or promotion decisions about them.

SUPPORTING DATA

Table 11.1-1 | Academic Advising/Counseling

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with academic advising/counseling.

GQ 2017		GQ 2018	
School %	National %	School %	National %
86.0	73.5	53.5	72.4

Table 11.1-2 | Academic Advising/Counseling by Curriculum Year

Provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with academic advising/counseling and tutoring services. Add rows for each additional question on the student survey. Schools with regional campuses should also specify campus.

Survey Question	Year 1	Year 2	Year 3	Year 4
Availability of academic counseling	87.7	91.7	85.9	87.8
Availability of tutorial help	95.1	90.5	84.6	85.1

Schools with regional campus(es) should provide data from the AAMC Graduation Questionnaire or independent student analysis by campus (as available).

NARRATIVE RESPONSE

a. Describe how medical students experiencing academic difficulty are identified. Is it possible for a medical student to be identified as being in academic difficulty before he/she has a failing final course/clerkship grade?

Medical students are identified as experiencing academic difficulty using the "Identification of Students Experiencing Academic Difficulty" policy. Using internal quantitative predictive measures, outcomes of block exams and scores of NBME exams, student academic progress is reviewed at weekly department meetings consisting of Offices of Academic Affairs, Student Affairs and Academic Support. Early identification and intervention are the goals of consistent monitoring. In addition to academic challenges, students may be experiencing academic difficulty as a result of personal, financial, or physical issues. JCESOM recognizes that these can contribute as underlying causes of academic difficulty and as such has a contract with Cabell Huntington Hospital Counseling Services for students to receive 10 complimentary counseling services per academic year.

JCESOM uses a multidimensional and holistic approach to aiding in student success. The Assistant Dean of Academic Affairs and the Assistant Dean of Student Affairs are primarily responsible for identifying any student who is not making academic progress. The student is informed of available resources such as peer tutoring, personal counseling, and the learning specialist. The Assistant Dean of Student Affairs is primarily responsible for coordinating services for medical students and, as needed, will meet with the student to discuss the possibility of a psycho-educational evaluation; a psychiatric evaluation; a medical physician

referral, etc. On a weekly basis, the student's academic progress plan is reviewed and revised as needed by the support team.

Documentation of student interventions and processes of formative feedback to the students are challenges that the JCESOM currently faces. Currently, the weekly meeting notes are kept in offices of the individual administrator with no ability to share information. Feedback to the students is completed on a one to one basis and documented individually. The Offices of Student Affairs, Academic Affairs and Academic Support, in collaboration with the Office of Medical Education, are evaluating various electronic methods to record information in a student portfolio method.

PRECLINICAL:
Years 1 and 2: the Assistant Dean of Student Affairs reviews scores of all block exams when posted in Exam Soft. Any student with a score of less than 75% is identified as possibly at risk for academic challenges. The student's academic profile is evaluated, any trends of declining scores will warrant a wellness check to ensure no personal or medical issues exist. For any student who is noted to have a lack of understanding of content, the student is strongly advised to meet and discuss with the block leader.

In preparation for taking the USMLE Step 1 exam, students take shelf exams after five blocks in the second year and the CBSE after the end of the year. Students falling below the required scores are considered at risk suggesting lack of readiness to pass Step 1. For those students, the Offices of OME, OSA, and OAA collaborate and review the student records and create an individualized academic support plan. Examples of resources used for the academic support plan are Doctors in Training and PASS Program. Continued progress is monitored and when readiness is noted, the student is permitted to sit for the exam.

CLINICAL:
Years 3 and 4 students are monitored for academic difficulty using several indicators. A) not achieving a passing score on a NBME subject exam using the scores set by the individual clerkships; B) Noted to not be meeting clinical performances and expectations by the clerkship director, faculty, etc.; or C) any student not meeting expectations at mid-point or concerns held by the clerkship. The first step to action is for the clerkship director to address the concern at the clerkship level or a report may be made and guidance received from the Office of Student Affairs.

In preparation for USMLE Step 2 CS, nearing the end of the student's spring semester of year 3, all students participate in a six station clinical competency exam. All encounters are recorded and reviewed by faculty. Two to four weeks prior to sitting for the exam the student will meet with a faculty advisor, review the recordings and readiness is determined. In the event the faculty note deficiencies, the student must successfully complete a CCE remediation focusing on weak areas noted in the final CCE.

b. Describe the types of academic assistance available to medical students (e.g., tutoring, academic advising, study skills/time management workshops). For each type of assistance available to students, summarize the role and organizational locus (e.g., medical school, university) of the individual(s) who provide this support and how medical students can gain access to each of the resources.

JCESOM believes that academic assistance begins with content experts. Block leaders and Clerkship Directors are deemed to be the first resource for academic assistance. Students are encouraged to reach out to their respective content leader early in the coursework to assist in understanding medical knowledge or clinical content. Students are strongly encouraged to ask early and not wait for a formal assessment. Students may request to meet with any faculty member via email or by honoring open office hours noted in syllabus. Informal methods of assistance occur during Learning Community Meetings.

Additionally, the Associate Dean of Medical Education holds a weekly meeting during the preclinical curriculum "What's Working Wednesday"; a town hall structured meeting that allows students to discuss in an open forum strengths, weaknesses and opportunities for the curriculum. During these sessions, the Associate Dean of Medical Education is available to aid students and recommend academic support as needed.

The Office of Medical Education dedicated 1.5 FTEs for Academic Support positions. The Director of Academic Support serves as the learning specialist who assesses and creates a plan of academic support plan for any student who experiences learning difficulties. The Director serves as a team member for any student who presents with learning disabilities and aids in providing reasonable academic accommodations. Students gain access to any academic support services by personal request or formal referral by faculty or administration. The Assistant Director of Academic Support is responsible for evaluating students who perform less than 75% on block exams. The assistant director evaluates for the need of tutors and offers available resources.

Peer tutors are hired and report directly to the Assistant Director of Academic Support. Students are notified of group test prep sessions in which peer tutors review didactic material and provide additional educational instructions. Individual peer tutors are available at no charge to the students. Student can gain access to an individual tutor by request from the assistant director of Academic Support, or by formal referral by faculty or administration.

Academic assistance begins two weeks prior to matriculation. The Office of Academic Support hosts a medical school preparedness "Bootcamp". JCESOM Academic Boot Camp occurs the week prior to M1 orientation and is on a voluntary basis by newly matriculating students as well as repeating students, or students who want to review their academic skills. Its purpose is to provide an overview of effective study skills, test-taking strategies, and various approaches to manage time and tasks well. Stress and anxiety reduction techniques are addressed, as well as the importance of maintaining positive habits in the areas of sleep, exercise, and nutrition. During orientation, students are provided peer support through the introduction of learning communities. Rising second year medical students and faculty provide a survival skills panel. The Assistant Dean of Student Affairs provides students with a session on resources available to medical students.

In the second year of the curriculum, students attend a one-day orientation in which third year students provide a survival skills panel that advises navigating through the curriculum, USMLE Step 1 preparation and curriculum study resource recommendations.

During the clinical curriculum, all students attend an orientation series that advises students on overall academic success in the clinical setting. Each clinical rotation holds an individual clerkship orientation on day one. During these sessions, students are prepared with academic tools and expectations for success.

c. Describe how the medical school provides an option for medical students to obtain academic counseling from individuals who have no role in assessment or advancement decisions about them, including individuals who prepare the MSPE.

JCESOM has dedicated 1.5 FTEs that have no role in assessment or advancement decisions. The Director of Academic Support and the new Assistant Director of Academic Suppport are resources for academic counseling and support. These speciallytrained employees are not involved in the preparation of the MSPE and are never in a position to evaluate the students. Students can obtain services via email, appointment or open office hours. Any faculty or administrator can refer a student for learning specialist services or academic advising.

11.2 CAREER ADVISING

A medical school has an effective career advising system in place that integrates the efforts of faculty members, clerkship directors, and student affairs staff to assist medical students in choosing elective courses, evaluating career options, and applying to residency programs.

SUPPORTING DATA

Table 11.2-1 | Career Planning Services

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied (aggregated)* in the following areas.

	GQ 2015		GQ 2016		GQ 2017		GQ 2018	
	School %	National %	School %	National %	School %	National %	School %	National %
Career planning services	89.6	64.1	41.2	64.4	77.2	63.9	51.9	63.3
Information about specialties	93.8	70.6	57.6	71.5	78.0	71.3	56.9	71

Table 11.2-2 | Career Planning Services by Curriculum Year

Provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with career advising. Add rows for each additional question on the student survey. Schools with regional campuses should also specify campus.

Survey Question	Year 1	Year 2	Year 3	Year 4
Adequacy of career advising	59.3	64.3	84.6	72.0

Table 11.2-3 | Optional and Required Career Advising Activities

Provide a brief description of each career information session and advising activity available to medical students during the most recently completed academic year. Indicate whether the session was optional or required for students in each year of the curriculum.

Advising activity/ Information session (required/optional)	Year 1	Year 2	Year 3	Year 4
	Optional: During orientation, students are introduced to the student driven medical specialty interest groups at the Career Fair Optional: "Career Conversations with a Physician"-Meetings sponsored by the various medical interest groups are held throughout the academic year and	Optional: "Career Conversations with a Physician"-see year 1 description. Optional: Student Interest Group sponsored events-see year 1 description. Required: Students complete the CiM Physician Skills Inventory Assessment to consider how they fit	Required: Clerkships conduct Career Counseling and advising sessions in each of the seven third year clinical rotations. Required: One on One meetings with the Assistant Dean of Student Affairs to approve 4th year required course schedules and electives. During this meeting, career	Required: Students attend "Interviewing Seminar" with faculty and residency program directors. Required: Class meeting to review MSPE and ERAS preparations Required: Beginning in July 2019. 4th Year Orientation Day. Optional:

	are open to all students. Optional: Student Interest Groups sponsor numerous events throughout the academic year displaying their specialties within the SOM and the community. Open to all medical students. Required: Students attend a school-sponsored introduction to the AAMC's Careers in Medicine website. To demonstrate familiarity with CiM as a resource for career development the student completes the CiM's Medical Specialty Preference Inventory (MSPI) and the CiM's Physician Values in Practice Scale. The student then submits a short narrative to the Assistant Director of Academic Support discussing the results.	with the specialties that interest the student. The student submits a personal reflection describing the results to the Assistant Director of Academic Support.	decisions and competitiveness are discussed. The student's academic profile are reviewed.	Students participate in one mock interview with medical school faculty

Schools with regional campus(es) should provide the supporting data requested above for each campus (as available).

NARRATIVE RESPONSE

a. Provide an overview of the personnel from the medical school administration, faculty (e.g., career advisors), and other sites (e.g., a university career office, outside consultants) available to support the medical student career advising system and the role(s) played by each. Provide the title(s) and organizational placement(s) of the individual(s) responsible for the management/coordination of the career advising system.

1. Assistant Dean of Student Affairs reports directly to the Vice Dean of Medical Education. The primary role of the Assistant Dean of Student Affairs is to assist the student in making final career decisions. The Assistant Dean of Student Affairs has the primary role of overseeing all career advising during a student's medical education career.

Year 3 students: In rotations 5 and 6, each student is required to meet one on one and review the 4th year academic schedule. This includes review of step 1 score, step 2 CS and CK preparations, sites for the exams and choice of career. Then the 4th year schedule of required courses and electives is discussed and reviewed to ensure no overlaps of required coursework occurs at the time of interview season begins. Students are encouraged to consult with any clinical faculty who have knowledge of their career.

Year 4 students: Immediately after the end of year 3 curriculum, students begin to prepare for residency application, and interviews. The students are required to attend a class meeting to discuss upcoming preparation of the MSPE and an overview of the residency application process. The student is provided a Quick Guide to ERAS and NRMP with deadlines for completion of tasks. (Appendix) The Office of Student Affairs reviews any application at the student request. Formative feedback is provided when needed throughout the interview season. Throughout the fall, using an internal Excel tool-kit, the student is requested to communicate via electronic means or in person with the Assistant Dean of Student Affairs to ensure the application process and deadlines have been completed. The Assistant Dean of Student Affairs monitors interview offers and acceptances throughout the fall.

In January and February, students meet one-on-one to discuss final interview season information. Based upon the collection of data, using a "traffic light" system, students are categorized. Prior to submission of rank lists, the Assistant Dean of Student Affairs is available to review and discuss any rank list at the student's request.

Between ranking and match day-students who are deemed at high risk meet with the Assistant Dean of Student Affairs and using the Using the AAMC Advising At Risk Students, a transparent discussion occurs including creating an alternative plan in the event the student does not match.

Note: Beginning in AY 2019-2020 a mandatory 4th year orientation will be held for all students. This orientation will hosts a variety of workshops including CV and Personal Statement Writing, mock interview opportunities, and interviewing tips by program directors

2. Assistant Director of Academic Support and Career Advising-directly reports to the assistant dean of student affairs with career advising activities.

Years 1 and 2-Following the curriculum of AAMC Careers in Medicine, this employee conducts and manages all career advising activities for the preclinical students. The assistant director assigns all reflection activities, collects the information, and provides formative feedback to the student.

The employee is responsible for organizing Career Conversations, Interest group meetings, and AMA Speed dating career fair event.

3. Clerkship Directors-all clerkships are expected to conduct a career information workshop during each rotation. The structure of the workshop varies between clerkships, however, all sessions are consistent with advising on the specifics of the clerkship they represent.

4. Clinical Faculty-clinical faculty assist students in reading and making recommendations to personal statements for ERAS.

Department chairs participate in an annual panel on interviewing strategies and tips.

b. Provide a description of the print and/or online resources available to medical students to support their career investigations. Note if students are required to use some or all of these materials (e.g., as part of career advising sessions).

In 2016, the Office of Student Affairs ramped up the services available to students in all four years of the curriculum. The AAMC Careers in Medicine toolkit is now used starting in the first year of the curriculum. Unfortunately, the most recent graduates did not benefit as much as their underclassmen peers. We chart predicted outcome through a web based home grown application that can be used to advise students about their career choices. In addition to AAMC Careers in Medicine, student are encouraged to look at our internal match data and to utilize FRIEDA. We review all ERAS applications, all CV's and personal statements, provide mock interviews, and specialty specific mentors in addition to the print and online resources available to the students.

c. Identify the individual(s) who are primarily responsible for providing guidance to medical students on their choice of intramural and extramural electives during each year of the curriculum. List the role(s) or title(s) (e.g., student affairs dean, college advisor, departmental faculty advisor) of the individual(s) responsible for the formal approval of medical students' elective choices. Describe any formal (required) sessions where counseling on electives occurs.

The JCESOM employs a medical school dedicated registrar who has overall responsibility for ensuring medical students are enrolled for all required courses and meet promotion and graduation requirements. In addition to required courses, the registrar also is responsible for tracking electives throughout the four years of medical school.

The assistant dean of student affairs primarily is responsible for advising all rising third year medical students. Rising orientation meetings are held in the spring semester of a student's third year. In collaboration with the registrar, the assistant dean discusses away rotation requirements and elective away rotations. All rising 4th year students are required to meet with the Assistant Dean of Students Affairs to review, discuss, and approve the final 4th year elective choices. During the meetings, students are reminded of the 4th year attendance policy, elective schedules, interviewing season schedules and demands and managing all schedules above. During the discussion the student is provided feedback which includes areas of concerns such as potential conflicts of schedules and interviews. This formative feedback is a block calendar that replicates their 4th year block schedule with notes to the student listed and emailed to the student following the discussion.

Clerkship directors, department chairs, and faculty are all advisors to medical students who are entering into the department's field of clinical study.

d. List the individual(s) primarily responsible for the preparation of the Medical Student Performance Evaluation (MSPE). Describe the opportunities for medical students to request another MSPE writer.

Primary authors for the MSPE are the Vice-Dean of Medical Education and the Assistant Dean of Student Affairs. During the final rotation of year 3 or immediately at the beginning of year 4, a mandatory class meeting is held where a power point presentation is given to all students explaining the structure, content, and composition of the MSPE. Students are informed that if they wish to request another writer, they can make a formal email request to both writers.

SUPPORTING DOCUMENTATION

1. A sample MSPE for a recent graduate with good academic credentials and a sample MSPE for a student who has experienced academic difficulty. Personally identifiable information should be redacted.

   Appendix 11.2-1 MSPE for Well Performing Student
   Appendix 11.2-2 MSPE for a Student that Struggled

11.3 OVERSIGHT OF EXTRAMURAL ELECTIVES

If a medical student at a medical school is permitted to take an elective under the auspices of another medical school, institution, or organization, a centralized system exists in the dean's office at the home school to review the proposed extramural elective prior to approval and to ensure the return of a performance assessment of the student and an evaluation of the elective by the student. Information about such issues as the following are available, as appropriate, to the student and the medical school in order to inform the student's and the school's review of the experience prior to its approval:

- Potential risks to the health and safety of patients, students, and the community
- The availability of emergency care
- The possibility of natural disasters, political instability, and exposure to disease
- The need for additional preparation prior to, support during, and follow-up after the elective
- The level and quality of supervision
- Any potential challenges to the code of medical ethics adopted by the home school

NARRATIVE RESPONSE

a. Describe how and by whom extramural electives are reviewed and approved prior to being made available for student enrollment.

Domestic Extramural electives: All domestic fourth year extramural electives scheduled at other LCME accredited institutions are reviewed by the Office of Medical Education to determine if the course content and objectives are aligned similarly to JCESOM. If so, no additional review is required. If no course is available in JCESOM course catalog, the Office of Medical Education in conjunction with the academic department will review the elective for educational content that is appropriate for a final year elective.

International Extramural Electives: There are two methods for students to participate in international extramural electives: 1) faculty-led experience; and 2) students can independently acquire information on an international elective and submit to our Office of International Health for review and approval. The Office of International Health is responsible for evaluating and monitoring a proposed international elective location with support from the Office of Medical Education. The Office of International Health also will support the student in set up preparations, which includes assessing issues related to availability of emergency care, natural disaster potential, political instability, exposure to native diseases and any other significant concerns students should be prepared for.

b. Describe how the medical school evaluates each of the following areas in its review of electives at locations (e.g., countries/regions) where there is a potential risk to medical student and patient safety:

1. The availability of emergency care
2. The possibility of natural disasters, political instability, and exposure to disease
3. The need for additional preparation prior to, support during, and follow-up after the elective
4. The level and quality of supervision
5. Potential challenges to the code of medical ethics adopted by the home school
6. Provide an example of how medical students were prepared and supported before and during electives in which there is a risk to student and patient safety.

Domestic Extramural Electives

- **Availability of emergency care**: JCESOM employs the AAMC Uniform Clinical Training Affiliation Agreement (UCTAA) to contract for domestic extramural electives with other LCME accredited U.S. medical schools. The UCTAA is designed to require compliance with applicable state and federal laws regarding workplace safety regulations, which includes environmental hazards, infectious hazards, and other occupational injuries, which may require emergency care following an incident of exposure.

  Regarding health emergencies not related to occupational exposure or injury JCESOM students are required to maintain current personal health insurance while enrolled at JCESOM. This allows access to healthcare services at an extramural training site and/or hospital. All domestic extramural electives approved by the SOM are affiliated with U.S. hospitals and/or health care facilities accredited by the LCME and/or the Joint Commission. This practice ensures the facilities in which extramural electives take place maintain healthcare requirements, emergency care, emergency plans, and quality supervision, and they meet the same medical ethics standards for patient care as does the JCESOM.

- **The possibility of natural disasters, political instability, and exposure to disease:** Students completing approved extramural electives are in affiliation with other LCME accredited medical schools by way of the AAMC Uniform Clinical Training Affiliation Agreement (UCTAA). All domestic sites therefore must comply with LCME standard 5.7 regarding student safety, security and disaster preparedness. Standard 5.7 also requires adequate security systems to be in place at all locations and policies and procedures must be in place to ensure student safety during disaster preparedness. Furthermore, the UCTAA requires host schools/institutions provide an orientation of their schools policies and procedures.

- **The need for additional preparation prior to, support during, and follow-up after the elective:** Students are required to maintain personal health insurance and they must also maintain up to date immunizations while enrolled at JCESOM. During years 3 and 4, students are required to keep OSHA training up to date, which covers needle stick protocol and specifically outlines the procedures to take should an incident occur. Students are monitored by the Office of Medical Education to ensure they maintain up to date OSHA for both electives at JCESOM and any extramural electives they may participate in. Students are also verified in the VSLO system that they have completed the OSHA training for workplace safety.

  The UCTAA additionally stipulates hosting institutions orient visiting students (e.g., JCESOM students) regarding the host institution's rules, regulations, procedures, and policies, as well as comply with state and federal workplace safety laws and regulations including exposure to an infectious or environmental hazard or other occupational injury. The UCTAA additionally specifies the quality of instruction, supervision, and learning environment are appropriate to the level of the student's level of training, and an evaluation of a student be completed and returned to the home school in a timely manner.

- **The level and quality of supervision:** As stated in the UCTAA or other affiliation agreements with extramural institutions, hosting institutions are expected to "maintain a level of care which

meets generally accepted standards conducive to satisfactory instruction" and that "all services rendered by students must have educational value and meet the goals of the medical education program." Additionally, host intuitions are required by the UCTAA or other affiliation agreement, "to participate in the evaluation of the learning and performance of participating students by completing evaluation forms provided by and returned to the SCHOOL in a timely fashion."

- **Potential challenges to the code of medical ethics adopted by the home school:** All U.S. LCME accredited schools are required to ensure their learning environment fosters the development of appropriate professional attributes in medical students. The UCTAA specifies the home school is accountable for ensuring students who are allowed to participate in extramural electives have received adequate training and educational experiences in professional ethics. Additionally, home schools are responsible for advising students to comply with host institutions' policies and procedures while on extramural electives.

- Provide an example of how medical students were prepared and supported before and during electives in which there is a risk to student and patient safety: Students in their final year have the option to select electives located in rural locations throughout the state of West Virginia. These locations are affiliated with Marshall Health and/or Cabell Huntington Hospital. All supervising physicians at these locations are JCESOM faculty. Each student who has chosen a designated rural location works with the JCESOM Rural Health Coordinator to set up any required activities before, during or after a rotation.

Pre-departure requirements:

- Make contact with department/facility coordinator or the physician/faculty member to set up the schedule during the time the student will be rotating in their elective.
- Complete any necessary documentation for emergency contacts
    - The Office of Medical Education maintains updated information and can share with the Rural Health Coordinator if needed.
- Vaccinations/Immunizations are verified as up-to-date with the Clinical Health Nurse.
    - Any outdated immunizations are updated as needed
- Students are required to update their OSHA training if needed
- Rural Health Coordinator or the Department Coordinator of the facility are to inform the students of any additional occupational safety training needed for the elective location.

During the experience

- If possible, students are to check in with the JCESOM Rural Health Coordinator to answer any questions about the location or to address any issues of concern.
- The Rural Health Coordinator will notify the Office of Medical Education and the Office of Student Affairs in the event there is an emergency involving a student.

After the experience

- Students give feedback regarding their experience to the Rural Health Coordinator. This helps to ensure rural electives are fostering an educational experience that is appropriate for our students.
    - Students may also help update our Rural Rotation guide with information about the area in which they rotated in their elective.

International Extramural Electives

- **The availability of emergency care:** International host institutions are expected to arrange JCESOM students' with an on-site orientation to their elective rotation which includes the following:

    1) How medical care can be provided in the local area (as compared to the United States);
    2) What their emergency procedures and protocols are;
    3) Any local or current safety hazards the student should be aware of.

    This information must be submitted by the student or host institution to the Office of International Health for review prior to approval of the rotation. If the student is arranging the rotation, the student must submit the name of the institution and the program administrators name to the Office of International Health. The JCESOM Office of International Health will coordinate with the host institution regarding all aspects of orientation, policies and procedures, and expectations of other resources that should be available to the JCESOM student.

- **The possibility of natural disasters, political instability, and exposure to disease:** During the approval process of an international elective, the Office of International Health considers the location of the host institution. JCESOM does not allow students to travel to areas the State Department has deemed restricted, issued a warning, or deemed to be a high or extremely high travel risk. Ongoing monitoring of global locations deemed unsafe occurs once an elective has been approved. If a change in safety or risk should occur, the student will be notified that the elective is cancelled.

- **The need for additional preparation prior to, support during, and follow-up after the elective:** The Office of International Health utilizes the U.S. Department of State's Smart Traveler Enrollment Program, which registers the student's trip with the nearest U.S. Embassy or Consulate. Students are also required to meet with the Office of International Health for pre-departure training. (See description below).

- **The level and quality of supervision:** The Office of International Health works in conjunction with the Office of Medical Education to ensure quality standards for educational learning environments will be met during the experience of all international extramural electives.

- **Potential challenges to the code of medical ethics adopted by the home school:** The Office of International Health in conjunction with the Office of Medical Education is responsible for

reviewing international elective requirements for any possible challenges to the code of conduct JCESOM students are held to.

- Provide an example of how medical students were prepared and supported before and during electives in which there is a risk to student and patient safety: On average, 40 JCESOM students participate in our Herd for Honduras, in La Esperanza, Honduras. Each of these students complete a standardized procedure developed by the Office of International Health in collaboration with the Office of Medical Education. This procedure includes required activities which are completed before, during and after the international elective experience.

Pre-departure requirements

- Review online webinar and presentations from the U.S. Department of State Study Abroad Division
- Register trip with the U.S. Department of State Smart Traveler Enrollment Program, a service of the Bureau of Consular Affairs
- Check Travel Advisories from the U.S. Department of State
- Check Center for Disease Control (CDC) resources for the area the student is traveling to
- Complete the Global Health Rotation packet and submit to the Office of Global Health
- Purchase travel insurance (if necessary)
- Complete any needed vaccinations
    - Students are directed to the Office of Clinical Health to obtain any needed vaccinations
- Must have current passport or visa

During the experience

- JCESOM Faulty also attend this experience so the students' first point of contact is the JCESOM supervising faculty members.
- Students are required to check in to the Office of Global Health upon arrival to their elective location.
- Students are given emergency information to contact JCESOM in the event there is an incident during their experience.

After the experience

- Students must debrief with the faculty sponsor or Office of International Health
- Students are may be required to complete a written reflection of their elective experience and/or discuss presentation options

c. Describe the system for collecting performance assessments of medical students and evaluations of electives from medical students completing extramural electives.

Any JCESOM student completing an extramural elective must have the supervising physician/faculty member complete the JCESOM assessment if the student is completing the experience for credit. The Office of Academic Affairs collects these evaluations and coordinates with the student or the facility directly to ensure

an assessment is completed. All extramural rotations are PASS/FAIL and the final grade is assigned by the host institution.

d. Describe how the evaluation data on extramural electives provided by medical students is used by the school. For example, how are these data made available to medical students considering their elective options?

Data are collected using the JCESOM Student Scheduling system and Visiting Student Learning Opportunities. Experience locations are noted in the JCESOM Student Scheduling system as well as contact information provided by the student for that specific experience. The data are reviewed by the Office of Academic Affairs for any concerns or trends that could be shared with students seeking rotations at specific locations. At this time, information is only available if a JCESOM student contacts the Office of Academic Affairs about information for a specific location or facility.

11.4 PROVISION OF MSPE

A medical school provides a Medical Student Performance Evaluation required for the residency application of a medical student only on or after October 1 of the student's final year of the medical education program.

NARRATIVE RESPONSE

a. Provide the earliest date for release by the medical school of the mspe.

The JCESOM follows all rules and regulations set forth by the AAMC MyERAS regarding the composition and release of the MSPE. As such, October 1 is the earliest date for release of the MSPE.

11.5 CONFIDENTIALITY OF STUDENT EDUCATIONAL RECORDS

At a medical school, medical student educational records are confidential and available only to those members of the faculty and administration with a need to know, unless released by the student or as otherwise governed by laws concerning confidentiality.

NARRATIVE RESPONSE

a. How does the medical school differentiate between academic records and other relevant records (e.g., health information) so that there is an appropriate separation and assurance of confidentiality?

A JCESOM student's educational record is maintained by the Office of Academic Affairs under the supervision of the Registrar. The JCESOM Educational Record Policy defines items kept in the academic records. Health items are maintained by the Office of Occupational Health and are not kept in the academic record of the student unless it is part of an extramural elective application. Once a student has graduated, those file items will be purged from the permanent academic record.

A student's active educational record may contain the following, but is not limited to the items listed below:

- Signed statements of understanding regarding professional and technical standards
- Commendation letters
- Documentation of Grade Changes
- Documentation in change of status relating to leaves of absence, academic remediation
- Documentation of Name Changes
- Decisions or letters from the Academic & Professionalism Standards Committee
- Evaluations of the student from clinical rotations/courses
- Admissions material such as application for admission (AMCAS), test scores, transcripts and any other application correspondence
- Copy of MSPE
- Copy of Diploma
- Copy of Degree Audit/Confirmation of completion of M.D. requirements
- Letter confirming reasonable accommodations

Following graduation, student files are reviewed for document retention by the Registrar of JCESOM. Documents retained in the permanent academic file include the student's MSPE; clinical and clerkship evaluations/grades; documentation regarding leave of absences; records/letters related to disciplinary actions, records of academic difficulties (e.g. course remediations); documentation related to transfer to or from JCESOM; documentation of withdrawal or dismissal; documentation related ADA accommodations. Any document which is not to be retained in the permanent record, will be destroyed in a secure manner.

b. Describe how the medical school determines which individuals have permission to review a medical student's file. Identify the categories of individuals (i.e., administrators, faculty) who are permitted to review medical student records. How does the medical school ensure that student educational records are available only to those individuals who are permitted to review them?

Review of Medical Student Educational Records. The JCESOM Office of Academic Affairs follows the Family Education Rights and Privacy Act (FERPA) and the JCESOM Educational Records Policy which provide guidelines on how to determine who should be given access to a student's educational record. The JCESOM Registrar, in consultation with the Vice Dean of Medical Education, is authorized to determine who

shall be permitted to review a student's educational record as outlined in the MUJCESOM Educational Records Policy, section 8, Disclosure of Student Information without Student Consent.

To gain access to a student's educational information, the individual seeking access should contact the JCESOM Registrar. Per the MUJCESOM Educational Records Policy, information may be released to JCESOM officials, staff, and others engaged in endeavors on behalf of JCESOM with a legitimate educational interest.

A person with a legitimate educational interest is defined as:

- If the individual needs to review an education record in order to fulfill his or her professional responsibilities to the JCESOM.
    - Such individuals include officers of the University, faculty, administrative staff, law enforcement and medical and legal personnel, and may include contractors, consultants and professionals engaged by JCESOM where disclosure of the information is necessary for such individuals to fulfill their duties and responsibilities to JCESOM.
    - In addition, these individuals may include JCESOM students, individuals from outside the School of Medicine, and volunteers, who are requested to serve on an authorized committee or board of JCESOM (such as the Academic & Professionalism Standards Committee or the Board of Trustees) or to otherwise perform authorized tasks for JCESOM.

Specific individuals who are eligible to access a student's educational record based on legitimate educational interests are:

- The Dean; Vice Dean of Medical Education; Assistant Dean of Academic Affairs; Assistant Dean for Student Affairs; Associate Dean of Pre-Clinical Education; Director of Clinical Education; Academic & Professionalism Standards Committee.

c. Describe the physical location(s) where medical student academic records are kept or if records are only stored online.

All student records are kept onsite at our main campus located in the Administrative Suite of the JCESOM. Records are only accessible to the Office of Medical Education staff and are kept in locked file cabinets in two filing locations based upon the year of graduation.

SUPPORTING DOCUMENTATION

1. Policy and procedure for a member of the faculty/administration to gain access to a medical student's file.

Appendix 11.5-1 FERPA

11.6 STUDENT ACCESS TO EDUCATIONAL RECORDS

A medical school has policies and procedures in place that permit a medical student to review and to challenge his or her educational records, including the Medical Student Performance Evaluation, if he or she considers the information contained therein to be inaccurate, misleading, or inappropriate.

NARRATIVE RESPONSE

a. Describe the procedure that medical students must follow in order to review or challenge their records. Note if there are any components of students' records that students are not permitted to review.

Inspection of Educational Records. Students may request to have access to their educational record at any time. If possible, immediate access will be granted, however if immediate access is not available a student should have to wait no more than 45 days to gain access to their educational record. If a student is required to wait, the Office of Medical Education will inform the student of when the record will be available. Students will be required to establish their identity with a picture ID prior to viewing their record.

Information Which a Student Does Not Have the Right to Inspect
Under FERPA, a student does not have the right to inspect information that is not an educational record, such as follows, but not limited to:

- Medical treatment records:
  - Records maintained by a physician, psychiatrist, psychologist, or other recognized professional or para-professional, which are used only for treatment purposes (such records may be reviewed by a physician or other appropriate professional of the student's choice).
- Financial information submitted by the student's parents (these records are kept in the Financial Aid Office).
- Confidential letters and statements of recommendation which were placed in the files before January 1, 1975, and which were used only for the purpose(s) for which they were intended.
- Confidential recommendations concerning admission and any other materials for which the student has specifically and in writing waived his/her right to access.
- Admissions records for a student who did not officially attend the program of admission.
  - If the student completed a course at JCESOM but never officially attended as a degree candidate in the program of admission, then the student has FERPA rights with respect to that course but does not have rights in respect to the admissions records for that program.
- Records of a student that contain information on other students.

b. Can students gain access to their records in a timely manner? What is the typical time for a student to gain access?

Students typically have immediate access to their records once an informal request is made. If access is not immediately available, all attempts are made to accommodate the student's request within 24 to 48 hours. Per FERPA and the JCESOM Educational Records Policy, JCESOM has up to 45 days to comply with the request.

c. Indicate whether medical students are permitted to review and potentially challenge the following records. If review and challenge are possible, describe the procedures used.

1. Content of the MSPE
2. Course and clerkship data (e.g., examination performance, narrative assessments)
3. Course and clerkship grades

1. Content of the MSPE
   Students may request to review and challenge any section of their MSPE. To request a review or to challenge information on their MSPE, the student must contact the Assistant Dean of Student Affairs and/or the Vice Dean of Medical Education. A meeting will be arranged between the student and the one of the above designees. Final approval of any challenges to information on the MSPE is granted by the Vice Dean of Medical Education.

   All JCESOM Students are required to review their MSPE with either the Vice Dean of Medical Education or the Assistant Dean of Student Affairs prior to submission to ERAS.

2. Course and clerkship data (e.g., examination performance, narrative assessments)
   Exam Challenges in Years 1 and 2. Students are given the opportunity to review their examinations at scheduled Exam Review Sessions. The time of the exam review will be determined by the course director and posted on the curriculum calendar. Students will be able to access a report of their performance on the ExamSoft ExamTaker portal once the results are released by the course director.

   Students will have 45minutes to log onto Examplify to review the exam and identify any questions they wish to challenge. Once students have logged out of Examplify, they will have one hour to develop question challenges. Students write the questions they wish to challenge on a form or the board. For multiple challenges to the same question, students may challenge as a group. Faculty will have until the end of the day on the third working day after the exam review to return their responses to the course director. The course director will distribute the responses to the students and, if necessary, regrade the exam and repost grade reports. The course director has the final decision on resolution of exam question challenges.

   NBME Exam Challenges. Students may challenge their NBME Subject Exam score. The process is facilitated through the Office of Academic Affairs to the NBME. The NBME does charge a fee for this process which the student is responsible for.

   Clinical Clerkship Narratives. Students may challenge or request to review narratives submitted by a clerkship director for enclosure in the MSPE. A student may challenge the narrative paragraph for up to eight weeks after the completion of the clerkship. Procedures for a student to challenge the narrative content include:
   - **D**irect discussion with the clerkship director via individual evaluations submitted by supervising faculty and residents.
   - If the challenge is denied at the clerkship level, students may follow the process as outlined in the Marshall University Joan C. Edwards School of Medicine Honor System & Policy Regarding Academic and Professionalism Standards, Leaves and Appeals, section 11, Appeal Process.
   - Students have 10 days to appeal the clerkship director's dismissal of the challenge to the Academic & Professionalism Standards Committee (APSC). If the APSC denies the student's challenge, a Second Level of Appeals Committee can be formed. Should the Second Level of Appeals deny the students challenge, the appeal can go

to the Dean of the SOM. The Dean's decision is the final decision. There are no further levels of appeal.

3. Course and clerkship grades
   The Grade Appeal process for all class years, is outlined in the Marshall University Joan C. Edwards School of Medicine Honor System & Policy Regarding Academic and Professionalism Standards, Leaves and Appeals, section 11, Appeal Process. Students may request to challenge a grade at the level of the course/clerkships director. The student must initiate the challenge within thirty days of notification. If not satisfied with the outcome at the course/clerkship level, the student has ten days to appeal to the Academic & Professionalism Standards Committee (APSC). If the APSC denials the students appeal, the student has ten days to appeal to the Second Level of Appeals Committee (SLAC). If the SLAC denies the students appeal, the student has ten days to present their appeal to the Dean of the School of Medicine. The Dean's decision is final and there are no further levels of appeal.

d. Describe how the medical school's policies and procedures related to students' ability to review and challenge their records are made known to students and faculty.

Students. All medical school policies related to a student's ability to review and challenge their records are posted on the student policy website. Policies are flagged if they are new or updated and notification emails are sent out when updates are approved. Students are also informed of their educational rights during:

- Orientation to medical school
- Orientation to course/clerkships
- Curriculum Calendar has times and dates of Exam Reviews
- Email and Verbal reminders during student meetings throughout the year

Faculty and Staff. Policies relating to students' rights are posted and flagged as updated or new on the student's policies webpage. Faculty and Staff are also notified throughout the following methods:

- Annual Disclosure Statements for FERPA
- Marshall University GreenBook (Faculty handbook)
- Curriculum Committee and Sub-Committee and meetings

SUPPORTING DOCUMENTATION

1. Medical school policies and procedures related to medical students' ability to review and challenge their records, including the length of time it takes for students to gain access to their records.

Appendix 11.6-1 Student Access to Records Policy
Appendix 11.6-2 Academic and Professionalism Standards Policy

STANDARD 12: MEDICAL STUDENT HEALTH SERVICES, PERSONAL COUNSELING, AND FINANCIAL AID SERVICES

A medical school provides effective student services to all medical students to assist them in achieving the program's goals for its students. All medical students have the same rights and receive comparable services.

SUPPORTING DATA

Table 12.0-1 | Tuition and Fees

Provide the *total tuition and fees* assessed to first-year medical students (both for in-state residents and out-of-state non-residents) for the indicated academic years. Include the medical school's health insurance fee, even if that fee is waived for a student with proof of existing coverage.

	AY 2014-15	AY 2015-16	AY 2016-17	AY 2017-18	AY 2018-19
In-state	$20,086	$20,100	$21,104	$22,154	$22,094
Out-of-state	$47,676	$47,690	$50,074	$52,542	$54,772

Table 12.0-2[3] | Median Medical School Educational Debt

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the **median** reported medical school educational indebtedness of all medical student graduates with medical school debt and the percentage of graduates with indebtedness **equal to or** more than $200,000.

	GQ 2015		GQ 2016		GQ 2017		GQ 2018	
	School %	National %	School %	National %	School %	National %	School %	National %
Median medical school debt	$160,500	$132,968	$200,000	$180,000	$145,000	$180,000	$140,000	$195,000
Percent of graduates with debt **equal to or** more than $200,000	19.8	24.9	45.8	32.5	22.1	33.0	14.6	35.4

Table 12.0-3[4] | Median Overall Educational Debt

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the ***median*** *overall educational debt (*including undergraduate college/university debt) of all medical school graduates with educational debt and the percentage of graduates with debt **equal to or** more than $200,000.

	GQ 2015		GQ 2016		GQ 2017		GQ 2018	
	School %	National %	School %	National %	School %	National %	School %	National %
Median overall educational debt	$170,000	$183,189	$206,000	$190,000	$160,000	$195,000	$150,000	$200,000
Percent of graduates with debt **equal to or** more than $200,000	31.9	32.1	49.9	36.3	27.5	36.9	18.6	38.7

[3] Due to a change in the 2016 AAMC Graduation Questionnaire (GQ) data, table 12.0-2 has been revised. The prepopulated data have been deleted because they were in error on 8/11/2016.

[4] Due to a change in the 2016 AAMC Graduation Questionnaire (GQ) data, table 12.0-3 has been revised. The prepopulated data have been deleted because they were in error on 8/11/2016.

Table 12.0-4 | Support Services at Regional Campuses

Indicate how the following services are made available to students at each regional campus by placing an "X" in the appropriate columns(s). Add additional rows for each service/campus. *Note: this question only applies to schools with regional campus(es).*

Available to Students via	Campus	Services			
		Personal counseling	Student health services	Student well-being programs	Financial aid management
Personnel located on campus	N/A				
Visits from central campus personnel	N/A				
E-mail or tele/videoconference	N/A				
Student travel to central campus	N/A				

12.1 FINANCIAL AID/DEBT MANAGEMENT COUNSELING/STUDENT EDUCATIONAL DEBT

A **medical school provides its medical students with effective financial aid and debt management counseling and has mechanisms in place to minimize the impact of direct educational expenses (i.e., tuition, fees, books, supplies) on medical student indebtedness.**

SUPPORTING DATA

Table 12.1-1 | Financial Aid and Debt Counseling Services.

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) in the following areas.

	GQ 2015		GQ 2016		GQ 2017		GQ 2018	
	School %	National %	School %	National %	School %	National %	School %	National %
Financial aid administrative services	97.7	78.9	54.5	75.7	82.0	75.0	80.5	75.0
Overall educational debt management counseling	95.5	70.4	60.6	67.3	74.6	66.3	70.5	67.5

Table 12.1-2 | Financial Aid and Debt Counseling Services.

Provide data from the independent student analysis, by curriculum year, on the percentage of respondents that were *satisfied/very satisfied* (aggregated) with financial aid services and debt management counseling. Add rows for each additional question on the student survey.

Survey Question	Year 1	Year 2	Year 3	Year 4
Quality of financial aid administrative services	97.5	92.9	89.3	88.0
Overall debt management counseling	76.6	79.8	84.6	86.7

Table 12.1-3 | Financial Aid/Debt Management Activities			
Describe financial aid and debt management counseling/advising activities (including one-on-one sessions) that were available for medical students in each year of the curriculum during the most recently completed academic year. Note whether they were required (R) or optional (O).			
Financial Aid/Debt Management Activities			
Year 1	Year 2	Year 3	Year 4
• Orientation presentation regarding policies and procedures, budgeting, money saving tips, scholarships, and resources. (**R**) • One-on-one budgeting session (**R)** • Financial aid forum presentation with 4 West Virginia representatives discussing financial opportunities in the state as well as national financial incentive programs. (**R)** FAFSA workshops offered twice during the academic year (**O**)	• Bank representatives come to discuss issues such as credit cards, credit scores, how student loans effect credit, and budgeting. (**R)** FAFSA workshops offered twice during the academic year (**O**)	• Rising MS4 presentation discussing budgeting issues for upcoming year and testing, interview and travelling costs (**R)** FAFSA workshop offered twice during the academic year (**O**)	• Loan Exit Interview presented by AAMC discussing repayment plans and forgiveness programs. (**R)** • One-on-one exit counseling (**O**) FAFSA workshops offered twice during the academic year (**O)**

If the medical school has one or more regional campuses, list which of the required and optional advising sessions were available at each campus during the most recently completed academic year.

NARRATIVE RESPONSE

a. Describe the staffing of the financial aid office used by medical students.

1. Note if the financial aid office resides organizationally within the medical school or at the university level. If the latter, list the other schools/programs supported by financial aid office staff.
2. Indicate the number of financial aid staff who are available to specifically assist medical students.
3. Describe how the medical school determines and evaluates the adequacy of financial aid staffing.

JCESOM employs a 1.0 FTE employee to manage and advise all medical students regarding financial aid. The employee resides in the JCESOM Office of Student Affairs at the Byrd Clinical Center and is readily available to all medical students. Financial aid staffing is reviewed annually by monitoring the responses from the AAMC GQ.

b. Provide a description of the types of print and/or online debt management information available to medical students. Note if students are required to use some or all of these materials (e.g., as part of financial aid/debt management sessions).

The JCESOM Student Financial Aid Department utilizes the resources from AAMC's Education Debt Manager, AAMC SALT Program, and AAMC Medloans Organizer and Calculator. All resources are optional for student use.

c. Describe current activities at the medical school or university to raise funding for scholarship and grant support for medical students (e.g., a current fund-raising campaign devoted to increasing scholarship resources). Describe the goals of these activities, their current levels of success, and the timeframe for their completion.

For the sixth straight year, the Joan C. Edwards School of Medicine increased scholarship revenue and distribution during the 2016-2017 academic year. A total of $2,953,464 in scholarship funding was distributed to 193 different medical students, making the average amount per student $15,303. This is an increase of 5 percent from 2015-2016 and an increase of 61 percent from 2011-2012.

Although significant progress has been made since 2011-2012, we continue to cultivate a large number of alumni and friends as potential donors and work with current donors to expand their capacity for major gifts. A total of eight new scholarships, both endowed and expendable, were established during 2016-2017.

Thanks to generous sponsors, Standing Out in Our Field, the school's annual scholarship fundraising event now in its fourth year, has contributed a total of $400,000+ to the MUJCESOM Scholarship Campaign Fund.

As we look toward 2018-2019, the School of Medicine will continue its efforts to increase the number of current scholarships while planning for the future. This includes a focus on our "Adopt a Medical Student" initiative, as well as planned giving. Another area of emphasis is growing our underfunded endowed scholarships. Currently, 27 scholarship funds have been established by donors or school of medicine graduating classes that have not yet reached endowed status. We continue to work with donors to complete the funds so that they may begin earning revenue and awarding scholarships.

d. Describe other mechanisms, such as limiting tuition increases that are being used by the medical school and the university to limit medical student debt.

JCESOM has made multiple attempts to limiting medical student debt. There has been a slow rise in tuition for several years, increase in tuition waivers, a dedicated effort to increasing scholarship opportunities, and establishing a student budget that equals the economic status of the region.

SUPPORTING DOCUMENTATION

1. The most recent LCME Part I-B Financial Aid Questionnaire.

Appendix 12.1-1 LCME Part I-B Financial Aid Questionnaire

12.2 TUITION REFUND POLICY

A medical school has clear, reasonable, and fair policies for the refund of a medical student's tuition, fees, and other allowable payments (e.g., payments made for health or disability insurance, parking, housing, and other similar services for which a student may no longer be eligible following withdrawal).

NARRATIVE RESPONSE

a. Briefly describe the tuition and fee refund policy. Describe how the policy is disseminated to medical students.

MUJCESOM follows the Marshall University policy on tuition and fee refunds. The policy is available to students on the Marshall University Office of Financial Assistance webpage.

https://www.marshall.edu/sfa/notificationdisbursement/#fndtn-efs-tabpane-1-4

According to Marshall University's Refund Policy:

When students withdraw from all courses on or before the 60% point in time of an academic term, the Office of Financial Assistance is required to review financial aid awards to determine whether financial aid funds must be adjusted in accordance with federal and state regulations. The policies on treatment of financial aid for total withdrawal are specific to each designated financial aid program and are applicable only if the student has received those particular kinds of funds. If a student received various types of financial aid, more than one policy may apply when determining revised financial aid eligibility.

Adjustments to institutional and external financial aid follow the Marshall University Refund Policy. If the student is a recipient of state aid but is not receiving federal student aid, adjustments to state aid follow the Marshall University Refund Policy. The chart below describes how institutional, state, and external financial aid is treated whenever a student withdraws:

Period of Withdrawal During a Semester	Percentage of Aid Returned to Program
Weeks 1-2	90%
Weeks 3-4	70%
Weeks 5-6	50%

b. If not included in the tuition refund policy, describe policies related to the refund of payments made for health and disability insurance and for other fees.

Disability insurance premiums are covered by the school of medicine.

Health insurance premiums for medical students are paid on an annual basis through Marshall Health, the practice plan of JCESOM. Students reimburse Marshall Health at the time financial aid is dispersed. In the event a medical student withdraws or is dismissed from medical school, the student has the option to remain on the insurance plan for the remainder of the policy year.

SUPPORTING DOCUMENTATION

1. Policy for refunding tuition and fee payments to medical students who withdraw or are dismissed from the medical education program.

   See Appendix *12.2-1 Tuition Refund Policy.pdf*

12.3 PERSONAL COUNSELING/WELL-BEING PROGRAMS

A medical school has in place an effective system of personal counseling for its medical students that includes programs to promote their well-being and to facilitate their adjustment to the physical and emotional demands of medical education.

SUPPORTING DATA

Table 12.3-1 | Personal Counseling

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with personal counseling.

GQ 2015		GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %	School %	National %
100.0	75.5	55.6	73.3	80.0	72.3	55.9	71.3

Table 12.3-2 | Mental Health Services

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with student mental health services.

GQ 2015		GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %	School %	National %
95.2	77.0	73.6	74.1	85.3	74.0	68.9	73.3

Table 12.3-3 | Well-being

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with programs and activities that promote effective stress management, a balanced lifestyle, and overall well-being.

GQ 2015		GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %	School %	National %
95.2	75.5	54.5	73.3	80.0	72.1	67.3	70.8

Table 12.3-4 | Student Support Services by Curriculum Year

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with the listed student support services. Add rows for additional student survey questions.

Survey Question	Year 1	Year 2	Year 3	Year 4
Accessibility of personal counseling	83.9	92.9	75.4	82.7
Confidentiality of personal counseling	71.6	70.2	70.4	80.0
Availability of mental health services	87.7	90.5	80.0	88.0
Availability of programs to support student well-being	88.9	91.7	84.6	84.0

NARRATIVE RESPONSE

a. Describe the system for personal counseling for medical students, including how, by whom (i.e., roles and titles), and where services are provided. Describe how students are informed about the availability of personal counseling services.

CONTRACTED SERVICES WITH CABELL HUNTINGTON HOSPITAL
Personal counseling for medical students is provided by Cabell Huntington Hospital. JCESOM holds two contracts that provide Employee Assistance Program (EAP) and counseling services to all medical students.

This benefit provided by JCESOM demonstrates that mental health and wellbeing is a cornerstone of services. Utilization of services is monitored on a monthly basis with the issue of an invoice.

The Cabell Huntington Hospital Counseling Center is located on the second floor of the Chafin Building in downtown Huntington, less than a mile from the main campus and Marshall Medical Center. Examples of services provided are counseling specialties of individual sessions, counseling couples, families, children/adolescents, learning disabilities, sexual addiction, and death of a loved one, sexual assault, and workplace stress, history of childhood abuse/neglect, and health crisis /chronic illness. All mental health specialist has a Master's Degree in Counseling or Psychology and independently licensed except for one doctoral student who is under licensure supervision. For current patients, staff are available 24/7 for emergency/crisis interventions.

EMPLOYEE ASSISTANCE PROGRAM (EAP)

Cabell Huntington Hospital makes its employee assistance program available to medical students at JCESOM. On an annual basis, the agreement between Cabell Huntington Hospital and JCESOM is reviewed. During the review process, the value of the EAP program, utilization of resources, and future needs are discussed. JCESOM compensates Cabell Huntington Hospital $6600 per year for the EAP services provided.

Per the agreement the EAP program offers the following services to all medical students and immediate family members defined as spouses and dependent children under the age of 26. In the event of a student's death, services are extended for their immediate family members for one year following the student's date of death.

Intervention Services:
Counseling-CHH will provide consultation and assessments as needed by referral from the Office of Student Affairs. The EAP program will then make a referral to an appropriate counselor to address the medical student's concerns as needed. Additionally, if the consultation deems to be a short-term resolution counseling then the EAP will conduct this service independently.

Education and Skill Development:
At the request of the Office of Student Affairs, the EAP staff will provide one (60-minute) substance abuse in-service per year. At the time of this document, the director of the EAP program and the assistant dean of student affairs agreed upon to revise this service to substitute another topic for substance abuse such as burnout and stress.

Consultation Services:
The staff of the EAP program are available to JCESOM Office of Student Affairs to assess student needs and make recommendations regarding intervention options as needed.

Availability of services:
Office hours are 8am-5pm Monday-Thursday, Friday appointments are available upon request.
In the event of an emergency, the EAP Coordinator may be contacted after hours using a posted pager number.

COUNSELING SERVICES
Cabell Huntington Hospital operates a counseling center and provides contracted services to the JCESOM. As with the EAP program, the contract is reviewed annually around the anniversary date. JCESOM compensates Cabell Huntington Hospital Counseling Center $20,000 per year for counseling services.

Per the agreement, in the event of a student's death services will be extended to the student's spouse or domestic partner for one year following the student's death. It is important to note that extension of services in other circumstances will be at the discretion of the counseling center and office of student affairs.

All current medical students are covered for a total of ten (10) sessions (individual, couple, family, group or session referred by the WV Medical Professionals Health Program). The ten sessions are counted within the academic year of July 1-June 30. If a student requires more than 10 sessions, the charges are the responsibility of the student. It is noteworthy to state that the administration of the counseling centers works closely with the medical students to make additional visits as affordable as possible by using a sliding scale fee.

TYPES OF COUNSELING SERVICES
Individual counseling where the student meets one on one with a counselor working on individual's issues.

Couples counseling where student with spouse or domestic partner working in relational issues.

Family counseling is the student with any member of immediate family which includes siblings, spouse, or domestic partner, siblings-in-law, parent-in-law, dependent children, adult children, or parents.

Group counseling where the counseling center manages group therapy sessions that focus on a range of issues such as healthy relationships, anxiety, depression, sexual addictions, and other topics.

Availability of services:
Appointment hours are Monday 11am-7pm; Tuesday-Thursday 8am-5pm.

Student intakes will be scheduled at the next available appointment.

In the case of emergency including potential harm to self or others the student is to call 911 or go to the closest Emergency Department.

For urgent issues, the student may call after hours and weekends the on call counselor via a pager.

MARSHALL UNIVERSITY STUDENT SERVICES
Students also have access to the Marshall University Counseling Center on main campus. Examples of services provided are counseling specialties of individual, couples, group, sexual assault/abuse, rape concerns, dating concerns, domestic violence, substance abuse, eating disorders, stress management, and depression. Appointments are recommended, however, walk-in hours are available. Services are free to all current full-time and part-time students. Emergency/Crisis Counseling is available 24/7 for any student. All mental health specialist has a Master's Degree in Counseling or Social Work.
Students are informed of services annually during orientation and as needed during the academic year. Services are found on the Student Resource webpage.

Services are free to all students.

In the event psychiatric services are needed, the medical school has an agreement with a board certified, licensed psychiatrist. The office is located approximately 10 miles from main campus and Marshall Medical Center. Additionally, the psychiatrist is the medical director of the Cabell Huntington Hospital Counseling Center. This provides additional points of communication for any medical student within the services.

Students are informed that in the event of an emergency including potential harm to self or others, the student is to call 911 or go to the closest emergency department.

Information regarding personal counseling, EAP and psychiatry appointments are discussed annually during matriculation and class orientations and as needed during the academic year. Services are found on the Student Resource webpage.

b. Comment on how the medical school ensures that personal counseling services are accessible and confidential.

The medical school has invested resources to ensure personal counseling services are available to medical students. Counseling services and an EAP program is contracted out annually to Cabell Huntington Hospital. Additionally, Marshall University provides all students access to counseling services through main campus resources.

Both institutions respect student's privacy and have policies and procedures that ensure protected health information is not obtained by the medical school or any other individuals without written authorization of the medical student. Policies are in accordance to the HIPAA Omnibus Privacy Rules.

c. Summarize medical school programs or other programs designed to support students' well-being and facilitate students' ongoing adjustment to the physical and emotional demands of medical school. Describe how students are informed about the availability of these programs/activities.

Maintaining a healthy sense of emotional well-being is a vital component of success as a medical student. MUSOM supports a medical student wellness committee that enables students to create an atmosphere of support, encouragement, and wellness activities. Examples of activities include yoga, Zumba, intermural activities, and access to the MU Rec Center. The MUJCESOM Wellness program is distinguished by eight major categories: Career, Physical, Social, Financial, Intellectual, Environmental, Spiritual, and Emotional. Each of the eight categories have specific activities that promote health and wellness.

In addition to the provided counseling sessions, MUJCESOM has an active chapter of Active Minds. Active Minds is a nonprofit organization that empowers students to speak openly about mental health. The chapter participates in national programs that surrounds mental health issues such as Stress Less…Laugh More weeks, and Post Secret U activities.

In the fall of 2018, The Office of Student Affairs and the Topics in Healthcare Interest Group hosted a voluntary panel group discussion that was led by an attending physician, two licensed practicing counselors and a senior medical student. Topics discussed were recognizing burnout, stress, reaching out for assistance, mindfulness activities, etc.

One-on-one general wellness checks are conducted as needed by the Assistant Dean of Student Affairs, Assistant Director of Student Affairs, or the Assistant Dean of Academic Affairs. The Vice Dean of Medical Education is readily available when needed. The meetings include a review of common problems for medical students such as: sleeping schedules, eating, adjustment to medical school, risky behaviors such as drug/alcohol use, status of relationships, past history of any learning disabilities, history of any psychological problems, personal life issues or stressors, etc. Depending on the outcomes of the wellness check, appropriate referrals are made for counseling, primary care physician, learning specialist, etc.

Each semester, the Dean, Vice- Dean of Medical Education, Associate Dean of Medical Education, Assistant Dean of Student Affairs and the Assistant Dean of Academic Affairs hosts a dinner with pre-clinical and clinical students. These are town hall, open forum dinners for any medical student to discuss whatever concern(s) he or she may have with any aspect of medical student life. The dean of the medical school has weekly open office hours to any student who wishes to meet to discuss any personal or academic issues.

Communication on student wellness begins in year one at orientation. Multiple presentations are provided that discuss emotional health, coping strategies, resiliency, and self-care are some examples. During orientation, students are notified of support services available such as counseling, learning specialist, and administration. The Vice Dean of Medical Education and the Assistant Dean of Student Affairs provides their personal cell phone numbers to all medical students. Students have access to faculty via Doc Halo, a secure text messaging system. Learning Communities focus on wellness and self-care during orientation sessions.

For year 2-4 students, resources, activities, well-being and self-care are discussed at the beginning year orientation. Events are communicated via email, class newsletters, Office of Student Affairs Facebook, and class specific Facebook pages.

Multiple one-on-one meetings are scheduled throughout third and fourth year with the Assistant Dean of Student Affairs to discuss clinical academic life, clinical learning environments, adjustment and student' career selections. All meetings are documented and placed in the student's personal files in the Office of Student Affairs.

All offices of student affairs and medical education maintain an open door policy for addressing any students with issues or concerns. Any member of the staff can assist a student and in the event, a specific staff member is requested, then all efforts are made to make that accommodation or assist with a temporary solution. The Assistant Dean of Student Affairs is primarily available during off-hours to assist students with concerns and circumstances that may occur during evenings and weekends. In the event of vacations or unavailability, students are communicated whom to contact.

SUPPORTING DOCUMENTATION:

Appendix 12.3-1 Cabell Huntington Hospital EAP Contract.pdf
Appendix 12.3-2 CHH Counseling Agreement.pdf

12.4 STUDENT ACCESS TO HEALTH CARE SERVICES

A medical school provides its medical students with timely access to needed diagnostic, preventive, and therapeutic health services at sites in reasonable proximity to the locations of their required educational experiences and has policies and procedures in place that permit students to be excused from these experiences to seek needed care.

SUPPORTING DATA

Table 12.4-1 | Student Satisfaction with Health Services

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with student health services.

GQ 2015		GQ 2016		GQ 2017		GQ 2018	
School %	National %	School %	National %	School %	National %	School %	National %
57.8	79.7	55.5	78.9	83.3	79.5	77.3	78.5

Table 12.4-2 | Student Satisfaction with Health Services by Curriculum Year

As available, provide data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with health care services. Add rows for each additional student survey question.

Survey Question	Year 1	Year 2	Year 3	Year 4
Accessibility of student health services	83.9	78.5	81.5	88.0

Schools with regional campuses should provide the supporting data requested above for each campus (as available).

NARRATIVE RESPONSE

a. Describe the current system for providing medical students with access to diagnostic, preventive, and therapeutic health services, including where and by whom (i.e., roles and titles) services are provided. For example, if there is a student health center, comment on its location, staffing, and hours of operation.

Student Health is housed and adequately staffed through a contract with the main campus in the Department of Family and Community Health Department of Marshall Health. Hours are Monday-Friday when the main campus is in session 8-10:45am and 1pm-4pm. No appointment is necessary.

The Department of Internal Medicine has a walk-in clinic that medical students may utilize. It is located at the Byrd Clinical Center, second floor. Hours are Monday-Friday 8am-4pm. No appointment or established care are required.

For establishing a medical relationship, students are provided a list of participating physicians on the student resource website. Often, students will consult with the Assistant Dean of Student Affairs who will aid in finding medical care, in particular, for any specialized needs.

b. Describe how medical students at all instructional sites/campuses with required educational activities are informed about availability of and access to health services.

Students who rotate away from the home medical campus on electives are instructed to seek care at the nearest Emergency Department or Urgent Care. Information is given and reiterated to students during their orientation to their elective year.

c. Describe how medical students, faculty, and residents are informed of policies that allow students to be excused from classes or clinical activities in order to access health services.

Medical students are educated on the "Student Access to Health Services" policy during orientation. Faculty and residents are informed via clerkship, subcommittee, and curriculum committee meetings, or through orientations that cover teaching responsibilities.

SUPPORTING DOCUMENTATION

1. Policy or guidance document that specifies that medical students may be excused from classes or clinical activities in order to access health services.

Appendix 12.4-1 Student Access to Health Services.docx

12.5 NON-INVOLVEMENT OF PROVIDERS OF STUDENT HEALTH SERVICES IN STUDENT ASSESSMENT/ LOCATION OF STUDENT HEALTH RECORDS

The health professionals who provide health services, including psychiatric/psychological counseling, to a medical student have no involvement in the academic assessment or promotion of the medical student receiving those services. A medical school ensures that medical student health records are maintained in accordance with legal requirements for security, privacy, confidentiality, and accessibility.

NARRATIVE RESPONSE

a. Describe how the medical school ensures that a provider of health and/or psychiatric/psychological services to a medical student has no current or future involvement in the academic assessment of, or in decisions about, the promotion of that student. Describe how medical students, residents, and faculty are informed of this requirement.

JCESOM faculty and residents who provide any health services to students are excluded from participating in the academic assessment or promotion of the medical student. If a student is assigned to an educational activity or educational site in which the healthcare provider is providing services, the student will be reassigned.

The Office of Student Affairs works closely with healthcare centers distant from the Marshall Health main campus to establish healthcare services to students.

For each clinical student evaluation, the faculty completing the evaluation must attest that they have no provider-based relationship with the student they are evaluating.

Due to the sensitivity of psychiatric and psychological service, the SOM does not promote Marshall Health Department of Psychiatry to medical students. Services are contracted out with Cabell Huntington Hospital Department of Counseling and Midland Behavioral Health for Psychiatric services.

b. If health and/or psychiatric/psychological services are provided by university or medical school service providers, describe where these student health records are stored and how the confidentiality of these records is maintained. Note if any medical school personnel have access to these records.

Marshall Health (which controls and maintains all University generated health services) maintains all health records in a fully electronic state. This electronic medical record is certified and fully compliant with all electronic HIPAA and CMS regulations. Medical student health encounters which are non-psychiatric in nature are shielded by a standard, double sign-in method requiring special documentation for need and justification of access. This is the same privacy shielding accorded faculty and staff of the facility. Access to these records are monitored by the Organization's privacy and security officers. Psychiatric records are shielded by an even stronger system of protection. They are entirely inaccessible by any other staff and faculty of Marshall Health and cannot be viewed under any circumstance except for those specifically designated mental health personnel who are directly involved in the patient/student's care.

SUPPORTING DOCUMENTATION

1. Policies and/or procedures that specify that providers of health and psychiatric/psychological services to a medical student will have no involvement in the academic assessment of or in decisions about the promotion of that student.

Appendix 12.5-1 Provider-Student Evaluation Policy.pdf

12.6 STUDENT HEALTH AND DISABILITY INSURANCE

A medical school ensures that health insurance and disability insurance are available to each medical student and that health insurance is also available to each medical student's dependents.

NARRATIVE RESPONSE

a. Indicate whether health insurance is available to all medical students and their dependents.

It is a requirement of all enrolled medical students to provide proof of health insurance. In the event the student needs to purchase a policy, the medical school provides options annually for students to purchase a policy. It is available to their dependents. The insurance policy contract is negotiated by the Chief Financial Officer of Marshall Health in collaboration with the Assistant Dean of Student Affairs.

All students are automatically enrolled at the beginning of each academic year, there is a waiver period in which the student must provide adequate coverage to the CHP-Student Health Insurance. The Office of Student Affairs staff works closely with all students to ensure that waivers are processed in a timely manner. Marshall Health pays the annual premium for all medical students who are enrolled. Students are provided the opportunity to reimburse Marshall Health bi-annually at the time of financial aid disbursements. In the event the student withdraws, they have the option to remain covered for the remainder of the policy active dates.

b. Indicate whether and when disability insurance is made available to medical students. Describe when and by what means medical students are informed of its availability.

The medical school provides disability insurance to any enrolled student. Availability is discussed at each year's orientation and as needed with each student.

A medical student group disability insurance policy is provided by Marshall Health and developed by Health Sciences Assurance Consulting, Inc. It was developed to meet the needs of the student and is updated as needed. In the event a student suffers from a disabling injury or illness, they are informed to submit their claim form as instructed https://app.hsac.com/MUJCESOM. The Office of Student Affairs is primarily responsible for guiding and advising students who may qualify for LTD.

12.7 IMMUNIZATION REQUIREMENTS AND MONITORING

A medical school follows accepted guidelines in determining immunization requirements for its medical students and monitors students' compliance with those requirements.

NARRATIVE RESPONSE

a. Note if the immunization requirements for medical students follow national and regional recommendations (e.g., from the Centers for Disease Control and Prevention, state agencies, etc.). Summarize the rationale for any school requirements that differ from national/regional guidelines.

The immunization requirements for all medical students follow the requirements from the CDC and are reviewed annually with the Department of Family Medicine, Assistant Dean of Admissions, and the Assistant Dean of Student Affairs. Immunization policy can be found https://jcesom.marshall.edu/admissions/once-youve-been-accepted/

Immunization Requirements for AY 2018-2019 for entering JCESOM students are as follows:

- Rubella (German Measles)-titer required
- Rubeola (Measles)-titer required
- Mumps-titer required
- Varicella (Chicken Pox)-titer required
- Hepatitis B-documentation of three immunizations and quantitative titer required
- Tetanus/Diphtheria/Pertussis-proof of immunization
- Tdap-recent Td > 2 years Tdap required
- TST (Tuberculin Skin Testing) or Quantiferon TB Gold Assay
- Influenza Vaccine (annually in the fall)

b. Describe how and by whom the immunization status of medical students is monitored.

Immunization status is monitored by the Clinical Coordinator of the Marshall Health Family Medicine, Division of Occupational Health and Wellness. The Assistant Dean of Student Affairs is currently a licensed registered nurse and is available to assist when needed.

If any student is found to be non-compliant, assistance from the Office of Student Affairs is available. The Vice Dean of Clinical Affairs is a resource for assistance as well.

12.8 STUDENT EXPOSURE POLICIES/PROCEDURES

A medical school has policies in place that effectively address medical student exposure to infectious and environmental hazards, including the following:

- The education of medical students about methods of prevention
- The procedures for care and treatment after exposure, including a definition of financial responsibility
- The effects of infectious and environmental disease or disability on medical student learning activities

All registered medical students (including visiting students) are informed of these policies before undertaking any educational activities that would place them at risk.

NARRATIVE RESPONSE

a. Describe institutional policies in the following areas related to medical student exposure to infectious and environmental hazards:

1. The education of medical students about methods of prevention
2. The procedures for care and treatment after exposure, including definition of financial responsibility
3. The effects of infectious and/or environmental disease or disability on medical student learning activities

1. The education of medical students about methods of prevention

Education of prevention of infectious and environmental hazards occurs during orientation to the clerkships. All students are required to complete annual online OSHA Blood-borne Pathogens training which includes the procedures for exposure.

2. The procedures for care and treatment after exposure, including definition of financial responsibility

a. STEP 1 – IMMEDIATE TREATMENT

Percutaneous (needlesticks/sharp objects) Injury (where there is the slightest suggestion that the integrity of skin has been broken by a potentially contaminated item)

1. Wash wound thoroughly with a sudsy soap and running water; if water is not available use alcohol. (This first step with soap directly reduces the virus's ability to infect.)
2. Remove any foreign materials embedded in the wound.
3. If not allergic, disinfect with Betadine solution.

Non-intact Skin Exposure

1. Wash skin thoroughly as in #1 above.
2. If not allergic, disinfect with Betadine solution. There is no evidence that squeezing the wound or applying topical antiseptics further reduces the risk of viral transmission.

Mucous Membrane Exposure

1. Irrigate copiously with tap water, sterile saline, or sterile water

Intact Skin Exposure

1. Exposure to intact skin to potentially contaminated material is not considered an exposure at any significant risk and is neither considered an exposed person or in need of evaluation. Thoroughly clean and wash exposed intact skin.

b. STEP 2 – Exposure Protocol

1. Report the exposure to a supervisor (faculty or resident preceptor or other responsible person)
2. During regular business hours, report to the Marshall University Division of Occupational Health & Wellness located in the Department of Family Medicine. If exposure occurs after hours or off-site, report this to your immediate supervisor and go to the nearest Emergency Department and follow their school/hospital-specific policy.
3. After treatment in the Emergency Department, call the Marshall University Division of Occupational Health & Wellness at 304-691-1187 to report your incident and to coordinate any follow-up care needed.

REMEMBER TO:

- Remind others (while you seek immediate medical attention) to obtain consent and test source individual's blood (requesting a rapid HIV antibody test) immediately or ASAP if the patient is not on premises. If the source individual is known to be infected with HIV, HBC, or HCV, testing need not be repeated to determine the known infectivity.
- Identify and document the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law.

For Medical Students: FINANCIAL CONCERNS ASSOCIATED WITH AN EXPOSURE

The Office of Student Affairs encourages students to become aware of the Blood and Body Fluids Exposure Protocol so that an appropriate course of action can be followed in the event of an exposure. Please do not let a concern over expenses result in a lack of health care. With appropriate documentation, the Office of Student Affairs will reimburse any enrolled student up to $10,000 for costs related to an exposure. Students must provide a copy of their Explanation of Benefits from the health insurance AND a copy of the bill from the site at which you had services such as lab work to Ms. Laura Christopher in the Office of Student Affairs at the Byrd Clinical Center. Submit this documentation for payment or reimbursement as soon as possible after the event. Direct any questions to Amy Smith at 304-691-8684 or by email at smith305@marshall.edu

3. The effects of infectious and/or environmental disease or disability on medical student learning activities.

Any medical student exposed to infectious and/or environmental disease would follow the Post Exposure Policy (Appendix).The student will coordinate follow up testing and treatment with the Marshall Health Occupational Department. For any student unable to fulfill educational duties, they would be referred to the long term disability process.

Students infected with an infectious or environmental disease are directed to apply for an occupational evaluation so that the medical condition can be assessed and reviewed by a review panel with expertise on deciding safety for the student and patients. Clinical duties may be modified based upon the recommendations of the review panel and based upon CDC guidelines.

b. Describe when and in what way(s) the school's own medical students and visiting medical students are informed of the medical school's policies and procedures related to exposure to infectious and environmental hazards at all instructional sites. For example, describe when and how students, including visiting students, learn about the procedures to be followed in the event of exposure to blood-borne or air-borne pathogens (e.g., a needle-stick injury).

Policies and procedures are reviewed at new student orientation, rising class meetings, and individual clerkship meetings. All information, including procedures, is available to students on the Student Resource webpage. Protocols are posted on the medical student resource webpage.

c. Describe when in the course of their education medical students learn how to prevent exposure to infectious diseases, especially from contaminated body fluids.

Students are required to complete an annual OSHA training. Compliance is monitored by the Office of Medical Education. Clerkships review the information in their clerkship orientations.

d. Provide data from the Independent Student Analysis on the percentage of medical students who report being familiar with the protocol following exposure to infectious and environmental hazards. For programs with regional campuses, provide data by campus. Also, provide data from the Independent Student Analysis on student satisfaction with the adequacy of education about prevention and exposure to infectious and environmental hazards.

From the 2017-2018 Independent Student Analysis:

Adequacy of education about prevention and exposure to infectious and environmental hazards											
Medical School Class	Number of Total Responses to This Item	Number and % of N/A Responses		Number and % of Very Dissatisfied (1)		Number and % of Dissatisfied (2)		Number and % of Satisfied (3)		Number and % of Very Satisfied	
		N	%	N	%	N	%	N	%	N	%
M1	80	7	8.8	0	0.0	2	2.5	24	30.0	47	58.8
M2	84	3	3.6	0	0.0	3	3.6	39	46.4	39	46.4
M3	63	5	7.9	1	1.3	2	3.2	30	47.6	25	39.7
M4	75	1	1.3	1	1.3	4	5.3	38	50.7	31	41.3
Total	302	16	5.3	2	0.7	11	3.6	131	43.4	142	47.0

SUPPORTING DOCUMENTATION

1. Policies on medical student exposure to infectious and environmental hazards.

   Appendix 12.8-1 Student Exposure to Hazards.pdf

2. Policies related to the implications of infectious and/or environmental disease or disability on medical student educational activities.

   Appendix 12.8-2 Post Exposure Policy

GLOSSARY OF TERMS FOR LCME ACCREDITATION STANDARDS AND ELEMENTS

Adequate types and numbers of patients (e.g., acuity, case mix, age, gender): Medical student access, in both ambulatory and inpatient settings, to a sufficient mix of patients with a range of severity of illness and diagnoses, ages, and both genders to meet medical educational program objectives and the learning objectives of specific courses, modules, and clerkships. (Element 5.5)

Admission requirements: A comprehensive listing of both objective and subjective criteria used for screening, selection, and admission of applicants to a medical education program. (Standard 10)

Admission with advanced standing: The acceptance by a medical school and enrollment in the medical curriculum of an applicant (e.g., a doctoral student), typically as a second or third-year medical student, when that applicant had not previously been enrolled in a medical education program. (Element 10.7)

Any related enterprises: Any additional medical school-sponsored activities or entities. (Element 1.2)

Assessment: The systematic use of a variety of methods to collect, analyze, and use information to determine whether a medical student has acquired the competencies (e.g., knowledge, skills, behaviors, and attitudes) that the profession and the public expect of a physician. (Element 1.4)

Benefits of diversity: In a medical education program, the facts that having medical students and faculty members from a variety of socioeconomic backgrounds, racial and ethnic groups, and other life experiences can: 1) enhance the quality and content of interactions and discussions for all students throughout the preclinical and clinical curricula; and 2) result in the preparation of a physician workforce that is more culturally aware and competent and better prepared to improve access to healthcare and address current and future health care disparities. (Standard 3)

Central [or centralized] monitoring: Tracking by institutional (e.g., decanal) level offices and/or committees (e.g., the curriculum committee) of desired and expected learning outcomes by students and their completion of required learning experiences. (Element 8.6)

Clinical affiliates: Those institutions providing inpatient medical care that have formal agreements with a medical school to provide clinical experiences for the education of its medical students. (Element 1.4)

Clinical and translational research: The conduct of medical studies involving human subjects, the data from which are intended to facilitate the translation and application of the studies' findings to medical practice in order to enhance the prevention, diagnosis, and treatment of medical conditions. (Element 7.3)

Clinical reasoning: The integration, organization, and interpretation of information gathered as a part of medical problem-solving.

Community service: Services designed to improve the quality of life for community residents or to solve particular problems related to their needs. Community service opportunities provided by the medical school complement and reinforce the medical student's educational program. (Element 6.6)

Comparable educational experiences: Learning experiences that are sufficiently similar so as to ensure that medical students are achieving the same learning objectives at all educational sites at which those experiences occur. (Element 8.7)

Coherent and coordinated curriculum: The design of a complete medical education program, including its content and modes of presentation, to achieve its overall educational objectives. Coherence and coordination include the

following characteristics: 1) the logical sequencing of curricular segments, 2) coordinated and integrated content within and across academic periods of study (i.e., horizontal and vertical integration), and 3) methods of instruction and student assessment appropriate to the achievement of the program's educational objectives. (Element 8.1)
Competency: Statements of defined skills or behavioral outcomes (i.e., that a physician should be able to do) in areas including, but not limited to, patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism and ethics, and systems-based practice for which a medical student is required to demonstrate mastery prior to completion of his or her medical education program and receipt of the MD degree. (Element 8.7)

Core curriculum: The required components of a medical curriculum, including all required courses/modules and clinical clerkships/rotations. (Element 7.9)

Critical judgment/critical thinking: The consideration, evaluation, and organization of evidence derived from appropriate sources and related rationales during the process of decision-making. The demonstration of critical thinking requires the following steps: 1) the collection of relevant evidence; 2) the evaluation of that evidence; 3) the organization of that evidence; 4) the presentation of appropriate evidence to support any conclusions; and 5) the coherent, logical, and organized presentation of any response. (Elements 7.4)

Curriculum management: Involves the following activities: leading, directing, coordinating, controlling, planning, evaluating, and reporting. An effective system of curriculum management exhibits the following characteristics: 1) evaluation of program effectiveness by outcomes analysis, using national norms of accomplishment as a frame of reference, 2) monitoring of content and workload in each discipline, including the identification of omissions and unplanned redundancies, and 3) review of the stated objectives of each individual curricular component and of methods of instruction and student assessment to ensure their linkage to and congruence with programmatic educational objectives. (Element 8.1)

Direct educational expenses: The following educational expenses of an enrolled medical student: tuition, mandatory fees, books and supplies, and a computer, if one is required by the medical school. (Element 12.1)

Direct faculty participation in decision-making: Faculty involvement in institutional governance wherein faculty input to decisions are made by the faculty members themselves or by representatives chosen by faculty members (e.g., versus appointed by administrators). (Element 1.3)

Diverse sources [of financial revenues]: Multiple sources of predictable revenues that include, but are not unduly dependent upon any one of, the following: tuition, gifts, clinical revenue, governmental support, research grants, endowment, etc. (Element 5.1)

Effective: Supported by evidence that the policy, practice, and/or process has produced the intended or expected result(s). (Standard 1)

Eligibility requirements…for initial and continuing accreditation: Receipt and maintenance of authority to grant the MD degree from the appropriate governmental agency and initial and continuing accreditation by one of the six regional accrediting bodies. (Element 1.6)

Equivalent methods of assessment: The use of methods of medical student assessment that are as close to identical as possible across all educational sites at which core curricular activities take place, but which may not occur in the same timeframe. (Element 8.7)

Evaluation: The systematic use of a variety of methods to collect, analyze, and use information to determine whether a program is fulfilling its mission(s) and achieving its goal(s). (Element 3.3)

Fair and formal process for taking any action that may affect the status of a medical student: The use of policies and procedures by any institutional body (e.g., student promotions committee) with responsibility for making decisions about the academic progress, continued enrollment, and/or graduation of a medical student in a manner that ensures: 1) that the student will be assessed by individuals who have not previously formed an opinion of the student's abilities, professionalism, and/or suitability to become a physician; and 2) that the student has received timely notice of the proceedings, information about the purpose of the proceedings, and any evidence to be presented at the proceedings; his or her right to participate in and provide information or otherwise respond to participants in the proceedings; and any opportunity to appeal any adverse decision resulting from the proceedings. (Element 9.9)

Fair and timely summative assessment: A criterion-based determination, made as soon as possible after the conclusion of a curricular component (e.g., course/module, clinical clerkship/rotation) by individuals familiar with a medical student's performance, regarding the extent to which he or she has achieved the learning objective(s) for that component such that the student can use the information provided to improve future performance in the medical curriculum. (Element 9.8)

Final responsibility for accepting students rests with a formally constituted admission committee: Ensuring that the sole basis for selecting applicants for admission to the medical education program are the decisions made by the faculty committee charged with medical student selection in accordance with appropriately approved selection criteria. (Element 10.2)

Formative feedback: Information communicated to a medical student in a timely manner that is intended to modify the student's thinking or behavior in order to improve his or her subsequent learning and performance in the medical curriculum. (Element 9.7)

Functionally integrated: Coordination of the various components of the medical school and medical education program by means of policies, procedures, and practices that define and inform the relationships among them. (Element 2.6)

Health care disparities: Differences between groups of people, based on a variety of factors including, but not limited to, race, ethnicity, residential location, sex, age, and socioeconomic status, educational status, and disability status, that affect their access to health care, the quality of the health care they receive, and the outcomes of their medical conditions. (Element 7.6)

Independent study: Opportunities either for medical student-directed learning in one or more components of the core medical curriculum, based on structured learning objectives to be achieved by students with minimal faculty supervision, or for student-directed learning on elective topics of specific interest to the student. (Element 6.3)

Integrated institutional responsibility: Oversight by an appropriate central institutional body (commonly a curriculum committee) of the medical education program as a whole. An effective central curriculum authority exhibits the following characteristics: 1) participation by faculty, students, and administrators; 2) the availability of expertise in curricular design and methods of instruction, student assessment, and program evaluation; and 3) empowerment, through bylaws or decanal mandate, to work in the best interests of the medical education program without regard for parochial or political influences or departmental pressures. (Element 8.1)

Learning objectives: A statement of the specific, observable, and measurable expected outcomes (i.e., what the medical students will be able to do) of each specific component (e.g., course, module, clinical clerkship, rotation) of a medical education program that defines the content of the component and the assessment methodology and that is linked back to one or more of the medical education program objectives. (Element 6.1)

Major location for required clinical learning experiences: A clinical affiliate of the medical school that is the site of one or more required clinical experiences for its medical students. (Element 5.6)

Medical education program objectives: Broad statements, in measurable terms, of the knowledge, skills, behaviors, and attitudes (typically linked to a statement of expected competencies) that a medical student is expected to exhibit as evidence of his or her achievement of all programmatic requirements by the time of medical education program completion. (Standard 6 and Element 6.1)
Medical education parallel curriculum (track): A parallel program of study for a subset of the medical student body that requires participating students to complete specific programmatic learning objectives (e.g., in research, primary care, leadership) in addition to the medical educational program objectives required of all medical students. (Element 5.12)

Medical problem-solving: The initial generation of hypotheses that influence the subsequent gathering of information. (Elements 7.4)

Mission-appropriate diversity: The inclusion, in a medical education program's student body and among its faculty and staff and based on the program's mission, goals, and policies, of persons from different racial, ethnic, economic, and/or social backgrounds and with differing life experiences to enhance the educational environment for all medical students. (Element 3.3)

Narrative assessment: Written comments from faculty that assess student performance and achievement in meeting the objectives of a course or clerkship. (Element 9.5)

National norms of accomplishment: Those data sources that would permit comparison of relevant medical school-specific medical student performance data to national data for all medical schools and medical students (e.g., USMLE scores, AAMC GQ data, specialty certification rates). (Element 8.4)

Need to know: The requirement that information in a medical student's educational record be provided only to those members of the medical school's faculty or administration who have a legitimate reason to access that information in order to fulfill the responsibilities of their faculty or administrative position.
(Element 11.5)

Outcome-based terms: Descriptions of observable and measurable desired and expected outcomes of learning experiences in a medical curriculum (e.g., knowledge, skills, attitudes, and behavior). (Element 6.1)

Primacy of the medical education program's authority over academic affairs and the education/assessment of medical students: The affirmation and acknowledgement that all decisions regarding the creation and implementation of educational policy and the teaching and assessment of medical students are, first and foremost, the prerogative of the medical education program. (Element 1.4)

Principal academic officer at each campus is administratively responsible to the dean: The administrator identified by the dean or the dean's designee (e.g., associate or assistant dean, site director) as having primary responsibility for implementation and evaluation of the components of the medical education program that occur at that campus. (Element 2.5)

Program objectives: See definition for Medical education program objectives above.

Publishes: Communicates in hard-copy and/or on-line in a manner that is easily available to and accessible by the public. (Standard 10)

Regional accrediting body: The six bodies recognized by the US Department of Education that accredit institutions of higher education located in their regions of the US: 1) Higher Learning Commission; 2) Middle States Commission on Higher Education; 3) New England Association of Schools and Colleges Commission on Institutions of Higher Education;4) Northwest Commission on Colleges and Universities;5) Southern Association of Colleges and Schools

Commission on Colleges; and 6) Western Association of Schools and Colleges Senior Colleges and University Commission. (Element 1.6)

Regional campus: A regional campus is an instructional site that is distinct from the central/administrative campus of the medical school and at which some students spend one or more complete curricular years. (Element 2.5)

Regularly scheduled and timely feedback: Information communicated periodically and sufficiently often (based on institutional policy, procedure, or practice) to a faculty member to ensure that the faculty member is aware of the extent to which he or she is (or is not) meeting institutional expectations regarding future promotion and/or tenure. (Element 4.4)

Scientific method: A method of procedure consisting in systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses. Typically the method consists of the following steps: 1) identifying and defining a problem; 2) accumulating relevant data; 3) formulating a tentative hypothesis; 4) conducting experiments to test the hypothesis; 5) interpreting the results objectively; and 6) repeating the steps until an acceptable solution is found. (Element 7.3)

Self-directed learning: Includes all of the following components as a unified sequence: 1) the medical student's self-assessment of his/her learning needs; 2) the medical student's independent identification, analysis, and synthesis of relevant information; and 3) the medical student's appraisal of the credibility of information sources. (Element 6.3)

Senior administrative staff: People in academic leadership roles, to include but not limited to, associate/assistant deans, directors, academic department chairs, and people who oversee the operation of affiliated clinical facilities and other educational sites. Many, if not most, of these people also have faculty appointments, and for tracking purposes should only be counted in one category when completing tables such as those listed in the DCI under Element 3.3. (Standard 2 and Elements 2.1, 2.4, and 3.3)

Service-learning: Educational experiences that involve all of the following components: 1) medical students' service to the community in activities that respond to community-identified concerns; 2) student preparation; and 3) student reflection on the relationships among their participation in the activity, their medical school curriculum, and their roles as citizens and medical professionals. (Element 6.6)

Single standard for the promotion and graduation of medical students across all locations: The academic and non-academic criteria and levels of performance defined by a medical education program and published in programmatic policies that must be met by all medical students on all medical school campuses at the conclusion of each academic year for promotion to the next academic year and at the conclusion of the medical education program for receipt of the MD degree and graduation. (Element 9.9)

Standards of achievement: Criteria by which to measure a medical student's attainment of relevant learning objectives and that contribute to a summative grade. (Element 9.6)

Technical standards for admission, retention, and graduation of medical students: A statement by a medical school of the: 1) essential academic and non-academic abilities, attributes, and characteristics in the areas of intellectual-conceptual, integrative, and quantitative abilities; 2) observational skills; 3) physical abilities; 4) motor functioning; 5) emotional stability; 6) behavioral and social skills; and 7) ethics and professionalism that a medical school applicant or enrolled medical student must possess or be able to acquire, with or without reasonable accommodation, in order to be admitted to, be retained in, and graduate from that school's medical educational program. (Element 10.5)

Transfer: The permanent withdrawal by a medical student from one medical school followed by his or her enrollment (typically in the second or third year of the medical curriculum) in another medical school. (Element 5.10)

Visiting students: Students enrolled at one medical school who participate in clinical (typically elective) learning experiences for a grade sponsored by another medical school without transferring their enrollment from one school to the other. (Element 5.10)