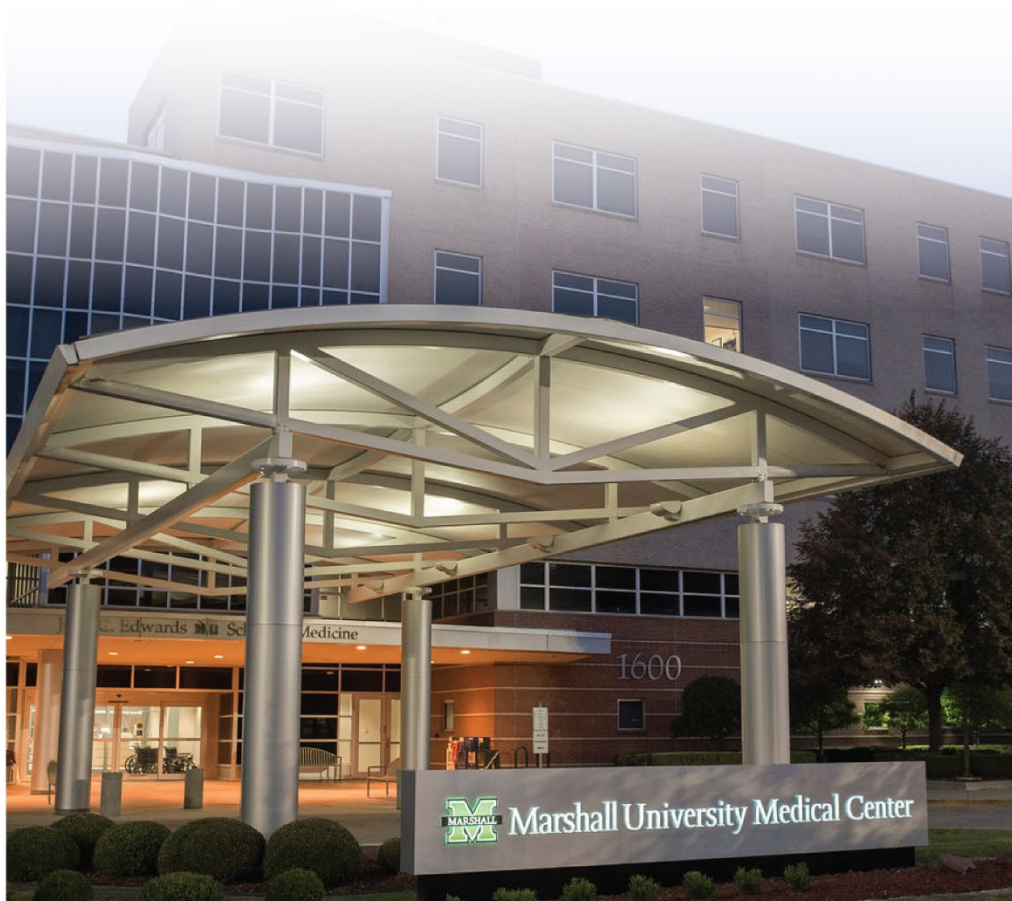




LCME Site Visit 2019



Executive Summary of the Institutional Self-Study

Introduction

The Marshall University Joan C. Edwards School of Medicine (JCESOM) continues to achieve its primary mission of addressing the physician shortage in the Appalachian region by training future physicians, developing innovative educational opportunities, delivering quality health care to a diverse and largely rural population through strong partnerships with clinical affiliates, and seeking research insights into the science of medicine, treatment, prevention and cures.

Overview of the Institutional Self-Study

Following the establishment of the 12 accreditation standards by the LCME in the summer of 2015, the JCESOM began to consider new methods of strategic planning and continuous quality improvement. The LCME Accreditation Committee was formed in 2015 and consists of the stakeholders for each of the 12 standards. This committee began an ongoing continuous quality improvement process for the medical education program by completing the Data Collection Instrument (DCI) for each individual standard with one standard undergoing a thorough review at each monthly meeting such that all 12 standards are reviewed on a yearly basis. The LCME accreditation committee was charged with completing the DCI for the full survey visit in March 2019. The Independent Student Analysis (ISA) Committee members were peer-selected and worked independently of the LCME Accreditation Committee. This hardworking group of students achieved an overall survey participation rate of 96% with 300 out of 312 students completing the survey. The Self-Study Task Force consisted of 30 faculty members, residents, students and key administrative personnel. The Self-Study Task Force was divided into 5 subcommittees based on thematic grouping of the accreditation standards.

Summary of Previous Findings and Actions Taken

The last full LCME survey was held March 13-16, 2011. In a letter dated June 15, 2011, the LCME notified the school that the medical education program leading to the M.D. degree was placed on probation. The LCME took this action based on a constellation of areas of partial or substantial noncompliance with the accreditation standards. As part of the probation requirement a limited LCME site visit was conducted June 23-26, 2013. In a letter dated October 21, 2013, the LCME removed the status of probation with some areas still requiring monitoring.

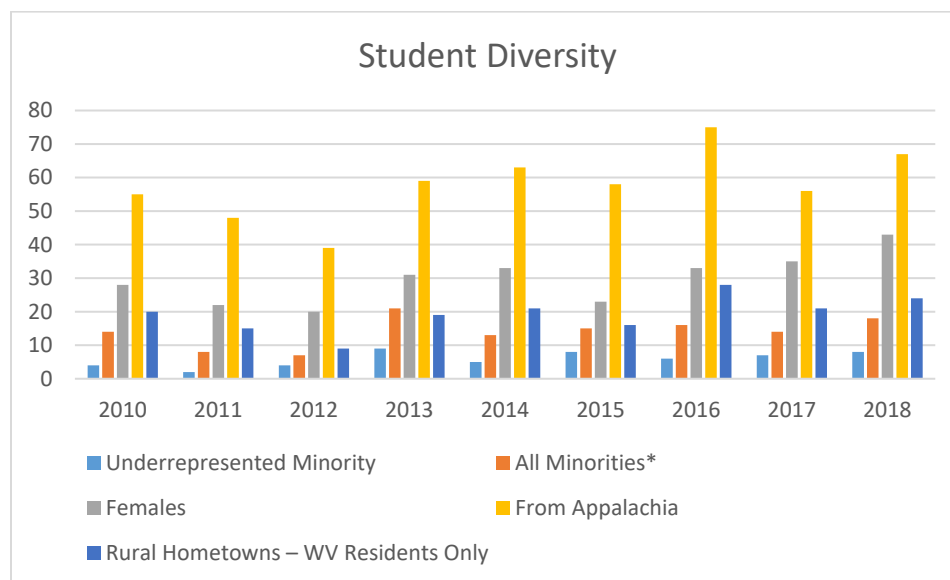
Areas of partial or substantial noncompliance with accreditation standards (2011).

Strategic goals and practices to promote racial and cultural diversity of the student body.

Finding: The medical school has not explicitly defined its goals for diversity and has not engaged in systematic efforts to develop programs aimed at broadening diversity among medical school applicants or recruiting faculty members and students from demographically diverse backgrounds. (3.3; formerly IS-16)

Corrective Action: JCESOM has focused on creating an environment where students and faculty understand and embrace the importance of diversity in both the educational program and culturally competent health care. The institution has defined its value added groups to improve its diversity. An Assistant Dean of Diversity and Inclusion was recruited and hired and runs the JCESOM Office of Diversity and Inclusion. Pipeline programs have been strengthened and continue to grow. One of the most beneficial pipeline programs has been Project PREMED with 14 of 100 participants entering medical

school. The institution has shown sustained improvement in the recruitment of a diverse student body and faculty over the last four years.



Educational objectives must include opportunities for active learning.

Finding: The first two years of the curriculum are highly dependent on lecture and offer few opportunities for medical students to develop the skills necessary for lifelong learning. (6.3; formerly ED-5-A)

Corrective Action: An Associate Dean of Medical Education with an educational doctorate was hired to perform faculty development on new and different pedagogies that would allow faculty to replace some of their educational activities with active learning or self-directed learning experiences for the students. The curriculum committee set a goal that each block leader would reduce the amount of lecture time to 50%. As of the 2017-2018 academic year, all blocks in the first two years average between 50 and 60% lecture with the remainder being active learning or self-directed learning sessions.

Course	Lecture	Lab	Small groups *	Other†	Total	
Year 1						
Elements of Medicine	94.5	6	12	36	148.5	
Structure and Function I	66.5	48.5	4	13	132	
Structure and Function II	87	41	2	24	154	
Structure and Function III	56	17.5	9	18	100.5	
Structure and Function IV	53	34.5	10.5	13	111	
Introduction to Clinical Skills	21	0	6	25	52	
Total	378	147.5	43.5	129	698	

Year 2						
Principles of Disease	86.5	0	12	33	131.5	
Diseases and Therapeutics I	42.5	2	4.5	10.5	59.5	
Diseases and Therapeutics II	65.5	0	23	16	104.5	
Diseases and Therapeutics III	48	0	8	40	96	
Diseases and Therapeutics IV	68	0	5	27	100	
Advanced Clinical Skills	24.5	0	4	24.5	53	
Total	335	2	56.5	151	544.5	
* Includes case-based or problem-solving sessions						
† Team-Based Learning, Independent Learning, Large Group Discussions, Peer Teaching, and Demonstrations						

Students must have opportunities to learn about the impact of diversity and culture on the care of patients from a wide range of cultural diversity.

Finding: The curriculum offers limited opportunities for medical students to participate in learning activities that allow them to acquire and demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness. In the 2010 AAMC Medical School Graduation Questionnaire, more than one-third of respondents reported that their instruction related to providing culturally appropriate care for diverse populations was inadequate. (7.6; formerly ED-21)

Corrective Action: The curriculum committee first developed a list of potential cultural diversity and belief systems that could be incorporated into learning opportunities. Block leaders were charged with expanding the number of learning opportunities and required to report the number and types of diversity elements incorporated into their courses. As of the 2017-2018 academic year, there were more than 120 cultural diversity elements across the four years of the curriculum. Both the Introduction to and Advanced Clinical Skills courses have incorporated workshops and discussion panels with diverse populations in the community in order to allow students to interact with individuals from different backgrounds.

There must be institutional responsibility for the horizontal and vertical integration of the curriculum.

Finding: Both years one and two of the curriculum have been reorganized into systems based blocks, where the subjects are coordinated temporally but have varying degrees of horizontal content integration. As yet, there has been little attention to achieve vertical integration of content across the curriculum, except in specific subject areas. (8.1; formerly ED-33)

Corrective Action: The curriculum committee appointed an ad-hoc integration committee specifically targeting the issues of horizontal and vertical integration. The committee was composed of four basic science faculty, four clinical faculty, and two medical students. The committee elected to use specific diseases as a means of tracking integration and selected the 115 diseases most frequently logged by medical students in the electronic patient logging system. An integration report was developed for each disease that demonstrated where the material was taught across all four years of the curriculum, the number of questions used for multiple choice exams, and the number of patients logged. Gaps and redundancies were identified and recommendations were made to the curriculum committee for their approval. Most recommendations stood as presented but some were slightly modified prior to their full implementation in the curriculum.

A medical education program offers effective career advising and support for residency application.

Finding: A new staff member has been hired to shepherd the career advising and counseling program for medical students. To date, however, career advising has been limited and programs often have been informal and student-initiated. More formal advising has been directed at students in the later years of the curriculum. (11.2; formerly MS-19)

Corrective Action: The JCESOM established a comprehensive, systematic approach to career counseling that includes a number of required and several optional sessions across all four years of the curriculum. The largest portion of this approach is based on the AAMC Careers in Medicine Toolkit and starts early in the first year of the curriculum. Students are required to have one on one sessions with a member of the Student Affairs Office. All electives in the fourth year are approved by the Office of Student Affairs. The AAMC Medical School Graduation Questionnaires have continued to demonstrate that the majority of student continue to be satisfied or very satisfied with career advising.

Career Planning Services								
Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were <i>satisfied/very satisfied (aggregated)</i> 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	N/A	N/A
Information about specialties	93.8	70.6	57.6	71.5	78.0	71.3	N/A	N/A

Provision of effective financial aid and debt management counseling to medical students.

Finding: While a staff member has recently been hired by the school to provide financial aid and debt management counseling, a longitudinal, effective financial aid and debt management program does not yet exist. (12.1; formerly MS-23)

Corrective Action: The School of Medicine continues to maintain a full time financial aid and debt management counselor dedicated solely to the medical students. This individual holds mandatory sessions for all classes each year. These sessions include how to create and maintain a budget, responsible personal debt management, as well as specifically addressing financial aid borrowing and management. She meets with each student annually to review their budget and discuss their financial aid plans.

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.	Bank representatives come to discuss issues such as credit cards, credit scores, how student loans affect credit, and	Rising MS4 presentation discussing budgeting issues for upcoming year and testing, interview and	Loan Exit Interview presented by AAMC discussing repayment plans and forgiveness programs. (R) One-on-one exit counseling

<p>(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)</p>	<p>budgeting. (R) FAFSA workshops offered twice during the academic year (O)</p>	<p>travelling costs (R) FAFSA workshop offered twice during the academic year (O)</p>	<p>(O) FAFSA workshops offered twice during the academic year (O)</p>
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Mechanisms to minimize the impact of direct educational expenses on medical student indebtedness.

Finding: Student debt has been increasing, with 32% of the class of 2010 graduating with debt of \$200,000. Scholarship support is well below the national mean and fund raising to support scholarship has not, to date, added significantly to the amount financial aid that is available. (12.1; formerly MS-24)

Corrective Action: The School of Medicine immediately froze tuition when placed on probation in 2011 and maintained it at the same level until the 2014-2015 academic year. Since being placed on probation, tuition has only increased by 9.3% compared to the national average of 17.9% (between 2014 and 2018). The school increased the provision of tuition waivers for students. For the sixth straight year, the Joan C. Edwards School of Medicine increased scholarship revenue and distribution during the 2017-2018 academic year. Thanks to generous sponsors, Standing Out in Our Field, the school's annual scholarship fundraising event now in its fifth year, has contributed a total of \$500,000+ to the JCESOM Scholarship Campaign Fund. This and other fund raising campaigns have allowed the school to increase scholarship and financial support for students from \$400K in 2011 to nearly \$2.8 million in 2017-2018.

Personal counseling aimed at improving student well-being as they adjust to the physical and emotional demands of medical education.

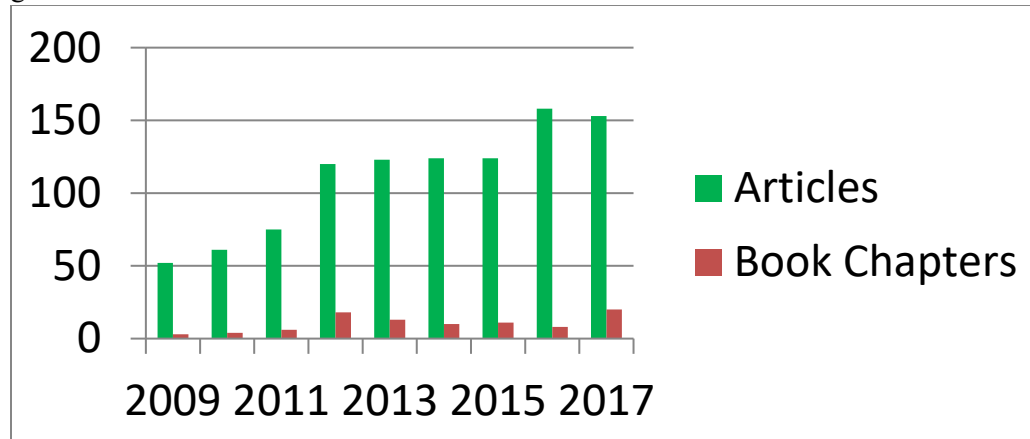
Finding: There are limited programs and practices available to support student well-being and no system to promote student emotional health. There is no designated individual for students to access for emotional health issues who has no role in student evaluation. (12.3; formerly MS-26)

Corrective Action: JCESOM contracted with the Cabell Huntington Hospital Counseling Center which is located off-site of the medical center and the hospital to ensure student privacy. Each student is able to attend 10 counseling sessions per year free of charge. The school also created a medical student wellness committee that focuses on eight areas: career, physical, social, financial, intellectual, environmental, spiritual, and emotional. Each category has specific activities that promote health and wellness. A chapter of the mental health group Active Minds was recently founded specifically for medical students. The school has added 80 new lockers in the medical center, opened a student only canteen on the third floor of the hospital, added student only space in the Byrd Clinical Center, and opened up additional classrooms for study space.

Faculty commitment to scholarly productivity at an institution of higher learning.

Finding: Scholarly activity by the faculty is quite variable among the departments, with the departments of surgery, family medicine, and psychiatry demonstrating virtually no activity. (4.2; formerly FA-5)

Corrective Action: The JCESOM placed a new emphasis on research with the dean providing seed funding for grants, working with other institutions in the state to promote collaboration, and supporting the Department of Clinical and Translational Science at the medical school. This department provides monthly or biweekly workshops for research design, grant writing, biostatistics, and IRB preparation to assist students, residents, and faculty in being successful in scholarly endeavors. All of these efforts have paid off with a significant improvement in publications, an \$11 million COBRE grant and several other grants.



Affiliation agreements should define the responsibilities of each party as related to the medical education program.

Finding: There is no affiliation agreement with the Riverpark Psychiatric Hospital. (1.4; formerly ER-9)

Corrective Action: The School of Medicine immediately obtained an affiliation agreement with Riverpark Psychiatric Hospital.

Self-Study Responses

STANDARD 1: MISSION, PLANNING, ORGANIZATION, AND INTEGRITY

1. Evaluate the utility and success of institutional planning efforts, and summarize how planning has contributed to the accomplishment of the medical school's missions and the achievement of measurable outcomes. How effective is the medical school's system for monitoring its ongoing compliance with the accreditation elements? (1.1)

The school utilizes a Strategic Planning Committee consisting of 15 members from various components of the medical school's organizational structure to develop priorities consistent with the school's mission. Strategies for achieving success in the prioritized efforts of the school in the areas of citizenship, education, research, and service are developed and monitored. Measurable outcomes for the strategies are reviewed by the committee and dispersed to the faculty members of the School of Medicine. The latest review of the 2012 Strategic Plan

occurred and concluded in 2017. The review demonstrated positive outcomes in 46 strategies of the 18 priorities from 2012. Utilizing the positive measurable outcomes and strategies not yet realized, the Strategic Planning Committee looked to the future in the 2017 Strategic Plan document, developing priorities and strategies to guide the school through the next 5 years. Nevertheless, it would be beneficial for the Strategic Planning Committee to include barriers recognized for not achieving positive outcomes in strategies in the next edition.

Marshall's process for monitoring ongoing compliance with accreditation elements includes the use of the LCME Accreditation Committee. 12 Standards lend themselves to a reasonable 1 standard per month review and update in the most recent data collection instrument after each meeting. These reviews are available to students and faculty via an online process.

2. Evaluate the adequacy of the structures, policies, and other safeguards in place to prevent or identify conflicts of interest at the levels of the governing board, the medical school administration and faculty, and others with responsibility for the medical education program. Note whether there is evidence that these are being followed. (1.2)

Conflict of interest policies are in place for the Marshall University Board of Governors, as well as Marshall University Medical School administrators and faculty. Conflicts of interest are tracked by the main campus and by the Marshall Health Practice Plan. All conflicts are tracked on a spreadsheet that is reviewed on an annual basis.

3. Evaluate the effectiveness of mechanisms for direct faculty involvement in decision-making related to the medical education program, including the election of members of the general faculty to relevant committees. Are there sufficient opportunities outside of formal committees for faculty to learn about and comment on medical school policies and procedures? Do members of the faculty consider that they have sufficient opportunities to provide input and make themselves heard? (1.3)

Faculty, through appointment or election by their departments may participate in committees related to the medical education program of the school. Faculty representation accounts for at least 70% of the current committee membership.

Faculty meetings and electronic delivery of proposed changes in medical education policies and procedures are current methods for attaining information and providing comments. A recent change in the structure of biomedical science departments and curriculum committee operating procedures represent the successful utilization of electronic delivery information prior to a discussion and voting mechanism at a general faculty meeting.

Members of the faculty indicate they have sufficient opportunity to provide input and make themselves heard according to the 2017 Standpoint Survey™ Executive Summary. 79% of faculty were either positive or neutral to a question similar to this portion of the element.

4. Does the medical school have up-to-date affiliation agreements with the clinical partners that are used regularly for required inpatient clinical experiences? Evaluate whether agreements contain the language specified in the element and serve to ensure that the educational program for medical students remains under the control of the medical school's faculty. (1.4)

The medical school has up-to-date affiliation agreements with 10 different participating sites for inpatient clinical experience: Cabell Huntington Hospital, St. Mary's Hospital, Charleston Area Medical Center, Logan Regional Medical Center, Mildred Mitchell Bateman Hospital,

Huntington Internal Medicine Group, Pleasant Valley Hospital, River Park Hospital, UPMC and Veterans Affairs Medical Center. Each agreement includes the required elements of:

- 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
5. Are there bylaws in force for the medical school that are sufficiently clear and comprehensive in describing the responsibilities and privileges of members of the medical school administration and faculty and the roles and responsibilities of committees? Are the bylaws available to faculty? (1.5)

Standard 1.5 indicates that medical school bylaws need to address responsibilities and privileges of its administrative officers, faculty, medical students, and committees. Please refer to the appendices for a copy of the JCESOM's bylaws.

6. Evaluate whether the medical school has met and maintained the eligibility requirements for initial and continuing LCME accreditation, as specified in the *Rules of Procedure*. (1.6)

Marshall University is fully accredited by the Higher Learning Commission (formerly the North Central Association of Colleges and Schools). Marshall University derives the legal authority to award the MD degree through legislation enacted by the State of West Virginia. . The LCME placed the Marshall University Joan C. Edwards School of Medicine on probation in 2011, but removed this probation in 2013, finding the school to be in compliance with accreditation standards at that time. Please visit the medical school's website <https://jcesom.marshall.edu/about/lcme-information/> for additional information.

STANDARD 2: LEADERSHIP AND ADMINISTRATION

1. How is the authority of the governing board for the appointment of medical school administrators and faculty being exercised? Has appropriate authority for appointments been delegated by the board to the university and medical school administration? (2.1)

The Dean's position for the School of Medicine is appointed by the Marshall University Board of Governors. The position has the delegated authority to appoint Dean's staff and faculty members to the School of Medicine.

2. Comment on the responsibility and qualifications of the dean to provide leadership in the missions of the medical school for which he/she has responsibility. Is there a clear definition of and general understanding of the dean's authority and responsibility for the medical school and its educational program? Evaluate whether the dean has appropriate access to university and other officials, so as to support his or her ability to carry out his/her defined responsibilities. (2.2, 2.3)

Dean Shapiro is excellently qualified by his education, training and experience to provide outstanding physician leadership of the School of Medicine. His CV demonstrates that he is appropriately educationally credentialed and maintains specialty and subspecialty board certification and state licensure. His 30 + years as a faculty member and administrator of medical schools has provided opportunities for leadership in clinical and basic science departments and the financial management of departments and school wide practice plans. Stronger yet, his research experience and productivity is prolific.

Roles and responsibilities of the Dean's position are clearly described in the "Position Description: Dean" and "Bylaws of the Faculty" documents and include the position's authority and responsibility for the medical education program.

Evidence of access to the President of the University demonstrates that the Dean has regularly scheduled monthly meetings individually with the President and bi-weekly joint meetings with the President's cabinet. His performance in carrying out his roles and responsibilities is evaluated annually by the President and Board of Governors and external 360° evaluations that are reported.

The Dean also has direct access to the CEO's of the major teaching hospitals and provided leadership in developing the Academic Medical Center designation of Cabell Huntington Hospital.

3. Comment on the temporal stability, adequacy of time commitment, and effectiveness of the medical school's central administration (associate and assistant deans and senior administrative staff). Are students satisfied with the accessibility of the medical school leadership and their understanding of students' concerns? Have vacancies in administrative and departmental leadership been filled in a timely manner without detriment to departmental or institutional functions? Note any leadership gaps that are affecting the medical school's ability to carry out its missions. (2.4)

Organizational charts and completed data tables indicate that the medical school has in place 5 assistant deans, 4 associate deans, 7 vice deans, 14 division or operational leaders, 5 senior administrative staff and 16 department chairs. The stability of the positions is documented for chairpersons with only 1 interim chair over the last 3 years. There do not appear to be gaps in leadership positions with the exception of the recent death of Laura Richardson, PhD, Director of Preclinical Education.

The effectiveness of leaders in understanding medical students' concerns, providing access to students, and performing satisfactorily in the estimate of students is demonstrated in information attained via the AAMC Graduation Questionnaire. The 2017 results indicate satisfied or very satisfied responses above the national averages for "accessibility", "awareness of student concerns" and "responsiveness to student problems" for both the Office of the Assistant Dean of Student Affairs and the Office of the Associate Dean for Medical Education.

4. Evaluate whether the medical school's dean is administratively responsible for the conduct and quality of the medical education program and the adequacy of faculty at each regional campus. Is the principal academic officer at each campus administratively responsible to the dean? Are appropriate processes in place to ensure that this relationship is functioning effectively? (2.5)

Marshall University Joan C. Edwards School of Medicine operates as a main campus facility located in Huntington, WV. There are no regional campuses

5. Evaluate the effectiveness of methods used to support the functional integration of the faculty who are located at regional campuses. (2.6)

Marshall University Joan C. Edwards School of Medicine operates as a main campus facility located in Huntington, WV. There are no regional campuses.

STANDARD 3: ACADEMIC AND LEARNING ENVIRONMENTS

1. Does each medical student have the opportunity to complete at least one required clinical experience in a setting where he/she interacts with residents? (3.1)

Yes. Medical students have the opportunity to interact with residents in all of the required clerkship rotations.

2. Evaluate whether the medical school provides a scholarly environment for faculty and students. Is there appropriate support and encouragement for medical students to participate in research? (3.2)

Medical students are not required to complete a research project during the medical education program. However, they are able to participate in the MS1 Summer Research Stipend Program during the summer between MS1 and MS2 years. The number of students in this program has grown over the past two years from 48 MS1 students in AY 2016-2017 to 71 MS1 students in AY 2017-2018. They are also offered a research elective during the MS4 year. The number of MS4 students taking the research elective has grown from 37 MS4 students in AY 2016-2017 to 47 MS4 students in AY 2017-2018. Data from the 2017 AAMC Graduate Questionnaire showed that 81.8% of JCESOM students participated in a research project with a faculty member. JCESOM has also had 5 students involved in research through the MD/PhD Program in AY 2016-2017 and AY 2017-2018.

Students involved in research have access to support services in the School of Medicine's Appalachian Clinical and Translational Science Institute.

3. Evaluate the medical school's efforts to promote diversity, including the clarity of diversity definitions and policies, the linkage of recruitment and retention efforts to the school's defined diversity categories, and the sufficiency of resources to support diversity efforts. Has the school demonstrated sufficient effort and been successful in achieving its desired diversity? Has the school monitored the effectiveness of its pipeline programs and have these programs contributed to the diversity of the medical school and to the national applicant pool? Is a formally-approved anti-discrimination policy in use? (3.3, 3.4)

The school has significantly ramped up its efforts to promote diversity, having hired an Assistant Dean of Diversity and Inclusion. Recruitment and retention efforts have strengthened and are supported by the Dean. School defined diversity categories are monitored on an annual basis and have shown significant improvement since 2012. The Office of Diversity and Inclusion is involved in several pipeline programs and tracks data for all participants. Numerous participants are currently enrolled in the School of Medicine.

The School of Medicine adheres to the Marshall University Board of Governors 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, are required to be completed by

faculty, residents, staff, and students.

4. Evaluate whether the medical education program sufficiently and appropriately includes education and assessment related to the professional behaviors that its students are expected to acquire. Are there adequate mechanisms in place to evaluate the learning environment? Do the school's clinical affiliates share the responsibility for this evaluation and for the remediation of any identified problems? (3.5)

Professional behaviors are assessed as part of the core competencies in the curriculum of JCESOM. The learning environment is managed and monitored by the JCESOM Curriculum Committee. An internal survey is given every year to evaluate the learning environment by both clerkship and training locations. These data are used in conjunction with data from the AAMC Graduate Questionnaire to address any concerns. Students are given the opportunity to complete anonymous evaluations at the conclusion of each course and clerkship. Student mistreatment may be reported in person or in writing and anonymously.

5. Evaluate the effectiveness of the school's policies and procedures related to preventing and responding to incidents of inappropriate behavior, such as student mistreatment. Are students familiar with the school's mistreatment/professional conduct policies and are they familiar and comfortable with the mechanisms to report violations? (3.6)

Data from the 2017 AAMC Graduate Questionnaire indicated that 73.8% of students knew the procedures for reporting mistreatment, and 93.4% of students were aware of policies regarding student mistreatment. Both are below the national percentage reported by the AAMC. Data from the Graduate Questionnaire also indicate that no students felt that they were frequently subject to mistreatment.

The Independent Student Analysis data indicated that students are generally satisfied with the school's mistreatment policy, reporting mechanisms, and activities to prevent mistreatment.

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

1. Evaluate the current and anticipated adequacy of faculty numbers, specialty and discipline mix, qualifications, and availability to support the medical education program and the other missions of the medical school. (4.1)

The basic science faculty numbers are down because of retirements and the recent unexpected death of one of the anatomy professors. At least four active searches are ongoing in the basic science department. In the interim, we have utilized some faculty from other regional medical schools as contracts to teach any areas of deficit.

Clinical faculty have seen an increase across all departments including most sub-specialists. The acquisition of the St. Mary's Medical Center will further increase the School of Medicine's faculty numbers.

2. Evaluate the level of scholarly productivity of the faculty in the context of the medical school's expectations for faculty scholarship and its research goals. (4.2)

In 2011, when placed on probation, the faculty only had 78 publications, 6 book chapters, 74 national or international presentations. The new Dean implemented changes that included seed funding for faculty, student research stipends, and asking the personnel advisory committee to clarify research expectations for promotion and tenure. In 2017, the faculty doubled their publications to 159, increased the number of book chapters to 13 and presented at 137 national or international conferences. It seems clear that the instituted changes have markedly improved the level of scholarship and research expectations in the program.

3. Are the policies and procedures for faculty appointment, promotion, granting of tenure (if applicable), and dismissal clear, understood by the faculty, and followed? Do all faculty receive regular and sufficient information related to their responsibilities, benefits, and remuneration? (4.3)

Policies and procedures regarding appointment, promotion, tenure, benefits, and dismissal are given to faculty at the time of appointment through their memorandum of intent and notice of appointment. Faculty are notified in writing of their responsibilities through their annual notice of appointment. Performance and expectations are reviewed annually with the chair of the department.

4. Comment on the adequacy of the policies and procedures related to provision of feedback to faculty about their academic performance and progress toward promotion and tenure (if relevant). Is there evidence that faculty are regularly receiving such feedback? (4.4)

The Marshall University Board of Governor's Policy AA-22 requires annual evaluation of faculty. As part of their evaluation, faculty are required to provide a report of their performance regarding their teaching, research, scholarly activities, and service.

The Personnel Advisory Committee provides recommendations to the Dean regarding promotion and tenure of faculty holding regular, tenure track appointments. Tenure track faculty also undergo a formal mid-tenure review between 2 to 3 years of initial faculty appointment. In the 2017 StandPoint™ survey, 86% of the faculty strongly agreed or agreed that the feedback they received from their chairs was useful.

5. Evaluate the adequacy of opportunities for professional development to enhance the teaching, assessment, evaluation, and research skills of the faculty and their knowledge of their disciplines. Is faculty development accessible/available to faculty at all sites and is faculty participation supported by the institution, including providing sufficient resources for faculty development efforts? (4.5)

The Office of Faculty Advancement designs, develops, and implements professional development programs and activities for faculty.

Faculty development opportunities are available to all faculty and are supported by the faculty's respective department. In the 2017 StandPoint™ survey, 70% of faculty strongly agreed or agreed that they were satisfied with the pace of professional development at the medical school.

6. Comment on whether the dean and a committee of the faculty are responsible for determining institutional governance and policymaking processes. (4.6)

Each department has an elected faculty member sit on the Faculty Council. The Faculty Council is responsible for determining policy and overseeing institutional governance. This committee reports and recommends directly to the Dean.

STANDARD 5: EDUCATIONAL RESOURCES AND INFRASTRUCTURE

1. Evaluate the adequacy and sustainability of and the balance among the various sources of financial support for the medical school. Is there evidence that funding is sufficient for the missions of the medical school, including the conduct of a quality medical education program? Identify any constraints on the institution due to the amount of available funding or the balance among funding sources. (5.1 plus Supporting Data for Standard 5)

Supporting information from the Data Collection Instrument includes information through FY 2016. It will be beneficial for the LCME Accreditation Team to review information when FY 2017 ends to see if anticipated events, revenue, expenditures and reserves are in line and if there have been changes to anticipated reductions in funding in some areas. The DCI information provides positive support for the adequacy and sustainability of financial support for the medical school to conduct a quality medical education program. An operational margin of 1 to 3% over the last 5 years is projected to remain as the school continues to grow and increase services to fulfill its various missions. Revenue sources reported include tuition and fees, government and state support, grants and contracts, practice plan revenue and hospital revenue. The highest level of growth over the last 5 years is from Practice Plan and Hospital support. It is anticipated that continued growth in these areas will offset anticipated small reductions in State/Government support. Market value of endowments continues to increase and earnings are being utilized to fund research and reduce student indebtedness. Debt is funded annually and does not reduce departmental or corporate reserves. These reserves have been increasing annually. The only particular constraint on the institution noted may be individual departments utilizing a portion of their reserves for capital expenditures

2. Evaluate whether the dean, or the individual functioning as chief academic officer, has sufficient financial and personnel resources and appropriate authority to support planning, implementing, and evaluating the medical education program. Note if any compromises that can be attributed to insufficient resources have had to be made in these areas. (5.2)

Dean Shapiro is the chief academic officer. The DCI outlines how the Dean is supported for planning, implementing and evaluating the medical education program. The planning support comes from regular meetings and updates with the Vice Dean of Medical Education, all other Vice Deans, Assistant and Associate Deans. Budgeting support consists of the Dean, Vice Dean for Medical Education, Chief Financial Officer, and Chief Executive Officer. The Curriculum Committee plans, implements, evaluates and oversees the curriculum, reports to the Dean, with the Dean having ultimate responsibility for implementation. The Dean may modify Curriculum Committee recommendations due to financial implications. No evidence is presented in the DCI of specific compromises attributed to insufficient resources.

3. Comment on whether there is evidence that pressures to generate revenue from tuition, patient care, and/or research are negatively affecting the ability to effectively conduct the medical education program. Note if decisions about class size take into account the full spectrum of faculty responsibilities and the availability of institutional resources. (5.3 plus Supporting Data for Standard 5)

Tuition and fees comprise around 4% of the total revenue of the School of Medicine. As no particular source of revenue attributes more than 50% share, a diverse source of funding exists for the school. Clinical and research productivity of clinical faculty have increased over the last few

years. The experience of graduating students attained through the AAMC Graduation Questionnaire generated areas for focused internal surveys regarding resources. These combined factors are viewed by the medical school administration in determining if changes in the class size should be considered. No evidence is presented in the DCI information regarding faculty input about pressure to generate clinical revenue and research productivity in terms of negative effect on conducting the medical education program.

4. Evaluate the adequacy of the facilities used to support the teaching and research missions of the medical school. How satisfied are students and faculty with the availability and quality of education and research space? Is the availability or quality of educational space negatively impacting the ability to implement or change the medical education program as desired? (5.4)

Satisfaction of students and faculty with availability of quality education and research space is not addressed in the Appendices or DCI. The ISA suggests that medical students are generally satisfied with teaching space but become less satisfied with study space in the hospital and clinical sites. Tables in the DCI clearly indicate the size and number of lecture halls, auditoriums, labs, discussion rooms, offices and research labs within the medical school. Current building projects will free potential space for conversion to study or research areas.

5. Evaluate the adequacy of the resources for the clinical instruction of medical students, including patient numbers and case mix and inpatient and ambulatory teaching sites. Note if the constellation of teaching sites used for required clinical experiences collectively can accommodate the assigned number of learners in each discipline and can meet the objectives for clinical education, including the required clinical encounters specified by faculty. Does each site used for required clinical experiences have sufficient and appropriate teaching and study space and information resources? (5.5, 5.6)

Medical students help confirm that they are participating in the care of an appropriate case mix of pediatric and adult patients by being required to log experience electronically in New Innovations. Specific demographic information of gender and age is not presented in the DCI or Appendices. Information regarding sites for inpatient and outpatient experience would indicate a reasonable breadth of outpatient and inpatient facilities for clinical experience.

The facilities provide ample opportunity for clinical experience and teaching according to internal student surveys. The survey results located in the DCI also reveal that a smaller majority of students feel their study space is adequate at the medical school campus, at hospitals, and at clinical sites.

6. Comment on the adequacy of security systems on campus (including at regional campuses) and at clinical teaching sites and on institutional policies and procedures to ensure student safety. Has the institution engaged in appropriate and comprehensive emergency and disaster planning? (5.7)

Security of students lies with appropriate identification cards allowing access to appropriate secured areas of campuses, ambulatory centers and hospitals. Security guards, University Police and Veterans Affairs Police are located at the hospitals and main campus site and respond to security concerns. Most important is the vast majority of students feel security is adequate, although not 100%. The JCESOM relies on the disaster and emergency policies utilized on the main campus.

7. Evaluate the adequacy of library and information technology resources and staff support. Are staff

members in these units responsive to the needs of students, faculty, and others in the medical education community and are they involved in the planning and support of the curriculum? If these units serve other schools and colleges, do medical students and faculty have sufficient access to library and information technology resources? (5.8, 5.9)

The library is staffed by one professional staff, 2 technical staff and 3 part time staff. Opinions differ among the AAMC Graduate questionnaire and internal surveys regarding the satisfaction with library resources. Nationally students are less satisfied than their peer graduates from other medical schools. Data are not available in the DCI or Appendices regarding holdings or electronic subscription availability.

Information technology resources are staffed by 8 professionals, 8 technical staff and 2-part time staff. A similar pattern of Graduate questionnaire responses in terms of satisfaction with the resources and an internal survey exists for information technology compared to resources. There is no evidence in the DCI or Appendices to support the role information technology plays in curriculum planning or support. Students do have adequate access as there is campus wide Wi-Fi available.

8. Evaluate the adequacy of processes in place to ensure that the resources, such as faculty, educational space, and clinical placements, used to accommodate visiting and transfer students do not diminish the resources for already-enrolled medical students. (5.10)

The process for accepting visiting students for elective rotations is based on departmental assessment first of rotational load and requirements of JCESOM students and then excess availability of adequate faculty space and placement for the visiting student(s). Transfer students are vetted through the executive committee of the admissions committee. The number of visiting students in core required clerkships has decreased from last year to 5 and will be zero the following year.

9. Evaluate the adequacy and quality of student study space, lounge and relaxation areas, and secure storage space at all locations; include student perceptions of quality and adequacy in your evaluation. If students participate in overnight call at any location, comment on the security, accessibility, and availability of call rooms. (5.11)

The DCI includes multiple tables regarding this information. Student study space is available on the medical school campuses, the hospitals and ambulatory centers. These spaces include open classrooms, small group rooms, individual study rooms, and individual open seating. Students' perception of the quality and adequacy of these facilities have been improving in the Graduation Questionnaire and are substantial for the medical center. This perception is decreased, but still positive for ambulatory centers and hospitals. Lounge and relaxation centers have improved in terms of student perception for quality and adequacy to national norms in the Graduate Survey. The vast majority of students perceive the quality and adequacy of secure storage space to be satisfactory in the medical center but to a lesser extent in the hospitals and clinical settings.

In hospital settings where overnight call occurs, students do have individual secure call rooms.

10. Note whether the medical school has provided the LCME with the expected notifications prior to the identified changes taking place. (5.12)

Information in the table in the DIC regarding 5.12 demonstrates that the school has not met the

notification thresholds 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.

STANDARD 6: COMPETENCIES, CURRICULAR OBJECTIVES, AND CURRICULAR DESIGN

1. Have outcome-based educational program objectives been developed and linked to the competencies expected of a physician? Evaluate whether the objectives are being used for the assessment of medical students' progress in achieving these competencies. Evaluate whether the educational program objectives and the learning objectives of individual courses and clerkships have been shared with medical students and with relevant individuals and groups responsible for curriculum planning and implementation and for medical student teaching and assessment. (6.1)

Joan C. Edwards School of Medicine clearly defines the competencies that are to be achieved upon successful completion of the four-year curriculum and these competencies are shared with the students and faculty in the form of syllabi. These competencies are divided into the following six categories: Interpersonal and Communication Skills, Medical Knowledge, Patient Care / Clinical Skills, Practice-Based Learning and Improvement, Professionalism, and Systems-Based Practice. Each core competency contains objectives that are systematically measured for each student to determine successful achievement of the objective. For example, under the "medical knowledge" competency, the objective to "describe the normal structure and function of the human body" is measured by multiple choice exams administered by "in-house" faculty, the NBME, and the USMLE Step 1. Broadly, Medical Knowledge is assessed as above, through formative quizzes and summative exams. The remaining competencies are largely evaluated through clinical notes and faculty evaluations (Clerkships); Professionalism is evaluated via ethics exams (years 1 and 2) and by faculty evaluation (years 3 and 4)

From the 2017 Medical School Graduate Questionnaire students at JCESOM agree or strongly agree that they had adequate time for personal (83.6%) development and for professional (98.4%) development as a future physician, which is above the national averages (73.9% and 91.8%).

From the Independent Student Analysis 93.1% of the students were satisfied or very satisfied that they were informed of all policies and requirements for their academic advancement and graduation.

2. Evaluate whether the faculty has defined the patient types and clinical conditions that all students are expected to encounter and the procedures/clinical skills that all students are expected to perform. Have these experiences been assigned to relevant clerkships? Is each type of patient encounter and procedure/clinical skill associated with a clinical setting and level of medical student responsibility? (6.2)

Joan C. Edwards School of Medicine clearly defines the types of patients and clinical conditions that medical students are required to encounter, the skills to be performed, the appropriate clinical setting for these experiences and the expected levels of responsibility. These requirements begin in the first two years of medical school in the form of clinical shadowing with a physician mentor and Introduction to Clinical Skills and Advanced Clinical Skills courses. Students are given syllabi for each of these courses, and informed of the required competencies. For example, on the first day of each of the third-year clerkships, students receive paper syllabi and verbal instruction regarding competencies they will be expected to have achieved at the conclusion of each

clerkship. The list of competencies, objectives, and measurements can be found in the DCI Table 6.1-1 under the heading “Patient Care / Clinical Skills.” Students are made aware of these requirements through the syllabi for the curriculum, which have posted in a central site (Curriculum Map).

The overwhelming majority of JCESOM students are satisfied with their clinical experiences in training:

In the 2017 Medical School Graduate Questionnaire 98.8% of graduating physicians at JCESOM agree or strongly agree that they have acquired the clinical skills necessary to begin a residency program, compared with 90.1% national average. Further, 98.4% of JCESOM students agree or strongly agree that they developed the communication skills necessary to interact with patients and healthcare professionals.

In the LCME Independent Student Analysis, 95.9% of respondents who had an opinion were satisfied or very satisfied with the quality of Year 3 clerkship experiences. Further, 96% of respondents were either satisfied or very satisfied with the level of supervision during the third-year clerkships, and 95% were satisfied or very satisfied with the amount of formative feedback in the third and fourth year.

3. Evaluate the sufficiency of self-directed learning experiences in the pre-clerkship curriculum to allow students to acquire and demonstrate lifelong learning skills. Is there sufficient time for these experiences within and outside of formal class hours? (6.3)

JCESOM provides multiple opportunities for self-directed learning experiences which begin in the first year of medical school, as independent learning assignments are integrated into each course. These include case studies, research questions, and group activities.

In the LCME Independent Student Analysis, 86.1% of current students were either satisfied or very satisfied with self-directed learning opportunities in years 1 and 2.

4. Comment on the adequacy of inpatient and outpatient experiences in the curriculum to allow the objectives of the educational program and the individual clerkships to be met. (6.4)

Both Ambulatory and Inpatient experiences are provided in each clerkship, ranging from 87.5% ambulatory in Family Practice to 75% inpatient in Surgery, with Ob/Gyn and Psychiatry not reporting.

From the Independent Student Analysis, 84.3% of Year 3 students were either satisfied or very satisfied with the quality of the third year clerkships, and 97.8% were either satisfied or very satisfied with the quality of fourth year required clerkships. The majority of current Year 3 and 4 students feel their clinical experiences for each clerkship were effective in preparing them for the NBME shelf exam as well as Step 2.

The Graduation Questionnaire includes items asking students to rate the quality of the student’s educational experiences in each clerkship. Over the last 5 years, the majority of graduates have rated their experience good or excellent.

5. Evaluate whether sufficient time is available in the curriculum for electives that supplement required learning experiences. (6.5)

Each student is required to take 28 weeks of clinical electives in Year 4. There are electives available in other years, but they are not required.

From the independent student analysis, there was a 97.7% response rate with 60% of responders satisfied or very satisfied with the adequacy of counseling about elective choices. Of the Year 1 and Year 2 students who responded other than NA, 84.7% were satisfied/very satisfied with the adequacy of counseling about elective choices.

According to the Graduation Questionnaire, 60% of respondents agree or strongly agree that they received appropriate guidance in the selection of electives.

6. Evaluate the availability of service-learning and community service activities and the adequacy of time students have to participate. Is there evidence that the medical school supports service-learning/community service and provides information to medical students about these opportunities? (6.6)

There is no requirement for service learning at JCESOM, however there are abundant opportunities for students to participate in community service locally through local agencies and the Marshall Medical Outreach organization. Students are made aware of opportunities through multiple means, including the student-run Community Service Organization (CSO). Several members of each class serve as liaisons between the CSO and the class, and take a leadership role in developing opportunities and informing their classmates. The Office of Student Affairs provides administrative support to the CSO.

JCESOM students are overwhelmingly satisfied with their access to community service opportunities (94.4%). According to the Graduation Questionnaire, 50-30% of respondents had field experience in providing health education in the community through the last 5 graduating classes, while 80-75% had free clinic experience for the underserved population.

7. Does the medical school exist in an environment that permits the interaction of medical students with other learners, including other health professions students, graduate students, residents, and physicians engaging in continuing medical education? (6.7)

Medical students at JCESOM have the opportunity to interact with graduate students at the masters and doctoral levels in the following programs: Biomedical Sciences (PhD, MS, and MD-PhD), and Clinical and Translational Sciences (MS). Shared experiences occur in class, in research labs, and at the annual JCESOM Research Day.

Medical students also have opportunity to interact with residents and fellows across specialties. In clerkships students continuously interact with residents, fellows, and attending physicians. There are 31 fellows and 169 residents currently serving in GME programs.

Of those students responding on the ISA, 90.8% were satisfied or very satisfied with their inter-professional experiences.

8. Does the medical education program consist of at least 130 scheduled weeks? (6.8)

JCESOM curriculum runs 38 weeks in Year 1, 41 weeks in Year 2, 48 weeks in Year 3, and 36 weeks in Year 4, for a total of 163 weeks.

STANDARD 7: CURRICULAR CONTENT

1. Evaluate whether there is sufficient representation in the curriculum of topics from the biomedical, behavioral, and social sciences and of medical ethics. Is there evidence to support the determination of adequacy and appropriateness of content coverage? (7.1, 7.7 and Standard 6 Supporting Documentation)

The DCI has five tables displaying data in this area from the curriculum map and the GQ.

Content coverage and student satisfaction: Eleven basic science subjects are covered in integrated courses in Year 1 and Year 2. All subjects are also covered in years 3 and 4, except for Biostatistics and Epidemiology, which are available informally, and through a 4th year elective at the Health Department.

Students' ratings of preparation for clinical clerkships in basic science areas have improved significantly in the most recent graduation survey, showing satisfaction at or above national averages in 2017. Percentages range from 65.7% for Biochemistry (national average 62.9%) to 97% for pathophysiology (national average 93.5%). The percentage of satisfied students increased by ten or more percentage points between 2016 and 2017 for Biochemistry, Biostatistics and Epidemiology, Genetics, Immunology, and Microbiology.

When surveyed about the quality of education in years 1 and 2, student satisfaction with year 1 ranges from 80 to 91.7%. Satisfaction rises with each year of experience from 67.4 (in year 2) to 90.6% (in year 4).

There are fifteen identified areas of social and behavioral science. Ten of these are covered during the preclinical years, all through integrated courses. Four topics are exclusive to Years 3 and 4 (evidence-based medicine, health care financing, medical management/compliance, and palliative care). Pain management is covered in all segments of the curriculum. Population-based medicine is not listed as covered, however specific areas are known to be covered in years 2-4.

Over 95% of surveyed students feel that their medical education has prepared them to have a fundamental understanding of social issues in medicine.

Efforts have been made in the last several years in each block to address identified gaps and redundancies, and to improve the way in which radiology/imaging is addressed in the year 1 and 2 blocks.

2. Comment on whether the curriculum adequately covers each of the levels of care and phase of the human life cycle. (7.2 and Standard 6 Supporting Documentation)

Organ Systems are addressed in the Structure and Function Blocks (1-4) of Year 1 and the Diseases and Therapeutics Blocks (1-4) in Year 2. The human life cycle is covered in Years 1 and 2 in multiple places: Early human embryology is covered in the first structure/function block of Year 1. Embryology of each organ system is covered in the appropriate blocks in Year 1. Cognitive and behavioral development are also introduced in year 1, and this material includes discussion of aging, medical decision making, end of life care and MPOA. In third year rotations, aging processes are covered in a specific unit on geriatrics.

The survey data show some inconsistency in student responses. The Independent student analysis indicates that fewer than 37% of year 1 and year 2 students are satisfied with their education in diagnosis/disease management/prevention or health maintenance (37% or less), with the majority of these students responding NA to these questions. Year 3 and 4 students are overwhelmingly satisfied (over 90%). It isn't clear from the data whether year 1 and 2 students are not yet comfortable applying information to clinical questions, or whether they feel the material they are learning does not have clinical application. In the Graduation Questionnaire, 75% of 2017 graduates agreed or strongly agreed that their basic science education illustrated adequate clinical relevance. In the same survey, the great majority of 2017 graduates felt that preclinical courses provided a good to excellent preparation for clinical clerkships, with scores ranging from 73.8% satisfaction (histology) to 100% satisfaction (Introduction to clinical medicine).

3. Evaluate the adequacy of experiences that permit students to directly apply the scientific method and to become familiar with the basic principles of clinical and translational research. (7.3)

JCESOM offers excellent hands-on research experiences to medical students. The MS1 Summer Research Stipend Program was launched in 2013, available to all students who have successfully completed year 1. Students are provided a stipend for 6 weeks of summer research, with the requirement that they participate in all aspects, including presentation of results and manuscript preparation. Participation in the program has risen each year and in 2017 87% of eligible students participated.

4. Evaluate whether the curriculum includes sufficient learning opportunities and assessment to ensure that students develop skills in medical problem-solving and evidence-based clinical judgment. (7.4 and Standard 7 Supporting Data)

Critical Judgment and Problem Solving Skills are included in Integrated Courses in all four years of the curriculum.

Examples of exercises requiring students to exhibit critical judgment and problem solving skills in years 1 and 2 are provided. These include: Year 2 exercises in Advanced Clinical Skills requiring students to use information from a patient history and physical findings to develop and refine a differential diagnosis; and Year 1 exercises in which students are expected to show recall of critical pathways and cellular mechanisms and to apply this information to disorders of those systems (channelopathies and disrupted coagulation are two examples)

5. Evaluate whether the curriculum adequately prepares students to recognize and appropriately address the medical consequences of common societal problems. Has the school identified relevant societal problems in the context of its mission and location? (7.5)

These topics have been included in the curriculum on an ad hoc basis for some time, including in the preclinical years through case discussions, group exercises and clinical correlate lectures. More recently, the following five themes were chosen after discussion among curricular subcommittees for Years 1-4, because of the known impact of each in the State of WV and surrounding area:

Opioid and substance abuse,
Obesity,
Domestic violence,

Tobacco use and smoking cessation,
Poverty and healthcare access.

These themes are woven into the curriculum in class material and specific case studies. For example, in Year 1 nutrition case studies in MDC710 explore the challenges of accessing a prescribed diet for a variety of conditions (diabetes, weight loss, etc.) for an individual on a limited budget with access to local grocery stores.

6. Evaluate how well medical students are being prepared to communicate appropriately with patients, colleagues, and other health professionals. Is the curriculum preparing students to understand and work effectively with and identify their own biases related to patients from a variety of backgrounds? (7.6, 7.8)

The ICS (Introduction to Clinical Skills) and ACS (Advanced Clinical Skills) courses specifically address Cultural Competence and mentions topics including “LGBTQ Community” and “Substance Use Disorders.” LGBTQ issues are also addressed in the Psychiatry rotation.

Health Disparities, Demographic Influences, and Medically Underserved Populations are specifically addressed in the Family Medicine and Psychiatry Clerkships.

The Independent Student Analysis shows that while Years 1 and 2 students felt less confident (42.5 and 53.5%, respectively) that they are prepared to care for patients of different backgrounds; the great majority of Year 3 and 4 students (92.3 and 94.6%) felt prepared to do so.

In the Graduation Questionnaire 93.7% of students agree or strongly agree that they have been adequately prepared to care for patients from different backgrounds.

The narrative section of the DCI refers to the ICS and ACS courses and lists community panels on LGBTQ, Communication Barriers, and Substance Use Disorders as well as a Medical Humanities Assignment from the ICS course. There is no detailed information provided on these exercises. It is not possible to determine from these materials whether the students are challenged to “be aware of their own gender and cultural biases” or “those of their peers or teachers” as is called for.

7. Evaluate whether medical students are being prepared adequately to function collaboratively in health care teams. Are there objectives related to collaborative team care and are sufficient experiences related to these objectives included in the curriculum? (7.9)

There is evidence of a number of opportunities for students to develop collaborative skills through inter-professional education.

Specific examples of collaborative work in the curriculum are provided from Year 1 (basic science courses and Introduction to Clinical Skills), Year 2 (IPE event and Advanced Clinical Skills), and Year 3 (Internal Medicine Clerkship). Most students who responded to the Independent Student Survey are satisfied or very satisfied with their inter-professional education experiences, with low response rates in years 1 and 2 (fewer than 40% of students provided a response, and of those responding 93% and 65% were satisfied respectively); and over a 95% response rate in Years 3 and 4, and an overwhelmingly positive response (95.4% and 93.4% were satisfied/very satisfied).

STANDARD 8: CURRICULAR MANAGEMENT, EVALUATION, AND ENHANCEMENT

1. Is there a faculty committee that has appropriate responsibility and authority for overseeing and approving the design, management, and evaluation of the curriculum to ensure that it is coherent, coordinated and integrated horizontally and vertically? Is this committee's authority codified in institutional bylaws and/or policy? Is there evidence that this authority is being appropriately and successfully exercised? (8.1 plus Supporting Documentation for Standard 8)

The JCESOM Curriculum Committee is given responsibility and authority through the JCESOM Bylaws for the overall design, management, and evaluation of the medical school curriculum. The activities of the Curriculum Committee are recorded in the meeting minutes and published on the JCESOM website. Through periodic evaluation of courses and content, the committee mandates appropriate corrective measures, if needed, in areas of deficiency.

Yes, there is evidence that the authority of the committee is sufficiently and appropriately exercised. Incorporation of biostatistics and radiology themes across the pre-clerkship curriculum is one such example.

2. Evaluate whether the educational program objectives are being used to guide curriculum planning, select and apportion curriculum content among instructional units, review and revise the curriculum, and evaluate curricular outcomes. Have the course and clerkship learning objectives been linked to the educational program objectives as a means to determine the sufficiency and placement of content and to guide program evaluation? (8.2)

The Institutional program-objectives are being tied to the curricular content and can be longitudinally tracked on the academic dashboard. Each course and/or clerkship is required to tag their learning-outcomes to the Institutional program-objectives. At periodic intervals (Bi annual retreat), the Curriculum Committee, with assistance from the OME, reviews the adequacy of overall program-objectives being met across all courses and clerkships.

3. Is there appropriate faculty participation in curriculum design, implementation, and evaluation? Are the units of the curriculum (i.e., courses and clerkships), the segments of the curriculum (i.e., years or phases) and the curriculum as a whole being reviewed according to a predetermined schedule? Are there tools, such as a curriculum database, available to support these reviews and to allow a determination of the adequacy and placement of curriculum content? Are the results of these evaluations used by the curriculum committee, the course leadership, and the departments to inform needed change? (8.3)

Faculty are responsible for including or eliminating content they teach within the curriculum at the direction of the Curriculum Committee. As such, they provide learning materials, select assessment questions, and assign learning objectives for their content. Course content is linked to the learning objectives defined by the Curriculum Committee through a learning management system. The MS1, MS2, and Clerkship Sub-committees review course/clerkship content and evaluations. The reports from these sub-committees are presented to the Curriculum Committee as the course/clerkship is being reviewed. The results are then forwarded to the course/clerkship director.

4. Evaluate the adequacy of the system of program evaluation for judging whether educational program objectives are being met and desired program outcomes are being achieved. Are appropriate data being collected from students and graduates to allow such judgments to be made

and are these data being appropriately and regularly used? (8.4)

Students are required to pass the USMLE Step 1, Step 2 CS, and Step 2 CK examinations during the medical education program for advancement and graduation. At least 95% of students at JCESOM have passed these examinations on their first attempt during the past 2 academic years. All students are longitudinally tracked by the OME for desired outcomes. These include, but are not limited to, academic progress across courses and clerkships, performance in licensure examinations, clerkship evaluations, OSCE and CCE performance, GQ data and residency placements.

The data collected are used for programmatic assessment and improvement.

5. Evaluate the adequacy of the system to collect student feedback on courses and clerkships and on faculty, residents, and others who teach, supervise, and assess medical students. Does the system provide valid and reliable data, for example, through adequate response rates to questionnaires? Is there evidence that the data are used for program review and improvement? (8.5 plus Supporting Documentation for Standard 8)

All students are asked to complete an evaluation of the course/clerkship and all who instruct them upon completion of the course/clerkship.

The 2017-2018 Independent Student Analysis indicated that around half (50.9%) of medical students who responded felt satisfied/very satisfied with the medical school's responsiveness to student feedback on courses/clerkships.

6. Evaluate the adequacy of the processes for monitoring medical student clinical encounters at the clerkship and department levels and centrally. Do the processes used for monitoring ensure that required clinical experiences or identified alternatives are completed and that gaps are identified? (8.6)

Students are required to log their patient encounters and procedures in the Activity Logger. Clerkships maintain a list of required procedures and patient encounters to be met by each student. This list is reviewed and approved by the Clinical Clerkships Committee and the Curriculum Committee.

7. Are there processes in place to ensure that there is comparability of education and assessment across all locations for an individual course and clerkship? Evaluate whether there is effective monitoring at the department and medical school levels to identify any inconsistencies across sites and to remedy any identified problems. (8.7)

All preclinical courses are completed at the main JCESOM campus. The education and assessment of these courses is monitored by the Curriculum Committee and its Sub-committees. Clinical clerkships are evaluated in the same manner across all teaching sites. Problems regarding courses and clerkships are identified in evaluations of the courses and clerkships in the MS1, MS2, and Clinical Clerkship Sub-committees and are brought to the Curriculum Committee to decide on corrective actions and provide recommendations to the course or clerkship director.

8. Does the medical school have policies for the time that medical students spend in required activities during clinical clerkships and are these policies understood by students? Is the time medical students spend in required clerkship activities monitored? Comment on the presence and effectiveness of mechanisms for medical students to report violations of these policies and the willingness of

students to utilize these mechanisms. (8.8)

Yes, there are policies in place for all required activities links to which are included in the syllabi and communicated to the students. Students are monitored through all required clerkships and there are mechanisms in place to report policy violations. Students can report policy violations to their clerkship director and/or the department chair. Students can also report violations to the OME or Student Affairs directly.

STANDARD 9: TEACHING, SUPERVISION, ASSESSMENT, AND STUDENT AND PATIENT SAFETY

1. Evaluate the adequacy of the methods used to ensure that residents and other non-faculty instructors receive and review the objectives of the courses and clerkships in which they will participate and are prepared for their specific teaching and assessment roles. Is there an effective system to centrally monitor the participation of residents and other non-faculty instructors in such orientation/preparation sessions? (9.1)

Residents are provided with course and clerkship objectives during their orientation to the course/clerkship. Residents are also required to complete the AMA module “Residents as Teachers” during their orientation. Residents are evaluated by the students in the same manner as faculty instructors.

2. Is there an effective system in place to ensure that medical student learning experiences in clinical clerkships are provided by faculty members and that there is appropriate supervision when medical students are engaged in patient care activities? Are there appropriate policies/guidelines to ensure that the level of responsibility delegated to students in clinical encounters is appropriate to their level of training and experience? (9.2, 9.3)

All required core clinical clerkships are taught by medical school faculty. Faculty members are responsible for the students on their service. MUJCESOM has in place policies that ensure students are provided with supervised learning activities appropriate with the student’s level of competence.

The adequacy of student supervision is polled twice per year through the AAMC Graduate Questionnaire and an internal survey of current third and fourth year students in January of each year.

3. Evaluate the adequacy of the methods used to assess student attainment of the knowledge, cognitive and clinical skills, attitudes, and behaviors specified in the educational program objectives. (9.4 plus Supporting Data for Standard 9)

As part of each clerkship, students are required to complete a clinical competency examination. Students are assessed on their competency when completing a history and physical in a standardized patient encounter. Students’ evaluations are used as either formative or summative feedback. This depends on the clerkship.

4. How effective are the processes and systems to ensure that students receive useful, comprehensive, and timely formative assessment and fair and timely summative assessment in both the pre-clerkship phase of the curriculum and in the clerkships? Is narrative assessment included as a component of

courses and clerkships where teacher-student interaction permits? (9.5, 9.7, 9.8 plus Supporting Data for Standard 9)

According to the 2017 AAMC GQ, students indicated that they received mid-clerkship feedback at rates higher than the national average in all six required clerkships.

Independent Student Analysis data indicates that students are generally satisfied/very satisfied with the amount and quality of formative feedback in all 4 years.

As per JCESOM policy, students are to receive grades no later than 6 weeks following the end of the course or clerkship. The average time for students to receive grades for the required clinical clerkships for the two most recent academic years was 3.6 weeks.

In the pre-clerkship curriculum, there are no courses in which faculty provide narrative assessment as formal feedback on non-cognitive achievement. The course director provides a narrative assessment of a written group assignment as a form of summative assessment of students and is included in their final grades.

5. Are standards of achievement for courses and clerkships and for the curriculum as a whole developed and set by faculty with appropriate knowledge and expertise? (9.6)

Standards of achievement for courses are set by the Curriculum Committee; course directors determine the assignment of points across assignments. The director of each clerkship is responsible for setting the standard of achievement for their respective clerkship. In AY 2015-2016, the Curriculum Committee approved an honors/pass/fail scale for each clerkship. The curriculum as a whole is monitored by the Office of Medical Education. The Curriculum Committee reviews the graduation requirements annually.

6. Comment on the adequacy of policies and processes to ensure that a single standard for promotion and graduation is applied across all instructional sites. Evaluate the fairness of due process protections in the case of an action that may affect the academic status of a student. (9.9)

The standards for promotion and graduation are outlined in the JCESOM Honor System and Policy Regarding Academic and Professionalism Standards, Leaves and Appeals. The Academic and Professionalism Standards Committee is responsible for the overall academic and professionalism progress standards and policy statements for the JCESOM.

The Committee sets guidelines for the evaluation of all aspects of student progress and success and/or failure. The Committee reviews student performance and makes decisions related to academic deficiencies, promotions and unprofessional behaviors. It reviews the academic and professional progress of all students and decides appropriate action for students earning one or more academic and/or professional deficiencies.

STANDARD 10: MEDICAL STUDENT SELECTION, ASSIGNMENT, AND PROGRESS

1. Critically review the medical school's criteria for admission and the processes for the recruitment and screening of applicants and the selection of students. Are the medical school's selection criteria appropriately reviewed and validated in the context of its mission and other mandates? Are the

criteria for admission, including technical standards, available to potential applicants and their advisors? (10.1, 10.3, 10.5)

Yes, there is evidence of review for selection criteria by a special workgroup of the Admissions Committee. The committee consists of members of the admissions committee, members of the Office of Medical Education, and representatives from the College of Science on the main campus. This committee meets every two years and reviews student outcomes data, including GPA's, MCAT scores and USMLE Step 1 performance.

The processes for reviewing and screening applicants appear adequate and are clearly the authority of Admissions Committee. The Admissions Committee's policies and procedures are in line with the medical school's mission. The Admissions Office runs several pipeline programs aimed at recruiting value added students as defined by the institution.

Criteria and Technical Standards are easily available to applicants and advisors online.

2. Evaluate admission policies and practices and comment on whether these ensure that admission is a faculty responsibility through the admission committee and that there are no conflicts of interest in or external influences on the admission process. (10.2)

Policies are very clear and ensure that faculty is responsible for admissions. All Admissions Committee members review the conflict of interest policy and sign a conflict of interest statement.

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. 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.

Recommendations for new members are taken from current members of the Admissions Committee, former Admissions Committee members and from departmental chairs. The Executive Committee reviews all recommendations, 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 candidates for the Admissions Committee, including considerations of diversity, judgment, clinical and administrative experience and willingness and availability to serve. The final selection of new members is subject to review by the Faculty Council of the Medical School. Each new member is asked to serve a three (3) year term, although members may remain on the Admissions Committee for multiple terms at the discretion of the Chair.

3. Comment on whether the school has identified the personal attributes of applicants that will be considered in the admission process. Are there processes and tools in place to prepare reviewers, including members of the admission committee and interviewers, to assess these attributes? (10.4 and Supporting Documentation for Standard 10)

Yes, in addition to the standard AMCAS information the committee and interviewers are charged to evaluate personal attributes that include community service, honesty/ethics, resilience, work ethic, and communication skills.

The Admissions Committee and interviewers have a workshop at the beginning of the interview season to review appropriate scenario based questioning techniques that aid in determining these personal attributes of the candidates.

4. Evaluate whether information about the medical school contained in informational, advertising, and recruitment materials is accurate and current. Is this information readily available to current and prospective students, advisors, and others? (10.6)

Yes, information is readily available online; however the necessity for review/update was noted by this subcommittee (e.g. minimum MCAT scores of 24 without notation of new-scale score). Materials should note month/year of last revision.

5. Are the policies and procedures for transfer or admission with advanced standing clear and do they ensure that students accepted for transfer have comparable credentials to enrolled students? Are review and acceptance for transfer faculty responsibilities that include involvement by the admission committee? (10.7)

Yes, policies are clearly delineated in the Transfer Student Policy and in the document. Comparable credentials appear to be achieved. Yes, it is clearly a faculty responsibility to accept transfer students.

6. Comment on the adequacy of policies and processes that ensure that visiting students' qualifications are comparable to those of enrolled students and that their credentials and personal information (e.g., immunization status) are verified. Is there a process in place to maintain an accurate roster of visiting students? (10.8)

Yes, policies for qualification are comparable to those of JCESOM students. The medical school utilizes the Visiting Student Application Service (VSAS). Rosters of all visiting students are maintained by the Office of Medical Education. However, the individual departments are responsible for accepting or denying a visiting student.

7. Evaluate whether the processes for assignment of students to instructional sites and/or educational tracks, as relevant, are fair and whether there are policies that allow students to request an alternate assignment. Are these processes and policies available to students? (10.9)

JCESOM does not have any regional campuses and does not offer any parallel tracks for medical student education. That being said students do have the opportunity to select the order of their clerkships and may switch with a classmate if approved by the registrar.

STANDARD 11: MEDICAL STUDENT ACADEMIC SUPPORT, CAREER ADVISING, AND EDUCATIONAL RECORDS

1. Evaluate the effectiveness of the medical school's system for early and ongoing identification of students in academic difficulty. Are there processes for counseling and remediation in place for all

students, including those at regional campuses? Do students have the option of obtaining counseling from individuals who do not assess them? Comment on the number of students experiencing academic difficulty and the extent of student attrition in the context of the school's academic advising and support programs. (11.1 plus Supporting Data for Standard 11)

Student performance is monitored after every exam by the Office of Medical Education, Academic Affairs, Student Affairs, and Academic Support Services. Any student scoring less than a 75% is considered to be at risk. These students are then required to attend counseling with a learning specialist in Academic Support Services. The learning specialist has a master's degree in counseling and does not evaluate or assess the students at any time during the four years of medical school. This applies to all students at JCESOM as there are no regional campuses.

Approximately 12 to 15 students (~20%) struggle academically in each year of the curriculum. The attrition rate is approximately 8% with about half of that being for non-academic reasons. Therefore, 10 to 12 students in each class year benefit from the academic advising and support programs provided by the institution.

2. Comment on the effectiveness of systems for career advising, residency preparation, electives counseling, and preparation and release of the Medical Student Performance Evaluation (MSPE) in the context of data on student satisfaction and residency placement rates. Note the extent to which appropriate required and optional experiences are in place to assist students in selecting a specialty and a residency. (11.2, 11.4 plus Supporting Data for Standard 11)

The DCI describes a robust career advising system that has actually been ramped up with the appointment of a different Assistant Dean of Student Affairs in August of 2015. Unfortunately, this has not been reflected in the Graduation Questionnaire for 2018 where only 51.9% of students were satisfied/very satisfied with career planning services compared to the national rate of 63.3%. Additionally, only 39.6% of JCESOM graduates reported being satisfied/very satisfied with information about specialties compared to 43.9% nationally. This is somewhat lower than the ISA data where those who responded other than NA, 81.1% were satisfied/very satisfied with the adequacy of career counseling. With regards to elective counseling, the ISA reported that of those who responded other than NA, 84.7% were satisfied/very satisfied with the adequacy of counseling about elective choices.

The MSPE is prepared by the Vice Dean of Medical Education and the Assistant Dean of Student Affairs who essentially divide them up evenly. If a student would prefer a different author they just request it. As long as the author is willing to write the MSPE then that is allowed. All MSPE's are reviewed by the Vice Dean of Medical Education and the Assistant Dean of Student Affairs prior to being uploaded to ERAS on September 30th.

In regards to residency preparation and career selection, 75.5% of graduates reported that special interest group-sponsored panels and presentation were useful to very useful compared to the national rate of 81.1%. School-sponsored career planning workshops and courses were rated useful to very useful by 49% of graduates compared to the national percentage of 63.3%.

Beginning with class of 2019 there was a "Medical Student Career Development Program" traversing all 4 years of medical school; with objectives and outcome measures.

3. Evaluate the effectiveness of procedures for the oversight of extramural electives, including prospective screening of potential electives that might pose risks for student and patient safety,

appropriate preparation of students, and assurance that assessment and evaluation data are collected. (11.3)

The oversight procedures utilized by the Office of Medical Education are effective for screening of potential electives, determining the appropriate preparation of students, and ensuring that assessment and evaluation data are collected. All senior electives are reviewed to determine equivalency of course content and objectives to senior electives available at the SOM. No additional pre-enrollment review is required for senior electives at LCME accredited institutions whose course content and objectives are similar in scope and expectation to a course available at the JCESOM. Senior Office of Medical Education personnel individually review the educational content of proposed electives at an LCME accredited school where a reasonable equivalent course is not available in the JCESOM course catalog. International electives are separately reviewed and dually approved by the Director of International Health and the Vice Dean for Medical Education. The JCESOM utilizes the AAMC Uniform Clinical Training Agreement (UCTAA) for sending medical students to domestically based extramural electives. The UCTAA contains specific provisions for how home and host institutions address the availability of emergency care, potential for exposure to disease, and any other special considerations needed for the support and follow-up of a visiting medical student. The Director of International Health assesses and monitors international elective locations for availability of emergency care, potential for natural disaster, political stability, and exposure to disease, as well as for any other special considerations needing additional preparation, support, and follow-up beyond what is required for all JCESOM students completing an international clinical experience.

Following the completion of an extramural elective the Registrar in the Office of Medical Education coordinates with the senior students to monitor, and ensure, the receipt of an assessment by a supervising clinician(s).

4. Comment on the adequacy of policies and processes to protect the confidentiality of student records and to provide students with access to their records in a timely manner. Are there fair and effective mechanisms for students to challenge information in their records? (11.5, 11.6)

The JCESOM has effective policies and procedures in place ensuring the protection of students' confidential records, that students have access to their educational records in a timely manner, and include a fair and effective mechanism for challenging the content of their educational records. The Registrar in the Office of Medical Education has a specific secure location for maintaining student educational records (key locked filing systems in a private storage room). The federal Family Educational Rights and Privacy Act and the JCESOM Student Education Records policy provide specific guidelines the Office of Medical Education uses for determining access to, and release of, student education records. Students additionally have the ability to challenge the content on their educational records, grades, and other institutionally held information outlined in the JCESOM Academic and Professionalism Standards Policy.

STANDARD 12: MEDICAL STUDENT HEALTH SERVICES, PERSONAL COUNSELING, AND FINANCIAL AID SERVICES

1. Review trends in tuition in relation to trends in medical student debt and in the level of scholarship support available. Evaluate the extent and effectiveness of efforts to minimize student debt, including raising funds for scholarships and providing accessible financial aid and debt management counseling. Note if there is a clear and reasonable policy for the refund of tuition and allowable payments. (12.1, 12.2 plus Supporting Data for Standard 12)

Efforts to minimize student debt by minimizing progressive increases in tuition and fees, along with providing accessible funding support, financial aid, and debt counseling education have been effective. The Board of Governors allowed the medical school to freeze tuition for two years while on probation. Subsequently, tuition has been increased to \$23,094 which represents a 3% increase per year since academic year 2014-2015 (\$20,086).

A total of 88.7% of Class of 2017 seniors acknowledged receiving a scholarship, stipend, or grant while in medical school (from the 2017 AAMC Graduation Questionnaire). Of those, 65.5% (Class of 2017) received up to approximately \$25,000 in scholarships and financial support. A total \$2.3 million was awarded in AY 2015-16 and \$2.8 million in AY 2016-17. JCESOM continues to make efforts to increase scholarship funding, gifts, and establish long-term endowments.

The Class of 2017 AAMC GQ data are strongly positive regarding the adequacy of financial aid and debt counseling services. Class of 2017 graduates' overall satisfaction was 82.0% (versus 75% nationally) with financial aid administrative services and 74.6% (versus 66.3% nationally) for overall educational debt management counseling. Data collected from the ISA indicate current high satisfaction with the debt management counseling efforts. Satisfied and Very Satisfied responses ranged from 88% (Year 4 students) to 97.5% (Year 1 students) for adequacy of overall debt management counseling. JCESOM adheres to the Marshall University main campus policy for refunding tuition and fees to students who drop courses or withdraw from the institution, which is clear and reasonable.

2. Evaluate the adequacy, availability, and confidentiality (as relevant) of student support in the following areas, including the satisfaction of students at all sites with these services:
 - a. Personal counseling and programs to facilitate students' adjustment to medical school (12.3)
 - b. Preventive and therapeutic health care services (12.4)
 - c. Health and disability insurance (12.6)
 - d. Immunizations as specified in school of medicine policies (12.7)

The SOM has an effective and well-received system in place for ensuring students have adequate, accessible, and confidential personal counseling, preventive and therapeutic health care services, and health and disability insurance. This statement is supported by comparative data from the AAMC Graduation Questionnaire (GQ) as well as data from the ISA. Data from the Class of 2017 was very positive and reinforcing across multiple areas related to personal counseling, health services, and well-being.

Data collected from the ISA indicate that current overall satisfaction with student wellness related services is extremely high. Student satisfaction across all class years is exceptionally strong in each of the following areas: accessibility of personal counseling, confidentiality of personal counseling, availability of mental health services, availability of programs to support student well-being, accessibility of student health services, and availability of disability insurance; with satisfaction levels ranging from 87.6% (Year 4 satisfaction with availability of programs to support student well-being) to 87.7% (Year 1 satisfaction with availability of mental health services).

The JCESOM immunization requirements are based on regulations, guidelines, and recommendations from the U.S. Centers for Disease Control and Prevention and the Association of American Medical Colleges.

3. Evaluate whether existing policies and processes ensure that a health professional who provides health services and/or psychiatric/psychological counseling to a medical student will have no role in that student's assessment or promotion. Are there processes in place to ensure the confidentiality of student health records? (12.5)

The Policy for the Provision of Healthcare Services to Students specifically addresses the prohibition against providers of health care or mental health services having any role in a student's assessment or promotion decisions. Providers through the Cabell Huntington Counseling Center (mental health and personal counseling services) have no role in the assessment or promotion of SOM students. Clerkship and elective directors are advised at least twice per academic year regarding the SOM's policy and are expected to communicate these restrictions to their teaching faculty and residents along with monitoring within their clinical department adherence to the policy. The Office of Student Affairs reminds students annually of the Provision of Healthcare policy and the various avenues available to prevent situations that may violate the policy.

The health records for SOM students who receive health services through a JCESOM affiliated physician are stored in a secured electronic medical record (EMR) system. All JCESOM EMR records and access to these records are protected by JCESOM operating policy and under HIPAA regulations. Any individual who has access to a JCESOM associated EMR system is required to complete institutional HIPAA training. All student records are behind a 'break glass' feature in the EMR that reduces the possibility of it being seen by inappropriate personnel or other students.

4. Evaluate the timeliness, effectiveness and comprehensiveness of policies and educational programs addressing medical student exposure to infectious and environmental hazards. Are students, including visiting students, appropriately educated about methods of prevention and about the steps to take in the case of exposure? Do medical school policies include all required components? (12.8)

Policies include all required elements. JCESOM policies and procedures are effective in addressing exposure to infectious and environmental hazards, educating students about the prevention and subsequent management of hazards if an exposure event occurs. Needle Stick/Blood and Body Fluid Exposure Protocol Summary is used by JCESOM for institutional management of exposure to blood-borne pathogens, body fluids, and other miscellaneous exposures. The JCESOM Post-Exposure Policy for Management of Blood and Body Fluid Exposure provides additional guidance and outlines procedures for minimizing the impact that certain blood borne infectious could have on medical student learning activities. All JCESOM students receive required institutional and school level training regarding prevention of and risks associated with potential exposures to infectious and environmental hazards beginning pre-matriculation and each year thereafter through Year 3 of the curriculum. Data from the ISA indicate the JCESOM's efforts to educate students about prevention and exposure to infectious disease and environmental hazards are highly effective. Overall student satisfaction (all class years) with adequacy of education above prevention and exposure to infectious disease and environmental hazards ranges from 86.5% (Year 1 students) to 92.4% (Year 4 students).

Self-Study Summary

The JCESOM leadership strives to create and maintain a professional and supportive environment for the medical education program. This is evident by a commitment to engage faculty, students, and staff in the

planning and development of the curriculum and new, innovative programs. A sincere effort to listen to these stakeholders and to make continuous improvements, in addition to an openness in every aspect of the medical school's structure and management, has positively impacted the culture and success of the JCESOM since our last full site visit.

The LCME Self-Study and the data derived and evaluated from numerous sources speak to this success in many important areas. The JCESOM exceeds national averages across a variety of fundamental metrics, including the AAMC Graduation Questionnaires, AAMC StandPoint™ Surveys, the Independent Student Analysis and the 2018 AAMC Missions Management Tool. Several highlights include:

- Students have been highly rated for history and physical exam skills, effective midterm feedback and timely grades, access to and engagement with the dean and executive leadership, availability of counseling, involvement in research opportunities, and the overall professional environment.
- Over the last several years, graduates have reported a greater than 90% satisfaction rate with the overall quality of their education.
- Over the last several years, graduates have reported a greater than 90% confidence that they have acquired the skills to begin a residency position.
- Faculty satisfaction ratings are among the highest among medical schools participating in the 2018 AAMC StandPoint™ Surveys.
- Students have had much lower rates of educational debt over the last several years when compared with previous years and other medical schools across the country.
- Students report mistreatment of all types at very low levels.

Some strengths of the JCESOM include the findings in the AAMC 2018 Missions Management Tool which places the institution above the 90%ile for graduates practicing in primary care medicine and graduates practicing in underserved areas. Recent innovations have included the medical student summer research program, the student-run free clinic and other service-learning opportunities, the excellent teaching provided by faculty, the curricular initiatives supported by the Office of Medical Education, and the new health and wellness initiatives by the Office of Student Affairs.

The SOM addressed several important challenges since we were placed on probation at our last LCME site visit. The curriculum has undergone major changes and has been integrated both horizontally and vertically. Over 120 diversity elements were added to the curriculum. Didactic lectures have been reduced in the preclinical year with a renewed emphasis on self-directed learning. We have diligently endeavored to increase our scholarship programs while at the same time reducing student debt. The new Office of Diversity and Inclusion has ramped up activities aimed at recruiting and retaining a diverse student body and faculty to improve the learning environment. The dean has spearheaded our research endeavors leading to scholarly productivity that has nearly doubled over the last five years.

The JCESOM has rigorously addressed a number of issues identified in the self-study process. Study space was improved by dedicating and granting access to a new student canteen in the hospital that is swipe access for students only, opening all classrooms and study rooms around the clock, expanding library hours, and adding a student only relaxation area in the Byrd Clinical Center. The Surgery clerkship received low ratings by the students in the ISA and on the 2017 GQ, prompting the Vice Dean of Medical Education to meet with the Chairman of Surgery and the Surgery Clerkship Director. Following this meeting, an action plan for improvement was put into place.

Looking to the future, Marshall University will be constructing new buildings on campus starting in 2018. This will free up additional space for the School of Medicine which presents an opportunity to maximize

space for the JCESOM and plan for improved utilization of facilities for the medical education program as well student study and relaxation space.

Medical students' morale and satisfaction with the JCESOM depend in part on successfully matching with the specialty of their choice. In the coming years, the number of medical students in the United States will likely outpace the number of new graduate medical education resident slots, and thus, it is expected pressures and student anxiety related to the Match will increase. The JCESOM continues to meet the challenge of maintaining excellent Match results by strong advising from faculty mentors, requiring ongoing career education programs, counseling students to identify a backup field, providing students with opportunities for research and other activities that add value to their application portfolios, and continuing to promote a culture that values primary care.

The changing national health care system will be a constant test to fiscal stability as well as clinical education. Fortunately, the JCESOM's practice plan remains strong with increasing revenue each year from patient care and financial cooperation from the affiliated hospitals. Marshall Health is the largest medical practice in Southern West Virginia; its size, geographic distribution, diverse specialties, and role as a referral center for rural Southern West Virginia gives it strength, flexibility, and the opportunity for continued growth. In addition, the strong organizational structure of the JCESOM practice plan makes it capable to compete successfully in metrics of quality and cost containment as reimbursement systems change.

A challenge for any successful medical school is to uncover new and obtainable opportunities, to consistently engage faculty and students in the growth and forward direction of the school, to identify areas for further improvement, to benchmark accomplishments in every area possible, and to build upon existing strengths. The JCESOM is expected to accomplish these through stable leadership, appropriate incentives, positive encouragement, transparency, and continuous quality improvement.

Appendix – Institutional Self-Study Committee

I. Standards 1, 2, & 5

1. Mitch Shaver, MD (Chair) – Associate Professor, Department of Family Medicine
2. Larry Grover, PhD – Professor, Department of Biomedical Sciences
3. James Day MD, PhD – Associate Professor, Department of Orthopaedics
4. Diapli Nemade, MD – Resident, Department of Neurology
5. Hannah Leport – Medical Student, Class of 2021

II. Standards 3 & 4

1. Shannon Browning, MD (Chair) – Associate Professor, Department of Internal Medicine
2. Sona Shah, MD – Assistant Professor, Department of Neurology
3. Tiffany White, MD – Resident, Department of Psychiatry
4. Courtney Wellman, MD – Resident, Department of Family Medicine
5. Amber Stewart – Medical Student, Class of 2021
6. Eric Carter, MD – Assistant Professor, Department of Internal Medicine

III. Standards 6 & 7

1. Bev Delidow, PhD (Chair) – Associate Professor, Department of Biomedical Sciences
2. Jessica Hale, MD – Resident, Department of Surgery
3. Scott Murphy – Resident, Department of Psychiatry
4. Allie Bias – Medical Student, Class of 2020
5. Chris Blackwell – Medical Student, Class of 2019

IV. Standards 8 & 9

1. Richard Egleton (Chair) – Associate Professor, Department of Biomedical Sciences
2. Kelly Melvin, MD – Associate Professor, Department of Psychiatry
3. Adrienne Mays, MD – Assistant Professor, Department of Family Medicine
4. Yara Tovar, MD – Fellow, Section of Endocrinology, Internal Medicine
5. Erika Maynard, MD – Resident, Department of Family Medicine
6. Andrea Hart – Medical Student, Class of 2020

V. Standards 10, 11, & 12

1. Pat Kelly, MD (Chair) – Professor, Department of Pediatrics
2. Elsa Mangiarua, PhD – Professor, Department of Biomedical Sciences
3. Jarod Brownfield, MD – Assistant Professor, Department of Obstetrics and Gynecology
4. Michelle Studeny, MD – Resident, Internal Medicine/Pediatrics
5. Matt Saab – Medical Student, Class of 2019
6. Jenna Dolan, MD – Associate Professor, Department of Pediatrics