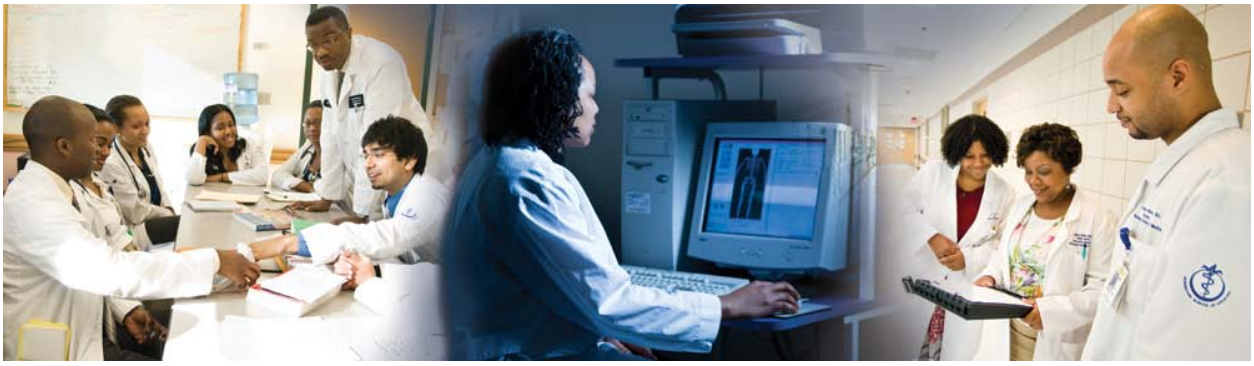
MOREHOUSE SCHOOL OF MEDICINE

Mentoring Students at Morehouse



Quality Enhancement Plan

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We are on a mission.

Morehouse School of Medicine (MSM) is like no other medical school in the country. We attract students who want to be great doctors, scientists and health care professionals– and who want to make a lasting difference in their communities. MSM ranks number one in the first-ever study of all U.S. medical schools in the area of social mission. The ranking came as a result of MSM's focus on primary care and addressing the needs of underserved communities – a role the study emphasizes is critical to improving overall health care in the U.S. Such recognition underscores the vital role that MSM and other historically black academic health centers play in the nation's healthcare system by addressing head on the issues of diversity, access and maldistribution.

Put simply, we attract and train the doctors and health professionals America needs most – those who will care for underserved communities; those who will add racial and ethnic diversity to the health professions and scientific workforce; those who will dedicate themselves to eliminating the racial, ethnic and geographic health inequities that continue to plague the country.

Likewise, our researchers seek to understand not only the biological determinants of illness and health, but also the social determinants – the circumstances in which someone is born, lives, works and ages. These circumstances can be shaped by diverse forces, but can be just as powerful as physiology – if not more so – when it comes to health and wellness.

knowledge. wisdom.
excellence. service.

MENTORING **S**TUDENTS AT **M**OREHOUSE

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Section I. Executive Summary

Morehouse School of Medicine (MSM) has a short but rich history of producing medical doctors and other health professionals to provide health care and health-related services to America's poor and underserved. In keeping with this mission and aligned with the strategic initiative to expand the institution's educational programs and sustain the highest standards of teaching, excellence, and professional competence, a Quality Enhancement Plan (QEP) project entitled, "**M**entoring **S**tudents at **M**orehouse" will become operational in the fall of 2011.

In a deliberative and comprehensive process, which involved and was informed by all campus stakeholders, including administration, faculty, staff, and students, through committees, forums, focus groups, and surveys, "**M**entoring **S**tudents at **M**orehouse" was selected as the most time appropriate and resource sensitive way to enhance student learning outcomes at MSM. A combination of growth in student enrollment and new degree/honors programs required a formal reassessment and restructuring of current approaches to mentoring so as to expand, redevelop and reemphasize new strategies. By strengthening mentorship of students and faculty in all programs, MSM will build on past successes, creating a vibrant infrastructure for planned growth. Our vision is ***to connect, expand, and enhance the mentoring of MSM students to sustain excellence as programs expand.*** To achieve this vision, the following learning goals were developed:

1. Assure the success of mentoring programs through ongoing faculty training.
2. Enhance students' academic success by expanding and enriching peer/near-peer mentoring and enhancing the support of challenged students in course enrichment mentoring and tutoring.
3. Enhance student development as professionals through the establishment of learning communities.

For each of these goals, the QEP outlines the necessary objectives, activities, timelines, responsible personnel, and evaluation questions to assess the effectiveness of the project. Current and required resources are also outlined. Responsibility for this program rests with the Senior Associate Dean for Education, the QEP Director and the directors of the degree programs.

A successful "**M**entoring **S**tudents at **M**orehouse" will result in:

- improved learning outcomes for our students, including skills, grades, scores, and time- to- degree, when compared to established baselines;
- our students developing long-term supportive relationships through mentoring sessions, mentors, and/or learning communities;
- and, development and/or enhancement of faculty members' skill and capacities as mentors through mentoring training sessions.

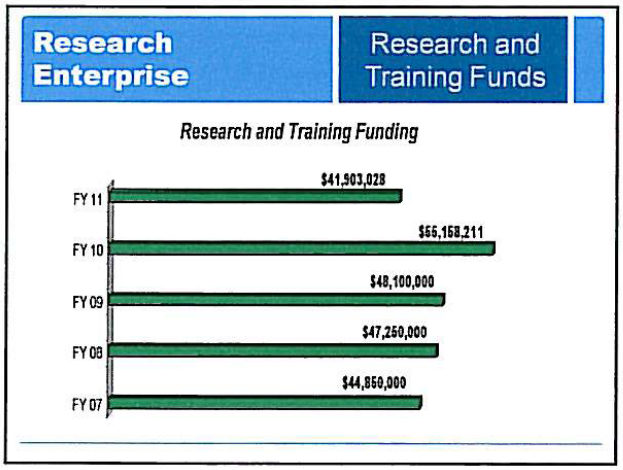
Section II: Morehouse School of Medicine: Historical Perspective

Morehouse School of Medicine (MSM), located in Atlanta, Georgia, was founded in 1975 as a two-year Medical Education Program at Morehouse College with clinical training affiliations with several established medical schools for awarding the M.D. degree. In 1981, MSM became an independently chartered institution and the first medical school established at a Historically Black College and University in the 20th century. MSM is among the nation's leading educators of primary care physicians and was recently recognized as the top institution among U.S. medical schools for its social mission. (See Appendix I) MSM faculty and alumni are noted in their fields for excellence in teaching, research, and public policy, and are known in the community for exceptional, culturally appropriate patient care.

MSM has seven accredited residency programs: Family Medicine (1981), Preventive Medicine (1986), Internal Medicine (1991), Psychiatry (1991), Surgery (1993), Obstetrics and Gynecology (1997), and Pediatrics (2000). Major components of MSM patient care and clinical training occurs at Grady Memorial Hospital, one of the largest public hospitals in the Southeast. The school's research stature and reputation have grown exponentially over the past decade.

Graduate education in the biomedical sciences (GEBS) leading to the PhD welcomed the initial class of students in July 1992, and the first two PhD degrees were conferred in May 1998. Development of the Master of Public Health (MPH) program began in 1992 with the first student admitted in Fall 1995. The program received full accreditation by the Council on Education in Public Health (CEPH) in 1999 becoming the first accredited MPH program at a historically black college and university (HBCU). To support the development of faculty research skills, a program leading to the Masters degree in clinical research (MSCR) was added with first students matriculating in 2002, and graduating in 2004. Graduate education was further expanded in 2008 with the initiation of programs leading to Masters degrees in Biomedical Research (MSBR) and Biomedical Technology, and with the first MSBR graduate in 2010.

In 2008, MSM ranked number three among the nation's community-based medical schools in research funding from the National Institutes of Health and among Georgia's four medical schools, MSM ranked number two. This table reflects research and training funds through December 2010. Moreover, MSM ranks in the top five of U.S. medical schools with four or more Institute of Medicine (IOM) members, based on the ratio of the IOM members to faculty size.



Morehouse School of Medicine Mission Statement

Morehouse School of Medicine is dedicated to improving the health and well-being of individuals and communities; increasing the diversity of the health professional and scientific workforce; and addressing primary health care needs through programs in education, research, and service, with emphasis on people of color and the underserved urban and rural populations in Georgia and the nation.

We have succeeded in this mission by recruiting a diverse student body, with individuals from backgrounds under-represented in Medicine (URM) comprising between 70 and 80 percent of our MD program students, and greater proportions of other degree programs. MSM graduates serve as physicians in underserved communities and as faculty and public health professionals in Georgia and throughout the nation.

Section III. Process Used to Develop the QEP

During her tenure as Morehouse School of Medicine dean, Dr. Eve Higginbotham (2006-2009) appointed an Educational Council, consisting of the assistant and associate deans, directors of educational programs, and the director of the library. This council, led by the senior associate dean for educational and faculty affairs, met monthly to discuss educational initiatives, outcomes, and innovations, scholarship, and other related areas. In June 2009, Dr. Higginbotham charged the council with the task of developing a list of possible focus areas for a Quality Enhancement Plan (QEP) and vision summaries for these areas. The Educational Council was later expanded with additional faculty members and students from each program to comprise the full QEP Committee. (See Appendix II). The Dean also charged this group to seek input from key institutional stakeholders and to review and recommend a theme and topic for the QEP.

In keeping with the Dean's mandate, the Educational Council carried out the initial exploration and research that included developing vision summaries, for potential focus areas, that were ultimately distributed to the campus community by way of focus groups, committee and other general meetings. This process of institutional involvement is discussed in more detail below:

A. Review and Assessment of Institutional Data

Since MSM had recently completed a comprehensive strategic planning process, documents, including self-assessment results, generated as a part of this process were reviewed. The Educational Council was comprised of leadership of all educational programs. Outcomes data, program reviews, and other materials from these programs were also collected and reviewed. These included, but were not limited to, 2002 – 2009 American Association of Medical Colleges (AAMC) graduation questionnaires, for the MD program, the Graduate Education in Biomedical Sciences (GEBS) strategic planning documents; and Council on Education in Public Health (CEPH) accreditation documents.

As a component of an assessment of institutional needs, the Educational Council reviewed the degree programs as well as accreditation self-studies, student and faculty surveys, and an initial strategic plan assessment. Recent educational literature was

discussed and QEP themes from other SACS schools were reviewed. The Educational Council discussed ideas and outlined possible themes and approaches. In particular, the educational "strengths and weaknesses" revealed through the strategic planning process and students' survey responses on the American Association of Medical Colleges (AAMC) graduation questionnaire, were found to be very helpful. Elements from these resources, including "strengths and weaknesses," are listed below in Table 1.

Table 1: Educational Strengths and Weaknesses from 2009-2014 Institutional Strategic Plan

Educational Strengths	Education Weaknesses
Faculty and staff dedicated to a distinctive mission, history of success in producing primary care practitioners.	Disproportionate reliance on Grady Health System for clinical training.
Accredited educational programs with national reputation for quality and success in producing primary care providers dedicated to underserved communities.	Limited access to Veterans Affairs facilities and private hospitals for training purposes.
Reputation as having a very nurturing academic environment and highly supportive faculty and staff.	Small number of subspecialty faculty and of medical subspecialty fellowships.
The existence of a clinical skills assessment facility.	Heavy reliance on public funding
Long established affiliation with a network of Area Health Education Centers.	Vacant chair and faculty positions.
Small class size and effective student support services and programs.	Small size of MPH and PhD programs limits effectiveness, efficiencies and quality of student experiences
The existence of Ph.D. and masters degree programs, and residencies that provide opportunities for training and recruitment of faculty.	Library in need of modernization.
Good relationship with Emory University School of Medicine.	Insufficient number of core faculty positions to meet demands of increasing class sizes and curriculum changes
Excellent MD student performance on nationally standardized licensure examinations	Limited number of Ph.D. training grants and associated stipends for PhD trainees.
Excellent relations with Atlanta University Center schools and strong minority recruiting pipeline programs in math and science enrichment and biomedicine.	Insufficient number of need based scholarships and 4 year merit scholarships for MD students

An analysis of our strengths and weaknesses demonstrated a need for all MSM degree programs to grow in order to achieve a "critical mass" for optimizing the educational

environment, achieving efficient use of faculty time, and enhancing stability. Based on this, “Expanding educational programs and sustaining the highest standards of teaching excellence and professional competence,” became the first priority of the MSM Strategic Plan.

The strategic planning process involved faculty, administrative leadership, and teams of students; it included planning, revision, and the development of explicit outcomes measures. It was clear that the QEP had to align with the goals and vision of the strategic plan. This review of institutional data provided by the strategic planning process contributed to the needs assessment for planning the QEP.

Since the key educational goal of the strategic plan is growth of all degree programs without compromising excellence, it was clear that a QEP must support this expansion. Also, since respondents to student surveys, for all programs, repeatedly identify the existence of close personal relationships, between faculty and students, as a key asset for MSM, it will be vital to preserve this characteristic as class sizes increase.

B. Process of Topic Area Identification

After a series of discussions and meetings involving faculty, students and staff, and survey administration (See Appendix III) the following general areas were identified as potential QEP topics:

1. Strengthening mentoring/career advising
2. Addressing analytic skills (critical thinking, data interpretation)
3. Building written and verbal communication skills
4. Enhancing global health emphasis
5. Enhancing competency-based objectives and evaluations

The Educational Council developed brief vision summaries for each of the proposed topics (See Appendix IV). The topics were identified as those that most strongly resonated with the institutional culture and that linked well to identified needs from educational program reviews. In preparing the vision summaries, the Educational Council examined prior program reviews and analyzed faculty and student surveys (including the AAMC graduation questionnaires analyses), in order to link the QEP development plans to key needs assessments and key learning outcomes for the programs.

C. Broad-Based Institutional Participation of Campus Constituencies

The vision summaries were distributed at a series of focus groups and meetings throughout the institution. Among the venues were: the Leadership Council, consisting of senior administration, departmental chairs, and institute directors; Curriculum Committee (MD program); Student Focus Groups; MD first, second and third year class meetings; MPH student class meetings (both years); GEBS student class meeting; Faculty/Course Director groups (curriculum operations committees, directors for MD program); Departmental Presentations; and Faculty Assembly (open meeting of school faculty).

D. Topic Selection Elimination Process

Members of the Educational Council discussed the stakeholder input and reviewed institutional potential for successful, timely, and comprehensive completion of the various possibilities. Summaries of the major discussion points for each of the potential topics are below:

1. Strengthening Mentoring/Career Advising

This topic was seen as linking to key strengths of the institution while addressing challenges of "ramping up" the personal mentoring relationships between faculty and students as programs are expanded. Students in all of the programs noted a desire for enhancement of career mentoring efforts. Mentoring had been identified by faculty and post-doctoral trainees as key requirements for their own career development. Faculty and students were enthusiastic about strengthening their own skills in providing and/or receiving mentoring. Many faculty had participated in structured personal or group mentoring, and recognized the value of explicit emphasis on mentoring. Mentoring, faculty and career development had been identified in the strategic planning process as key elements for several initiatives.

Upon review of the resources needed, the planned initiatives seemed to be well-linked to ongoing efforts and elements of the strategic plan.

2. Addressing analytic skills (critical thinking, data interpretation)

Faculty identified expanded analytic and critical thinking skills as a key need of students in all degree programs. In the medical programs, application of biostatistical principles to understand research data and apply it in evidence-based analysis of specific patient management issues is of vital importance in improving patient outcomes. Similarly, MPH students rely on an understanding of these principles to improve community health. Basic principles in data analysis are a part of all degree programs. Because critical thinking skills are so important for master's level and doctoral research, the faculty has developed an educational program to instruct and assess critical thinking skills. The current course and the associated faculty development, funded by a seed grant from the MSM Teaching Academy, would form the foundation for more extensive emphasis throughout all the programs. As faculty considered a vision to implement this plan, it was determined that such a program would require the addition of several key faculty and require the development and implementation of an extensive faculty development plan that was not aligned with initiatives in the strategic plan.

Critical thinking and data interpretation were determined to be important competencies, and therefore it was decided they should be incorporated into the QEP and the curriculum.

3. Building Written and Oral Communication Skills

Faculty reviews, student surveys, and focus groups identified this as a key area. It is also a key area from the point of view of competencies in public health and medical education, and strongly linked to cultural competency—another key issue in health and health care education. Faculty members have identified many students with the need for strengthening oral and written communication skills. These are addressed in courses and/or elements of courses in all programs, but all degree programs would benefit from an institutional emphasis on building these skills.

On review of institutional resources and strengths in communication skills instructions, we have faculty and facilities to support instruction and evaluation of key skills for MD students. We also have faculty explicitly addressing key written

communication skills in the public health and the biomedical sciences educational programs.

Efforts to optimally address these competencies and skills would involve adding faculty and programs that are currently not mission critical. It would also involve a significant re-direction of faculty development emphasis.

4. Enhancing Global Health Emphasis

Global health is of central interest to the MSM faculty, staff and students. Faculty is currently engaged in a wide variety of international endeavors. Indeed, proportionately, a large number of faculty has engaged in international research, service, and/or collaborations. Global health is a national and institutional priority and is of key interest to current and prospective students. Global health issues are currently a part of all degree programs. MSM is also notable for having a large number of faculty and students of international origin. Global health issues are seen as having a significant impact on the health of this nation and on the future careers of our students. Enhancing Global Health Emphasis received a high degree of interest and enthusiasm from faculty, students, and staff during focus group meetings. It was very clear that this topic did resonate with the institutional community.

Faculty on the Educational Council were concerned about choosing this area because of the increasing uncertainty of funding resources to support international travel for students and faculty, a necessary core element to any QEP emphasizing global health.

While it is a part of the Strategic Plan, it is not a central and pervasive element. It is clear that global health will be a key element of the educational programs, but a global health emphasis did not hold as strong a potential for enhancing student learning outcomes as an emphasis on mentoring would hold.

5. Enhancing Outcomes-Based Assessment

Competency-based assessments have become of key importance in graduate medical education and a variety of other contexts. Mirroring the emphasis on skills and competencies of resident educational programs, many medical schools have adopted this approach. The Liaison Committee for Medical Education (LCME) has adopted this approach for the expression of learning objectives for MD programs. Many other educational programs and accreditation bodies, including the Council on Education for Public Health which accredits the MPH program, are also focused on educational outcomes and student competencies rather than the process-oriented assessments and objectives focused on instructional content that have characterized these programs in the past.

Faculty and students do need experience and orientation to this approach and to aligning educational experiences, grading processes, and progression policies to a competency and outcomes-based paradigm. While the faculty leadership identified faculty and curricular development to address this and it is a key element of sustaining excellence, this was not seen as a theme and approach that would engender the degree of engagement and enthusiasm that would be necessary for a productive QEP. While this is key to sustaining accreditation, its role would be more in the context of assessing educational outcomes rather than in improving student learning. This activity was seen as a more "faculty centered" rather than "learning centered" endeavor.

Because this is a key element of graduate medical education and is required for the Public Health and MD programs, this assessment paradigm is already in use for the Public Health and MD programs. For these reasons, this topic was not chosen for further consideration as our QEP.

E. Identification of Topic

After critical consideration of the five topics, the Educational Council and the MSM Leadership Team chose "**M**entoring **S**tudents at **M**orehouse" as the topic/theme for the MSM QEP. As discussed above, there were multiple reasons for this decision. First, it is strongly linked to the culture and strengths of the institution. Secondly, it addresses a need identified by faculty, staff, and students to intentionally increase our "family" and

supportive structures, as degree programs expand. To date, our programs have not been linked to intentional expansion of structured faculty mentoring processes and the explicit development of mentoring skills. As the focus of educational assessment has evolved to a stronger emphasis on outcomes and competencies, there is a need for stronger mentoring skills on the part of faculty. Rationale is included in section IV.

Section IV. Rationale for Mentoring Students at Morehouse

A. Consideration of Topic in View of MSM History

The Morehouse School of Medicine (MSM) was established within Morehouse College in 1975 with a mission of training underrepresented individuals for medical careers devoted to the primary care needs of underserved patients. As the school has grown, graduate education in biomedical sciences and public health have been added with degree programs including the PhD, MPH, MSCR (clinical research) and MSBR (biomedical research) degrees. Personal engagement of the students and faculty is a tradition at MSM.

Education is much more than an impersonal act of receiving information. Preparing to become a professional requires appropriate role models, guidance, support, and proper connections. Mentoring can encompass all of these elements and can also involve structured processes of career pathway awareness that support and encourage self-directed activities that can enhance a student's possibility of success.

As an integral part of MSM's approach to supporting its students, with the intended institutional program growth, current approaches to mentoring must be expanded, restructured, and reemphasized. By strengthening mentoring of students and faculty, ultimately in all programs, MSM can build on past successes, creating a vibrant infrastructure for planned growth.

Connections and informal mentoring have been a part of all degree programs. The three degree programs, MD, Graduate Education in Biomedical Sciences (PhD, MSCR, MSBR), and Public Health Education (MPH) is described below:

1. Mentoring in the MD Program

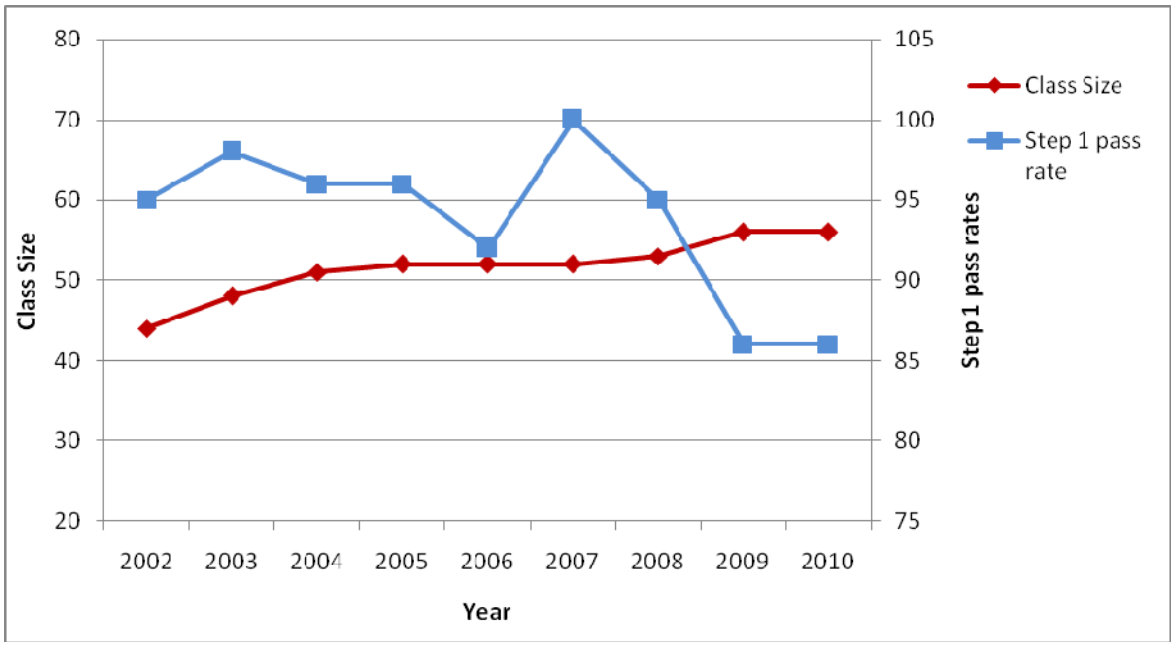
MSM has a long tradition of experiencing a high degree of academic success for students in the MD program whose entering credentials would be considered "at risk" compared to most medical schools. The standardized test for admission to medical school, the Medical College Admissions Test (MCAT), consists of three sections of multiple choice questions with a maximal score of 15 each for a total of 45. The national

mean of medical school matriculants has been about 31. The mean for MSM matriculants over the past 4-5 years has been 26-27, at about the 16th percentile of the national matriculant pool.

In medical school, students usually take Step 1 of the United States Medical Licensure Examination (USMLE) after the second year and Step 2 after the third year. National average first-time taker pass rate is about 94-95-percent. In 2007, MSM had 100-percent first-time taker pass rate and the average ranged from 95-100-percent from 2002-2008. In 2009 and 2010, the pass rate fell to 86-percent. This was associated with an increase in class size from 52 to 56, concomitant with an increase in the total number of students who were not successful in progressing through the curriculum on schedule. Figure 1 shows the percentage of MSM students passing on first-time taking of Step 1 of the USMLE, compared to national performance scores.

This figure demonstrates the recent decrease in first-time taker pass rates on USMLE Step 1 that is associated with increase in class size. Faculty notes a "threshold" effect of class size surpassing the optimal faculty-student ratios that were associated with earlier success.

Figure 1. First time Taker Step 1* Pass Rates on USMLE by Class Size



*Taken after completion of second year.

Review of the curriculum, student support, and other elements, identified several possible contributors to this decline in performance. There was the perception that the effective faculty-student relationships enabled by smaller class sizes were much more difficult to achieve at an effective class size of 60. At MSM, effective student-faculty relationships are easier to achieve in smaller classes than in larger ones. The 2009 interruption of our prior use of near-peer mentors also had contributed to this outcome.

Two members of the M.D. class of 2012, wanting different outcomes for their class, developed a more assertive plan for peer tutoring/peer mentoring of the second year students. With guidance from faculty, they developed a year-long series of sessions, led by strong third- year students, to motivate second-year students to pre-read, study strategically, and adjust to the different rhythms of the second-year curriculum. Their enthusiasm and the fervor of the second-year students underscore the importance of enhancing peer and near-peer tutoring. Upon re-institution of peer-mentoring, student outcomes on exams were much improved (greater than 50-percent reduction in number of students in academic difficulty on next examination).

Personal relationships between faculty and students have always characterized the MSM/MD program. Even as class size grew from the initial 24 to the 50's, these relationships were important to the students. For the MD program, they are exemplified in the students' comments taken from the yearly AAMC Graduation Questionnaire. Comments from representative classes of 2003 and 2009 are in the table that follows.

2003 Summary of comments from MD students on AAMC graduation questionnaire

MSM is an intimate family fostering delivery the application of medicine to the underprivileged and underserved communities. Faculty is encouraging, and challenges the students to be their best and deliver the best medical practices to ALL patients.

Small class size and availability of faculty members

The small class size and the fact that you feel like part of a family.

Small class size allowing for greater interaction and mentoring between faculty and students

The small class size allowed for faculty and staff to become intimately involved in student concerns and this was advantageous.

Small school, it is family oriented. Personal interaction with faculty. Serving underserved populations

Dedicated faculty and staff; Small size.

The focus on community health, and the commitment to the underserved. The small size of the school increases individualized teaching.

The small class size is definitely a plus. The interaction and dedication from the faculty is one of the strongest attributes of the school. Personal attention that each student receives is definitely a plus.

The faculty and administrative staff are by far the strength of Morehouse School of Medicine. These people actually become family to students. You feel comfortable to share anything with them both academic and personal, including tragedies and triumphs.

The professors are Morehouse's greatest strength. They are knowledgeable, willing and available to teach. They show that they care for each and every student that passes through their doorway

Small class size Supportive/family environment Emphasis on cultural and religious diversity among patients

Nurturing and supportive environment. Administration is accessible. Personal and academic counseling is accessible. This is an excellent place for students who earnestly desire to be physicians because this institution will make sure you get there. Faculty will also foster interests in research and public service.

The environment is very student friendly. The faculty is excited and always willing to share pearls of wisdom. The faculty members are intelligent and compassionate. They are good clinicians/scientists. The administration cares about the students. The student body gets along well. The support services are great. It is a family like atmosphere.

We have a very small intimate setting filled with professors and administrative workers that really care about our learning experience.

2009 Summary of comments from MD students on AAMC graduation questionnaire

Small class size, unlimited access to faculty/professors caring/supportive atmosphere

A large amount of personal support

Level of involvement of faculty in students' academic life.

Caring faculty and residents

Faculty is very involved in learning

Attending care about teaching the students.

Helpful and friendly

I love the nurturing and supportive environment MSM has provided for us throughout our 4 years of medical school

Small size allowed for a family atmosphere

They did a good job showing us how much their care about our education, and it felt like a family.

They would also listen to us and make changes accordingly

Great all around, family-like faculty. make sure you get there. Faculty will also foster interests in research and public service.

The environment is very student friendly. The faculty is excited and always willing to share pearls of wisdom. The faculty members are intelligent and compassionate. They are good clinicians/scientists. The administration cares about the students. The student body gets along well. The support services are great. It is a family like atmosphere.

We have a very small intimate setting filled with professors and administrative workers that really care about our learning experience.

These and many other comments demonstrate the key role of "family" and personal mentoring relationships at MSM. On review of MD students' academic success, faculty and students cite this as a key contributor to their success.

When MSM was founded its vision for the MD program was a class size of 64. By 2000, class size had grown from an initial 24 students to 40 students, with a plan to increase

class size to 64 by 2004. This plan was initiated, but class size was held at 52 because of concerns about the potential impact of the increased number on student performance. Curricular reform addressed performance deficiencies and the implementation of the planned class expansion continued. The current strategy is to increase class size to 70-75 students over the next 5-10 years.

In order to grow while preserving our strengths, it was recognized that the "small school" connectedness that has been a key element to success must be preserved and enhanced as class size increases. Sub-dividing the MD program into longitudinal learning communities is key to preserving this aspect. By intentionally creating student interactions within a class year as well as among the different years of training, and linking this to longitudinal mentoring, the "family" atmosphere and connectedness of the MD program can be preserved during expansion.

2. Mentoring in Graduate Education in Biomedical Sciences

MSM's programs for Graduate Education in Biomedical Sciences have also shown growth. The PhD degree program was started in 1992 with the first two graduates in 1998. The program has graduated 36 students and currently has 27 predoctoral students enrolled, most of whom are underrepresented minorities. An MS in Clinical Research (MSCR) was added in 2004, and in 2008, MSM initiated an MS in Biomedical Sciences program. The doctoral program is anticipated to grow to 50-60 students over the next 5-10 years with about 20 in each of the MS programs. The camaraderie and support of students in the smaller programs will be sustained by supporting learning communities in each of these programs, as well as in our key research areas. A key need for all of these graduate programs is increased career linking, networking, and mentoring. We will be expanding and integrating career mentoring into these programs.

One overarching goal of MSM's Graduate Education in Biomedical Sciences (GEBS) Program has always been increasing the diversity of America's scientific workforce. The proposed QEP project fits well with that commitment to that diversity. At MSM, students benefit from role models at all levels of the academic and research professional continuum, all of whom understand the importance of increasing the diversity of the

United States' scientific workforce for maintaining our leadership in science and technology.

Over the last five years the GEBS program has had 100-percent retention of students entering the program. Between 2006 and 2010 20 PhD's were conferred. The ability of one small, young, graduate program to contribute 20 successful African-American PhD's to the workforce in a period of five years is certainly notable. Five of these scientists were admitted to post-doctoral positions at Emory University; four to appointments at the Centers for Disease Control (CDC) and others to places such as the University of North Carolina, Georgetown, Vanderbilt and Yale Universities, the University of Pennsylvania, and Georgia Institute of Technology.

Focus groups were used to assess the strengths and challenges for the growth of graduate education at MSM. These groups, including graduate faculty, students, and alumni, identified several aspects of MSM's Graduate Education in Biomedical Sciences Program (GEBSP) that may contribute to the success of the program and students. Noted as a strength was "Community mentoring, not just one on one – more like a family" and a weakness was "Formal and ongoing mentorship training for faculty and students is currently unavailable." Analysis revealed strong success of a small young program and opportunities for growth. This growth would require intentional efforts to preserve strengths and build the infrastructure for improved mentoring. A summary table of strengths and weaknesses follows:

MSM's Graduate Education in Biomedical Sciences Program (GEBSP) Focus Groups Summaries	
Strengths	**Weaknesses and Opportunities**
Evident faculty interest in training the next generation of minority scientists	Training for students in professional networking is inconsistent and dependent on individual faculty experience and initiative
Shared cultural experiences among students and faculty	The program's approach to matching students with appropriate research mentors relies too heavily on the initiative and effort of students
Willingness to meet students where they are in their academic development and assist them in moving forward instead of projecting personal expectations	Too many active and potential faculty mentors are unfamiliar with the institutional degree requirements they are expected to help their mentees navigate

MSM's Graduate Education in Biomedical Sciences Program (GEBSP) Focus Groups Summaries	
Strengths	**Weaknesses and Opportunities**
on them	
Curriculum content, starting with basics and building	The most talented mentors and career coaches are not always the best-funded researchers at the institution
Small size of the institution (people are individuals not numbers)	Institutional incentives and recognition for mentoring efforts are insufficient to encourage the best efforts of the graduate faculty
Critical mass of minority students at multiple levels of training	Institutional support for student travel to scientific meetings is unreliable
Faculty more supportive than judgmental when academic difficulties are encountered	
Shared social mission: Students feel responsibility to something larger than themselves	
Near-peer mentoring by more-advanced students and postdoctoral fellows	
Direct mentoring contact and instruction of students by Principal Investigators (PIs)	
Talented, committed teachers in the core curriculum	
Laboratory training prior to entering lab rotations and PI laboratories	
Faculty expertise in student's field of interest	
Research instrumentation available	
Assistance and instruction in professional networking	

The MSBR and MSBT degrees are new and are integrated with the PhD program in the first year. The numbers of students in these programs have been small, so first year students in all three programs typically work together. Because of the different career trajectories for these programs, opportunities for learning communities for each of the programs are warranted. With recent program growth toward a critical mass of students, supportive, but informal, interactions between upper level students and first year

students in each of the programs has improved. However, to maintain such improvements as growth continues, a more structured mentoring plan will be needed.

3. Mentoring in Public Health Education

MSM established the Master's of Public Health program through the Department of Community Health and Preventive Medicine in 1994, with its first graduates in 1996. Individual mentoring has been a part of this program from the beginning. There are both formal and informal approaches for mentoring students in public health. A required practicum experience, including 480 hours of work experience, involves mentoring by a preceptor. MPH alumni formally initiated a mentoring program in 2007 to support the career transitions of students. There are career "tracks" within the MPH program that include Health Administration and Policy, Epidemiology, Health Education and Health Promotion, and International Health. The students in each track meet periodically with the track coordinators to address process issues.

The practicum is a valuable component of both the educational process and professional preparation of the graduate students in the Master of Public Health Program. The Practicum experience also contributes to a student's career, personal, intellectual and ethical development. For the preceptor, students can provide assistance with special projects and offer fresh ideas and new perspectives for accomplishing and improving projects. For the MPH student, fieldwork assignments offer an opportunity to develop sustainable public health partnerships. For in the community setting, students receive hands-on training to provide technical assistance, develop programs and conduct research to address community concerns. The MPH Program is committed to partnering with public health-related organizations to provide high-quality professional and educational placement opportunities. One of the most essential aspects of placing a student in a work setting is the guidance, direction, and instruction provided by the preceptor.

Faculty members currently participate in planning and workshops related to mentoring, but a greater emphasis on mentoring training and evaluation will enhance the mentoring skills of faculty in the program. Comprehensive workshops for students on the roles and skills of being a mentee (and mentor), combined with more emphasis on measuring the

elements of mentoring would be expected to enhance the effectiveness of these programs.

The MPH Program provides direct mentorship/advisement to each student by: advising students throughout the practicum planning process; assisting with identification of required skills; setting time specific goals/learning objectives; connecting students with potential preceptors and organizations; and monitoring and evaluating student performance during the practicum experience.

The MPH Program has seen the value of peer and near peer mentoring through the hiring of teaching assistants (TAs). TAs form peer and near peer relationships with students in the class as they are carrying out their TA duties. Interestingly, when the TAs are 2nd year students who are assisting with 1st year courses, near peer relationships form and the relationships continue after the 2nd year student has graduated, thereby leading into an alumni-student mentoring relationship. These relationships will be formalized through learning communities.

4. The Benefits of Learning Communities

Relationships with faculty, alumni, and career mentors are essential for the support of the career transitions of students. Learning communities will enhance these connections and plan to extend them beyond the superficial interactions that are achieved in stand-alone sessions. These relationships will be resources of support for the students as they encounter personal, academic, or career issues and need support and guidance.

What is a Learning Community?

A group of learners and teachers who:

- Share common values and beliefs
- Learn from each other
- Time for reflection
- Build student morale and self confidence
- Share curricular and co-curricular elements
- Build interpersonal connections

Learning communities serve many purposes; they:

- Assist with transitions in medical school/graduate program
- Enhance critical thinking

- Enhance communication skills
- Enhance leadership skills
- Enhance persistence and retention
- Foster sense of community
- Improve interpersonal relationships
- Inspire self-confidence
- Provide opportunities for service and involvement

Learning communities can promote the career advancement of students new to the program. Areas of research concentration-based learning communities help mentees build critical thinking, networking, and communication skills, all necessary for a science career. An additional learning community, to support the transition to and success at the degree candidacy level, is planned to supplement the mentoring efforts of the research mentors. Explicit instruction in mentoring for both students and faculty could build skills of current and future mentors and mentees in achieving their scientific and career goals. Increasing the effectiveness of peer interactions within each of these degree programs should enhance student retention and career development.

Service Learning

Service-learning is a formal element of the MD program and will become a component of learning communities. Currently the community focus begins in the first year of the medical curriculum with a required course in community health and later students can elect civic engagement honor courses. Service will be encouraged as part of the activities within each learning community. Service to the team and to each other will provide important opportunities for the student to have the responsibilities of “making themselves useful” and of applying the skills that are learned.

Relationships Between Mentoring and Learning Communities for MSM Students

Connections and relationships

Peer mentoring—more correctly “near peer” (one year above) tutoring has been a key element of success. The MD program has a long-established tradition of “hiring” strong students to be peer tutors for the classes below them. The strength of this approach was inadvertently demonstrated when a decision was made to divert resources

previously allocated for peer tutors to a non-faculty basic sciences tutor. Initially, this seemed to work, perhaps, in part due to the availability of a peer mentor for the medical students. When this non-faculty tutor was no longer available to the second year students, the need for peer mentoring became obvious in the markedly poorer performance of the students; that was immediately improved by the re-institution of the peer mentoring program. It was clear that many struggling students are likely to "hear" and accept advice better from their peers, rather than from faculty. This experience was so strongly motivating for some of students (class of 2012), that as third year students they have developed and initiated a more global structured peer program for all students. Expanding on this effort will be important to assuring ongoing student success as "near peer" tutoring and mentoring has had clear benefits, both for the mentors and mentees.

The nature of the practice of medicine, the work of health care professionals as well as researchers and scholars all involve interpersonal skills of listening, reflection, assessment, and feedback. Each of these areas relies on a set of assumptions and culture. Indeed, there are even phases of culture in the transitions of training. Knowledge of these skills and transitions is rarely addressed in texts. In medicine, these are often learned as the "hidden curriculum". Unfortunately, the hidden curriculum is learned in the stress, challenge, and time-pressure of the clinical care setting, amid fatigue and raw emotions. It is rarely addressed with reflection or wisdom. Establishing longitudinal learning communities with ongoing relationships outside of this setting will counterbalance the cynicism and burnout that can occur in these settings. Relationships formed in advance can be a resource during these transitions.

Skills in giving and receiving support and communication skills are key for health professions students. Through role-modeling, discussion, and peer mentoring, individuals in learning communities develop communication skills, including the following:

- Active listening
- Self-awareness and self-assessment
- Reflection
- Respectful disagreement and constructive criticism
- Expressing personal limitations or vulnerabilities

- Expressing empathy and support

All of these are essential skills for any professional, but particularly for physicians and public health professionals. Verbal and interpersonal communication skills are a key competencies for these groups. Active modeling and practice of these skills in the supportive and nurturing company of the learning community is very important in the development and enhancement of these skills. Also, the opportunity to reflect on a variety of points of view from peers and others is key in developing a deeper foundation for approaches to problem-solving and leadership.

Reciprocity in learning is important in diminishing the barriers both to giving and receiving support. In a learning community, participants shift between roles of being givers or receivers of support. This reciprocity leads to the whole being greater than the sum of its parts. It also strengthens the relationships between the members of the learning community.

Teamwork and communication skills are also key elements of professional success for students. Skills necessary for strong teamwork will be built and sustained through the interactions in the learning communities. Getting things done in a group when there is not a set linear hierarchical structure can be a challenge. Increasingly, this characterizes the health professions workplace. Learning communities offer a setting in which the habits and skills of respectful teamwork can be built.

Teamwork skills can be assessed by self-assessment, peer, and supervisor assessments. Teaching and communication skills can be assessed by rubrics and assessments of presentations. Giving and receiving support, and networking skills can be assessed by reflection diaries, and self, peer and supervisor evaluation checklists.

Context, content and resources

There are many resources for the support of student academic success. Knowledgeable and committed faculty have identified and made available texts, learning materials, practice questions, web resources, and class activities to address the learning objectives. While faculty members are very accessible to the students, many fail to

seek, hear, or heed faculty advice. As noted above, peer (and near-peer) networking on resources is very helpful for many students in identifying and accessing the resources most helpful to them. As a verbal/oral culture, near peer advice on approaches can be very supportive for those students struggling with difficulties in setting priorities.

In addition, the career pathways for our students are very varied within each program. Intentionally extending the network of relationships and connections longitudinally within the program and with career mentors enhances the opportunities for students to better understand the variety of career pathways. This approach also improves students access to resources for guidance in their career choices. While much of this is available in print or online format, the personal relationship and connection can greatly assist in obtaining a deeper or clearer understanding of the career choices.

Skills in needs assessments are key for physicians, public health professionals, and biomedical scientists. This is true both in the context of assessment of learners or others as well as in self-assessment. Life-long learning is important for all these areas. The engagement of faculty and career mentors with the learning communities will provide role models of self-assessment and life-long learning as ongoing parts of any profession. These skills can be assessed by students and supervisors using checklists.

The interactions in the learning communities and with mentors will provide opportunities to build self-assessment skills. By becoming comfortable with peers in the safe setting of the learning community, learners should become less anxious over issues that they have not yet mastered because “we are all still learning”. The relationships developed in the learning communities are expected to decrease the number/ percentage of students who fail to seek appropriate guidance when in academic difficulty, or who do not graduate on time.

Knowledge of career options and career transitions is important for all programs. This includes enhanced understanding of the following:

- Career pathways
- Modeling of the profession
- Traditions of the institution/profession
- Reflection

- Context

In choosing a profession, students begin to assume new identities with which they may have little experience or to which they have little prior exposure. Not only do they face the transitions and challenges of graduate education in the health professions, but they also face the transition of becoming a new person—a professional. For students who have not had past experiences with their chosen profession, the full context of this is often hard to assimilate in the classroom or wards. Time to reflect, share, and develop a personal vision of one's future path is necessary and frequently under appreciated. For individuals from backgrounds not well represented in a profession, the need for diverse views in building a personal vision is even more important.

Mentoring sessions and learning communities can serve as settings where these issues are discussed. Mentors can guide students to other mentors for their specific questions or career interests.

Career transitions are particularly important for trainees. For the MD program, there are characteristic transitions across the four years. PhD and MS students also have transitions from classroom to laboratory and from student to degree candidate. While faculty can guide students in identifying and navigating these transitions, near-peers are often far more helpful in this regard. Similarly, strategies on career and position search activities are specific for each program and very well addressed in informal and formal mentoring sessions.

Learning outcomes can be assessed by satisfaction and knowledge self-assessment questionnaires. Longer-term outcomes include placement and career satisfaction surveys of graduates. Developing a strong vision of one's professional and life path is critical to sustaining excellence in the profession, identity with the profession, and the satisfaction and energy to sustain the journey.

Morehouse School of Medicine has been characterized as "family". The structure of learning communities would be expected to extend and enhance this relationship matrix. Within this context, students will be introduced to their respective professions by a variety of role models. The learning communities will support the students' earlier

development of professional context through discussion and reflection. These will be linked to course-related experiences in the profession in each of the programs.

Challenge

According to Daloz, one key attribute of a mentoring relationship is that the mentor challenges the mentee. In the learning communities, the mentor and community will challenge each other to the following:

- Setting high goals
- Planning strategies
- Commitment to excellence
- Dedication to Service

In pursuing a health and/or research career, students have already set high goals. Often, they are not fully aware of what this will entail. Learning communities and mentoring will guide students in learning to set high goals and standards and in developing strategies to understand, meet, and exceed those goals.

Dedication to service is already present in most of our students and is a key value for our institution. Learning communities will reinforce this dedication. By undertaking projects together, the learning communities will not only strengthen skills in teamwork and communication, but also build the students' dedication to a life of service.

"Setting high goals" means challenging the mentees to extend themselves, to take on a quest for which they may feel inadequately prepared. Indeed, this is a core aspect of each degree program. Without the context of community and relationship, students may not perceive the quest that their career choices truly represent as the noble challenge. The connections within the learning communities should create a milieu to support this framing of their educational program. Mentors can reinforce the aspect of the higher calling that drew them into the profession. We can blend these elements with the special challenges that have been successfully confronted by the leaders who established our school.

High standards are intrinsic to MSM programs, and must remain so, even in a nurturing and supportive environment in order for students to be successful in their careers. The personal relationships developed between students, and faculty and in the learning communities, will help to make it clear to the students that such standards are not punitive, but a requisite aspect of the profession that they are striving to enter.

Assessment of these learning outcomes would be by self-assessment checklist and reflection journals. Supervisor assessment of students would also be done. In addition to these specific linked outcomes, enhancements in standardized test performance (for MD students) and timely progress (for all students) are expected as described below.

MD program students take National Board of Medical Examiners (NBME) subject exams in 5 areas in both the first and second year (10 total), and six areas in the third year. They also take United States Medical Licensing Exams (USMLE) Step 1 after the second year and Step 2 Clinical Knowledge and Step 2 Clinical Skills after the third year. MSM students' performance on these exams has been near the national mean and at/near the national first-time taker percentage passing. We also note the low numbers of students below the 5th percentile on most of these exams. This is especially notable in the context that our enrollee performance on the standardized entry examination (Medical College Admission Test, MCAT) has averaged about the 16th percentile of the national cohort in medical school and in the context of an attrition rate that has been about 1%. Continued monitoring is expected to show high performance standards as the class size expands.

Assurance of timely progress is important in all programs. Despite the fact that many of our students having entry credentials that are often considered "at risk" by other institutions, our academic attrition rate for the last decade has been about 1%. We note that this rate has varied. In 2003, the first year of 52 students, 5 students were dismissed for academic reasons or withdrew after the first year. In other years, no students have been dismissed. On average, about five students have repeated one or more courses (first or second year). Enhanced mentoring and support is expected to reduce the numbers of repeating students and to sustain (or even further reduce) our low attrition rate.

Since the admission and performance standards for the PhD program are high and aligned, attrition rate in this program has been low in recent years. The recently initiated MS in Biomedical Research program is also a contributing factor to this success. This degree program was designed and implemented as a mechanism to assess and develop "at-risk" students *prior* to their entry into the PhD program. Progression to degree has been more variable. Years to degree often reflects the effectiveness of mentor-mentee relationships in the laboratory. More effective preparation of mentors and mentees is expected to reduce the mean and modal number of years from matriculation to degree to 5 years (from current of 6). Self-assessment, collaborating and networking skills, career-path awareness, and career-choice satisfaction are also key outcomes that will be assessed.

For the Masters programs in Clinical Research, Biomedical Research, or Biomedical Technology, some students experience challenges in the core curriculum and in career awareness and choices. Peer-mentoring and in-course enrichment are expected to result in a decrease in the number of students who have to remediate courses (currently about 15-20%). We also anticipate that this approach will continue to enhance self-assessment, collaborating and networking, skills, career-path awareness, and career-choice satisfaction.

The variety of career opportunities available to physicians has been remarkably broad. On the other hand, the unprecedented explosion and shifting focus of career opportunities beyond academia for professional health and biomedical science researchers over the past two decades presents a significant mentorship challenge for our research training programs. A similarly unprecedented and concerted effort at MSM will be needed to expand our students' access to information and to non-academic science professionals for mentoring relating to non-traditional health and biomedical research careers. Because these career opportunities and their related fields are continually (if not increasingly) in flux, broad training in adaptability, lifelong learning, and career risk management are projected as areas for further development. These circumstances suggest the need to expand the available mentoring cascade to include identification of specific expertise and skill sets to be sought in any future faculty hires, program alumni, and through collaborations with industry, government, and other academic institutions. Initially, these areas in addition to academia should include:

- Biomedical, pharmaceutical and biotechnology industry
- Bioinformatics
- Intellectual property law
- Government research
- Science and public policy

Surveys regarding applicant and enrollee career interests, including the evolving interests of students enrolled in the GEBS programs will be administered to inform, guide and track program planning. Annual career-planning workshops for all students will be implemented as a new curricular element and will be responsive to interests of the students. Outcomes measures will include student satisfaction surveys regarding the quality of the workshops, and student and alumni surveys regarding preparation for their evolving career interests and options. Numbers of graduates entering, succeeding and finding satisfaction in academic and non-academic careers will also be tracked on an ongoing basis.

Because many PhD alumni have entered or are currently pursuing most of these career paths, an alumni-guided workshop series is planned for current students. These alumni speakers will be supplemented by additional professionals from these fields to begin building a mentoring network that addresses students' interests and promotes their career development in their chosen fields.

For the public health programs, some key courses have posed challenges for some students (epidemiology and biostatistics). Through peer mentoring, and in-course enrichment, we hope to decrease the number of students who have to repeat or remediate these courses.

Through augmenting current career mentoring, we hope to enhance career awareness, networking skills (self-assessment) and career choice satisfaction in all programs. We also expect to facilitate and sustain the long-term links between the students and enhance collaboration between students in different years of their degree programs.

Section V. Desired Learning Outcomes

The overall goal of the MSM QEP is to improve student learning through the development and implementation of a structured mentoring program. Structured and unstructured events and mentoring sessions, will interlink faculty and students to enhance student learning and educational outcomes. The MSM QEP, will enhance student learning as evidenced by the following three goals and desired outcomes:

Goal 1: Assure the success of mentoring programs through ongoing faculty training.

Many resources are available to support student academic success — among them, a very knowledgeable faculty who have identified and made available texts, learning materials, practice questions, web resources, and class activities to address the learning objectives. While faculty are available to the students, many students fail to heed (or hear) faculty advice. Training provided by the MSM QEP project will enhance participating faculty members' ability to connect with and support students as mentors.

Outcome 1.A. **Faculty will demonstrate a knowledge of and the capacity to effectively mentor students.**

Outcome 1.B. **Faculty will perceive Mentoring Students at Morehouse (all components) to be effective and helpful in strengthening their mentoring skills**.

Development of Mentoring Skills

It is clear that mentoring is of benefit to the mentor, mentees, and institution and that mentoring skills can be built. In order to enhance and expand Mentoring Students at Morehouse, a variety of resources will be used to construct a basic curriculum of general mentoring skills. We also recognize that mentees can build a spectrum of skills that can enhance their ability to benefit maximally from their mentoring experience. A series of workshops and other learning sessions will provide resources for guidance and self-directed skill enhancement to support our faculty and students.

Faculty Mentoring Curriculum

There are basic mentoring skills and knowledge that are relevant for the entire faculty. There are also some specialized knowledge and skills, (such as finding and applying for research funding), that is more specialized, but is still applicable to large numbers of the faculty. There are also very specific areas of knowledge or skill that would only apply in specific areas (such as for a career in surgery and research). For these reasons, faculty mentoring is organized in the following fashion:

1. Core Mentoring skills (for all faculty)
2. Key domain skills—Research-specific and health-career/teaching specific
3. Specialized skills

Goal 2: **Enhance student academic success by expanding and enriching peer/near-peer mentoring and enhancing the support of challenged students through course enrichment mentoring and tutoring.**

Peer mentoring—more correctly "near peer" (one year above) tutoring has been a key element of success. The MD program has had a long-established tradition of "hiring" strong students to be peer mentors for the classes below them. The strength of this approach was inadvertently demonstrated when a decision was made to allocate resources to a non-faculty basic sciences tutor. Initially, this seemed to work, perhaps, in part due to the availability of a peer mentor for the medical students. When this tutor was no longer available to the second year students, the need for peer mentoring became obvious in the markedly poorer performance of the students. Performance was immediately improved by the re-institution of the peer mentoring program. It was clear that many struggling students are more likely to "hear" and accept advice from their peers, than from faculty. This experience was so strongly motivating for some students in the class of 2012, that as third year students, they have developed and initiated a more global peer program for all students. As "near peer" tutoring and mentoring have had clear benefits, both for the mentors and mentees, expanding on this effort will be important to assuring the continual student success.

Student Learning Outcome 2.A.	**Students will be able to complete courses on time.**
Student Learning Outcome 2.B.	**Students will pass Step 1 exams on the first time-taking.**
Student Learning Outcome 2.C.	**A cohort of students will learn how to be effective peer mentors.**

Goal 3: Enhance student development of professional competencies through the establishment of learning communities.

Our students have formed strong relationships with fellow students and faculty. With growth the number of students with effective peer mentoring relationships outside their own program/year has become increasingly limited. Through the longitudinal relationships of the learning communities and the peer mentoring programs, we anticipate that the network of relationships for students will expand beyond their class. Because all programs include predictable career transitions, the opportunity for expanded peer interactions should enhance student's abilities to navigate these transitions.

Student Learning Outcome 3.A.	**Students will be able to effectively communicate as demonstrated by active listening skills, restatement, asking clarifying questions.**
Student Learning Outcome 3.B.	**Students will be able to describe key competencies of professional behavior and demonstrate appropriate professionalism.**
Student Learning Outcome 3.C.	**Students will perceive the use of learning communities to be appropriate for their learning and career transition.**

Section VI. Context and Literature Review

Both learning communities and mentoring by faculty or peers are recognized as important approaches to increasing student support and retention. In some instances, these modalities have been combined, with mentors or peer-mentors leading learning communities. There is strong evidence that both of these modalities are helpful in developing as a professional and in building teamwork and interpersonal skills.

About mentoring

Mentoring has been recognized as a significant contributor to individual progress in academic programs and to career advancement .[1-7] Mentoring involves many different types of interactions—teaching, coaching, advising, supporting, encouraging, advocating, and other roles. [2-10] In addition, mentoring is also based in personal relationship and longitudinal development. While there are online and virtual mentoring opportunities, the interpersonal relationship is key in mentoring—especially in health professions.[2-7] For an optimal mentoring experience in health care, the mentee should come to know the mentor as a professional and as a person. The same is true for the mentor's understanding of the mentee.[2-7]

Whether informal or structured, mentoring is commonly seen as "one on one." However other models exist, such as mentoring of groups, by teams, and "stair step" mentoring.[11] In medicine, team mentoring is the common model for teaching the clinical ward team. This includes the supervisory physician, the upper level resident, the intern(s), and students. The supervisory physician mentors the team as a whole, the resident mentors the intern and students and the interns teach and mentor the students. This guidance includes not only the knowledge of disease, but also the skills of diagnosis, communication, teamwork, time management, and navigating health care systems. Often, the interaction also covers career- and life-planning. In large programs, most such relationships are episodic. In smaller programs, such relationships extend throughout the residency program, resulting in effective long-term relationships with the mentors. In fact, many larger residency programs intentionally divide groups into sub-groups, such as the firm system, in order to allow relationship with the mentor and the peers.[12]

About Historically Black Colleges and Universities (HBCU's)

Historically black institutions of higher education were initially established because African Americans were denied access to educational opportunities at other institutions. These institutions have flourished even after changes in laws and policies removed many some barriers to access because of the special nurturing atmosphere that these schools provide. [13-21] Although many of these schools lack the monetary resources and impressive facilities of majority institutions, students of these institutions have impressive records of achievement.[13] The success of the students at these institutions is attributed to the student-centered mentoring that is such a key element of these educational programs.[13-21] These institutions combine an emphasis on promoting excellence in instruction, inspiring role models, building confidence, and fostering strong and enduring relationships among students and faculty. These relationships serve as mentoring resources well beyond the years of education. It is notable that graduates of prestigious majority institutions envy the experiences and sustained connections of their peers from HBCU's (personal observations). Dr. Louis W Sullivan, founding President of Morehouse School of Medicine, in a briefing to the United States Commission on Civil Rights, reinforced these sentiments by stating that "Medical school faculty at HBCUs are committed to student success and spend an enormous amount of time with students." Additionally, faculty at HBCUs encourage students "to think of themselves as leaders" in the community.

Mentoring by faculty and peers at HBCUs fulfills a need common to many of their students. Students at such institutions often come from backgrounds in which there are no family members with the experience to guide them in the professional world. Because of the diversity of the African American experience, the community of learners at an HBCU represents a wealth of resources and a variety of viewpoints. Thus, mentoring by peers is also a key element of most HBCUs. This exists in the form of peer tutors and lab assistants, as well as informal relationships.

Social accountability is also a key element of most HBCUs.[13-15] The volunteer activities of the students, staff, and faculty often serve to mentor the local community of K-12 students. It is clear that in serving as mentor/teacher, the learner can gain great insights that improve their ability to envision and pursue learning and a career. This service of mirroring the mentoring received is also an element of the "Five Promises" program.[22]

The key importance of demonstrating self-efficacy by serving others as a mentor is recognized as an experience of value.

About the Connected Learner

Education has traditionally been modeled as an interpersonal interaction. However with the advent and proliferation of electronic media, the "connected learner" has come to include geographically dispersed learners interacting with diverse electronic media in an asynchronous fashion.[23] While this construct adds an important dimension of learning, particularly suited to the visual learner and the introvert, these modalities are clearly insufficient for mastering the skills of a health profession. Certainly, vocabulary, mechanisms, structures, and complex hierarchies can be introduced in this fashion, but the practice of science and health care involves mastering the manipulation of laboratory equipment and interactions with patients and healthcare team members. Therefore, nuances and ambiguities of medical care are best learned in mentored practice. Students from privileged backgrounds have often had multiple experiences with established professionals in their extended families or community. Such experiences afford these students multiple opportunities for the unconscious absorption of habits of thinking and analysis that students from underprivileged backgrounds are not aware of.

Critical thinking and clinical reasoning skills are often learned and developed by modeling and absorbing "habits of being" from experienced individuals in the environment. The independent learner can learn vocabulary and principles from a book or online materials. It is more difficult to master the skills of problem analysis and of precise and accurate history-taking from inanimate materials. Touch and interpersonal communications are vitally important in the practice of medicine. [24-25] These concepts are also vitally important in learning medicine and in learning to be a professional. While touch conveys much in a healing relationship[26,] it conveys just as much in a learning relationship.

Stories form the basis of diagnosis. Sharing of personal experiences and stories in a community is a dynamic and vital part of professional formation. Direct mentoring on the ward team or in other clinical practice is a key element of medical education from throughout medical school and into residency. Direct mentoring is also key in learning research skills and in developing skills as a public health professional.

About Learning Communities

Approximately 25 percent of medical schools have developed learning communities.[27] These communities have a variety of structures, but are usually designed so that ongoing relationships are built between selected students and faculty members. These relationships are sustained over a longer period of time than is possible through a traditional course structure.

Learning communities in K-12 or undergraduate institutions take many forms. [28-33] In some instances, these are communities of faculty seeking to enhance the school. At most undergraduate institutions, these take the form of a block of courses combined with ongoing discussion that increases the interaction between students across courses. Examples of these programs at other institutions can be seen at:

http://www.lc.iastate.edu/pm_overview.html, or
http://www.umassmed.edu/news/articles/2010/mentor_connections.aspx.

Long-term student-faculty relationships are a key element of the culture of HBCUs and as such, have been a part of the MSM structure. The "MSM Family" is a very real and palpable construct, continuing many years after a student graduates from MSM.
As the class size has grown, sustaining these relationships has been more difficult, and creating the need to intentionally recreate these structures through sub-dividing the programs into "learning communities."

Changes in Medical Practice and Medical Education

There have been recent reviews of the current state of medical education.[34-35] The recent review and update of Flexnerian assessment of medical education has laid out the following areas for further innovation and development in medical education.[34]

- Standardizing learning outcomes
- Integrating knowledge and clinical experience
- Developing habits of inquiry and improvement
- Addressing professional identify formation explicitly

It would be important for our innovations to address these issues. The modeling of problem-solving in a clinical context and explicit ongoing attention to professional development will be a part of the mentoring learning communities for the MD program.

Peer Mentoring

Peer and near-peer tutoring have been very effective, particularly with under-represented individuals in higher education in adapting to academic rigor and in supporting academic success.[36-37] Teaching medical students how to teach is an important element in promoting peer and near-peer tutoring, as well as an important skill for a career as a physician.[37-38] There are a variety of resources for teaching such mentoring and for evaluating peer tutors/mentors.[8-10, 37-52]

Peer-mentoring has long been a part of the MSM preclinical medical education. Faculty recommended upper-level students, who were supported through counseling services to provide group and/or individual tutoring of students. Enhanced tutor preparation and expansion of the program to include support for students in all degree programs is important for enhancing the effectiveness of this interaction.[33]

In-Course Enrichment

There is much research on how to support the struggling student.[1-6, 8-10, 13-18] Many approaches in medical schools have focused on remediating deficient performances. A program of faculty-led support of our students who are struggling in the first-year curriculum is offered. This program uses the tutorial approach in small groups of students. This has resulted in better outcomes for first-year students with about 80 percent of participants in this “In Course Enrichment” (ICE) successfully progressing in the curriculum. Experiences with this pilot program have led to implementation of similar support for students repeating any course. Students in academic difficulty appear to benefit from individualized mentoring and faculty support.[1-6] Expansion of this program to the second year of the MD program, as well as to the first year of GEBS (MSBR and PhD) is planned.

Mentoring Instruction

The special role of mentoring is documented in many resources.[1-10, 36-55] In addition, there are a variety of resources for mentoring mentors as well as guiding mentees in making the best use of mentors. Mentoring in science has been seen as key to career development.[5-10] Sessions to develop mentors must include explicit information, curricular elements, and skills development. Workshops to develop faculty using skills assessment have been well described in a variety of resources, and these will be used

as resources for faculty development sessions. [8, 43, 50] In addition to these resources, a number of medical schools have information on their mentoring programs on their Web sites included below:

http://facultymentoring.stanford.edu/
http://www.medschool.vcu.edu/facultyaffairs/career_dev/facultymentoringguide/
http://www.kumc.edu/som/facdev/mentoringoverview.html
http://www.crlt.umich.edu/faculty/facment.php
http://academicaffairs.ucsd.edu/faculty/programs/fmp/default.htm#Department%20Chair
http://www.mcw.edu/display/router.aspx?docid=1107&

The literature expands and reinforces our experience based on ongoing review of our students' performance and learning outcomes. By applying these ideas and principles of mentoring training and learning community development, MSM can strengthen its academic programs as the Institution expands.

A complete list of references is included in Appendix VI.

Section VII. Actions to be Implemented and Timeline

In order to realize the goals of the MSM QEP, specific steps must be undertaken in an ordered and time-appropriate fashion. This implementation plan includes those activities associated with the outcomes, the primary participants, timeline, and person/entity responsible for seeing that the activity is executed. The implementation plan is displayed in the following charts:

Goal 1. Assure the success of mentoring programs through appropriate ongoing faculty development and support.

Objective: Identify, recruit, train, support, and sustain faculty as lead and co-mentors and enhance the mentoring skills of other faculty.

Outcome 1A. Faculty will demonstrate knowledge and capacity to mentor students.
Outcome 1B. Faculty will perceive all components of project to be appropriate.

Expected Outcomes	Action/Key Activities	Targeted Participants	Timeline	Evaluation Questions	Responsible
Project director will be employed	Recruit QEP director	All faculty	2011	Was position filled?	Senior Associate Dean
1A. Faculty will demonstrate knowledge and capacity to mentor students. • Student satisfaction • Increased number of faculty with mentoring skills 1B. Faculty will perceive all components of project to be appropriate. • Faculty satisfaction	1.1 Identify key faculty to link to learning communities 1.2 Establish series of basic mentoring workshops 1.3 Invite faculty to participate in yearly workshops 1.4 Establish series of advanced research mentoring skills workshops 1.5 Establish series of advanced mentoring workshops in career mentoring and academic skills	Faculty engaged in research Teaching, clinical, community faculty, and alumni	2012 2013 2013 2013	Have faculty been identified? Have workshops been planned and scheduled? Have at least 15 faculty agreed to participate? Did at least 10 faculty per year participate in each of advanced workshop series?	QEP Director QEP Director Senior Associate Dean QEP Director Faculty Assembly

Development of Mentoring Skills

It is clear that mentoring is of benefit to the mentor, mentees, and institution and that mentoring skills can be built. In order to enhance and expand Mentoring Students at Morehouse, a variety of resources have been used to construct a basic curriculum of general mentoring skills. Because mentees can build a spectrum of skills to enhance their ability to benefit maximally from the mentoring experience, a series of workshops and other learning sessions will be implemented to provide resources for guidance and self-directed skill enhancement to support faculty and students.

Faculty Mentoring Curriculum

There are basic mentoring skills and knowledge that are relevant for the entire faculty. There are also some specialized knowledge and skills, (such as finding and applying for research funding), that is more specialized, but is still applicable to large numbers of faculty. There are also very specific areas of knowledge or skill that would only apply in specific areas (such as for a career in surgery and research). Faculty mentoring development is organized in the following fashion:

1. Core Mentoring skills (for all faculty)
2. Key domain skills—Research-specific and health-career/teaching specific
3. Specialized skills

A basic series of workshops suitable for all faculty will address these domains, and a series of workshops will focus on the two key domain skills. To address specialized skills, “master mentor” skills, and global skills development, learning communities of experienced mentors (by area of interest) will be developed and a series of seminars and special sessions will be implemented to support the development of specialized areas.

This curriculum is designed to be learner-centered and involve group work of the faculty. Weekly long lunches/afternoons over a series of 6 weeks will cover the curriculum. As in the models of faculty development that we have previously used, we would anticipate using trainees from one series to be facilitators for the next series. We plan to have such series approximately twice per year on different schedules to accommodate different faculty needs. Using Zachary’s ***The Mentors’s Guide*** and Handelsman’s ***Entering Mentoring*** (http://www.hhmi.org/resources/labmanagement/downloads

/entering_mentoring.pdf), as guides, the basic mentoring curriculum of workshops is as follows:

Mentoring Topics Core Series (6 sessions)	
	Topics Covered
Session I Elements of Mentoring What is a Mentor?	• Personal experiences with mentoring • Domains of mentoring – connection, context, challenge • Group work – elements of mentoring
Session II Biomedical Sciences Education	• Career pathways • Institutional structure and advancement • Faculty stages and needs • Student stages and needs
Session III Communication Skills for Mentoring	• Mentee assessment • Active Listening • Reflection • Feedback • Self-assessment of skills
Session IV Goal setting and mentoring	• Setting personal goals • Guiding mentee goals • Paradigms for assessing goals
Session V Challenges in Mentoring	• Case studies • Handling mentor/mentee conflicts • Motivating mentees
Session VI Other Group Models	• Group • Team • Learning Communities

This curriculum is designed to be learner-centered and involve group work of the faculty. The curriculum would be covered in weekly lunches/afternoons over a series of six weeks. As in the models of faculty development that have been previously used, trainees from one series will be facilitators for the next series. These series will occur approximately twice per year on different schedules to accommodate different faculty needs.

The faculty has an established program of assigning advisors to students. While all faculty will be invited to participate in the basic series of workshops, priority will be

placed on faculty who serve as advisors participating in (or leading) workshop sessions. Experienced mentor/advisors will also be looked to further develop and refine mentoring skills workshops for fellow faculty. Because MSM is a learning organization with a tradition of faculty and students learning from each other, this tradition will be built upon through an ongoing and expanding mentoring program.

The "Advanced Mentoring" workshop series would have two different areas of general emphasis -- research mentoring and health careers mentoring. Planned formats would be as follows:

Research Mentoring Workshops (modeled on Handelsman, and Johnson and Pratt)

Guiding a new researcher
- Elements of a good research project
- Setting goals and expectations

Guiding critical thinking
- Resources for research design
- Promoting mentee reflection
- Developing mentee skills with organizing research approaches

Funding sources/grant writing
- Building mentee skills with identifying grant resources
- Resources for grant writing
- Resources for funding

Writing for publication
- Helping mentees learn academic formats
- Resources for guiding beginning writers
- Building presentation organization skills

Career networking
- How to "case" a scientific meeting
- How to network for guidance
- How to "work" a poster session

For faculty with a clinical, educational, public health, or other health career focus, the advanced series of workshops would be as follows:

Health Career Mentoring Workshops

Resources for health career mentoring
- Educational pathways
- Career pathways
- Career barriers
- Resources for addressing career barriers

Varieties of mentoring
- Group
- Team
- Peer
- "stair step"

Guiding mentees in self-assessment
- Active listening
- Building reflection skills
- Building skills in seeking feedback
- Building skills maintaining balance

Guiding mentees in planning
- Building skills in goal setting
- Building skills in developing stepwise plans
- Re-directing mentees' career aspirations
- Building mentee confidence

The problem mentee
- Communication barriers
- The unreachable mentee
- Mentees in need of professional services

To complement these series, there will also be a general series of seminars and workshops on other topics related to mentoring, with outside speakers as needed (about two per semester). Topics will include (but not be limited to):

Mentoring in recruitment and retention

Mentoring of women in the sciences

Mentoring of individuals underrepresented in health care careers

Mentoring the mid-career scientist

Leadership mentoring

Faculty who are group leaders of the learning communities will be expected to be participants in these initial series of workshops (either as workshop leaders or participants). In addition, the team of faculty leaders for the MD workshops will form a learning community and meet at least monthly. These meetings will include both logistical issues as well as learning agendas set by the team of faculty.

Resources for mentoring have been collected and the faculty is building an online resource center for faculty and students on the blackboard web site. This will be a communal “bulletin board” for sharing ideas, schedules, insights and resources.

For MPH students, basic mentoring skills will be addressed in the first year fall semester and in the series of workshops that are scheduled twice a semester.

We will assure the success of the emphasis on mentoring through expanded emphasis on faculty participation in mentoring in the faculty evaluation process. We will also make sure that faculty contributions in mentoring will also be considered in the promotions process.

Goal 2. Increase student academic success by expanding and enriching peer/near-peer mentoring and by enhancing the support of challenged students through In-Course Enrichment (ICE) mentoring enhanced support of students repeating courses.

Objective: Expand use of peer/near peer mentors/tutors to assure academic success of students.

Student Learning Outcome 2.A. Students will be able to complete courses on time.
Student Learning Outcome 2.B. Students will pass Step1 exams on the first time-taking.
Student Learning Outcome 2.C. A cohort of students will learn how to be effective peer mentors.

Expected Outcomes	Action	Targeted Participants	Timeline	Evaluation Questions	Responsible
2A. Students will be able to complete courses on time. 2.B. Students will pass Step1 exams on the first time-taking. 2.C. A cohort of students will learn how to be effective peer mentors.	2.1 Develop curriculum for workshops. 2.2 Implement workshops in mentoring skills 2.3 Identify peer mentors/trainers student teaching assistants 2.4 Develop in-Course Enrichment Curriculum for second year MD program courses 2.5. Implement required tutorial and mentoring support of MD program	Students Peer tutors Students repeating courses	2011 2012 2013 2012 2013 2012	Was workshop curriculum developed and implemented in a timely fashion? Have workshops been planned and scheduled? Were TA's assigned to GEBS and MPH courses? Did second year MD students receive in-course enrichment? Did implementation allow for assessing changes in student performance? Did students consider mentoring and tutoring programs appropriate and helpful?	Course Faculty 2nd Year Faculty Course Directors 2nd Year Faculty QEP Director MD Program Coordinator

Goal 2. Increase student academic success by expanding and enriching peer/near-peer mentoring and by enhancing the support of challenged students through In-Course Enrichment (ICE) mentoring enhanced support of students repeating courses.

Peer-tutoring/mentoring has been a part of our support of students in the MD program who face challenging in mastering the pre-clinical curriculum. Current activities will be enhanced through the following areas:

Stronger and more structured training

- Teaching skills
- Mentoring skills
- Feedback skills
- Structured evaluation
- Assessment of mentor/mentee matching

Teaching assistants will be used in the public health programs to continually strengthen it. Peer tutoring will be implemented, as needed, throughout the graduate program.

Mentor training for Students

Mentoring curricula will be integrated into the MD program in the Fundamentals of Medicine 1 class sequence as outlined in this table. Topics integrated into the learning community sessions will deal with the following skills.

Topics integrated into the MD learning community sessions		
Fundamentals of Medicine 1	**Fundamentals of Medicine 2**	**Third year MD program students**
How to be a good mentee Setting personal goals Reflection and self-assessment Skills in giving and receiving feedback Peer mentoring skills	Teaching skills Assessment of needs of learner Basic teaching skills Basic assessment skills Writing multiple choice questions (NBME style) Peer mentoring skills Communication skills	Community teaching skills • K-12 • Adult education Teaching clinical skills • Near-peer teaching of first and second year students Networking skills • Career networking Teamwork skills

For students selected to be peer mentors, there will be an additional program that includes attention to applied skills including the following:

- Needs assessment
- Instructional techniques
- Encouraging engagement
- Providing feedback
- Knowing your limitations

For students in GEBS programs, basic mentoring skills will be addressed in sessions during the first semester. These will be further expanded through the first year learning communities then through their research learning communities.

In-course enrichment (ICE) is the term used for small group tutoring and mentoring of students in the MD curriculum of students whose test performance suggests risk of course failure. We will be expanding this program to second year students as well as to first year graduate students. Structured support will be implemented for MD program students in the second year who have failed one or more courses as an expansion of this program.

Students in this program are evaluated by a team of experienced faculty and counselors. They also self-assess (study skills, barriers to performance) and set goals for their own performance. Through weekly meetings with their mentor, they reflect on progress, identify barriers, and learn to problem-solve on addressing these challenges. These individual mentoring sessions are augmented by small group sessions addressing key concepts and skills.

Peer and near-peer in the MPH Program

During the 2009 – 2010 academic school year, MPH students participated in a number of mentoring relationships. MPH students became more comfortable with working together, academically, as a result of consistent group meetings with other students in their track. This will be expanded by the following:

- Enhancing the emphasis on peer interaction in the tracks. This is already an informal part of MSM tracks, but the track meetings will be restructured to emphasize student-to student interactions and sharing of experiences.

- It has been recognized that some courses, particularly biostatistics and epidemiology, are very challenging for some students. Peer mentoring will be instituted to assist students struggling with these sections.

Goal 3. Enhance student development of professional competencies through the establishment of learning communities.
*Objective: Engage students with peers, faculty, and career mentors longitudinally to enhance communication skills and professional development***.**

Student Learning Outcome 3.A. Students will be able to effectively communicate as demonstrated by active listening skills, restatement, asking clarifying questions.

Student Learning Outcome 3.B. Students will be able to describe key competencies of professional behavior and demonstrate appropriate professionalism.

Student Learning Outcome 3.C. Students will perceive the use of learning communities to be appropriate for their learning and career transition.

Expected Outcomes	Action	Targeted Participants	Timeline	Evaluation Questions	Responsible
3.A. Students will be able to effectively communicate..	3.1 Identify or develop curriculum for communication skills competency instruction and evaluation processes linked to learning communities	MD Students	2012	Was curriculum developed and implemented in a timely fashion?	QEP Director Learning Communities Faculty Leadership
3.B. Students will be able to describe key competencies of professional behavior and demonstrate appropriate professionalism..		First year MD Students	2012	Do students demonstrate effective communication skills?	QEP First Year Faculty Learning Communities Faculty Leadership
	3.2. Establish learning communities		2012 - 2015	Do students demonstrate appropriate professionalism?	
3.C Students will perceive the use of learning communities to be appropriate for their learning and career transition.	3.3 Foster the engagement of the learning communities in service-learning projects,	MD, GEBS, MPH Students	2012	Were learning communities expanded to 2nd, 3rd and 4th MD students as planned, in 2013, 2014, and 2015, respectively?	Director, Center for Community Health & Service Learning
	3. 4 Plan phase in Learning Communities to GEBS and MPH programs	GEBS and MPH students	2013	Were learning communities expanded to GEBS & MPH beginning in 2013?	QEP Director GEBS & MPH Faculty

Goal 3. Enhance student development of professional competencies through the establishment of learning communities.

Learning Communities in the MD Program

Four learning communities encompassing all MD program students will be established and phased in over four years. These four communities will be led by a pair of faculty, a clinician and non-clinician. The learning communities will be engaged in formal curricular elements and informal and extracurricular elements throughout the four years.

The two faculty leaders selected for these communities are expected to make a minimum three year commitment to the communities. These individuals will be selected from the teaching faculty and will have both community related and other roles in the curriculum and in student support and advisement. The faculty, who are community leaders, will also participate in ongoing learning/discussion sessions to enhance their career development and to enhance the coordination of community activities.

Upon admission, the students will be assigned to a community. Assignment will be stratified-random, with an effort to maintain balanced diversity in each of the communities. MSM has a long-standing tradition of assigning second year “sibs” to entering students. We will assign sibs, “grand sibs”, and “great sibs” (of the second year, third year, and fourth year classes) to the respective communities upon establishment. We will also try to ensure that individual assigned faculty advisors are linked to students within a community. In this way, there will not only be a team of two mentors for each community, but another team of faculty advisors associated with students of the same community. Each student will have access to a personal advisor as well as the team. This will enhance the number of personal contacts available to each student, as well as allow students with different styles or needs to be able to access a larger supportive structure.

Grade-level community meetings and events will be woven into the existing curricula of the first and second year. In particular, the community groups will be the assigned groups of our first year service-learning course, Community Health. In this course, students engage in team-building, community assessment, intervention development,

implementation, assessment, and reporting/presentation. Each group is guided by a team of faculty. In addition to these class sessions, small-group sessions of Fundamentals of Medicine 1 will be aligned with the learning community groups. A limited number of new curricular elements for Fundamentals of Medicine 1 will be added to address some topics in group discussion formats. These will be led by a group of community faculty leaders. A possible schedule is as follows:

July	Foundations for Life-long learning
July	US health care—what can/should be done?
August	Oaths and Medical Ethics
September	Teamwork
November	Dealing with Diversity
December	Reflection on half-year
January	Professionalism and ethics
February	Dealing with conflicts
March	Maintaining Balance
May	So far so fast

In addition, about 4 “social” sessions with all 4 years, 1 session per semester of first and second year students will take place. A “clinical day” for first year and for second year students is planned when they join a learning community member for their “day on the wards at Grady”. These would be opportunities for peer mentoring and career transition awareness.

MSM students engage in a variety of service projects and activities. Students will be encouraged to link to community members as they plan health fairs and other service activities. Communities will have modest budgets to support such activities and community faculty would be expected to provide appropriate supervision as necessary.

Students have traditionally been assigned faculty advisors when they enter the medical degree program. Advisors will be aligned with the students of specific communities. It is anticipated that these individuals would form a collegial group of “secondary faculty” associated with the respective learning communities. Ongoing training and mentoring of these advisors is being developed and this program will continue to be expanded.

These activities will be evaluated in the following ways and they are described more fully in the Assessment Section. Evaluation of the learning communities will include the following:

- Session evaluation by participants
- Yearly evaluation by participants
- Skills assessments—communication, self-assessment, networking, giving help, receiving help, teamwork (checklist by students and supervisors)
- Reflection notebooks (online)
- Impact on timely progression (comparing numbers of students repeating courses or failing Step exams)
- Subject exam scores
- Step exam scores
- Assessment of faculty mentors by students
- Narrative assessment of students by faculty

Learning Communities Phase In Plan - This QEP Plan commits to establishing eight learning communities in the MD program within the next two years. The learning communities will be phased into the GEBS and MPH programs beginning with Year 03 of the QEP Program.

MSM Learning Communities Phase In Timeline

Number of Learning Committees by Year

	QEP Year 1	QEP Year 2	QEP Year 3	QEP Year 4	QEP Year 5
Program					
MD	4 in Year 1	4 in Years 1 & 2	4 in Years 1, 2 & 3	4 in Years 1-4	4 in Years 1-4
GEBS	0	0	1	2	2
MPH	0	0	1	2	3

Learning Communities in GEBS Programs

By year three of this plan, learning communities in the graduate programs will be phased in. In order to enhance mentoring for GEBS students in the PhD, MSCR, and MSBR degree programs, the following goals will be pursued including establishing learning communities for key stage and step transitions, training of students and faculty in the key

skills of providing and receiving mentoring, and a more structured approach to matching research mentors.

In GEBS, the MSCR program already works as a learning community, and this will be supported and enhanced through an emphasis on transitions, stages, and personal development.

Learning communities will be established for first year students in the other GEBS degree programs—MSCR/CT and PhD. The focus of these learning communities would include

- Transitioning to graduate school
- Developing one's vision as a researcher
- Choosing a research mentor

Other topics of focus for these learning communities that are linked to curricular elements include

- Professionalism and Ethics
- Critical thinking
- Communication skills (improved writing and presentation)
- Study skills and in-course enrichment
- Time and task management
- Career planning

Support for students' study skills and in-course enrichment has been less organized. In some cases it has been too dependent on the students' own initiative in seeking assistance. This is an area identified for development of learning community intervention. The faculty learning-community mentor (FLCM) for the first-year students will develop and implement introductory and follow up study-skills sessions for all new students. The FLCM will also assess academic progress through formative and summative course evaluations and coordinate enrichment resources available through course faculty, counseling services, and peer and near-peer mentors with the goal of helping each student to reach their academic potential. One key element in successful adjustment to the greater demands of graduate school and achieving academic success is attention to learning and executing time- and task-management strategies. Sessions

covering these strategies and follow up on their execution will also be organized by the FLCM for this learning community.

Given the wide and growing range of career options facing these students, another key element selected for development and intervention across the stage-related learning communities for our students is career planning. In this first learning community, under the direction of the FLCM, a key curricular element involving introductory and follow-up exercises in developing a five-year individual development plan (IDP) will be developed and implemented. The model for this process will be that recommended by FASEB for postdoctoral fellows (http://www.faseb.org/portals/0/pdfs/opa/idp.pdf) and described in an article in Science (http://sciencecareers.sciencemag.org/career_magazine/prefvious_issues/articles/2002_10_18/noDOI.1597308240896926531 5). This plan has been adopted by some institutions as a model for graduate students as well (http://www.mcw.edu/VirtualCareerCenter/IndividualDevelopmentPlan.htm). The elements of this model provided to our first year students through workshops will be the conduct of a self-assessment, a survey of opportunities, the writing of an IDP, and the review and revision of the initial IDP with the aid of the FLCM and a follow-up review with the advisor once selected.

Learning Communities in the MPH Program

Learning communities will also be phased in for the MPH program. Learning communities will be available for all starting students in the first year to assist with transition to the program. The initial groups will be divided by “life stages” (those in executive/parallel employment; versus those who are full-time students) as the development needs of these groups has been different. These communities will be focused on developing insights, skills and identities as a public health professional. For the experienced group, sustaining life/work balance while negotiating advancement will be a key emphasis. Networking skills and exposure to public health professional roles will have a stronger emphasis for the full-time students.

MPH tracks partially function as learning communities now. As faculty participate in the mentoring skills sessions, the regular track meetings will evolve to include explicit emphasis on the development of related professionalism competencies, communication and networking skills, and career exploration. Select community faculty and alumni will

be included in the mentoring skills sessions and enhance their role in supporting the learning communities as a resource for career awareness and networking.

Summary

Learning communities in the health professions and other educational programs have been seen as enhancing the development of the competencies of professionalism and in addressing some of the challenges of transitions in professional development. By intentionally developing and supporting such learning communities in our degree programs we expect to enhance our students' mastery of skills, competencies and attitudes that will enhance their learning and development as professionals.

Section VIII. Organizational Structure

Program directors and the QEP director will make up the QEP leadership team, led by the Senior Associate Dean for Educational Affairs who will provide overall oversight. Leaders of the learning communities for each program will meet periodically with the program directors. Dedicated staff will support the overall QEP program and evaluation. Administrative support to the program directors will coordinate the scheduling of events and the collection and collation of evaluations. The QEP Leadership Team will have a student representative from each of the three academic programs.

QEP Director

Institutional funds have been identified for the establishment of a full time QEP Director to ensure full implementation and integration of the QEP goals into the MSM educational program. The Director will have responsibility for the implementation, coordination and development of the Quality Education Plan at Morehouse School of Medicine. The individual will provide major oversight on the direction and coordination of mentoring activities related to the MD, PhD, MSBR, MSCR and MPH degree programs. The Director will be responsible for the establishment and management of four Learning Communities in the MD program. This individual will synchronize faculty development and training activities to ensure the successful implementation of the Leaning Communities and development of mentoring plans of each degree program. The candidate should currently hold a faculty rand of Associate/Full Professor, and should have a Ph.D. in a biomedical discipline, MD or similar degree; also a major commitment to medical education and training with more than 15 years experience teaching and mentoring students in a medical school. The Director will directly report to the Senior Associate Dean for Education and Faculty Affairs.

The Director's Duties:

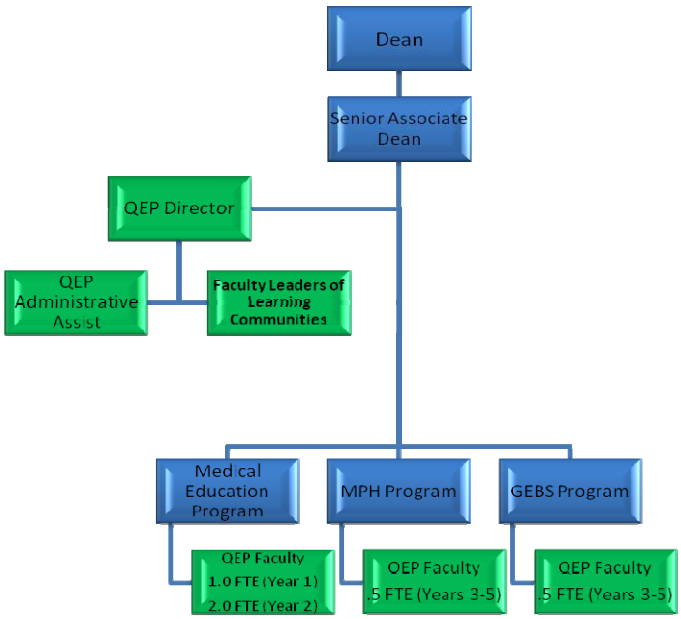
- Plan faculty activities such as workshops for improving mentoring skills.
- Plan student activities related to training students as peer leaders and mentors.
- Develop criteria for student selection as peer leaders.
- Coordinate and prioritize activities related to student mentoring and enrichment programs.
- Plan and coordinate meetings for faculty leaders of Learning Communities.
- Establish and coordinate schedules of learning community meetings and activities.
- Establish duties of faculty leaders of Learning Communities.

- Plan and coordinate all conference schedules related to mentoring and training.
- Collect and analyze data on faculty and student surveys.
- Write QEP progress reports on mentoring and development of Learning Communities.
- Manage and provide oversight of QEP budget.
- Direct staff coordinator of the QEP.
- Meet with students periodically to gain feedback on mentoring group activities and student concerns.
- Work with the Education IT specialist to coordinate and promote online communication resources.
- Actively participate on committees related to student procedures and medical education.

Recruitment for the QEP director will begin in April 2011 with a goal to be filled by July 2011. The Senior Associate Dean will serve as the Interim QEP Director until the position is filled.

General support and coordination of assessment and evaluation will be provided by staff reporting to this faculty member. The program will be supervised by a program evaluator who will report to the Senior Associate Dean. For the MD program, a designated staff member will coordinate the scheduling and events for the learning communities and will support the scheduling and evaluation of the mentoring workshops.

QEP Program Organizational Relationships



Section IX. Resources and Budget

Morehouse School of Medicine is fully committed to funding the QEP, *Mentoring Students at Morehouse*, in the amount of $3,313,700 to support the program over the next five years beginning July 2011. The institution considers SACS and QEP activities as "mission critical" and the enhancement of student learning as an ongoing priority for our school. The major budget category will be personnel;

- QEP Director – This position will be filled by a faculty member who will devote full (100%) time to the QEP Project and associated student learning.
- Learning Community Faculty – In Year 01 we will have two half time faculty member equivalents who will supervise medical school learning communities. One faculty member will be a clinician and the other a basic scientist. These positions will increase to full time equivalents beginning in Year 02 .
- Administrative Assistant – Full time position which will serve as the administrative support for the QEP Office
- GEBS research and MPH public health faculty members will be phased in during Year 03 at the half time (0.5FTE) level respectively.

The Mentoring Program Component will provide training/workshop funds to underwrite our proposed QEP Mentoring Curriculum, student mentor stipends, office supplies and program consumables. A modest travel budget is also included.
The QEP Project will be leveled a 8% indirect cost which equates to our institution rate for training programs

Space allocation – Offices have been identified for the QEP Director and administrative assistant. Lecture halls, conference rooms, and e-labs will be assigned for mentoring workshops and learning communities sessions as needed.

QEP SACS Five Year Budget

Category	Year 01 7/1/11	Year 02	Year 03	Year 04	Year 05	5 Year Total	Comment
Mentoring Program							
Training Workshops	$25,000	$40,000	$50,000	$50,000	$50,000	$215,000	
Student Mentor Stipends	$15,000	$20,000	$25,000	$25,000	$25,000	$110,000	$15/hour
Program Operations – Consumables	$5,000	$10,000	$10,000	$10,000	$10,000	$45,000	
Travel	$5,000	$5,000	$5,000	$5,000	$5,000	$25,000	
Learning Communities							
Personnel							
Faculty Member 1 .5 FTE Year 1 1 FTE Year 2-5	$62,500	$125,000	$125,000	$125,000	$125,000	$562,000	Basic scientist $100,000 + fringe
Faculty Member 2 .5 FTE Year 1 1 FTE Year 2-5	$93,750	$187,500	$187,500	$187,500	$187,500	$843,750	Clinician $150,000 + fringe
QEP Director 1 FTE Year 1-5	$125,000	$125,000	$125,000	$125,000	$125,000	$625,000	Basic scientist $100,000 + fringe
Administrative Assistant 1 FTE Year 3-5	$56,250	$56,250	$56,250	$56,250	$56,250	$281,250	Base $45,000 + fringe
GEBS Faculty 0.5 FTE Year 3-5	$0	$0	$65,000	$65,000	$65,000	$195,000	
MPH Faculty 0.5 FTE Year 3-5	$0	$0	$65,000	$65,000	$65,000	$195,000	
Operations							
Indirect Costs (8%)	$27,000	$39,500	$49,900	$49,900	$49,900	$216,200	
Total	**$414,500**	**$608,250**	**$763,650**	**$763,650**	**$763,650**	**$3,313,700**	

Section X. Assessment

The assessment plan provides a description of the process that will be used to determine whether the goals and objectives of the MSM QEP have been met. This process of documentation and evaluation will help us to determine the impact of the MSM QEP on student learning,

Overall responsibility for assessment of the QEP will rest with the QEP Director. The design of the MSM QEP and the implementation plan will require ongoing review and assessment over the next four years. QEP assessment, as a part of the institutional assessment, will involve all of the institution— faculty, staff, and students.
The assessment plan will address the evaluation questions listed for each goal and each activity in the implementation plan and will specify success measures.

Outcomes for the various components of the QEP will be assessed at different levels. In the Kirkpatrick evaluation formulation, Immediate impact on participant satisfaction in individual sessions; participant satisfaction with programs year by year; learning related to communication skills, professionalism, and career insights; and change in measures on variables such as performance, timely promotion, and career success will be assessed.

A variety of tools including satisfaction surveys, student grades analyses, standardized exam performance and promotion will be used for evaluation. (See Appendix VII for assessment survey examples). For MD program students, individual and group performance on subject exams (five per year, years 1-3); Step 1 exam given after the second year; and Step 2 exam, given after the third year will be tracked. For all programs, the number of students progressing on time as well as program attrition for academic reasons will be tracked.

Outcomes assessments will focus on the impact of specific QEP activities on faculty and students. For example, they reveal whether specific activities have enhanced faculty mentoring skills or enhanced student learning. These assessments focus on the impact QEP activities have had on students or faculty. Behavior perceptions, knowledge, skills, attitudes, or behaviors in specific areas are targeted by QEP activities.

Other outcomes measures address student performance as indicated by student grades compared to a historical baseline; and student progress (percent passing courses, Step exams, time to degree). The appropriate assessment tools and metrics will be determined for each outcomes measure. Data will be gathered from faculty and student surveys; student performance on tests, and other means of determining competency levels.

Examples of some process and outcome measures for each of the goals are listed below:

Goal 1. Assure the success of mentoring programs through ongoing faculty training.

Process Measure:

- Number of faculty participating in mentoring training
- How many training sessions were held?

Outcome Measure:

Degree of faculty satisfaction with Mentoring Training Sessions and with their mentoring role.

Goal 2. Enhance student academic success by expanding and enriching peer/near-peer mentoring and enhancing the support of challenged students through course enrichment mentoring and tutoring.

Process Measures:

- Number of peer mentor sessions; number of students participating in peer-mentor sessions; number of students participating in ICE session; number of ICE sessions; number of students in RICE; and number of students serving as peer mentors/tutors

Outcome Measure:

- Degree of student satisfaction with peer mentors; with ICE; with RiCE Student evaluation of peer mentors; ICE; and RiCE

Goal 3. Enhance student development of professional competencies through the establishment of learning communities.

Process Measures:

- Number of faculty, students participating in learning communities
- Number of structured sessions for learning communities

Outcome Measure:

- Degree of student satisfaction with learning communities; with mentors; student evaluation of learning communities; mentors;

The evaluation process will involve online and/or paper evaluation of all scheduled mentoring sessions. In addition, end-of-year written evaluations will be collected from all participants. Process measures will be collected and collated. In addition, yearly data on student progress will be collected by the QEP office. The steering committee will meet quarterly to review progress and problems. Semi-annually, this group will review overall progress. Yearly QEP assessment reports of outcomes will be provided to the dean, chairs, faculty, and students.

The data on outcomes will be reviewed by the Education Council, analyzed, and assessed against goals and objectives. The information gleaned from this process will be used to determine program effectiveness and to make recommendations for improvement to the plan, if necessary, thus "closing the assessment/effectiveness loop." The Educational Council will also meet semiannually with the learning community leaders to assess successes and challenges.

The final assessment will focus on the over- time impact of the QEP on student learning in preparation for the Five Year Report to SACS/COC.

The plan to assess the impact of the MSM QEP on student learning is illustrated below:

Goal 1. Assure the success of mentoring programs through ongoing faculty training.

Outcome 1A. Faculty will demonstrate a knowledge of and the capacity to effectively mentor students.

Direct Measure(s)

- Identify faculty mentors.
- Develop and implement an annual workshop and series of seminars covering mentorship principles and strategies.
- Implement a series of seminars every two months.
- Engage three internal speakers and three external mentoring experts to discuss principles and practices of effective mentorship.
- Attendee evaluations at the end of each session.
- Number of faculty mentors will increase annually.
- Student satisfaction with faculty mentors. on survey.

Outcome 1B. Faculty will perceive Mentoring Students at Morehouse (all Components) to be appropriate.

Direct Measure(s):

- Annual surveys of students and faculty regarding training sessions.
- Annual focus groups
- Preparation and distribution of annual program evaluation to faculty and students.

Goal 2. Increase student academic success by expanding and enriching peer/near-peer mentoring and by enhancing the support of challenged students through in-course enrichment (ICE) mentoring and enhanced support of students repeating courses.

Student Learning Outcome 2.A. Students will be able to complete courses on time.

Direct Measure(s):

- 90% or more of students participating in the In-course enrichment programs will complete course on time
- 90% of students referred to ICE will be active participants.
- 95% of active participants in ICE (attending ICE >90% of time and participating actively in learning activities of ICE) will complete curriculum without failing courses.
- 95% of repeating students who participate in R-ICE activities will pass all courses and Step exams.
- Students will perceive course is appropriate and express satisfaction on survey.
- Decrease the number of students who have to remediate courses (currently about 15-20%).

Student Learning Outcome 2.B. Students will pass Step 1 exams on the first time-taking.

Direct Measure(s):

90% or more of students participating in these programs (in-course enrichment or support of student repeating courses) will pass Step 1 exams on first time-taking.

Student Learning Outcome 2.C. A cohort of students will learn how to be effective peer mentors.

Direct Measure (s):

- Twenty students will be trained as peer mentors.
- 100% of students should be able to describe how to assess learning needs of their mentees.
- 100% of students should demonstrate engaging mentees in active learning sessions.

Goal 3. Enhance student development of professional competencies through the establishment of learning communities.

Learning Outcomes for MD students:

Student Learning Outcome 3.A. Students will be able to effectively communicate.

Direct measure(s):

- 95% of students completing the second year will be able to identify competencies, including active listening, restatement, clarifying questions,, conflict management, etc.
- 100% of students completing the second year will be able to identify and display communication skills.
- > 95%of students will show improvement in communication scores as indicated by:
    - End of program assessment of written communication skills
    - End of program assessment of oral communication skills
    - End of program assessment of other media communication skills
- 100% of graduating students will be able to describe three different career paths for graduates of their degree programs.
- 25% of graduating students will have experienced meaningful career mentoring by one or more alumni.
- 100% of students completing the first year of their programs will be able to describe career pathways in their chosen profession.
- 95% of students completing the first year of their programs will be able to describe networking approaches relevant to their professional area

Summary

MSM, although a young school, has a track record of success in recruiting and training individuals committed to serving the healthcare needs of the underserved. Student mentoring and personal guidance by faculty have been important contributors to our success. As we have grown, we have recognized the need to enhance our mentoring skills through explicit programs for students and faculty. We also have developed programs that support struggling students. Expanding these to assure support of all struggling students will assure that these students develop the necessary skills and competencies to learn and succeed in the curriculum. Furthermore, by assuring that every student is linked to mentoring through learning communities will help all students master the skills necessary for success as physicians, biomedical scientists, or public health professionals. In addition, the re-energizing of mentoring through this Quality Enhancement Plan is expected to enhance our impact on the individuals in the communities we serve.

We realize that as we execute this QEP, **M**entoring **S**tudents at **M**orehouse, our faculty will become better teachers and therefore better citizens; our students better prepared health professionals and human beings; and the patients and communities that we serve healthier and empowered.

Morehouse School of Medicine Mission Statement

Morehouse School of Medicine is dedicated to improving the health and well-being of individuals and communities; increasing the diversity of the health professional and scientific workforce; and addressing primary health care needs through programs in education, research, and service, with emphasis on people of color and the underserved urban and rural populations in Georgia and the nation.

Morehouse School of Medicine is on a mission.
A mission that has become more important than ever.

Section XI. Appendices

Appendix I	"The Social Mission of Medical Education Education: Ranking the Schools" Annals of Internal Medicine, Vol 52, No 12, June 15, 2010
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Morehouse School of Medicine
Annals of Internal Medicine

The Social Mission of Medical Education: Ranking the Schools

Fitzhugh Mullan, MD; Candice Chen, MD, MPH; Stephen Petterson, PhD; Gretchen Kolsky, MPH, CHES; and Michael Spagnola, BA

Background: The basic purpose of medical schools is to educate physicians to care for the national population. Fulfilling this goal requires an adequate number of primary care physicians, adequate distribution of physicians to underserved areas, and a sufficient number of minority physicians in the workforce.

Objective: To develop a metric called the social mission score to evaluate medical school output in these 3 dimensions.

Design: Secondary analysis of data from the American Medical Association (AMA) Physician Masterfile and of data on race and ethnicity in medical schools from the Association of American Medical Colleges and the Association of American Colleges of Osteopathic Medicine.

Setting: U.S. medical schools.

Participants: 60 043 physicians in active practice who graduated from medical school between 1999 and 2001.

Measurements: The percentage of graduates who practice primary care, work in health professional shortage areas, and are underrepresented minorities, combined into a composite social mission score.

Results: The contribution of medical schools to the social mission of medical education varied substantially. Three historically black colleges had the highest social mission rankings. Public and community-based medical schools had higher social mission scores than private and non–community-based schools. National Institutes of Health funding was inversely associated with social mission scores. Medical schools in the northeastern United States and in more urban areas were less likely to produce primary care physicians and physicians who practice in underserved areas.

Limitations: The AMA Physician Masterfile has limitations, including specialty self-designation by physicians, inconsistencies in reporting work addresses, and delays in information updates. The public good provided by medical schools may include contributions not reflected in the social mission score. The study was not designed to evaluate quality of care provided by medical school graduates.

Conclusion: Medical schools vary substantially in their contribution to the social mission of medical education. School rankings based on the social mission score differ from those that use research funding and subjective assessments of school reputation. These findings suggest that initiatives at the medical school level could increase the proportion of physicians who practice primary care, work in underserved areas, and are underrepresented minorities.

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For author affiliations, see end of text.

Medical schools in the United States serve many functions, but one of their most basic purposes is to educate physicians to care for the national population. During the latter half of the 20th century, with federal and state support, medical education expanded to meet population needs (1). However, 3 specific interrelated issues challenged medical educators and policymakers: an insufficient number of primary care physicians, geographic maldistribution of physicians, and the lack of a representative number of racial and ethnic minorities in medical schools and in practice.

As early as the 1950s, commissions concerned with the medical workforce in the United States issued reports that raised these concerns (2–4). These reports helped launch legislation beginning with the Health Professions Educational Assistance Act of 1963 that provided support for expansion of medical education with particular attention to primary care, physician distribution, and educational opportunities for minority medical students. The National Health Service Corps, created in 1970, provided scholarships for students who committed to practice in underserved communities. Of the 28 allopathic medical schools opened with the aid of substantial state and federal support between 1970 and 1982, the Association of American Medical Colleges designated 17 as community-based (Salsberg E. Personal communication).

Nevertheless, problems in these 3 areas remain. Evidence increasingly shows that primary care is associated with improved quality of care and decreased medical costs (5, 6). However, an insufficient number of primary care physicians has hampered efforts to provide expanded health care access in states, such as in Massachusetts (7), and business groups and insurers have begun to speak out about the need for increased access to primary care (8).

Rural communities have a chronic shortage of physicians (9, 10), and federally supported community health centers report major deficits in physician recruitment (11, 12). African-American, Hispanic, and Native-American physicians continue to be severely underrepresented in the U.S. workforce. Underrepresented minorities made up 28% of the general population in 2006 (13) but accounted for only 15% of medical students and 8% of physicians in practice (14). These minority physicians provide a disproportionate share of health care to the growing minority U.S. population (15).

See also:

Print
Editorial comment. 818

Web-Only
Appendix
Conversion of graphics into slides

Medical schools contribute numerous important public goods to society beyond training the future physician workforce. They generate new scientific knowledge, are the home of leading-edge clinical treatments, and often provide substantial health care to underserved communities through their university hospitals and affiliates. Medical schools, however, are the only institutions in our society that can produce physicians; yet assessments of medical schools, such as the well-known *U.S. News & World Report* ranking system, often value research funding, school reputation, and student selectivity factors (16) over the actual educational output of each school, particularly regarding the number of graduates who enter primary care, practice in underserved areas, and are underrepresented minorities.

As citizens and policymakers reconsider the U.S. health care system and seek "quality, affordable health care for every American" (17), the nature of the physician workforce is becoming a key concern (18, 19). Many people believe that medical schools are accountable to society for their actions and accomplishments (20–22). Beyond their general educational mission, medical schools are expected to have a social mission to train physicians to care for the population as a whole, taking into account such issues as primary care, underserved areas, and workforce diversity (23–26).

We describe the analytic method that we used to measure the output of U.S. allopathic and osteopathic medical schools in these historically linked and traditionally challenging dimensions. We constructed a social mission score to summarize overall school performance in these areas.

Methods

Our analysis is based on the percentage of medical school graduates who practice primary care, work in health professional shortage areas (HPSAs), and are underrepresented minorities. The analysis was performed using data on graduates from 1999 to 2001 to capture the most recent cohort of graduates who had completed all types of residency training and national service obligations, such as the National Health Service Corps and the military's Health Professions Scholarship Program, both of which may involve up to 4 years of service. These factors were essential to determine graduates' actual choices of location and specialty rather than intermediary placements.

We analyzed multiple years to account for annual variations and included the 141 U.S. allopathic and osteopathic schools that graduated students between 1999 and 2001. We used the 2008 American Medical Association (AMA) Physician Masterfile to calculate the percentage of graduates practicing primary care and located in HPSAs. All physicians except for those listed as residents or fellows or those employed as administrators, primarily engaged in research or teaching, or who were no longer active (7.4% of the study group) were included. International medical school graduates were excluded. We used publicly available data on the race and ethnicity of graduates from the Association of American Medical Colleges and the Association of American Colleges of Osteopathic Medicine (27) to calculate the percentage of graduates who were underrepresented minorities.

We obtained standardized values for each of the 3 measures, with a mean value of 0 (SD, 1).

Primary Care Measure

Primary specialty information from the AMA Physician Masterfile was used to calculate the percentage of primary care graduates for each medical school. Primary care physicians included those in family medicine, general internal medicine, general pediatrics, or internal medicine pediatrics.

HPSA Measure

The Health Resources and Services Administration identifies HPSAs on the basis of 3 primary criteria (population–provider ratios, poverty rate, and travel distance or time to the nearest accessible source of care) and several secondary criteria (including infant mortality and low-birthweight rates and proportion of the population younger than 18 years or older than 65 years. We calculated the percentage of graduates from each medical school with an address in an HPSA. Health professional shortage area geographic data were downloaded from the Health Resources and Services Administration's Geospatial Data Warehouse (28). We geocoded addresses from the AMA Physician Masterfile by using the spatial mapping tool ArcGIS (ESRI, Redlands, California) to determine physician location within a primary care HPSA using geographic and population-based definitions of primary care HPSAs to determine the greatest number of graduates working in HPSAs.

This method probably overestimates the number of physicians practicing in underserved areas by including some physicians working in non-HPSA settings, such as academic health centers. For physicians with a preferred mailing address not identified as a work address, we used the alternative address, if available, to increase the likelihood of obtaining a work rather than home address (29).

Underrepresented Minority Measure

On the basis of conventions used by the Association of American Medical Colleges, we defined underrepresented minorities as African-American, Hispanic, and Native-American persons. For the medical school graduating classes of 1999 to 2001, we divided the total number of underrepresented minority graduates for each medical school by the total number of graduates to create a raw percentage of minority medical school graduates for each school. Because the percentage of underrepresented minorities among states varied substantially, we adjusted each school's raw percentage.

Table 1. **Medical School Rankings Based on Social Mission Score***

Rank	School	State	Social Mission Score†	Primary Care Physicians		Physicians Practicing in HPSAs	
				Total, %	Standardized Score‡	Total, %	Standardized Score‡
Highest 20							
1	Morehouse College	GA	13.98	43.7	1.20	39.1	1.40
2	Meharry Medical College	TN	12.92	49.3	2.00	28.1	0.14
3	Howard University	DC	10.66	36.5	0.19	33.7	0.78
4	Wright State University Boonshoft School of Medicine	OH	5.34	49.2	1.98	28	0.12
5	University of Kansas	KS	4.49	45.2	1.42	43.9	1.96
6	Michigan State University	MI	4.13	43.6	1.20	26.5	–0.05
7	East Carolina University Brody School of Medicine	NC	3.72	51.9	2.36	34.2	0.84
8	University of South Alabama	AL	3.15	42	0.97	52.7	2.97
9	Universidad de Puerto Rico en Ponce	PR	3.02	33	–0.31	43.8	1.94
10	University of Iowa Carver College of Medicine	IA	2.97	37.1	0.28	21	–0.69
11	Oregon Health & Science University	OR	2.93	43.8	1.22	43.8	1.94
12	East Tennessee State University Quillen College of Medicine	TN	2.88	53.5	2.58	32.7	0.67
13	University of Mississippi	MS	2.86	33.5	–0.24	62.5	4.11
14	University of Kentucky	KY	2.61	39.8	0.65	32.5	0.64
15	Southern Illinois University	IL	2.59	45	1.39	46.5	2.26
16	Marshall University Joan C. Edwards University	WV	2.51	46.8	1.64	20.9	–0.70
17	University of Massachusetts Medical School	MA	2.48	45.9	1.52	36.7	1.12
18	University of Illinois	IL	2.27	36.7	0.21	35.7	1.01
19	University of New Mexico	NM	2.25	46.7	1.63	30.7	0.43
20	University of Wisconsin	WI	2.24	35.7	0.07	19.3	–0.87
Lowest 20§							
1	Vanderbilt University	TN	–3.95	21.9	–1.86	20.8	–0.70
2	University of Texas Southwestern Medical Center	TX	–3.64	26.8	–1.18	15.1	–1.36
3	Northwestern University Feinberg School of Medicine	IL	–3.11	24.4	1.51	19.5	–0.86
4	University of California, Irvine	CA	–3.02	32.9	–0.32	14.2	–1.47
5	New York University	NY	–2.65	24.3	–1.53	22.1	–0.55
6	University of Medicine and Dentistry of New Jersey	NJ	–2.46	23.7	–1.61	17.8	–1.05
7	Uniformed Services University of the Health Sciences	MD	–2.36	29.6	–0.78	21.4	–0.64
8	Thomas Jefferson University	PA	–2.34	32.1	–0.42	20.6	–0.72
9	Stony Brook University	NY	–2.21	29.1	–0.85	20.4	–0.76
10	Albert Einstein College of Medicine of Yeshiva University	NY	–2.13	26.1	–1.28	24.8	–0.25
11	Boston University	MA	–2.12	26.7	–1.19	23.3	–0.42
12	Loyola University Chicago Stritch School of Medicine	IL	–2.06	33.7	–0.20	20.7	–0.72
13	University of Pennsylvania	PA	–2.03	19.1	–2.27	20.4	–0.76
14	Medical College of Wisconsin	WI	–2.02	33.5	–0.23	15.9	–1.28
15	University at Albany, State University of New York	NY	–2.00	30.7	–0.63	24.2	–0.32
16	Columbia University	NY	–1.98	20.3	–2.10	31.8	0.57
17	Texas A&M University	TX	–1.95	37	0.26	16.2	–1.24
18	Duke University	NC	–1.91	22.3	–1.82	23.9	–0.34
19	Stanford University	CA	–1.90	27.4	–1.10	16.2	–1.23
20	Johns Hopkins University	MD	–1.90	24.3	–1.53	26.7	–0.02

HPSA = health professional shortage area.
* The ranking of all 141 schools is in the **Appendix**, available at www.annals.org.
† The sum of the primary care, HPSA, and underrepresented minority standardized scores.
‡ The standardized value calculated for each measure, with a mean value of 0 (SD, 1).
§ Ranked from lowest to highest (i.e., rank 1 is the lowest-performing school).

Public medical schools primarily admit students from within their states; therefore, we calculated the ratio of the proportion of underrepresented minorities graduated by the school to the proportion of underrepresented minorities living in the state. For private schools, which admit students from a more national pool, we calculated the ratio of the proportion graduated by the school to the national proportion. We calculated ratios for public and private Puerto Rican schools by using the proportion of underrepresented minorities in Puerto Rico because these schools primarily recruit from and produce physicians who practice in Puerto Rico. To calculate the percentage of state and national underrepresented minorities, we used data from the U.S. Census Bureau.

Three historically black medical schools with a high proportion of graduates who are underrepresented minorities created a significantly skewed distribution. To normalize the skewed distribution, we calculated the standardized scores without these 3 schools, then reincluded them by using the calculated mean value and SD.

Article incomplete for space reasons

APPENDIX II

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APPENDIX III – QEP Campus Wide Survey

Survey –MSM Quality Enhancement Plan (QEP)/SACS

1. I am a (please circle the single best description of your role)
   a. Faculty
   b. Staff
   c. Administrative leader
   d. Student
   e. resident
   f. post-doc, associate etc
   g. other (explain)_____

2. What are some topics or areas you would like to see addressed in an MSM QEP? (a QEP "focuses on learning outcomes and/or the environment supporting student learning and accomplishing the mission of the institution")

_____

_____

_____

3. Please suggest individuals who should be involved in the planning, evaluation or other processes of MSM'S QEP.

_____

_____

_____

4. Please share any questions, concerns or other issues that you have regarding the QEP. (or other comments regarding SACS/QEP)

_____

_____

_____

_____

APPENDIX IV: QEP Development Vision Topic Summaries

Vision Summary Topic 1: Mentoring at Morehouse

Education is not an impersonal act of receiving information. Becoming a professional requires role models, guidance, support, and connection. Mentoring can encompass all of these areas and more. Mentoring can also involve structured processes of career pathway awareness that support and encourage self-directed activities that can enhance a student's success. Mentoring is an integral part of our approaches to supporting our students. With growth of all of our programs, current approaches to mentoring need to be expanded, restructured, and reemphasized. By strengthening our mentoring of students and faculty in all programs, we can build on our past successes, creating a vibrant infrastructure for planned growth.

Needs assessment: For the MD program, student reviews, comments, and the graduation questionnaires have documented the strengths of Morehouse's personal mentoring approach and the needs for expanded career mentoring. Faculty and students in the Graduate Biomedical Science program and the MPH programs have recognized the importance of mentoring, and this is a core aspect of their programs. Both have also recognized the need for expanded resources for and training of mentors as well as expanded career mentoring. Mentoring programs for faculty and postdoctoral individuals are relatively limited and need to be expanded, strengthened, and made a more central part of our approach to faculty affairs.

Possible activities

- Expanding MD program mentor number and training of mentors (workshops, handbooks, etc)
- Development of "learning communities" or "houses" for MD program with emphasis on longitudinal interactions across classes and close relationships with mentoring faculty
- Expanded career awareness with enhanced early clinical experiences and linkages with alumni and community physicians
- Expanded role for mentors in guiding students facing academic difficulties
- Career fairs and other career experience activities

Possible measures

- Process –number of mentors
- Training workshops
- Web site and other materials for mentors
- Outcomes measures
- Student grades
- Standardized scores
- Time to degree
- Student satisfaction
- Faculty satisfaction
- Faculty time to promotion

Vision Summary Topic 2: Enhancing Analytic Skills

Excellence in patient care, research, and public health requires facility with analyzing a variety of situations. The ability to critically review a set of data, a process design, or a therapeutic plan and analyze results, are essential skills for our graduates. Our students certainly learn the core data base for their chosen professions and become acquainted with key analytic skills. Programs designed to build and enhance these skills and utilization of key analytic skills, including, but not limited to data retrieval, use of appropriate mathematical and computational tools, interpretation of results, and design of an inquiry (or research) plan would be expected to greatly enhance their effectiveness as clinicians, researchers, and public health professionals.

Needs analysis. Basic analytic skills are an integral part of our current programs. Recognizing a need to help our GEBSC program students build critical thinking skills, we have established a critical thinking course for this program. Currently, we lack a longitudinal curricular plan in analytic and critical thinking skills for our degree programs. It is imperative that students continue to develop and enhance these skills throughout their academic career. We also recognize that many faculty could benefit from enhanced facility with some information retrieval and/or analysis skills.

Possible Activities

- Development and implementation of longitudinal integrated curricula in information retrieval, data analysis, use of new bioinformatic software tools.
- Development and implementation of longitudinal faculty development curricula in information retrieval, data analysis,
- Expansion of resources to support above
- Explicit new courses and electives to address related topics
- Possible measures
- Number of courses implemented.
- Assessment of critical thinking (students)
- Assessment of problem analysis
- Assessment of information retrieval
- Assessment of application of analytic processes
- Demonstration of appropriate use of mathematical and computational tools by students

Vision Summary Topic 3: Communication Skills

Written and verbal communication skills are clearly necessary for physicians, research scientists, and public health professionals. While communication skills are explicitly or implicitly a part of all of our programs, we do not systematically teach and assess all of the communication skills relevant to these programs. This includes, but is not limited to:

- Oral professional communication (as in platform presentation and oral case report)
- Written professional (as in paper or case write-up)
- Public professional
- Public teaching
- Public testimony
- Interpersonal
- Teamwork
- With patients
- With language barriers
- Symbolic—diagram and illustration

Needs assessment: While communication skills are key for all our programs, we currently provide limited structured instruction and feedback on these areas. Faculty could also benefit from workshops on skills in teaching and evaluating communication skills.

Activities

- Explicit instruction in written communication skills in all programs
- Explicit assessment of written communication skills in all programs
- Faculty development in teaching communication skills
- Faculty development in assessing communication skills
- Explicit instruction in verbal communication skills in all programs
- Explicit assessment of verbal communication skills in all programs
- Explicit longitudinal curriculum in verbal communication skills (MD program)
- Explicit instruction in communication in other media (poster, diagram, etc)

Measures

- Baseline and end of program assessment of written communication skills
- Baseline and end of program assessment of oral communication skills
- Baseline and end of program assessment of other medial communication skills.

Vision Summary Topic 4: Global Health

Increasingly, students and faculty in all programs have shown interest in Global Health. While we have some elements of global health in all our programs, strengthening and interlinking these elements would address growing concerns with global issues in health. In an international city such as Atlanta, we do not have to leave the city, as many of our patients and communities have issues linked to global health including, but not limited to malaria, HIV, TB, malnutrition, lack of access to care and many other issues. Dealing with language barriers, cultural competency, emerging infections, disaster preparedness, and underserved populations are all key elements in global health.

Current programs include connections to Ghana through faculty and electives, research on malaria and other infectious conditions in Africa, missions to central America, Haiti, and many other efforts. In surveys, comments, and other communications, our students and faculty have demonstrated their increasing interest in global health issues. In a world of jet travel, global health issues are truly important. Our curricula include issues related to global health, with biomedical graduate students addressing research questions related to global health,, medical students doing international or local electives related to international health policy and diseases, as well as a vibrant and important global health track in the MPH program. We have many close interactions with the CDC, a great resource in global health issues. This is a platform on which to build expanded and integrated emphasis on Global health

Activities

- Integration and expansion of global health topics in every year of medical school
- Monthly series of global health grand rounds
- Expanded menu of global health electives for all students
- Focus on expanding faculty connections with international health organizations
- Faculty and student exchange programs
- Electives on “global health” issues in local communities

- Community education on global health issues
- Expanded research collaborations on global health issues
- Expansion of cultural competency education, assessment, and scholarly activity
- Self-directed learning website on global health issues

Process Measures

- Number of courses, course elements
- Number of different international sites associated with MSM.
- Number of research, educational, or service projects in Global Health

Outcome Measures

- Student knowledge in global health issues
- Students choosing MSM because of opportunities to study global health issues.
- Faculty choosing MSM because of global health

Vision Summary Topic 5: Emphasizing Educational Outcomes

Traditionally, many curricula have been based on "what is taught" rather than "what is learned" or "the capabilities of the graduates". Over the past two decades, many programs have re-oriented to an "outcomes" or "competency-based" curriculum. Critical elements of such an approach are defining the educational objectives in terms of skills and capabilities of the participants upon successful completion of the program, rather than in terms of "topics taught" and reliable methods for measuring skills. Such an approach has been embraced in Graduate medical education with the delineation of the six "competencies"—global skills areas that must be demonstrated by residents in order to complete the program. This approach has resulted in a paradigm shift from a focus on "what is taught" to processes for defining and assessing the desired competencies.

Because of the emphasis on "the competencies" in Graduate medical education, many clinical faculty are already adapted to the approaches, nomenclature, and mind-set of this approach. Biomedical sciences and MPH faculty are less focused on this approach. This approach has not been an explicit element of faculty evaluation and faculty advancement. To implement such an approach across all degree programs and faculty advancement would require a series of steps to re-define and re-align our educational programs with an emphasis on outcomes and assessments. Steps could be as follows:

1) Campus awareness. Workshops are held over a 2-3 month period of time for the key faculty of all degree programs on competency-based evaluations. Over a 2-3 month period of time, the following would likely occur:
2) Re-working faculty evaluations. A working group of faculty would be named to develop faculty competencies and relevant evaluation formats.
3) Re-working degree program requirements. The MD CEC, MPH Curriculum committee, and GEBSC curriculum committee would re-state program requirements in the context of outcomes
4) Re-working course requirements as outcomes
5) Developing/incorporating relevant assessment tools and portfolio products
6) Implementing baseline measurements with assessment tools

After providing facility with the mind-set, processes, and tools of outcomes assessments, we would follow outcomes assessments (and time frame to achieving the desired outcomes) over a 4-5 year time period. Expected outcomes would be as follows:

- Faculty would show a high degree of competence in outcomes assessments
- Student outcomes and skills would be better documented
- Self-directed learning would be emphasized with focus on learner-centered skills and competencies rather than curricular content
- Course structure would shift to emphasize demonstration of skills survey

APPENDIX V: - Development Timeline

June 2008	Dean Higginbotham gives institutional QEP charge
June 2008 – August 2008	MSM Leadership discusses process, key leaders and resources needed for QEP planning
October 2008-January 2009	Discussion of possible QEP topics and plans in monthly meetings of MSM Educational Committee
February 2009 – May 2009	Presentation to student, faculty, leadership on QEP process; Surveys of students, faculty, leadership on needs; Presentations to MSM Curriculum Committee, Leadership Council and others
June 2009 – August 2009	Review of data by Educational Council Selection of QEP topic by Educational Council
September 2009 – December 2009	Literature review Discussion of topics by members of Educational Council Drafts of QEP report sections
January 2010 – February 2010	Initial objectives outlines; Presented to MSM Curriculum Committee Update and presentation to Academic Policy Council (APC) Added junior faculty to Educational Council to form expanded QEP Committee
March 2010	SACS & QEP presentation to MPH student leadership SACS & QEP presentation to MSM alumni leadership MD, GEBS and MPH student representatives assigned to QEP Committee
March 3-5, 2010	QEP Consultant Visit – Drs. Williams & Epps – Meharry Medical College
April 2010	SACS & QEP presentation to MD program students Update to MSM Curriculum Committee
April 2010 – August 2010	Revision and expansion of QEP drafts
September 2010	Informational meeting with QEP committee and departmental leadership
October 2010	Follow-up meeting with QEP committee and departmental leadership

October 27, 2010	Formal QEP Presentation to MSM Board of Trustees' Academic Policy, Faculty and Student Affairs Committee
September 2010 – December 2010	Revised QEP segments prepared for review
January 2010 – February 2010	Monthly SACS Advisory Committee Monthly SACS update presentations (including QEP) to the MSM Leadership Team
December 2010	MSM attendance at SACS National Conference
January 2011	Lunch and learn with student leadership (MD, GEBS, MPH) Launch of *Mentoring at Morehouse* campus wide awareness campaign
January 2011 – February 2011	SACS & QEP Presentation to basic science and clinical departmental staff meetings
February 4, 2011	QEP Campus Wide Seminar – *Developing Learning Communities to Advance Institutional Objectives* by Carlton Anthony Usher II, PhD Kennesaw State University
July 2011→	QEP Implementation

APPENDIX VI Literature Review Reference List

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APPENDIX VII: **Assessment Evaluation Questionnaires**

MOREHOUSE SCHOOL OF MEDICINE

MSM STUDENT EVALUATION OF LEARNING COMMUNITY EXPERIENCE

Please use the scale below to indicate the degree to which you agree with the statement and place the appropriate number on the line.

1 = Very Little, 2 = Some, 3 = Quite a bit, 4 = Very much

I. Participating in a learning community has:

1. Improved my learning _____
2. Offered me a satisfactory intellectual environment _____
3. Offered me a satisfactory social environment _____
4. Helped me develop a strong sense of community and attachment to MSM _____
5. Helped me to build support groups that enhanced my academic experience _____
6. Increased my interactions with faculty _____
7. Helped me to develop more effective study habits _____
8. Helped me to attend class regularly _____
9. Allowed me to more actively participate in classroom Activities _____
10. Increased my participation in social activities at MSM _____

II. Through the learning community:

11. I have developed a variety of relationships _____
12. I have a good relationship with the mentor(s) of my community _____
13. I have good relationships with the students in my community _____
14. I have a better knowledge of resources to assist my career development _____
15. I have skills identifying needs _____
16. I have developed skills in giving and receiving support _____
17. I have developed skills in Active listening _____
18. I have more Self-awareness _____
19. I have developed habits of Reflection _____
20. I know how to show Respectful disagreement _____
21. I have experience with expressing personal limitations or vulnerabilities _____
22. I have experience with expressing empathy and support _____
23. I can discuss several Career pathways relevant to my degree program _____
24. I am aware of professional attributes and values of my degree program _____
25. I am aware of MSM and professional traditions _____
26 I have been engaged in service with MSM students, faculty and/or staff _____
27. I have been challenged to stretch myself _____
28. I have been encouraged to set and meet high standards _____

MOREHOUSE SCHOOL OF MEDICINE

MENTOR DRAFT EVALUATION QUESTIONNAIRE TEMPLATE

Please use the scale below to indicate the degree to which you agree with the statement and place the appropriate number on the line.

1 = Very Little, 2 = Some, 3 = Quite a bit, 4 = Very much

The mentor:

1. Is able to connect with the students _____
2. Helps to diffuse conflict/assures smooth sessions _____
3. Provides timely and helpful information _____
4. Is a good role model _____
5. Practices good listening skills _____
6. Encourages reflection _____
7. Helped students identify their needs _____
8. Helped students build skills with giving and receiving help _____
9. Helped students make links to other faculty, students and/or mentors _____
10. Demonstrated expressing empathy and support _____
11. Helped students express personal limitations or vulnerabilities _____
12. Provided guidance on academic transitions _____
13. Provided guidance on career pathways _____
14. Provided insight on MSM traditions _____
15. Provided insight on professionalism _____
16. Supported engagement in service _____
17. Helped students in meeting challenges _____
18. Helped students meet high standards _____

MOREHOUSE SCHOOL OF MEDICINE

MENTEE DRAFT EVALUATION QUESTIONNAIRE TEMPLATE

Please use the scale below to indicate the degree to which you agree with the statement and place the appropriate number on the line.
1 = Very Little, 2 = Some, 3 = Quite a bit, 4 = Very much

The Mentee:

1. Attended sessions _____
2. Contributed appropriately to sessions _____
3. Showed appropriate initiative _____
4. Was respectful _____
5. Was responsible _____

This student demonstrated skills with the following:

Active Listening Skills
- Restatement
- Asking clarifying questions
- Identifying context and emotions
- Displaying respect for differences

Conflict management skills
- Identifying areas of agreement
- Establishing context and commitment
- Brainstorming solutions
- Negotiating options
- Managing emotional conflict and distress

Interpersonal Support
- Sharing stresses
- Supportive feedback

Teamwork skills
- Role assignment
- Leadership
- Give and receive feedback
- Problem solving

Professionalism
- Timeliness in participation
- Respect for other participants
- Contribution to the good of the group
- Confidentiality

MOREHOUSE SCHOOL OF MEDICINE

IN CLASS ENRICHMENT (ICE) QUESTIONNAIRE

Please use the scale below to indicate the degree to which you agree with the statements and place the appropriate number on the line.

1 = Very Little 2 = Some 3 = Quite a bit 4 = Very much

ICE evaluation

1. Sessions were well-organized ----------
2. Sessions were helpful ----------
3. Leader was well-prepared ----------
4. Materials were useful ----------
5. Leader provided helpful guidance ----------
6. Participation helped my academic performance ----------

MOREHOUSE SCHOOL OF MEDICINE

COMMUNICATION SKILLS QUESTIONNAIRE

Please use the scale below to indicate the degree to which you agree with the statements and place the appropriate number on the line.

1 = Very Little 2 = Some 3 = Quite a bit 4 = Very much

Communication skills

1. Active listening skills ----------
2. Restatement ----------
3. Asking clarifying questions ----------
4. Identifying context and emotions ----------
5. Displaying respect for differences ----------
6. Conflict management skills ----------
7. Identifying areas of agreement ----------
8. Establishing context and commitment ----------
9. Brainstorming solutions ----------
10. Negotiating options ----------
11. Managing emotional conflict and distress ----------
12. Interpersonal support ----------
13. Sharing stresses ----------
14. Supportive feedback ----------
15. Teamwork skills ----------
16. Role assignment ----------

MOREHOUSE SCHOOL OF MEDICINE

LEADERSHIP EVALUATION QUESTIONNAIRE

Please use the scale below to indicate the degree to which you agree with the statements and place the appropriate number on the line.

1 = Very Little, 2 = Some, 3 = Quite a bit, 4 = Very much

1.	Give and receiving feedback.	----------
2.	Problem-solving.	----------
3.	Professionalism.	----------
4.	Timeliness in participation	----------
5.	Respect for other participants	----------
6.	Contribution to the good of the group	----------
7.	Confidentiality	----------
8.	Honesty and integrity	----------
9.	Managing conflicts of interest	----------
10.	Reflection and insight	----------
11.	Habit of reflecting on new or distressing experiences	----------
12.	Habit of discussing with others to enhance insight	----------

MOREHOUSE SCHOOL OF MEDICINE

LEARNING COMMUNITY QUESTIONNAIRE

Please use the scale below to indicate the degree to which you agree with the statements and place the appropriate number on the line.

1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree

My learning community experience improved my

(communication skills)

Ability to listen effectively to others, enabling me to better understand and reflect that understanding back to the speaker _____
Ability to manage conflict _____
Self confidence in presenting my views _____
Ability to give and receive feedback _____
Ability to integrate different points of view _____

(teamwork)

Ability to work cooperatively with others _____
Ability to identify different styles and adapt my responses _____
Ability to share workload and engage all _____
Ability to value and appreciate different viewpoints and approaches _____

(leadership)

Ability to persuade others to follow my lead _____
Ability to inspire others by my words and actions _____
Ability to enhance collaboration of others on a project _____
Ability to facilitate group interactions _____

(time management)

Ability to appropriately prioritize tasks _____
Ability to set and follow appropriate timeliness _____
Ability to effectively use group time _____

(career)

Awareness of career options for my degree program _____
Awareness of networking skills for career awareness _____
Awareness of my strengths and alignment with certain career options _____
Awareness of resources for career exploration _____

(self awareness)

Ability to identify my personal strengths and challenges _____
Awareness of how I am perceived by others _____
Ability to outline and follow a personal career plan _____
Ability to seek and receive help or guidance _____

MOREHOUSE SCHOOL OF MEDICINE

LEARNING COMMUNITY MENTOR EVALUATION OF MENTEE SKILLS

This student has demonstrated the following skills:
(Ratings: 1=Excellent, 2=Satisfactory, 3=Developing, 4=Needs improvement)

Communication skills/ Active listening skills, including one or more of the following:

Restatement:
- Asking clarifying questions _____
- Identifying context and emotions _____
- Displaying respect for differences _____

Conflict management skills, including one or more of the following:
- Identifying areas of agreement _____
- Establishing context and commitment _____
- Brainstorming solutions _____
- Negotiating options _____
- Managing emotional conflict and distress _____

Interpersonal support, including either of the following:
- Sharing stresses _____
- Supportive feedback _____

Teamwork skills, including:
- Role assignment _____
- Leadership _____
- Give and receiving feedback _____
- Problem-solving _____

Professionalism, including:
- Timeliness in participation _____
- Respect for other participants _____
- Contribution to the good of the group _____
- Confidentiality _____
- Honesty and integrity _____
- Managing conflicts of interest _____

Reflection and insight, including:
- Habit of reflecting on new or distressing experiences _____
- Habit of discussing with others to enhance insight _____

MISSION

Morehouse School of Medicine is dedicated to improving the health and well-being of individuals and communities; increasing the diversity of the health professional and scientific workforce; and addressing primary health-care needs through programs in education, research, and service with emphasis on people of color and the underserved urban and rural populations in Georgia and the nation.

SAVE THE DATE!

SACS On-Site Peer Review

April 12-14, 2011

JUMP INTO S·A·C·S
SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS

MOREHOUSE SCHOOL OF MEDICINE

AREAS OF ASSESSMENT

- Mission
- Governance
- Institutional Effectiveness
- Educational Programs and Resources
- Faculty
- Student Affairs and Services
- Financial and Physical Resources
- Federal Requirements

FOCUSED REPORT

Responds to issues raised in Off-Site Peer Review report:

- Governance
- Institutional Effectiveness
- Faculty
- Student Affairs and Services

NEXT STEPS

- Complete Focused Report and QEP
- Conduct internal information campaign for students, faculty, staff (meetings, handouts)
- Plan for and host On-Site Peer Review Committee April 12 -14, 2011

TIMELINE

Sept 2010
Compliance Certification

Nov 2010
Off-Site Peer Review Report

Feb 2011
Focused Report and QEP

April 2011
On-Site Peer Review

TBD 2011
Report of On-site Peer Review

TBD 2011
MSM Response to On-Site Committee Report

Dec 2011
Commission Action of MSM Reaffirmation

MSM QUALITY ENHANCEMENT PLAN

MENTORING STUDENTS AT MOREHOUSE

Describes a course of action for institutional improvement crucial to enhancing educational quality that is directly related to student learning.

To improve and sustain students' excellence and academic success through the development and implementation of a structured mentoring and tutoring program at MSM:

GOAL 1: TRAINING

Assure success of mentoring programs through ongoing faculty and student training.

GOAL 2: MENTORING

Increase students' academic success through expanded peer/near peer mentoring; enhanced support of challenged students in course enrichment mentoring/tutoring.

GOAL 3: LEARNING COMMUNITIES

Enhance student professional development through learning communities.

FAQ
Strategic Plan, SACS, QEP

JUMP INTO S·A·C·S
SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS

MOREHOUSE SCHOOL OF MEDICINE

1. What is SACS?

The Southern Association of Colleges and Schools Commission on Colleges is the regional body for the accreditation of degree-granting higher education institutions in the Southern states. The Commission's mission is the enhancement of educational quality throughout the region and it strives to improve the effectiveness of institutions by ensuring that institutions meet standards established by the higher education community that address the needs of society and students. It serves as the common denominator of shared values and practices among the diverse institutions in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia and Latin America and other international sites approved by the Commission on Colleges that award associate, baccalaureate, master's, or doctoral degrees. The Commission also accepts applications from other international institutions of higher education.

2. Why must the school be accredited?

Schools participate in the accreditation process to be eligible to receive federal funding for financial aid and other funding programs. In addition, accreditation fosters public confidence in the educational enterprise and provides assurance of a common set of requirements and standards.

3. When and how will Morehouse School of Medicine be reviewed for accreditation?

MSM is near the end of an almost two-year process of review and reporting of our compliance with SACS core requirements and comprehensive standards. Following the on-site peer review to be held here April 12 – 14, the peer review team will submit recommendations to the Commission on Colleges which will announce its decision on our reaffirmation at the annual SACS meeting held December 3-6, 2011 in Orlando, FL.

4. When is the on-site review?

The on-site review process will take place April 12 – 14, 2011. Faculty, students and administrators will be involved in the review as requested by the review team. We do not anticipate that the team will visit other locations, however faculty and staff from all campus locations may be asked to participate.

5. Where can I get more information about SACS?

Additional information about SACS can be found at http://www.sacscoc.org/aamain.asp. Information about the Morehouse School of Medicine SACS reaffirmation process can be found at www.msm.edu/SACSaccreditation.aspx

6. What is the role of the school's strategic plan in the SACS reaffirmation process?

The Morehouse School of Medicine strategic plan describes goals to achieve the School's mission and documents the school's compliance with a major component of the institutional effectiveness requirement that we engage in a continuous process of planning and evaluation.

7. What is the School's mission?

Morehouse School of Medicine is dedicated to improving the health and well-being of individuals and communities; increasing the diversity of the health professional and scientific workforce; and addressing primary healthcare needs through programs in education, research, and service, with emphasis on people of color and the underserved urban and rural populations in Georgia and the nation.

8. What does QEP stand for?

Quality Enhancement Plan

9. What is the purpose of a QEP?

The QEP satisfies a requirement of the Southern Association of Colleges and Schools (SACS) in our efforts to be reaffirmed. It describes a course of action for institutional improvement crucial to enhancing educational quality that is directly related to student learning.

10. How is QEP relevant to Morehouse School of Medicine?

The QEP is an addition to the SACS Reaffirmation process. This document was written with the input of a designated committee in response to surveys administered to the campus community. The document makes a case for our selection of specific objectives to enhance student learning and describes the activities that will be implemented to achieve those objectives. The QEP also includes a budget, a specific list of learning outcomes for students, a plan for evaluating our success in achieving stated outcomes, and a literature review.

11. What are the requirements of the QEP?

The QEP has to enhance student learning, have measurable learning outcomes, be affordable, and is the result of a process that includes the whole college community. Otherwise, there are no limitations to topic selection.

12. What is the topic of the MSM QEP?

The topic is "Mentoring Students at Morehouse."

13. What will the QEP accomplish?

The goals of the QEP are:

Goal 1: Assure the success of mentoring programs through ongoing faculty and student training

Goal 2: Increase students' academic success by:

Expanding and enriching peer/near peer mentoring

Enhancing the support of challenged students in course enrichment mentoring and tutoring

Goal 3: Enhance students' development as professionals through the establishment of learning communities

14. When will the QEP be submitted and reviewed?

The QEP will be submitted to the on-site committee by February 25, 2011. It will be a large part of the on-site review, slated for April 12 – 14, 2011.

15. When will the QEP be implemented?

The QEP covers a five year period beginning July 1, 2011.