

HEALTH SCIENCES CENTER Paul L. Foster School of Medicine

LCME INSTITUTIONAL SELF-STUDY, 2009-2010 EXECUTIVE SUMMARY REPORT

J. Manuel de la Rosa, MD Founding Dean

LCME Self-Study Executive Committee

David J. Steele, PhD (Chair)

Charles Miller, PhD (Institutional Setting)

Armando Meza, MD (Institutional Setting)

David J. Steele, PhD (Educational Programs)

Naomi Lacy, PhD (Educational Programs)

Katherine Horn, MD (Medical Students)

Manuel Schydlower, MD (Medical Students)

Hoi Ho, MD (Faculty)

Frank Stout (Educational Resources)

HISTORICAL BACKGROUND

Texas Tech University School of Medicine in Lubbock, Texas was chartered in 1969 as a regional medical school with a distributed model of education. It admitted its first class in 1971. El Paso was designated as a clinical campus of the school of medicine and received its first class of third year medical students in 1973. The El Paso campus has provided clinical education to third and fourth year medical students ever since.

Throughout this 30 year period, members of the faculty and community nurtured a vision of establishing a full four year medical school in El Paso. Needs assessment studies demonstrated that El Paso and the entire US-Mexico border region were severely underserved by almost all measures of health care resources including primary care, specialty, and sub-specialty trained physicians. In 1999, the Texas Tech University Board of Regents authorized planning for a four year medical school on the El Paso campus. The Texas Medical Association and the Texas Higher Education Coordinating Board also affirmed the need for a medical school in the border region. In 2001, the Texas State Legislature approved planning for the new school and allocated nearly \$44 million in funds for the purposes of recruiting faculty, establishing research activities, and constructing a research facility. In 2003, the Legislature funded the construction of a comprehensive medical education building adjacent to the new research facility. Additional legislative allocations in 2005 and 2006 supported continued planning and the recruitment of its founding dean, Robert M. Suskind, MD. In 2007, the Texas State Legislature authorized \$43 million appropriation to be used in for the purposes of establishing the Texas Tech University Health Sciences Center, El Paso School of Medicine, thus enabling the institution to recruit the faculty and administrative staff necessary to develop and implement a curriculum leading to the MD degree. Shortly thereafter, on August 24, 2007, another major milestone was reached with the announcement that local businessman and philanthropist, Paul L. Foster had donated \$50 million to endow the new school. In recognition of this gift, the school was named in his honor. On September 19, 2007, Dr. Suskind stepped down from his position as Founding Dean and Dr. J. Manuel de la Rosa, the former regional dean at the El Paso campus and a prominent member of the El Paso community, assumed the Founding Dean role.

In November, 2007, an ad hoc survey team of the Liaison Committee on Medical Education (LCME) conducted a 3 day site visit to assess preparations for accepting and educating a charter class. In February, 2008, the Paul L. Foster School of Medicine (PLFSOM) was granted "Preliminary Accreditation" by the LCME and immediately began recruiting students for its charter class. Over 2000 students applied, nearly 400 were interviewed, and, in July 2009, 40 students began their studies at the PLFSOM.

Preliminary Accreditation Findings and Responsive Actions

In granting preliminary accreditation, the LCME commended the PLFSOM for its clinically relevant basic science curriculum, its long history of educating 3rd and 4th year students from the Lubbock school of medicine, its exceptional facilities and educational resources, its commitment to faculty development, and its ability to recruit experienced educators and administrators to key leadership positions. However, the LCME also noted that the school had not demonstrated sufficient progress towards full compliance with five accreditation standards. A summary of these standards and the corrective actions taken to achieve compliance with those standards follows:

IS-4. The manner in which the medical school is organized, including responsibilities and privileges of administrative officers, faculty, students and committees must be promulgated in the medical school or university by laws.

"Finding: At the time of the survey visit, the medical school bylaws were in draft stage. Certain areas lacked clarity, especially with regard to curriculum oversight and appointment of faculty to key school committees."

Action: The faculty bylaws were revised for clarity and approved by faculty vote on March 18, 2008. These bylaws clearly specify that appointment of faculty to key standing committees is made by the dean based on recommendations from the elected faculty council. The bylaws also makes it clear that the Curriculum and Educational Policy Committee (CEPC) is responsible for providing curricular oversight and for proposing educational policies that must ultimately be approved by the elected faculty council.

ED-26. The medical school must establish a system for the evaluation of student achievement throughout medical school that employs a variety of measures of knowledge, skills, behaviors, and attitudes.

"Finding: An Office of Curriculum, Evaluation and Accreditation has been established and a comprehensive evaluation system has been planned, but is not yet in place. A next step is the hiring of a director of evaluation and related staff."

Action: A PhD level director of assessment and evaluation and a support staff was hired and in place in the February 2008. The initial director subsequently left PLFSOM but has been replaced by a new PhD level director. A comprehensive system of on-line student assessment, and course and faculty evaluations has been employed for the past year.

MS-24. Medical Schools should have mechanisms in place to minimize the impact of direct educational expenses on student indebtedness.

"Finding: Despite the goal of offering half the students in the charter class full scholarships, at the time of the survey visit little funding was available for scholarship support."

Action: The policy of the school is to award full four-year tuition and fee scholarships to *at least* 20 students per year with funding derived from the \$50 million gift of Paul L. Foster and other community members. Twenty-five of the 40 members of the charter class received scholarships and 21 of the 60 members of the class of 2014 were awarded four-year tuition and fee scholarships.

MS-27-A. The health professionals who provide psychiatric/psychological counseling or other sensitive health services to medical students must also have no involvement in the academic evaluation or promotion of students receiving those services.

"Finding: The school plans to establish a "College" system where College Masters are faculty members who may serve as advisors to students related to personal problems or academic difficulties. The Masters may also serve a teaching role where they evaluate student performance."

Action: The College Masters will not engage in mental health counseling. If a student has emotional or behavioral health problems, the College Master will refer the student to Office of Student Affairs for further evaluation and referral.

MS-32. Each medical school must define and publicize the standards of conduct for the teacher-learner relationship, and develop written policies for addressing violations of those standards.

"Finding: The provisions in the school's Policy for Addressing Allegations of Inappropriate Behavior of Faculty Toward Students" related to addressing violations of the policy likely would discourage student from reporting incidents."

Action: The school modified this policy by removing a requirement that students try to resolve any difficulty with a faculty member prior to filing a request for a hearing and it broadened the list of administrative personnel students may approach to discuss concerns and to seek advice on how to proceed, thus giving students more options.

The actions summarized above were detailed in a progress report submitted to the LCME on September 1, 2008. In a letter dated October 15, 2008 the LCME notified PLFSOM that it was in full compliance with the aforementioned standards.

Self-Study Methodology

The dean selected David J. Steele, PhD, Senior Associate Dean for Medical Education to lead the selfstudy process. With the dean's concurrence, he created an LCME Self-Study Executive Committee (EC) consisting of the associate deans for student affairs, admissions, research, graduate medical education, faculty affairs and development, and fiscal affairs. These individuals were assigned to chair self-study sub-committees in their respective areas of responsibility. Each sub-committee included faculty, administration, and student participants who were broadly representative of the medical school community. (See attached Appendix for a list of participants.) Each sub-committee 1) reviewed LCME standards related to their areas of responsibility; 2) reviewed and updated material from the 2007 data base; 3) identified institutional strengths and areas of insufficient progress toward provisional accreditation; and 4) suggested strategies for dealing with problems identified through the self-study process. The sub-committees submitted reports to the EC for review and discussion. The EC established a prioritized list of strengths and weaknesses and, subsequently, initiated steps to remedy problems. Concurrently, and as an extension of the self-study process, the school initiated a major year 3-4 curriculum design initiative based on a general design of integrated clerkship blocks that had been developed by a faculty task force the previous year. Over 50 faculty members (see attached Appendix for list of participants) were assigned to one of the following year 3-4 design teams: Internal Medicine/Psychiatry block, Obstetrics-Gynecology/Pediatrics block, Family Medicine/Surgery block, Critical Care, Emergency Medicine, and Neurology. Each design team: 1) developed clerkship specific learning objectives based on Institutional Learning Objectives (ED-1, 1-A); 2) identified the clinical conditions students will encounter (ED-2); 3) identified core topics for each clerkship; 4) identified clinical presentations from years 1-2 to be "revisited" in years 3-4; and 5) For the year 3 block rotations, identified "shared" topics for integrative learning across the specialties sharing a block.

I. INSTITUTIONAL SETTING

A. Governance and Administration

1. Describe how institutional priorities are set. Evaluate the process for and success of institutional planning efforts to date.

Institutional priority setting and planning for PLFSOM originates on the El Paso campus, but in the context of broader institutional planning by the Texas Tech University Health Sciences Center of which it is part. At the level of the university, institutional planning and priority setting are the responsibility of the president and his cabinet of executive and associate vice presidents working in concert with the deans of the system's constituent schools.

For Paul L. Foster School of Medicine, institutional priorities are set by three interacting constituencies: Administration, Department Chairs, and Faculty.

Administration, consisting of the dean, senior associate dean for medical education and the associate deans for fiscal affairs, clinical affairs, research, admissions and recruitment, graduate medical education, student affairs, and faculty affairs and faculty development, is responsible for establishing policies and procedures to ensure institutional success in its educational, clinical, and research missions. The administration monitors institutional performance, sets goals and priorities, initiates quality improvement efforts, and makes decisions about resource allocation. This group meets at least twice a month and at an annual 3-day retreat to discharge its leadership responsibilities.

Department chairs, working in collaboration with the dean and associate deans, set priorities within their individual departments. The chairs play a pivotal role in the day-to-day operations of their departments and they make policy decisions about departmental fiscal, academic, research, and clinical activities. The chairs meet with the dean both individually and as a group on a monthly basis.

The **faculty** set priorities within their domains as educators, scholars, and clinicians. Faculty input is solicited at all levels of planning and faculty members participate in the various standing committees and ad hoc task forces created to ensure that the school achieves its goals. A faculty council, consisting of elected representatives from each department, plays a particularly important role in setting institutional priorities related to faculty affairs, promotion and tenure, and educational programming.

Coordination and communication in decision-making and priority-setting is a primary function of the Dean's Academic Council consisting of four members of the Dean's Council, appointed by the dean, and five members of the Faculty Council including its president.

Strategic Planning

The Paul L. Foster School of Medicine is in the midst of a major strategic planning initiative, its first as an independently accredited medical school in the TTUHSC system. The dean established a Strategic Planning Leadership Group consisting of the associate deans and department chairs to serve as an oversight group in this planning process. This group met in a 2 day retreat in March 2010 and in a half day retreat in June 2010. Strategic planning priorities, linked to institutional goals include: space and facilities, relationships with clinical affiliates, faculty roles and responsibilities (including promotion and tenure preparation), research, and the educational program. In August, 2010, the dean named seven subcommittees with representation from administration, faculty, and staff to drive the strategic planning process for each of the school's major goal areas. Each sub-committee will submit a draft report in March 2011 for review by the Leadership Group and, ultimately, the faculty at-large.

2. Evaluate the role of the governance structure in the administrative functioning of the medical school. Comment on the appropriateness of the governance structure. Assess whether appropriate safeguards are in place to prevent conflicts of interest at the level of the governing board, and whether these safeguards are effective. Describe the situations that require review by or the approval of the governing board (board of trustees) of the school or university prior to action being taken.

PLFSOM is one of two medical schools under the Texas Tech University Health Sciences (TTUHSC) umbrella. TTUHSC is a separately chartered and accredited institution from Texas Tech University but shares a chancellor and Board of Regents. Each school at TTUHSC has its own dean which reports directly to the president. Within PLFSOM, the governing structure includes the dean, eight associate deans, and 15 departmental chairs. Shared academic governance includes a broadly representative Faculty Council elected by the faculty at large; a Dean's Council, which consists of the associate deans and the department chairs, which meets monthly, and an Academic Council, which meets quarterly and is a subset of the Faculty and Dean's Council described above. This governance structure is appropriate and functions well in meeting operational, emergent, and future planning needs.

Appropriate and effective safeguards are in place to prevent conflict of interest. The Regents' Rules set forth a conflict of interest policy for the board. The regents empanel an audit committee to oversee compliance and supervise internal and external audits. Numerous subcommittees of the regents exits for various tasks that could invoke conflict (eg., an Investment Advisory Committee), and each of these subcommittees has its own bylaws that govern conflicts that are specifically germane to the area of responsibility (eg., no member of the Investment Advisory Committee may have a financial interest in any organization providing investment services to the institution).

The TTU Governing Board must approve actions which have a significant overall financial and/or academic and programmatic impact on the University and/or School. The board's actions are based on school, university or board committee recommendations. Such situations include: approval of academic promotions, granting of tenure, removal of a tenured faculty member, approval of fiscal year budget, approval to purchase buildings or property and to accept large "gifts", and setting guidelines for the use of TT name.

3. Evaluate the current status of the relationship of the medical school to the university and to current clinical affiliates.

RELATIONSHIP OF THE MEDICAL SCHOOL TO THE UNIVERSITY

The University is physically located in Lubbock, Texas, 338 miles from the PLFSOM in El Paso. The campuses are connected electronically by the TechLink system. Though we are developing increasingly independent programs, many core administrative functions (purchasing, human resources, information technology support, safety services, etc.) are housed in Lubbock, with regional personnel located in El Paso. Programs that can be rationally maintained in Lubbock will continue to be maintained there for as long as practicable and as long as the system linked to Lubbock is working satisfactorily.

Other currently centralized functions that worked well in the past are beginning to show signs of strain as our programs grow. We are working with the parent institution to develop plans for orderly transition of programs such as the Office of Sponsored Programs to our local campus. As a component of strategic planning, a task force is identifying centralized functions that are working well and those that are not, in order to develop plans for establishing local infrastructure that will allow for rational migration of functions to the local arena.

RELATIONSHIP OF THE MEDICAL SCHOOL TO THE AFFILIATED HOSPITALS AND CLINICS

TTUHSC-El Paso and the El Paso County Hospital District have a relationship dating back four decades. As the school has moved forward in its development, so too has the Hospital District begun to stretch beyond its county-hospital roots. In the last five years, the Hospital District brought in new leadership and restructured its business model. It changed its name from R.E. Thomason General Hospital to University Medical Center of El Paso (UMC). A new Children's Hospital, funded by a vote of the El Paso community, is under construction. The Children's Hospital has its own board and chief executive separate from that of UMC. Other longstanding clinical affiliates include the El Paso Psychiatric Center, William Beaumont Army Medical Center, and the El Paso Veterans Affairs clinic.

Most PLFSOM residency programs are located at UMC. Similarly, most of the service line heads, as well as the chief of the medical staff, are PLFSOM full-time faculty. Recently, as the hospital has attempted to improve its bottom line, it has begun to grow its 501 programs by hiring its own non-faculty medical staff. This has created some challenges for the GME programs at PLFSOM, but has not impacted planning for the medical school curriculum.

Similarly, with the growth trajectory of the medical school class size in mind, the PLFSOM leadership has begun to create new clinical affiliation agreements with several of the private hospitals in town, in order to increase the diversity and volume of clinical experiences for trainees at all educational levels. Affiliations have been developed between the school and Providence Memorial Medical Center. As the effects of healthcare reform on medical education become clearer, we are also cognizant of the effects mass penetration of insurance coverage into the ranks of the currently uninsured might have on public hospitals. We are diversifying our portfolio of clinical affiliations to avoid being overly dependent on a health care system that might experience outmigration of its newly-covered population to private hospitals. Despite the new developments in the UMC's medical staff composition and the new outreach on the part of the PLFSOM, the two historically entwined institutions remain unequivocally committed to one another.

Finally, we have relationships with federal healthcare systems through William Beaumont Army Medical Center (WBAMC) and the Veterans Affairs Medical Center Clinic (VA) El Paso. The existing orthopedic surgery residency program is administratively housed at WBAMC, with rotations at PLFSOM. Third year clerkship opportunities at WBAMC are being developed with the long range view that such opportunities will be necessary once the medical school reaches full enrollment in 2012. In addition to clinical experiences, the growth of our research programs and the recent expansion of some of them into

WBAMC facilities has led to increased scholarly activity interaction between our institutions. New programs in psychiatry and traumatic brain injury are in development, as are orthopedic and internal medicine programs in basic science and translational research. These research programs not only help to define a scholarly academic environment, but also provide research opportunities for students.

The relationship with the VA is also undergoing review and expansion as the VA implements new programs and develops clinical experiences for students and residents. We are also discussing research program development with the VA.

4. Evaluate the organizational effectiveness of the medical school administration (dean, dean's staff). Note whether an effective decision-making structure at the leadership level has emerged. Report on whether the numbers and types of medical school administrators (assistant/associate deans, other dean's staff) are appropriate for the efficient and effective management of the medical school. Identify any changes in the administrative structure of the medical school that are planned or needed.

PLFSOM has been fortunate to have a long-serving chief executive. Dr. Jose Manuel de la Rosa was regional dean for 11 years while the school was a clinical campus of Texas Tech Lubbock School of Medicine before being named dean of the four year school in 2007. Dr. de la Rosa was born and raised in El Paso, and has deep ties to the region. He is a prominent member of the local community, and is well known in medical education circles. Dean de la Rosa shepherded the school through its transition from two-year clinical campus to a four year institution.

The dean is assisted by eight associate deans and 14 department chairs. The associate deans represent the areas of medical education, graduate medical education, student affairs, admissions and recruiting, faculty affairs and development, finance and administration, research, and clinical affairs. This number is appropriate for the effective management of all areas critical to meeting the school's missions.

The associate deans work well together and are accustomed to taking on group assignments at the direction of Dean de la Rosa. The dean has made a significant institutional investment in team building among the associate deans, having sent them away from campus to AAMC leadership development *en masse*, convening annual leadership retreats, and bringing them together monthly for half day miniretreats. The associate deans interact less formally on virtually a daily bases to discharge shared and related responbilities. There are no plans to change this administrative structure.

5. Indicate whether all planned departments have been formed and their leadership selected. Assess if any gaps in departmental leadership are negatively affecting the school's development.

Since the last accreditation visit, new chairs of Internal Medicine, Family Medicine, Biomedical Sciences, Psychiatry and Medical Education have been named. Searches are currently underway for chair positions in the pediatrics, obstetrics and gynecology, and neurology. In the interim, these departments are being ably led by either the current chair (e.g., obstetrics-gynecology) or senior faculty members serving interim chair terms. There is no evidence that the absence of permanent chairs in some departments is negatively affecting the development of the school.

In June 2010, the decision was reached to disband the Department of Ophthalmology and shift its faculty into the Department of Surgery.

B. Academic Environment

6. Evaluate the status of development of graduate program(s) in the basic sciences and other disciplines. Note whether appropriate and feasible timelines are in place for the introduction of such programs into the medical school. Report whether appropriate mechanisms are planned or in place for review of graduate programs.

Basic science faculty members recruited to focus on research are appointed to the Department of Biomedical Sciences, and are assigned to programmatic Centers of Excellence (Cancer, Diabetes and

Obesity, Neurosciences, and Infectious Diseases). El Paso based research faculty are eligible to supervise graduate students from the Graduate School of Biomedical Sciences that is part of the TTHUSC system in Lubbock. The associate dean for research at the PLFSOM also serves as a regional associate dean for the Graduate School of Biomedical Sciences to facilitate such relationships.

We have empanelled a review group to explore the feasibility and timing of developing our own graduate school. Contact has been made with the Texas Higher Education Coordinating Board to provide guidance. Graduate school development will occur in a coordinated fashion between the departments of Biomedical Sciences, Medical Education, and the clinical departments. At present, the graduate program planning group estimates that a translational research program could plausibly be ready in 3-4 years and a graduate program in biomedical research ready for students in approximately 5 years. Policies and procedures for the review of new graduate programs will be developed in concert with the planning of those programs.

As research faculty are being recruited, one important rate-limiting factor is the availability of research space. The recently constructed 80,000 net square foot Medical Science Building is rapidly reaching capacity. Despite the moderately large building size, actual wet bench space is only about 25,000 square feet, with the remaining 55,000 sq ft dedicated to classroom, administrative, and core support laboratory space, including a 12,000 sq ft vivarium. We currently have one research building. Currently, the 25,000 sq ft of independent investigator space are supporting \$9.9M in Federal research expenditures, which puts the yield at an aggressive \$396/sq ft. Modular laboratory facilities (5,000 sq ft) will be ready for occupancy in November of 2010. State appropriations are being sought for the construction of a third research and education building.

The regional campus of the Graduate School of Biomedical Sciences housed at the Paul Foster School of Medicine has recently received funding to participate in the GSBS SABR (summer accelerated biomedical research) internship program. The SABR program will fund three 10 week summer laboratory immersion experiences for junior-year undergraduates from nearby universities. The program requires the students to participate in a seminar series hosted over the TechLink media system by one of the regional campuses each week. This will serve as a pipeline program for future graduate and medical school applicants, will allow us to 'road test' a distributed GSBS experience over a circumscribed time period, and will create opportunities for faculty and students to interact throughout the system.

7. Evaluate the adequacy of plans for residency training programs sponsored either by the medical school or by its clinical affiliates. Note whether medical students will have sufficient contact with residents.

The Graduate Medical Education Office is under the associate dean for graduate medical education who is responsible for ensuring compliance with ACGME requirements. The Graduate Medical Education Committee (GMEC) meets monthly to review issues related to residency training. Currently there are 9 ACGME approved, TTUHSC sponsored residencies at University Medical Center in El Paso. In addition, TTUHSC co-sponsors an 18 resident orthopedics program at William Beaumont Army Medical Center. Students will have considerable contact with resident physicians in required clerkships.

8. Evaluate the current development of research at the institution, including areas of emphasis and level of commitment, in the context of the school's missions and goals. Assess the current adequacy of the resources (equipment, space, graduate students) for research.

The overarching vision for research at the Paul L. Foster School of Medicine is that focused, world-leading research programs will be developed in areas significant to the Texas / Mexico border. We are developing a diversified portfolio of research funding, which draws from state, federal, philanthropic and service-based operations to support our research initiatives.

An example of research program focus is our commitment to development of genomic research capability. The Paso del Norte region is geographically isolated and consists of a population that is nearly

80% Hispanic. Geographically stable, large, multigenerational families are the rule and this is an exceptional living laboratory. The school has made a huge financial commitment to genomic research, especially relative to the size of the total budget. We have invested roughly \$5 million in equipment for genomic deep-sequencing and proteomic work over the last two years, and have recruited internationally known genomics researchers with federal grant portfolios, mostly NIH monies. We have developed a Scholarly Activity and Research Program (SARP) for the medical students that expose them to research and helps establish inquiry as a lens through which to view patient care.

Since the previous accreditation cycle, we have recruited 16 investigators at faculty ranks ranging from instructor to professor, of whom seven have independently funded programs. This growth will enhance medical student education by raising the level of science in the academic milieu, and by offering increased access to SARP curricular experiences. We have been fortunate to develop a line of State funding that provides initial support for clinician-scientists, by offsetting time for scientific work among physicians who have scientific programs. One of the goals of the clinician-scientist program is to promote diffusion of research orientation and scholarly activity into the clinics through peer interactions, and to provide role models and mentorship for graduate medical trainees. We have funding to create such positions in each of the Centers of Excellence

Through the Office of the Associate Dean for Research, the school maintains a Biostatistics and Epidemiology Consulting Laboratory (BECL), which is staffed by two full professors of biostatistics, an MPH-level administrator/health promotion expert, a statistical programmer, a database programmer and an office/grants manager. Except for the office administrator, all members of the lab have some salary offset by grant funds (25-30% on average), but the institution is committed to maintaining this service without charge to all PLFSOM faculty and trainees. This is program represents a significant outreach to the clinicians on campus, who make up the majority of the BECL's business.

We recognize the need to bridge the communication gap between practicing clinicians and basic science researchers. The associate dean for research is sponsoring a series of "science mixers" so that clinicians and scientists may identify areas of overlapping interest and expertise for developing translational research projects. Our strategic planning process will consider additional procedures for enhancing communication between clinicians and scientists.

9. Assess the current availability of and plans for growth in opportunities for medical students to participate in research.

Students enrolled at the Paul L. Foster School of Medicine are required to complete a Scholarly Activity and Research Project (SARP) prior to graduation. A SARP experience can take the form of a laboratory research project, a clinical research project, a public health project, or even a humanities-based project. We are devoting significant time and effort to developing opportunities on- and off-campus to support the projected growth of the student body. Local opportunities emanate from laboratories of funded investigators in the basic sciences at PLFSOM, in a Medical Education Research Laboratory specifically designed for the students, and in various clinical research environments at the local hospital and in the community. Additional community projects are available at the University of Texas at El Paso and at the University of Texas School of Public Health El Paso extension campus. We have also developed an arrangement with the Methodist Hospital Research Foundation of Houston, which hosts students for summer projects in the Texas Medical Center in Houston, Texas. We are formalizing an affiliation with the UT-Houston/MD Anderson Cancer Center NIH Clinical and Translational Sciences Award (CTSA) site. This will provide training funds and additional research opportunities for PLFSOM students.

10. Describe programmatic and institutional goals for diversity. Indicate whether recruitment and support programs are being developed that will contribute to the educational environment and prepare students for meeting the health care needs of a diverse society?

Our institutional goal is to recruit and train physicians who will be well prepared and committed to caring for the health care needs of patients anywhere, but with a special emphasis on patients living along the Texas-Mexico border and the western region of the state. This area is geographically isolated, medically underserved, and predominately Hispanic. Approximately 32% of the population on the American side of the border lives in poverty level households. Spanish, rather than English, is the primary language. We have taken several steps to ensure that diversity is an intrinsic part of the learning environment, curriculum, and recruitment.

Curriculum: The Society, Community and the Individual (SCI) course includes experiences in community assessment, provides opportunities for students to acquire the skills needed to deliver culturally appropriate care, and includes required experiences in conversational and medical Spanish.

Recruitment: The PLFSOM has developed several programs to support the recruitment of a diverse student body. We work closely with the University of Texas at El Paso (UTEP), a large public university whose student body mirrors the local population, in providing its students physician shadowing and research opportunities. We are also working closely with the community to develop school-based pipeline programs, which not only help to emphasize the importance of math and science curriculum to intermediate and high-school students, but may also raise educational aspirations for all students in the community, regardless of their curricular interests.

Finally, a planning group is currently exploring the feasibility of developing a post baccalaureate program for promising students who need additional time to prepare for success in medical school. One of the goals of this program will be to enhance diversity in the student body.

II. EDUCATIONAL PROGRAM FOR THE M.D. DEGREE

A. Educational Objectives

1. Describe the level of understanding of the school-wide objectives for the educational program among administrators, faculty members, students, and others in the medical education community. Evaluate whether educational program objectives are serving as effective guides for educational program planning and for student and program evaluation.

Several steps are being taken to promote understanding of the institutional learning objectives. These include: publishing the objectives in the Student Catalogue (beginning in 2010), disseminating a pamphlet format, posting on the School of Medicine web-site, and highlighting institutional objectives in course and clerkship syllabi.

The institutional objectives are effective guides for educational program planning. Course and clerkship directors are required to demonstrate to the CEPC how course/clerkship learning objectives contribute to meeting school-wide objectives. The senior associate dean for medical education is responsible for communicating institutional objectives to the school's academic leadership. Attainment of the competencies defined by the institutional learning objectives is one of the benchmarks for evaluating program effectiveness.

2. Report if educational program objectives have been effectively linked to physician competencies expected by the medical profession and the public. Evaluate the status of planning to utilize the educational program objectives in student and program evaluation.

The institutional learning objectives were developed after consulting a variety of sources including the AAMC Medical School Objectives Project, the CanMEDS framework developed by The Royal College of Physicians and Surgeons of Canada, the Accreditation Council for Graduate Medical Education (ACGME) core competencies, and the institutional learning objectives of several LCME accredited medical schools.

We are implementing strategies to assess student attainment of the institutional learning objectives. In the Scientific Principles of Medicine course, for example, all examination items are linked to session level learning objectives. These items relate most closely to the medical knowledge domain. Patient care competencies, communication skills and medical knowledge competencies are addressed in our Medical Skills course and assessed via a combination of examination items utilizing multiple choice questions, direct observation, and end-of-unit OSCEs. In the Society, Community, and Individual (SCI) course, communication and patient care objectives are assessed by preceptor observation, and system-based care objectives can be assessed through student responses to written exercises designed to direct their observations of systems of care. In SCI, epidemiological principles, part of the practice-based learning domain, are assessed by performance on examinations. The Masters Colloquium provides an excellent setting to assess students' oral and written communication skills through student participation in group discussions and through rubric based assessment of written reflections on issues related to professional development.

The assessment of professionalism is an on-going challenge. In July, 2010, the dean convened a professionalism task force to clearly define and articulate expectations and standards. This task force is developing methods for systematically assessing professionalism and these are now being implemented.

3. Comment on the effectiveness of planning to date to assure that all students encounter the specified types of patients and clinical conditions needed to meet the clinical objectives.

A clerkship-directors task force has identified the types of patients and clinical conditions that students must encounter to meet educational objectives. Students will record their encounters electronically in an on-line patient log. The clerkship directors will review student logs periodically to ensure that students meet expectations. Our goal is to meet these objectives through real patient encounters and, if necessary, adjustments in student schedules and assignments will be made to accomplish this goal. When real patient encounters are not possible, alternative ways of meeting the objectives will be employed based on readings, on-line cases, standardized patients, or simulations.

B. Structure of the Educational Program

4. Delineate the mechanisms for ensuring that the educational program will provide a general professional education that prepares students for all career options in medicine. Indicate whether all subjects required for accreditation are appropriately and sufficiently included in the curriculum.

Several mechanisms are in-place to ensure that students are provided the appropriate breadth and depth of exposure to the biomedical sciences, social/behavioral sciences, ethics, medical humanities, and clinical disciplines required for a general professional education and preparation for all career options in medicine. These include:

The creation of a Department of Medical Education staffed by basic science faculty representing the following "foundational" disciplines—anatomy (gross, histology, and neuroanatomy), behavioral science, biochemistry, cell biology, embryology, genetics, immunology, microbiology, neuroscience, nutrition, pathology, pharmacology, and physiology. The Department of Medical Education also includes physician faculty representing a variety of disciplines. In addition to these full time educators, the educational program has access to PLFSOM faculty in other departments representing basic sciences and the full range of medical specialties, which have been called upon to provide their expertise to the design and implementation of the curriculum.

We adopted 31 general institutional learning objectives reflective of the core competency domains identified by the ACGME. Course and clerkship directors are required to note which competencies are covered by their respective programs in their syllabi and these are, in turn, monitored by the Curriculum and Educational Policy Committee and by the senior associate dean for medical education.

We employed the content outlines for Steps 1 and 2 of the National Board of Medical Examiners USMLE as a check on the content included in our curriculum.

We implemented a curriculum management data base that enables us to record and track curricular content including session-level learning objectives, "Hot Topics" (ED-10), reading assignments, educational material, contact hours, discipline hours, teaching and learning methods, and more. The search functions of this resource enable us to run queries on curriculum content and thereby identify potential gaps and unplanned redundancies.

In years 3-4 students will participate in the six standard clerkships—internal medicine, family medicine, psychiatry, surgery, obstetrics & gynecology, and pediatrics. During year 4, students will also be required to complete a sub-internship and clerkships in emergency medicine, neurology, and critical care. Finally, as part of the year 3-4 design process, the following topics were identified as "threads" that will be woven throughout the curriculum—geriatrics, communication skills, professionalism, ethics, pain management, palliative care, clinical pathology, evidence-based medicine, patient safety, and diagnostic imaging. Content related to these threads will be tracked though our curriculum data base.

5. Evaluate the appropriateness of the educational formats used for instruction in the first two years of the curriculum. Comment on whether sufficient opportunities exist for students to engage in active learning and independent study.

A variety of instructional methods are used across the curriculum based on their appropriateness for achieving educational program goals. These include lectures, Team Based Learning, laboratory sessions ("wet" and simulated), small group discussion and problem solving sessions, community-based activities (e.g., community assessments), standardized patient encounters, high fidelity simulations, and patient encounters. This mix of formats provides many opportunities for active engagement. Across the curriculum, approximately 50% of contact time involves lecture and large group activities including interactive problem solving and application exercises. An average of 3-half days per week is scheduled as independent self-study time.

The required Scholarly Activity and Research Project (SARP) program provides opportunities for students to engage in active learning and to hone the skills needed to be effective life-long learners. Students identify a problem or question, identify resources and methods appropriate for answering the question, critically assess published sources and data collected for the project, and then present the results of the project in a student forum. Students receive feedback on each stage of the process from a project mentor and from a faculty oversight committee.

6. Summarize the systems that are or will be used to ensure consistency in educational quality and student evaluation across all sites used for education. If these systems are already in place, provide evidence for their effectiveness.

In years 1 and 2, all instruction takes place on the campus of the Paul L. Foster School of Medicine with the exception of the community-clinic experience component of the Society, Community, and Individual (SCI) course. Students in this course spend one-half day per month in community based clinic settings. To promote comparable educational experiences, the course director created a set of detailed activity descriptions outlining session goals and objectives. She also developed a checklist summarizing the expectations of the session that the clinic preceptor completes to document that the student met expectations. Finally, the SCI course director meets with the community-clinic preceptors in groups and individually to describe the program and to answer questions.

Student feedback indicates some preceptors do not always adhere to the session plans. The course director is meeting with preceptors to elicit their perspectives and to convey the importance of providing student with comparable learning opportunities.

In years 3-4, a common syllabus and identical methods of evaluation will be used across all clinical teaching sites. To promote quality of the educational experience, the clerkship director will meet with all participating faculty members, regardless of site, to ensure they understand the objectives and expectations of the educational experience and their roles as evaluators of student performance.

7. Note whether plans for clinical instruction include an appropriate balance between inpatient and ambulatory teaching. Assess whether the curriculum includes, in general, appropriate objectives and teaching sites for clinical education.

Planning of the year 3-4 curriculum is in progress. Clerkship directors are designing their programs and determining the balance between inpatient and ambulatory learning experiences for students. The setting of patient contact will be based on the learning objectives. The required clerkship directors are committed to providing student learning experiences that accurately reflect the scope of practice within their respective disciplines, including the most common settings for the delivery of care. Approximately 50% of student experiences in required clerkships during the third year will be ambulatory.

Each of the required clerkships has identified their learning objectives and has tied these objectives to the institutional learning objectives adopted by the school. We have sufficient clinical sites for meeting these objectives for our charter class and for the immediate future as demonstrated by over 30 years successful experience providing clinical education to third and fourth year students from TTUHSC School of Medicine.

C. Teaching and Evaluation

8. Comment on plans to assure adequate supervision of medical students during required clinical experiences.

Students will be supervised by PLFSOM faculty in all clinical experiences. The course and clerkship directors are responsible for preparing faculty for their supervisory roles (please see response to #9 below) and for monitoring the supervision they provide. As part of the mid-clerkship formative assessment, student perceptions of the adequacy of supervision will be explored. If there are problems, the clerkship director will discuss the issue with the supervising faculty member. Students will also be asked about supervision at the completion of their required rotations. Faculty members who do not provide adequate supervision will be counseled about the importance of this function by the clerkship director.

9. Describe whether all individuals who participate in medical student teaching and supervision, including resident physicians, graduate students, and volunteer faculty members, are adequately prepared for their teaching responsibilities.

Faculty and residents participating in medical student education are thoroughly briefed on their roles and responsibilities by course/clerkship directors and are given reinforcing written information.

The Educational Program and Faculty self-study sub-committees recommended the school develop enhancements in the preparation of community faculty and residents for their roles as teachers and evaluators. The associate deans for faculty affairs & development and graduate medical education have developed the following programs:

Community Faculty Development - An 8 hour CME-bearing faculty development program for community faculty consisting of four, two-hour modules, based on existing faculty development materials has been designed. Module I addresses "professionalism" and the curriculum and learning objectives of the PLFSOM; Module II focuses on principles of adult lifelong learning and on assessment and feedback; Module III covers the applications of Evidence-Based Medicine in the office setting and introduces participants to the "One Minute Preceptor Model;" finally, Module IV is concerned primarily with bedside teaching and the approach to clinical reasoning employed in years 1 and 2. This program was initiated in fall, 2010. Several formats are available to complete this program including class room workshops, on-line presentations, workbooks, etc. To enhance communication and to introduce community faculty to key PLFSOM faculty, participants are required to participate in a live workshop for the first module. Satisfactory completion of this program is required for all new community faculty members in order to be assigned a student. Existing community faculty members will have until October 2011 to complete the program to be eligible for student assignment.

Residents as Teachers Program - With input from faculty and the associate dean for faculty affairs and development, the associate dean for graduate medical education developed a new Residents as Teachers Program, based in part on the program developed for community faculty. This program will be implemented beginning in January, 2011. Resident participation is mandatory.

10. Evaluate the adequacy of methods that are or will be used to evaluate student attainment of the objectives of the educational program, as well as the appropriateness of the mix of testing and evaluation methods.

We developed varied methods to assess the attainment of educational objectives during the first two years of the program. (A similarly varied approach is being developed for years 3-4.) These include USMLE style single best answer multiple choice questions, frequent OSCE-type exercises to assess basic clinical and communication skills, reflective writing exercises in the Masters Colloquium, and observational reports based on family home visits and community-clinic visits in SCI. In addition to the mix of methods designed to assess learning outcomes, the institution has developed infra-structure and IT resources to enhance the quality of student assessment. For example:

Item writing workshops have been held to enhance the quality of questions and "vetting teams" have been created to review test items before they are entered into the item pool. The IT staff has developed a student assessment system and reporting module that provides faculty with timely feedback on student performance and the psychometric characteristics of test items.

The PLFSOM has created a state-of-the-art clinical skills and clinical simulation center consisting of fully equipped examination rooms, clinical simulator labs, partial task-trainer labs, and virtual reality simulators.

Participation in the Progress Testing Collaborative—a joint venture consisting of 8 medical schools from around the country. The participating schools administer the same 150 item, standardized and validated examination annually from matriculation to graduation to assess student clinical reasoning skills.

The director of assessment and evaluation in the OCEA has assisted faculty in the development of scoring rubrics to assess student writing projects and the scoring of the component requirements of the SARP project.

11. Evaluate the sufficiency of opportunities for students to receive formative feedback during the preclinical years. Indicate whether a system has been developed to assure that there will be formative feedback during clerkships.

There are ample opportunities for formative assessment and feedback. PLFSOM hired a full time director of academic support in the Office of Student Affairs. She meets with students to reviews study habits and strategies, conducts error analysis sessions, provides counseling about test anxiety and provides other forms of assistance to maximize student success. The college masters are expected to monitor their students' performance and to meet with any having difficulty in order to identify possible remedies.

In **Scientific Principles of Medicine** students take weekly 25 item on-line quizzes covering content from the previous week. On submitting their responses, students automatically receive feedback on how many items they correctly answered. Students then review a version of the quiz which indicates the correct answers along with an explanation. Learning objectives associated with missed items are also sent to students. Student scores are entered in their e-Portfolios and a summary report is sent to the associate dean for medical education and the College Masters.

In the **Society, Community, and the Individual** course and in the **Masters Colloquium**, students are given narrative feedback on the various written assignments that are included in these courses. In both courses, the expectation is that students will be asked to re-do substandard work until it meets the minimal expectations required to be judged as satisfactory (passing).

In **Medical Skills**, students are provided feedback from standardized patients regarding their performance of the physical examination and the quality of their history taking and communication skills. At the end

of each Medical Skills session, the course director provides a group debriefing. As all encounters are digitally recorded, students are able to review their own performance and they may also request that their tapes be reviewed by the course directors.

Some students have commented that they would like more individualized feedback in Medical Skills. This desire was confirmed by the results of the student self-study survey. The course director has modified course delivery to provide more feedback. Students have responded positively to these changes. In **years 3-4** required clerkship directors will provide scheduled formative feedback at least half way through the experience, if not more often. The results of the formative feedback will be recorded in the student e-portfolio and will be monitored by the year 3-4 coordinator in the OCEA. She will contact both the student and the clerkship director if the mid-experience feedback session is not documented.

12. Describe the system that will be used for ensuring that students have acquired the core clinical skills specified in the school's educational program objectives. Describe any anticipated limitations in the school's ability to ensure that the clinical skills of all students are being or will be appropriately assessed.

The Medical Skills Course in years 1 and 2 lays the foundation for the acquisition of the core clinical skills needed to meet institutional learning objectives in this domain. Students are evaluated by trained standardized patients on their performance of the medical history and the execution of physical examination maneuvers according to the criteria specified in an on-line check list. In addition, at the end of each unit associated with the SPM course, a 5 station OSCE is conducted. Students are expected to achieve a minimum of 75% of the items on the OSCE check-list to pass the medical skills course. Students who do not meet this minimal standard are required to participate in individualized remediation training sessions. At the end of year 2, there will be a comprehensive, multiple stations OSCE designed to assess the acquisition of skills across the curriculum. Students will be required to "pass" the end of the year 2 OSCE in order to be certified for advancement into year 3. Students will be required to remediate by demonstrating acquisition of deficient skills.

In years 3-4, students will be observed taking histories and performing physical examinations by their ward attending or clerkship directors. Each of the clerkship blocks will also employ an OSCE type examination as a means of assessing student clinical skills. Finally, all students will be required to take a multi-station OSCE at the end of the third year to assess core clinical skills. Students will be required to remediate any deficiencies noted in this assessment by demonstrating acquisition of deficient skills. Faculty resources are adequate to meet the needs of our first student cohorts. As class size expands to 100 students per class, it may be more challenging to identify the numbers of faculty needed to observe and evaluate clinical skills. Ensuring adequate faculty resources is a major priority of strategic planning now underway and is also a major priority of an ad hoc task force on "educational value units" formed by the dean to identify ways that the institution can deal effectively with competing demands and mitigate perceived disincentives for clinical faculty to participate actively in medical student education.

D. Curriculum Management

13. Assess the adequacy of the system in place for planning and managing the curriculum and for ensuring that it is coherent and coordinated. Note whether the elements of the system, such as the committee structure, are already in place or are still being created.

Organizational systems for planning and managing a coherent and coordinated curriculum are in place and functioning well.

The dean of the school of medicine is both chief executive officer and chief academic officer. He has delegated responsibility for medical student education to a senior associate dean for medical education. This individual is responsible for overseeing the planning, development, implementation, and evaluation

of the educational program. He meets regularly with the dean to review the status of the educational program.

Office of Curriculum, Evaluation, and Accreditation (OCEA) is supervised by the senior associate dean for medical education. The personnel in this office are responsible for the day-to-day management of the curriculum. OCEA includes six course coordinators, two assessment coordinators, an associate director for instructional design and educational technology, a PhD level director of assessment and evaluation, and a unit manager.

Committee Structure--Coordination and coherency is promoted by a hierarchy of committees with well defined reporting relationships. Each course is managed by a course committee consisting of faculty members who are responsible for the planning, development, implementation, and continuous quality improvement of their courses. In Scientific Principles of Medicine (SPM), the course committee also includes "unit" committees corresponding to the 9 units that comprise this two year course. These course committees are chaired by the course directors. The course committees meet frequently—weekly for SPM and the Masters Colloquium and quarterly for Society, Community, and the Individual. For the Medical Skills course, the committee structure is more fluid as it consists of the Course Director and the SPM unit directors of the particular unit that is being implemented at any given time. This ensures close coordination and integration across these two curricular components.

The course committees report at least twice a year to the Curriculum and Educational Policy Committee (CEPC) which consists of basic science and clinical faculty members appointed by the dean. This committee is chaired by the senior associate dean for medical education. Ex officio members include the associate dean for student affairs, the associate director of the clinical skills and simulation center, the director of assessment and evaluation, the library director and the director of the IT department. This committee is responsible for overseeing the entire curriculum and for formulating policy proposals that apply to all components of the educational program (e.g., grading policies, approval of courses, etc.). The CEPC is responsible for ensuring that institutional learning objectives are being met and that each course is of high quality. The resources of OCEA are made available to the CEPC as well as to its standing Evaluation Committee, which is chaired by the director of assessment and evaluation. The Evaluation Committee is responsible for providing oversight for all program evaluation and student assessment. The CEPC reports quarterly, or as needed, to the elected faculty council.

14.Describe how the content covered in the curriculum will be monitored to ensure that all desired content is covered and that gaps or unwanted redundancies do not occur. Assess whether appropriate tools are available, such as a curriculum database, to support the monitoring of curriculum content.

Curriculum monitoring is a shared responsibility of administration, through the senior associate dean for Medical Education, and the faculty through the course (and unit) committee structure and CEPC oversight.

The senior associate dean for medical education is responsible for monitoring course content. In addition to the staff of the OCEA, the principal resource at his disposal to assist in this process is Ilios, a centralized, web-based curriculum management data base originally developed by the University of California San Francisco School of Medicine. The code for Ilios was purchased from UCSF and has been modified by PLFSOM IT staff to meet our unique needs. This data base is a repository of all learning objectives in the curriculum. Learning objectives are linked to key words to facilitate searches. This data base is also a repository of the learning materials including Power Point slides, study guides, images, and reading assignments. Through Ilios, we are able to monitor course content and objectives, contact time, educational methods, and also ensure that examination items are linked to learning objectives.

15. Report on whether the chief academic officer has sufficient resources and authority, to date, to assure that the educational program can achieve institutional goals and learning objectives.

Evaluate whether sufficient resources are likely to be available to support the implementation of the full curriculum.

PLFSOM is well supported by the State of Texas and funds have been ample for hiring the faculty and staff needed to plan, develop, and implement the curriculum. The dean has the authority to make decisions and to mobilize resources needed to ensure the goals and objectives of the institution are achieved. Department chairs and associate deans serve at his pleasure and by his direction.

As class size expands, additional faculty from the clinical departments will need to be identified to serve as small group tutors and as instructors in the Medical Skills course. Plans are being devised to ensure we have sufficient personnel available to meet the educational needs of an expanding student body. This issue is being addressed in our strategic planning process. A sub-committee on "educational value units" is developing a proposal to provide incentives for participation in the educational program. Additional faculty members are being recruited in virtually every clinical department. However, if sufficient resources are not available to meet the needs of a growing student body, class size expansion will be postponed until necessary resources are available.

16. Describe how the curriculum committee is assuring that students have sufficient time for learning. Evaluate the educational "workload" in the preclinical years.

The Curriculum and Educational Policy Committee approves the overall course schedule for each semester. This includes scheduled self-study time. By policy, students are given an average of 3 half days per week that is designated as self-study. Additional self-study time is built into the summative exam period at the end of each unit. The CEPC must approve any significant change in the amount of scheduled contact time. Course directors are required to report contact time to the CEPC as part of the end of course review.

17. For schools that operate geographically separate campuses, evaluate the effectiveness of the mechanisms in place to assure that educational quality and student services are consistent across sites.

The Paul L. Foster School of Medicine does not operate geographically separate campuses.

E. Evaluation of Program Effectiveness

18. Comment on the adequacy, to date, of the process to evaluate the effectiveness of the educational program. Describe the procedures to identify and rectify any problems in individual courses. Evaluate the effectiveness of these procedures, and provide specific illustrative examples of how appropriate changes were made.

We employ a number of methods to evaluate the effectiveness of the educational program including: Student responses to on-line course and faculty evaluations. SPM and Medical Skills are evaluated at the end of each SPM unit. Society, Community, and Individual and Masters Colloquium are evaluated at the end of each semester.

A Student Curriculum and Evaluation Committee was created to provide additional input on the educational program. This committee meets with the senior associate dean for medical education approximately every 6-8 weeks.

All formative and summative examination items are subjected to item analysis. This includes the difficulty of the item, as measured by what percentage of the class answered the question correctly, and how well the item discriminates between students in the upper and lower 25% of the distribution. We also look at the distribution of answers selected for all multiple choice questions. On the basis of this information we are in a position to know whether an item should be eliminated, modified, or retained in the item pool without change.

End of unit faculty debriefs (for SPM units and Medical Skills) and end of semester course debriefs for SCI and Masters Colloquium are held by the respective course (or unit) committees. These sessions review student evaluations, student performance, and the observations of participating faculty.

The following examples illustrate changes we have made based on the collection of evaluative data: Unit 1 in SPM has been substantially reorganized to provide a more coherent foundation for the remaining units in this course. The first iteration of this unit was labeled "Host-Defense" and consisted of the following clinical presentations: 1) the Work Physical, 2) Sore Throat, 3) Periodic Health Exam, 4) Abnormal Temperature and 5) Hypersensitivity Reactions. Feedback from students and faculty observations suggested students found it difficult to "tease out" the basic principles that were intended to lay a framework for subsequent study of the basic sciences. This unit has been substantially re-organized and is now titled, "Introduction to Health and Disease." It consists of the following clinical presentations: 1) the Adult Periodic Health Exam (homeostasis), 2) Pediatric Periodic Health Exam (growth—normal and abnormal including neoplasia), 3) Sore Throat (specific pathology), 4) Fever (invasion), 5) Wound (inflammation and repair). Each clinical presentation is assigned to a conceptual theme that is elaborated upon during the week the clinical presentation is presented. In addition, a "Conceptual Framework" presentation related to the theme is provided with the clinical presentation to lay a foundation for the basic science content to follow.

Based on student feedback, input from the Student Curriculum and Evaluation Committee, and faculty observation, the decision was made to reduce the volume of required reading and the number of objectives in Unit 2 (Musculoskeletal and Neurology) to make the workload more manageable.

Based on item analysis of questions used in the formative and summative exams, many items have been modified to improve their clarity and quality and to reduce flaws in question structure.

Based on student feedback, our IT department enhanced the search capabilities of our course delivery system to streamline the search process.

19. Summarize the kinds of outcome measures that will be used to evaluate the effectiveness and outcomes of the educational program. Describe how the school will document that institutional objectives are being attained.

We use a variety of methods and measures to evaluate the outcomes of the educational program. These measures are linked to the institutional learning objectives discussed earlier. Knowledge outcomes will be assessed by student performance on the USMLE Steps 1 and 2(CK). Clinical skills will be assessed through the USMLE step 2(CS) and by our internal end of year 3 OSCE. Attitudinal outcomes, for example, a commitment to providing culturally appropriate care, are being tracked through a longitudinal survey that is administered annually. After graduation, we will survey residency program directors for their judgments about the preparation of PLFSOM students for graduate medical education.

The Evaluation Committee will monitor these various outcomes and ensure that the Curriculum and Educational Policy Committee is aware of results The school's administration, through its senior associate dean for medical education and the dean, will ensure the institution responds appropriately to these outcome measures.

III. MEDICAL STUDENTS

A. Admissions

1. Critically review the processes for recruitment, assessment, and selection of medical students. Evaluate the results, to date, of those processes. Assess how well the medical education program's selection criteria are being validated in the context of its mission and other mandates.

Recruitment: In 2009-2010, the admissions staff made 18 visits to 12 different Texas institutions to meet with pre-med students. These visits provide pre-med students information about our facilities,

curriculum, educational programs, preparations for application, admissions processes and points of contact in the Office of Admissions. Additional recruitment interactions occur on interview days when the entire morning is devoted to briefings and tours regarding the various programmatic features of our medical school. Follow-up interactions also occur electronically.

Assessment and Selection of Students: Participation in the Texas Medical and Dental School Application Service (TMDSAS) facilitates the acquisition of cognitive and non-cognitive data, which allows a holistic assessment of the applicant. In addition to GPA and MCAT scores, applicants are evaluated on their life and extracurricular experiences, health related activities, letters of recommendation, personal statement, socioeconomic background, and regional origin. The interview is designed to focus on the applicant's medical experiences, motivation, and knowledge of issues of medicine, personal characteristics and problem solving ability. Full-time faculty members of the admissions committee and clinical faculty members in the community participate in the interview and appraisal of candidates. Consideration of various cognitive and non-cognitive factors by the admissions committee results in an overall weighted score that determines the ranking of accepted students.

Results of Processes and Validation: For each of the first two classes, these processes have resulted in an abundant pool of over 2,500 applicants, of whom nearly 400 per cycle were interviewed. The TMDSAS match resulted in the seating of a two highly qualified classes.

Currently enrolled students are performing well. Of the 5 students who have had academic difficulty, we have not been able to identify any particular variable or set of variables (including MCAT scores) to account for their difficulties.

2. Evaluate the quality of the applicant pool to date.

Applicants to the PLFSOM had GPAs and MCAT scores comparable to the pool of applicants in TMDSAS. Our mission of recruiting students from west Texas and the Border areas presents a challenge with regard to their GPAs and MCAT scores. Applicants from west Texas and border counties are not as competitive for admission based on these criteria as compared with applicants from the rest of Texas and out-of-state. Among students who matched for the PLFSOM, 5% come from the lower socioeconomic level compared with a 6% in the lowest parental income of entering medical students across the U.S. from 1987-2005 (AAMC data). As discussed below, we are developing pipeline programs and partnerships with the University of Texas at El Paso to facilitate the preparation of well qualified applicants who are from the border and western regions of the state.

The following table provides data on the depth of the applicant pool in filling the first two classes at PLFSOM.

	Class of 2013	Class of 2014
Applicants	2503	2531
Interviews	389	378
Acceptance Offers	273	364
Withdrew after Acceptance	53	125
Matched Elsewhere	180	179
Entering Class	40	60 (plus 2 deferrals)

3. Describe the school's plans for broadening diversity among medical school applicants. Report on the adequacy of resources (finances, personnel, other resources) that the school has committed to develop and implement programs to enhance the diversity of the medical school applicant pool.

Plans for broadening diversity include continuing pipeline programs such as Physician Shadowing for Pre-med Students (semester based), Summer Enrichment for Pre-med Students at the University of Texas at El Paso (UTEP), Summer Med Camp for High School Students and presentations at local high schools.

These programs principally involve students from the El Paso region where 80% of the population is Hispanic. In addition, plans are in progress to accept students (10% of the class) in 2012 who are in the Texas legislatively funded Joint Admissions Medical Program (JAMP). JAMP is a pipeline to medical school for disadvantaged students involving a partnership between 9 medical schools and 65 public and private undergraduate institutions in Texas. As previously noted, we have convened a task force to explore the feasibility of developing a post-baccalaureate program to better prepare promising students from diverse backgrounds to qualify for admission to medical school.

Financial and personnel resources are sufficient to proceed with the other programs to enhance the applicant pool. Additional faculty may be needed to support these programs.

B. Student Services

4. Comment on the levels of student attrition and academic difficulty, to date, in relation to the medical education program's admission requirements, academic counseling efforts, and remediation programs. Comment on the effectiveness of the system for early identification of students in academic difficulty. Evaluate also the effectiveness of the counseling and remediation systems that are in place. Report on any changes that are anticipated.

One student withdrew from the charter class in the first month prior to any summative evaluation. The student received extensive counseling about his choice but he still chose to withdraw. There was nothing in his application that would have anticipated his withdrawal. Another student in the second class had to take a leave of absence for personal reasons.

Ten percent of the charter class experienced some academic difficulty to date. A careful review of these students' records does not suggest any obvious explanation based on MCAT scores, GPAs, or science background. We therefore see no reason to change admissions requirements. Each student has met with the director of academic support as well as their college masters. Monitoring of individual students by the college master with follow up by the Office of Student Affairs will continue through the monthly student progress meetings consisting of the college masters, associate dean for student affairs, director of student affairs, director of academic support and the senior associate dean for medical education. This meeting is designed to identify students who may be at academic risk.

In the first year, we identified students in academic difficulty and offered them support before the end of the first semester. Students who failed examinations were provided assistance from the director of academic support, including error analysis on their examinations and feedback on study strategies and test taking skills. Students who failed examinations were also provided printouts of the learning objectives tied to the items they missed and were encouraged to meet with the faculty members of the disciplines in which they were having problems. Ultimately, two members of the charter class were unsuccessful in remediating their failures and were required to repeat the year.

The director of academic support has initiated a new peer tutoring program with funds provided by the dean. Carefully selected second year students (and eventually third and fourth year students) serve as tutors and are compensated for their time. We will monitor the effectiveness of this initiative.

5. Describe the implementation, to date, of the system of career counseling and assess the school's readiness to expand the system as students proceed through the educational program.

Career counseling begins in Year 1when students are introduced to the AAMC Careers in Medicine Program. Several student-initiated specialty interest groups have been formed. These groups bring in speakers about the specialty. Some departments allow first year students to participate in rounds on the weekends to experience hospital care. The Office of Student Affairs has planned a group of voluntary workshops to begin to prepare students for career planning. In the fall of 2010, workshops were initiated to help students identify personal strengths, weaknesses, and values that may influence specialty choice.

The college system was designed to give students a mentor with whom to discuss career issues. Some students have also identified mentors outside of the college through research or clinical activities. The Office of Student Affairs has identified advisors that have experience working with medical students. These advisors participate in a training session to orient them to the PLFSOM career advising system. The college masters are provided a list of approved advisors. This list is also available to students through the Student Affairs website (http://www.ttuhsc.edu/som/studentoffairs/). We have sufficient numbers of advisors to meet student needs at full roll-out.

6. Evaluate the level of tuition and fees in relation to the anticipated level of debt among indebted graduates. Describe the efforts in place minimize student indebtedness. Comment on the adequacy and availability of financial education and debt management programs.

The tuition and fees for PLFSOM are under \$15,000 per year. The annual budget for a single student is anticipated to be approximately \$42,000 per year for tuition, fees and living expenses. In-state tuition rates are very reasonable compared to the rest of the state and the country. Nonetheless, a student could still incur \$168,000 of debt over four years. The financial liaison within Student Affairs meets with all of the students to encourage careful consideration of borrowing for medical school. Students are provided information about loan forgiveness programs such as the Paso Del Norte Loan Forgiveness Program, as well as other national loan forgiveness programs. In the first year, five students received loans of \$20,000 from the Paso Del Norte Loan Forgiveness Program. Some of these students had already received a scholarship for tuition and fees. These students will have little debt to repay if they remain in El Paso to practice for at least four years. The AAMC website has modules to help a student understand the need for fiscal caution through the medical school years. The Office of Student Affairs added this link under the financial aid information on the Student Affairs website. We are also including debt management as part of an ongoing workshop series implemented in the fall of 2010.

In the charter class, 25 students received scholarships for tuition and fees. In the class of 2014, 21 students received four year tuition and fee scholarships. The policy of the school is to maintain at least 20 full four year scholarships per class. The Office of Development continues to work with local donors to increase the funding available for scholarships.

7. Evaluate the adequacy and availability of student support in the following areas:

Personal counseling and mental health services, including their confidentiality and accessibility

Preventive and therapeutic health services, including immunizations and health and disability

insurance

Education of students about bodily fluid exposure, needlestick policies, and other infectious and environmental hazards associated with learning in a patient care setting

Personal Counseling: There is adequate support for students in the area of personal counseling. At the beginning of the year, all students receive a pamphlet describing the program (also available on the Student Affairs website). The Program for Assistance to Students (PAS) is a confidential program allowing up to five visits with a mental health provider. The student may request the list of providers from the office of Student Affairs. A hotline is also available for urgent needs and results in a referral to a local mental health professional for further evaluation. Since students can call the hotline to get the list of providers in El Paso, we are not aware of how many students actually avail themselves of these services except by the number of billings we receive from the providers. We have had 23 bills for student services for this academic year. Since third and fourth year students from the TTUHSC SOM also utilize these services, it is impossible to estimate whether, and how many, PLFSOM students have utilized these resources.

Preventative Health Services: Students can obtain preventative and therapeutic health services at the Family Medicine clinic. This information is on the Student Affairs website and is given to the students at orientation. No concerns have been raised about the availability of services. Medical students seeking care at the Family Medicine Clinic are assigned to a clinician who does not evaluate the student's

performance. Students are also required to maintain health insurance. Disability insurance is purchased for students with a mandatory fee. Immunizations are tracked through the Office of Occupational Health. *Risk Reduction:* The students receive training on bodily fluid exposure, needle stick policies and other infectious and environmental hazards associated with learning in a patient care setting at orientation. This information is summarized on a laminated card that students receive at orientation. The Office of Student Affairs website includes a link to the Occupational Health website that includes information on the process to follow for needle stick injuries or exposure to hazardous materials.

C. The Learning Environment

8. Assess the adequacy of plans to create an effective learning environment for students. Identify the ways in which the medical school is preparing its faculty and others to support a positive learning environment and to mitigate negative factors. Comment on the amount and quality of interactions that have occurred, to date, between the medical school and its clinical partners related to this issue.

Several steps are taken to ensure wide dissemination among faculty, residents, and staff of policies and expectations related to the learning environment. An on-line training module has been developed and all faculty members and residents are required to complete this program. The associate dean for student affairs meets with each department annually to review institutional expectations regarding the treatment of students. The AAMC Compact between Teacher and Learners is incorporated into the Faculty Handbook and is also included in a laminated tri-fold pamphlet that lists the institutional learning objectives that is given to faculty. Finally, poster size versions of the Compact are posted in multiple locations across the campus.

A review of our affiliation agreements reveled that explicit language regarding the student learning environment was absent in some of these documents. These agreements are being amended to better inform the leadership of the affiliates about PLFSOM expectations and requirements.

9. Assess the effectiveness of the school's policies for addressing allegations of student mistreatment and for educating all members of the academic community about acceptable standards of conduct in the teacher-learner relationship.

The policies for addressing allegations of student mistreatment are included in the student handbook, which is posted on the Student Affairs website. To date, there have been no issues raised in this area. These policies are also described in the faculty development module on the learning environment described above.

Despite their availability in the student handbook and on the Student Affairs web-site, the independent student self-study survey revealed that only half of the respondents felt they knew about policies for dealing with conflict between teacher and student and between student and student. Consequently, the associate dean for student affairs reviewed these policies and explicitly pointed out where they can be found in required class meetings with each of the first and second year classes. She will continue this process by meeting annually with each student class at the beginning of the academic year.

10. Evaluate the familiarity of students and faculty with the school's standards and policies for student advancement, graduation, disciplinary action, appeal, and dismissal. Review the adequacy of systems for providing students with access to their records and for assuring the confidentiality of student records.

Students seem to be aware of the standards and policies for advancement, disciplinary action, and dismissal. These are detailed in the student handbook and the HSC Code of Professional Conduct which are available on the Student Affairs web site. This information is available to all faculty and those who sit on the Student Affairs, Grading and Promotion, Faculty Council, and Curriculum and Educational Policy committees are well informed about these policies.

Student access to their personal e-portfolio and to the TTUHSC Banner System, where test results and final grades (respectively) are stored, is password protected to ensure confidentiality.

11. Assess the current and anticipated adequacy and quality of student study space, lounge and relaxation areas, and personal storage facilities. Note whether available resources for study contribute to an environment conducive to learning.

Study space, lounge areas and personal storage facilities are adequate. Students have 24-7 access to small group study space in the medical education building. Lockers are available in the college suites and in the anatomy lab. There are two campus libraries that can be used for study. The students also have access to a fitness center that is exclusively for their use. However, the student self-study indicated that about a third of the class is dissatisfied with the amount of available study space and the student committee noted that dissatisfaction is likely to increase as the class size expands. This issue has been discussed with the director of the library and plans are in progress to add an additional 30 study carrels to the MEB library by the first of the year. Plans are also underway to expand study space at the Academic and Education Center located on the west-side of campus. Roughly a quarter of the student respondents evidenced some dissatisfaction with the availability of relaxation space. This issue will be referred to the Student Affairs Committee for further investigation.

IV. FACULTY

A. Number, Qualifications, and Functions

1. Indicate whether the current size and mix of faculty is appropriate for the delivery of the preclerkship phase of the curriculum. Evaluate the current availability of faculty to plan and deliver the clerkships. Report on any additional recruitments that are planned or underway to support clerkship education.

Pre-clerkship Curriculum: The number and mix of basic science faculty meets current and projected needs for all pre-clerkship courses. For the basic science portions of the pre-clerkship curriculum, we project a future steady-state need for 50-70 person-hours in class weekly. This need represents only a modest increase from current demands because most of the class contact with basic scientists is in large group settings. This level of contact can be met by the 16 basic scientists currently in the Department of Medical Education and 18 in the Department of Biomedical Sciences.

The number and mix of clinicians meets the current needs for the Scientific Principles of Medicine and Medical Skills courses, which employ small-group sessions and are thus clinical-faculty intensive. These courses currently require approximately 30 clinician-hours per week for our charter class of 40 students and 45 clinician-hours for the second class of 60 students. Faculty members from clinical departments have contributed to the implementation of the curriculum for both classes. As class size expands to 100 students, we project our need to be about 75 clinician-hours per week for MS 1 and 2 classes.

Society, Community and the Individual course is meeting its current needs but has its own future challenges in recruiting faculty for community activities. When class size reaches 100 students, the projected need will be for approximately 15 clinician-hours per week. In addition, an additional 15 person-hours per week will come from community dentists, social workers, pharmacists, and midwives.

The administration and course directors are currently planning to meet these future needs through a combination of planned increases in faculty numbers and recruitment of additional part-time and volunteer faculty. As noted in Section 1, the SARP directors are actively recruiting additional mentors both inside and outside of the PLFSOM for that component of the educational program.

Clerkship Curriculum: The clerkship curriculum has an adequate mix and number of faculty to meet needs for the current class. The faculty currently involved in clerkships for the Lubbock 3rd and 4th year students will transition to PLFSOM 3rd and 4th year students. PLFSOM students will replace Lubbock

students in Sept 2011 when they reach their 3rd year. By July 2012, TTUHSC Lubbock School of Medicine students will no longer be sent to El Paso. Additional clinical faculty will be needed once the school reaches a class size of 100. Planned faculty expansion through recruitment of both full-time and part-time faculty is expected to meet future needs.

2. Describe and evaluate the availability of opportunities for both new and experienced faculty members (full-time, part-time, and volunteer) to improve their skills in medical student teaching and evaluation. Comment on the availability of institutional or departmental-level assistance (e.g., training sessions from education specialists). Report on the current and desired levels of faculty participation in such programs.

There are abundant opportunities for new and experienced faculty members to improve their skills in medical student teaching and evaluation. Institutional-level programs include the following:

For the last 7 years, the institution has sponsored a comprehensive 35 weeks Faculty Development Course (FDC), which includes instruction about adult learning, effective teaching, performance assessment, and new teaching methods. All newly hired faculty members are encouraged to begin the FDC within 6-12 months of their hire date. So far over 40% of PLFSOM faculty members have completed this program. Internal educational specialists (senior associate dean for medical education and Office of Curriculum, Evaluation, and Accreditation (OCEA) staff) have provided faculty development workshops on an ad hoc basis. For example, the senior associate dean for medical education provided an item writing workshop that was attended by over 20 members of the Department of Medical Education—nearly the entire department.

A faculty development program for community physicians was initiated in the fall of 2010. New community-based volunteer faculty will be required to this course before medical students will be assigned to them. This course consists of four, 2 hour modules available in different formats to facilitate participation. A post-test will be administered at the conclusion of each module and a participant must attain a score of 75% to be certified for student assignment.

In May 2010, the Office of Faculty Affairs & Development launched a new program for continuing faculty development—the Institutional Formal Faculty Mentoring Program (IFFMP) to provide continuing feedback and assistance intended to enhance faculty success (see #3 below).

Departmental level faculty development programs include the following:

Course directors provide guidance to faculty members regarding appropriate instruction and assessment strategies for any educational assignments. This is a continuous process, specific to each faculty member's familiarity with the relevant teaching materials and modalities.

Feedback about teaching skills is provided to faculty via course evaluations by students and by department chairs during annual faculty evaluations. This promotes faculty member reflection and self-improvement.

A number of departments have internal programs for faculty development and/or will send faculty to teaching courses. Faculty members are largely allowed to self-direct the degree to which they participate in development programs. However, department chairs and faculty mentors are expected to encourage education skills development for all faculty members.

3. Describe whether faculty receives appropriate support and mentorship related to scholarship and whether formal institutional programs are available or planned to support faculty research.

Several programs are in place and in development to assist faculty members in developing their scholarly potential. As noted above, over 40% of the faculty has completed the Faculty Development Course which includes sessions on grant writing, principles of clinical research, and biomedical statistics. Every participant is required to present a research proposal before graduation.

In 2008, PLFSOM implemented a peer-reviewed seed grant program and the associate dean for research has provided \$120,000.00/year to fund 8-10 projects. Thus far, 11 faculty members have received funding. The four Centers of Excellence provide opportunities for interested faculty to engage in ongoing research initiatives as well as access to state-of-the-art core research facilities (including genomics, proteomics, histology, flow cytometry, and microscopy). To enhance collaborative opportunities for translational research, the Department of Biomedical Sciences sponsors an annual research colloquium. A Biostatistics and Epidemiology Consulting Lab has been established to assist in design, analysis, and dissemination of research results.

To date, mentorship has been largely informal. In May 2010, the Office of Faculty Development & Affairs launched the Institutional Formal Faculty Mentoring Program (IFFMP) targeting underrepresented minority (URM) faculty and junior-level faculty. This program is funded by a recently awarded HRSA Hispanic Center of Excellence (HCOE) Award. Thus far, 14 senior faculty members have volunteered to serve as mentors and 25 faculty members have requested that they be assigned to a mentor. Faculty mentors participate in an orientation program led by the associate dean for faculty affairs & development. In addition to the mentoring program, our HCOE provides resources for additional training in education, research, and clinical skills. To date, 47 individual faculty members have been supported by HCOE funding to participate in one or more training program opportunities.

B. Personnel Policies

4. Evaluate the systems for the appointment, renewal of appointment, promotion, granting of tenure, and dismissal of faculty members. Note whether the policies are clear, widely understood, and followed.

Policies governing faculty appointments, promotion, tenure, and dismissal are established by the Board of Regents and are described in the PLFSOM Faculty Handbook (see http://www.ttuhsc.edu/fostersom/facultyaffairs/ebook.aspx). These policies have been in place for many years within the TTUHSC system and they are clear and conform to state and federal employment and equal opportunity standards. These policies are adhered to strictly.

The Committee on Faculty Appointment, Tenure & Promotion and Performance Assessment (CFAPTA) reviews application materials of candidates who are under consideration for initial faculty appointment, promotion, tenure, or continuation of appointment associated with comprehensive performance evaluation. CFAPTA recommends action to the dean for review, recommendation, and transmittal for final action to the president of the TTUHSC and the Board of Regents.

The associate dean for faculty affairs & development regularly conducts workshops on these guidelines in faculty orientation, as part of the Faculty Development Course, and in department meetings. All policies and procedures for faculty appointment, renewal of appointment, promotion, granting of tenure, and dismissal of faculty members are available online. PLFSOM policies went through a full cycle of faculty review and comment within departments as well as formal acceptance through the faculty council. The T&P guidelines are discussed during new faculty orientation and there have been annual T&P workshops for those who are completing their applications. Workshops for tenure & promotion are also available on DVD through the Office of Faculty Affairs & Development. The Office of Faculty Affairs & Development assists the faculty in clarifying these policies and guidelines.

Individual departments are required to develop their own guidelines for evaluating faculty for promotion and/or tenure consistent with school-wide guidelines. Annual faculty evaluations by the chair are intended to be promotion-focused so that faculty members will be aware of their progress. The self-study process revealed this is not always the case. Additionally, the self-study indicated faculty members do not take full advantage of the annual pre-tenure and promotion review conducted by the Office of Faculty

Affairs. These issues were discussed in a half-day mini-retreat for department chairs, associate deans, and the dean in September, 2010 and the following decisions were reached:

The form used by the Chairs to document their annual review of faculty performance will be modified to include sections dealing with the individual faculty members progress toward promotion and/or tenure; Faculty members will be required to participate in a pre-promotion and tenure review at the 3 year point in their advancement cycle;

In November 2010, all chairs will participate in a workshop on promotion and tenure guidelines, policies, and procedures.

5. Assess the adequacy of institutional and departmental conflict of interest policies relating to faculty members' performance of their academic responsibilities.

Institutional conflict of interest policies are set by the Regents' Rules and HSC operating policies. These include general policies for all employees plus additional guidelines for research. On top of these are newly approved policies regarding health care vendor interactions. Together, these policies address all academic responsibilities from the classroom to the clinic to the bedside and are currently adequate. The institution also mandates participation in workshops and/or online training for compliance. In addition to the institutional conflict of interest policies, departments can develop their own guidelines to further enhance the quality and application of these policies.

6. Assess the implementation of policies and systems designed to assure that faculty members receive feedback about their academic performance and progress toward promotion and/or retention. Describe whether faculty members are regularly informed about their job responsibilities and the expectations that they must meet for promotion and/or retention.

General school-wide guidelines for tenure and promotion have been developed and are widely disseminated. Departmental guidelines, consistent with the school-wide policies are being developed and disseminated. In the interim, the institutional guidelines apply. Responsibility for informing faculty about job responsibilities and progress toward tenure/promotion lies with the chair. Please refer to Item #4 above for a discussion of problems in the implementation of policies related to promotion and tenure and the steps we have taken to correct these problems. In addition to the chairs' role in advising faculty members about their progress toward promotion and/or tenure, the Office of Faculty Affairs also provides pre-promotion and tenure review opportunities.

7. Discuss the extent to which education is valued in the institution. Describe how the degree and quality of participation in medical student education are factored into decisions about faculty rewards, retention, and promotion.

PLFSOM places great value on its educational mission. This is reflected in the creation of an academic Department of Medical Education staffed by 27 full-time basic science and clinician faculty members whose primary assignment is medical student education. In addition, virtually all faculty members are expected to teach in some capacity. The degree and quality of participation in education are factored into decisions about awards, promotion, and retention commensurate with the individual's principal appointment as a researcher, clinician, or educator. Clerkship Directors receive protected time and additional compensation for teaching and supervising students.

The PLFSOM Guidelines on Faculty Appointment, Tenure & Promotion value accomplishments in the scholarship of teaching and learning. The existence of an extensive faculty development program is further evidence of institutional support for education. Excellence in teaching is recognized through a number of awards for that are conferred at the annual Faculty Appreciation Banquet.

As previously noted, the dean has appointed a task force to review, evaluate, and recommend a system for quantifying the value of educational contributions that can be used in calculating incentives for participation in educational activities.

C. Governance

8. Evaluate the current mechanisms for organizational decision-making. Assess whether necessary decisions are currently being made in a timely and efficient manner and with appropriate input from faculty and other concerned parties.

Faculty members are involved in institutional decision-making primarily through participation as faculty representatives on the various standing committees and ad hoc task forces formed to address specific issues. The organizational structure of the PLFSOM promotes transparency and provides for frequent faculty input and representation (see #9 and #10 below). The timeliness of decision-making varies depending on the issue and mechanism for faculty input. Issues like bylaws or guidelines for tenure and promotion have required lots of faculty feedback and have utilized general faculty meetings, small group meetings, and feedback to departmental faculty council representatives. Decision-making for curriculum, admissions, and student promotion allows for and relies on faculty input. Efficient and timely decision-making is enhanced because some committees and the associate deans have managerial authority in their areas of responsibility.

9. Comment whether the current committee structure is mature (i.e., whether all planned committees been formed and have begun to function). Describe and assess the relative roles of committees composed of the faculty, of department heads, and of medical school administrators in school-related decision-making.

All of the standing committees required by the Faculty Bylaws are operational and include representation from faculty, chairs, and administration based on background, expertise, and jurisdiction. Most have been functioning for 12-18 months and are adjusting their membership and functions to the degree allowed by the bylaws. If a committee cannot function efficiently under the current bylaws, a bylaw amendment can be proposed and evaluated through the described process. These standing committees report to either the Faculty Council or the Academic Council.

10. Assess the effectiveness of the methods used to communicate with and among the faculty. Note whether faculty perceive themselves to be well informed about important issues at the institution. Assess whether faculty believe that they have sufficient opportunities to make themselves heard.

Efforts have been made to ensure that faculty members are informed about important issues through the announcements page on the TTUHSC website, weekly dean's letters, regularly scheduled monthly department faculty meeting, quarterly general faculty meetings, and special general faculty meetings. Faculty members are represented on the faculty council through their departmental representative and may bring issues or concerns to the council personally or through their representative. The dean gives a report at monthly faculty council meetings.

The faculty members are represented on the Dean's Council by the president of the faculty council and four of its members. The president's reports on issues discussed at the Dean's Council are included in the FC minutes. Minutes from the FC meetings are available to all faculty members. In general, communication from administration to faculty is more robust than from faculty to administration. Although the dean has an open-door policy and encourages faculty to schedule appointments with him to discuss concerns, he recognizes the need to create additional opportunities for faculty to "communicate up." The dean is adopting a three prong approach to enhance communication from faculty to administration: 1) he will continue his practice of attending every faculty council meeting and of reporting issues discussed at faculty council with his dean's council; 2) he will meet with each department on an annual basis in a "town hall" format; and 3) he will visit each community site annually. This policy creates at least three opportunities per month for faculty to communicate ideas and concerns to administration.

V. EDUCATIONAL RESOURCES

A. Finances

1. Discuss the current sufficiency of funding for the medical school. Describe the current balance among the various sources of financial support for the medical education program and school (i.e., state and local appropriations and income from patient care, endowments, tuition income, research income, hospital revenues). Comment on any anticipated changes in funding sources or their balance over the next three years.

State Appropriations: The school receives state funding through special line items from the Legislature, which is expected to continue for the foreseeable future. The total direct state funding to the school is approximately \$54M in FY2010 and is projected to be \$62.6M in FY 2011. Approximately \$20M of state funding in FY2010 supports medical education. The special line item funding is the primary funding source for the medical education program.

Endowment: We were very fortunate to receive a \$50M gift, from El Paso resident Paul L. Foster in September 2007. These funds were placed into an endowment and a significant portion of the endowment income is allocated to support student scholarships. In addition, a local foundation has allocated \$1.2M to support the tuition and fees for students who will agree, once they complete their training, to practice in El Paso for each year of support they receive. Further modest endowment funds have been raised from other sources to support student scholarships. Our goal is to provide four year tuition and fees scholarships for at least 20 students per year. We believe we will be able to continue to support this goal. In FY 2011, these costs are projected to be \$14,469.50 per student. The balance in this fund is currently greater than \$4M. The remaining endowment funds are primarily for the support of named "chairs." An important component of the current strategic planning process is to develop strategies to expand our endowment program.

Tuition: All tuition received from the students is offset against the special line item funding. However, all student fees are passed through to the school and allocated to the appropriate office responsible for the program.

Patient Care Income: At \$77M, income from our clinical practice is the largest source of funding for the school and has been growing, primarily based on the growth of our 30 year partner, the University Medical Center (UMC). We expect a significant increase in this source of income when the recently established Children's Hospital (CH), currently under construction, opens in mid 2012. These two hospitals are located adjacent to the medical school campus. The clinical practice continues to produce a significant positive bottom-line, with revenues net of hospital, (line 222 of LCME Part I-A Annual Financial Questionnaire of Medical School Financing), of approximately \$77M and expenses of approximately \$65M. Approximately \$880,000 was allocated this fiscal year to support the medical education program and it is expected this amount will grow and be supported by the practice plan next year.

Hospital Income: Hospital income is growing as UMC continues to expand and support its commitment to the medical school of \$10.3M for the recruitment of new faculty members. Also, the establishment of Children's Hospital of El Paso (CH), increases the need for primary and specialty pediatric care. CH has made a commitment to support the salary and fringe benefits for three years per faculty for the recruitment of an additional 40 new pediatric subspecialties and pediatric related faculty members. In addition, the medical school is continuing to expand its relationships with other hospitals and clinical settings in the community. These relationships will generate additional income to support our educational mission.

Hospital revenues, based on the definitions in the LCME instructions in Part I-A are \$2.7M. The \$2.7M is only for "on-call". In addition, \$51M is noted in the Practice Plan section of Part I-A. The \$51M is reflected as "not related to affiliated hospital" because it comes through a UPL agreement. Hospital

income supports approximately 178 of 208 residents. UMC has continued to support growth in numbers of residents and resident programs. Support for pediatric residents will transfer to CH when it opens.

Research Income: Prior to the establishment of the four year medical school, research income was not a significant source of revenue for the El Paso campus. However, with dramatically increased State support, the opening of the new Medical Science Building 1, and the expansion of faculty members with funded research programs, research is growing in importance as a source of revenue for the institution. Research Centers of Excellence have been created and provided significant startup funding from the State totaling \$10.3M in FY 2010. In the section on grants and contracts, Part I-A of the Annual Financial Questionnaire, approximately \$2M in revenue are derived from direct and indirect expenditures from federal funding. This grew to \$7M in federal funding in FY 2010. We project that federal funding will continue to grow to \$12M in FY 2011, and \$15M in FY 2012.

Changes in Funding Sources: We expect state funding to remain fairly flat but anticipate significant increases in clinical practice revenue and research funding. We base this conclusion on known commitments from the state and the state's economy; recently recruited research faculty; the growing healthcare market based on the expansion of UMC, the addition of CH, and population growth in the metropolitan area.

2. Evaluate whether any departments or units are in financial difficulty and whether there adequate systems and policies in place to address any departmental financial difficulties.

Systems are in place to deal effectively with departmental financial difficulties that may arise. The school functions through a very transparent financial system. On a monthly basis, we provide all clinical departments a summary of each department's revenues, expenses, changes in fund balance, etc. For non-clinical departments, expenses are reviewed monthly by the finance office. A Budget Advisory Committee representing clinical, research, and educational missions of the school review all budget requests and submits recommendations to the dean. The director of fiscal affairs or the associate dean for finance and administration, who is also the CFO for the School and AVP for Fiscal Affairs for TTUHSC, meets monthly with each department administrator to review current or upcoming changes, either +/-, which may require action from either his office or from the dean.

If a significant financial issue arises in a clinical department, the chairman of the medical practice group is informed and his advice is requested. In the event a department is facing a financial challenge that cannot be resolved by the chairman, the dean's office has several options to assist ranging from eliminating the expenses causing the problem, granting additional support, having the chairman present to the chairs of the clinical practice plan and request support, or the dean may request support from the Office of the President of TTUHSC.

The Health Science Centers' financial system will not allow transactions to take place if an account goes negative. If an account has a negative balance of \$100,000 or more, the associate dean for finance and administration and the dean are required to submit an action plan to the executive vice president for finance and administration of the Texas Tech University Health Sciences Center. The executive vice president for finance and administration submits the plan to the board of regents. This plan is monitored by the Office of the Executive Vice President for Finance and Administration to insure corrective action. Recently, the Department of Ophthalmology was in financial difficulty. The various mechanisms described above were called upon to deal with this situation. Ultimately the decision was made to disband the department and roll its service line into the Department of Surgery.

3. Comment on the degree to which pressures to generate revenue (from tuition, patient care, or research funding) are affecting or have the potential to affect the desired balance of activities of faculty members. Describe the mechanisms that are in place to protect the accomplishment of the educational mission.

Currently, the educational mission of the school is adequately supported through state and clinical practice plan funding. The school is fortunate to have 27 FTE faculty state line item positions dedicated to teaching first and second year students. Participation in the first and second year program by faculty members in clinical departments is both necessary and desirable to tap into their areas of expertise. As class size increases so will the demand for clinical faculty to facilitate small group sessions and to participate in medical skills instruction.

To protect the accomplishment of the educational mission, the senior associate dean for medical education tracks faculty participation in medical student education. Problems with the level of participation can be brought to the chair, dean's council, faculty council, or the dean. The dean has the resources to underwrite the expense until other resources can be identified.

4. Describe how present and future capital needs are being addressed. Note whether the financial condition of the school is such that these needs can be met.

As a state school, all capital needs (primarily facility needs) are requested through state appropriations. The request is submitted through the executive offices of TTUHSC and the board of regents. If approved at this level the request is then submitted to the legislature. If approved by the legislature, the funding of the facility is through state bonds that are ultimately paid off through tuition dollars (Tuition Revenue Bonds or TRBs).

At the school level, our primary charge is the identification and justification of space or other major capital needs. As part of the overall strategic planning process, we have recently initiated a strategic facility planning program to anticipate immediate and longer range needs.

B. General Facilities

5. Evaluate the current and projected adequacy of the general facilities for teaching, research, and service activities of the medical school. Assess whether the fulfillment of any of the medical schools missions (e.g., education, research, clinical service) is being constrained by space concerns. If so, describe how these constraints are currently being addressed.

Education: The general facilities for teaching as described in ER-4 reflect an appropriate allocation of space that is either very new, recently renovated or is undergoing renovation. The facilities meet current and immediate future needs and are well equipped with the best available educational technology. Our 10,000 square foot clinical simulation facility is state-of-the-art. Teaching laboratories in the new Medical Education Building are spacious and well equipped. The library facilities are highly satisfactory.

Research: The general facility for research, of which approximately 90% is new, is now completely committed to externally funded research programs. In addition to well designed laboratories, the Core labs include genomics, proteomics, flow cytometry, histology, nano-biology, a laboratory animal facility, and the Division of Biostatistics and Epidemiology. All are well staffed and are readily available to the research community. As noted earlier in this self-study, our success in recruiting research groups for the Centers of Excellence in Infectious Diseases and Neuroscience is placing a strain on research space, which will limit our ability to expand this component of the school's mission. Pending the outcome of our request for new space, a modular laboratory facility was installed adjacent to Medical Science Building I.

Clinical: Clinical service facilities are in good condition and, in most cases, provide adequate space for the delivery of patient care. However, we are experiencing some "growth pains" coincident with the growth in the clinical departments and increasing demands for clinical services. Our response to future needs is discussed in detail below (section C-7).

Parking: Based on the rapid growth of employees and expanding numbers of medical students, parking will become a significant issue within a year. Our immediate response has been to expand parking as much as possible. We are in process of obtaining land immediately adjacent to the campus for additional

parking. The city of El Paso is in process of building an office and parking garage on property adjacent to the medical school and we have requested an option on several hundred parking spots. The need for additional parking will be included in the Strategic Facility Plan.

While we acknowledge some space challenges we believe our immediate strategic response, as well as our longer term new building construction strategy, will alleviate space shortages for the next few years.

6. Discuss the adequacy of security systems on each campus and at affiliated sites.

A number of measures have been taken to ensure campus safety. These include: 24 hour guards and police who rotate through the facilities, an on-call security escort service to another building or to a person's car, the installation of "blue lights", security cameras, and police training with the local and State police as well as with the FBI and other federal agencies.

Our affiliated clinical inpatient sites meet JCAHO standards and have many of the same protective programs as the medical school.

Affiliated outpatient facilities, in most cases, do not have the same protective programs as the campus. However, these facilities are open primarily during the daylight hours and have a track record as being safe.

The University System is considering purchasing a Text Blast IT system. However, until such a system is available on campus, we will use the current system of sending a "blast" email to all employees, students and faculty along with placing an electronic emergency notice on the flat screen TV monitors located in public areas throughout the campus.

C. Clinical Teaching Facilities

7. Analyze the adequacy of resources for clinical teaching that currently are available for both the preclinical and clinical phases of the curriculum. Describe any additional clinical resources that are needed, as well as the timeline for their acquisition. Comment on the current and future adequacy of the number of patients and supervisors available at all sites for the current and anticipated size of the student body. Assess the appropriateness of the patient mix. Note whether clinical facilities, equipment, and support services are appropriate for exemplary patient care. Discuss the availability, quality, and sufficiency of ambulatory care facilities for teaching.

Financial resources for preclinical and clinical phases of the curriculum are fully adequate. PLFSOM adopted a clinically focused curriculum beginning in the first year of medical school. This program is delivered primarily by 27 FTE State supported faculty members appointed to the Department of Medical Education, of whom 9 are physicians. State support for pre-clinical education totals approximately \$8.3M. The overall support for medical education, which includes support to clinical departments for educating third and fourth year students, is \$20M/year. The Medical Education Building includes a state-of-the-art, 10,000 sq ft clinical skills and simulation center.

The on-campus ambulatory clinics are appropriate for training students, but at times are crowded due to patient volume. Our off-site clinics, primarily the Family Medicine Clinic in the Northeast section of El Paso, are newer facilities and their design lends itself to handling patient flow and training of students. We recently expanded the Family Medicine Clinic through the acquisition of an additional 5000 sq feet of space. Our primary inpatient affiliated institution recently completed significant renovations. These renovations updated the facility, allowed smoother patient flow from ER to a floor, increased patient beds, and allowed for expansion of the ancillary diagnostic labs. During this renovation period, there was some inconvenience to patients, faculty, students and staff. Our other inpatient affiliated partner institutions have recently renovated their facilities and the space is appropriate and adequate for teaching students.

Our current on- and off-campus clinics draw a major portion of the population of El Paso and expose students to the full range of conditions needed for an excellent clinical education. However, these clinics

do not always have the same patient-payer mix as would be seen in many private practice groups in the area. In response to the need to expose students to a complete patient mix, we are expanding relationships with private practice groups in the community. To assist the leadership in this area, the school is opening an Office for Clinical Outreach Relations. This office has just been funded.

The medical school's growing patient population is being driven in part by the growth of University Medical Center and its new partner, Children's Hospital. These two major hospital systems rely heavily on the medical school for staffing and the size of the clinical faculty is growing in parallel. There is an abundance of patients to meet the educational needs of the students in our new four year medical school. While the clinical facilities, equipment and support services at all the clinical sites are satisfactory and in many cases excellent for teaching patient care, we acknowledge the need to expand opportunities for ambulatory and primary care learning experiences for our growing student body. We are responding to this by: 1) increasing the number of affiliated clinics and practices in the community; 2) leasing additional off-campus clinic space, and 3) converting on-campus administrative space to clinic space by moving non-clinical staff and units to off-campus locations.

8. Describe and evaluate the interactions between the administrators of clinical affiliates that will be used for teaching and the medical school administration. Evaluate whether the level of cooperation is sufficient to result in a smoothly operating and effective clinical education program.

In general, the working relationship between the administrators of our major clinical affiliates and the medical school leadership is very good. They meet frequently — at least monthly, if not more often — and fully appreciate that the success of the school and the affiliate are intertwined. While there are disagreements from time to time, these have always been worked through. We are fortunate in that our affiliates are constantly asking us to expand our relationship with them and they understand a clinical expansion always includes a teaching component.

D. Information Resources and Library Services

9. Evaluate the quantity and quality of the current print and non-print holdings of the library as a resource for medical students, graduate students, and faculty members. Describe the general types of additions to resources, if any, which are anticipated in the next three years.

Library holdings and services are outstanding. The TTUHSC Libraries of the Health Sciences system serves the PLFSOM along with the other schools and campuses in the TTUHSC system. Collections are now in place to support the full four-year program leading to the M.D, residency program needs, and the needs of basic sciences instructors and researchers. The Libraries' holdings include more than 85,000 textbooks that are all available for free checkout to PLFSOM students, nearly 43,000 electronic books and close to 20,000 electronic journals. The library system collectively serves as a Resource Library for the National Network of Libraries of Medicine and has held Association of Research Libraries' status since 1998 (an honor accorded to less than 10% of academic health sciences libraries nationwide).

TTUHSC faculty, staff, and students are able to access research materials 24 hours a day through the TTUHSC Libraries webpage. The online library catalog may be searched from any Internet access computer without the need of a password. ID and password authentication is used to provide off-campus/remote access to subscription-based electronic databases, electronic journals, and electronic books. Materials can be requested around the clock daily through an electronic interlibrary loan form on the TTUHSC Libraries webpage. A sophisticated interlibrary loan system enables the collections to be shared, with rapid access by borrowers. Resources held at other institutions are generally available to users via Interlibrary Loan.

10. Comment on the adequacy of information technology resources and services, particularly as they relate to medical student education. Assess the adequacy of these resources to support the needs of the educational program in the preclinical years.

Comment on the adequacy of planning to support clinical education.

Information technology (IT) support at the PLFSOM is outstanding. The staff is knowledgeable, creative, and service focused. The director of the information services unit serves as an ex-officio member of the Curriculum and Educational Policy Committee and regularly attends its meetings. The Information Technology department has developed an information technology master plan to provide resources and services to support the needs of the four year educational program. This plan organizes the department into several areas to provide support including information services support, PC support, audio visual support and network infrastructure support.

Information technology has four full-time software application developers and an educational technology area with three full-time analysts and a section manager. As previously noted, PLFSOM purchased the code for the Ilios curriculum management system, from the University of California, San Francisco School of Medicine. Information Services staff have done a masterful job of enhancing this resource to meet PLFSOM needs. Drawing upon this database, IT personnel have developed a number of applications to enhance the learning process.

IT's audio visual support consists of four full-time technicians who provide classroom support to medical student education. Students are provided lap top computers on matriculation.IT provides students and faculty with PC technical support through the services of four full time PC technicians.

11. Assess the status of integration of the information systems of the medical school and its major clinical affiliates. Note any problems, and describe any plans in place to address those problems.

The Information Technology Department continues to work towards integration of its associated information systems at Texas Tech University Health Sciences Center PLFSOM and its affiliated clinics. The TTUHSC Clinics and outlying clinics have network access to the information systems developed and provided by TTUHSC El Paso Campus.

While connectivity problems have been minimal, the Information Technology department has developed a contingency plan to provide redundancy to clinics in the case of any disruption. The information systems are housed and maintained within the El Paso Campus Data Center. This data center consists of state-of-the-art data storage systems and application servers. These systems are configured with redundancy technology to minimize disruption in delivery of data to the users. The Texas Tech University Health Sciences Center El Paso campus and University Medical Center (UMC) have also developed an integrated solution within their network infrastructures to provide accessibility to each other's information systems.

Currently Texas Tech University Health Sciences Center El Paso and UMC are passing information and data between the two institutions via the network connection. While there have been instances when this connectivity has been disrupted, these instances have been resolved quickly. There is continuing dialogue with UMC to develop a redundant network connection within the two institutions and thus eliminate this problem. Both institutions' Information Technology departments meet periodically to discus network connectivity and contingency plans in the case of network disruptions.

12. Evaluate the usability and functional convenience of the library and of information resources. Note the appropriateness of hours, the availability of assistance, and the adequacy of study space and resources, such as computers and audiovisual equipment. Comment on whether students can access information from affiliated hospitals or from home

The Delia-Montes Gallo Library of the Health Sciences at El Paso housed in two campus locations: the clinical resources are located in the Academic and Educational Center (AEC) building and the basic science resources are located in the Medical Education Building (MEB). This arrangement provides availability to the clinical literature for clinical faculty who are located in the Regional Academic Health Center Building and the adjacent Texas Tech Medical Center. The basic science and medical education collections in the MEB facility are readily available to medical students and

the basic science faculty. The facilities are located within two city blocks of each other. Library staff members regularly transfer materials between libraries to address patron needs.

The library is open a total of 100.5 hours per week between the two sites. Scheduled hours are: AEC-Monday through Friday 7:30 a.m.–10:00 p.m.; Saturday 10:00 a.m.–10:00 p.m.; Sunday 1:00 p.m.–10:00 p.m. MEB--Monday through Friday 7:30 a.m.–11:00 p.m.; Saturday 10:00 a.m.-11:00 p.m.; Sunday 1:00 p.m.-11:00 p.m. Access to the library's online databases, electronic journals, and electronic books is available twenty-four hours a day, seven days a week. Generally, we have found this schedule to meet the needs of medical students, but if there is increased demand in the future, hours can be expanded with agreement from the medical library director. Hours are currently expanded as needed during periods preceding examinations. As previously noted, some students express the need for more study space and the library is in the process of reconfiguring its layout to add additional study carrels.

- 13. Assess the contributions of library and information technology staff to the education of medical students and the professional development of faculty members in the following areas:
 - Teaching specific skills, such as instruction in computer usage and bibliographic search
 - Retrieving and managing information
 - Interaction with the curriculum committee to coordinate various library and information resources with planned curricular design

Instruction in computer usage and bibliographic search: The staffs of the library and information technology service on the El Paso campus play an important role in the educational mission of the campus. Librarians collaborate with faculty to incorporate library and information skills into the curriculum. Workshops on the use of biomedical electronic tools and databases are regularly conducted by librarians to introduce students to the resources available through the TTUHSC Libraries. Librarians are available for one-on-one instruction and consultation.

We provide students a broad overview of library resources during orientation. Additional library and IT information is included as part of the curriculum of the course Society, Community, and the Individual. For faculty members, there is a component of the basic Faculty Development Course devoted to library resources. Advanced topics taught by library staff during the Faculty Development Course include searching evidence based medicine resources and using reference management software (EndNote and RefWorks). The library staff will be available to provide any requested instruction for years 3 and 4 of the curriculum.

Interaction with the curriculum committee: Both the associate director of the library and the director of the IT Department are ex officio members of the Curriculum Committee. This enables them to anticipate the library and IT needs for the execution of the curriculum and to advise the faculty on new library and information resources.

SUMMARY

1. Summarize the medical education program's strengths and challenges, including potential areas of noncompliance and insufficient progress toward compliance with accreditation standards. Analyze progress that has been made since the survey visit for preliminary accreditation. Describe whether the school is where it wishes to be in its development at this point in time. Indicate whether any changing conditions within or external to the school are likely to cause problems in the near future.

We are pleased with the progress of the PLFSOM. Since the survey visit for preliminary accreditation in November 2008, we have recruited a talented and enthusiastic faculty group that has designed, developed, and implemented a highly integrated, clinically relevant basic science educational program. We have also developed the administrative and information technology infrastructure needed to deliver a centrally organized, coordinated, and coherent curriculum. We have recruited and seated two well qualified classes

from a large pool of applicants and are actively interviewing students for a third cohort. We are also making good progress in the development of the year 3-4 clerkship components of our curriculum. Clerkship directors have been appointed, goals and objectives have been developed, instructional methods described, clinical conditions identified, level of student responsibility and setting of service specified, and assessment strategies have been formulated. The PLFSOM has also made tremendous strides in developing its research enterprise, thus ensuring that medical students will be trained in an environment of inquiry and knowledge creation.

Our strengths include the following:

- Extraordinary support from the state, the University, University Medical Center, and the community.
- An experienced, energetic, and well qualified team of administrators and chairs who work well together and who are united in their commitment to creating a first-rate medical school, coupled with a commitment by the dean's office to invest in the professional development of the schools administrative leaders.
- An experienced, well qualified, and enthusiastic faculty who were recruited expressly for the purposes of designing, developing, and implementing the curriculum.
- A highly integrated approach to teaching basic biomedical sciences in the context of clinical applications.
- Over 35 years experience, as an institution, in the training of third and fourth year medical students as a regional clinical campus of TTUHSC in Lubbock.
- Access to a large patient population that is more than adequate to meet the training needs of medical students and that is well matched to the educational goals and objectives of the medical school.
- A unique social and cultural setting that enhances opportunities for students to acquire the skills needed to care for diverse patient populations in culturally appropriate ways and to gain an understanding of the social determinants of health.
- A well organized, and institutionally supported, faculty development program, through which over 40% of the school's faculty have received training and continuing professional development.
- State-of-the-art research and educational facilities.
- A rapidly growing research program based in four Centers of Excellence in infectious diseases, neuroscience, cancer, and obesity and diabetes.

We also recognize that there are a number of challenges that we must addresses in order to both capitalize upon, and maintain, our strengths. Challenges that we have identified through our self-study process include the following:

- Establishing a sustainable model for valuing contributions in medical student education by clinical faculty members across the full four year curriculum.
- Expanding the pool of community-based faculty to provide early clinical experiences for pre-clerkship students, and ambulatory and primary care experiences for third and fourth year students.
- Establishing a variety of clinical affiliations to ensure that students are exposed to a broad range of practice environment and patient demographics in an era of health care reform.
- Enhancing the effectiveness of mentoring of junior and mid-career faculty through promotion-oriented annual reviews by department chairs to prepare faculty for success in promotion and/or tenure.
- As the institution grows, clinical, research, and educational space is being stretched.
- Clinical faculty, community-based faculty, and residents will need to be prepared to teach and supervise medical students in ways that are consistent with the clinical presentation educational model adopted in the pre-clerkship curriculum.
- Developing effective strategies to enhance communication between researchers and clinicians to promote the development of robust clinical and translational research programs.

2. Note major recommendations for the future. Comment on how institutional strengths can best be maintained and how pressing institutional challenges can best be addressed? Be brief, but specific in describing actions that will need to be (or already have been) taken.

Among the steps that we are taking to maintain the institutional strengths noted above and to address current challenges are the following:

- We have embarked on a campus-wide strategic planning initiative to develop a 5 year plan outlining specific steps to be taken to sustain institutional strengths and meet current and future challenges. This process involves planning in the following areas: 1) undergraduate medical education, 2) graduate medical education, 3) research programs, 4) clinical programs, 5) student recruitment and admissions, 6) faculty affairs, 7) and community programs and relations.
- The dean has appointed an "educational value unit" task force to develop a framework for valuing the contributions of clinical faculty across the four year curriculum and for aligning education dollars with these contributions. A major goal of this task force is to codify educational expectations of clinical faculty and to remove or mitigate perceived disincentives of participating in medical student education.
- The dean has created a task force to review community faculty relations and has authorized hiring a community faculty relations coordinator who will assist with the recruitment, credentialing, and retention of community faculty to ensure placements for early clinical experiences for first and second year medical students and ambulatory experiences for students in years 3 and 4.
- New affiliations are being discussed to expand the sites available for clinical education in years 3-4 in the face of expanding class-size and uncertainties related to the impact of health care reform on patient populations in the public sector.
- A facilities planning firm has been retained to conduct long range planning with the goal of identifying future educational, research, and clinical space needs. Several steps are currently being taken to ensure the availability of needed space, including reallocation of administrative space to other functions, leasing of additional off-campus space, and construction of a modular laboratory facility. The Board of Regents has approved our request for a new education/research building and a new clinic building. These requests have been submitted to the state legislature.
- The issue of enhancing the preparation of faculty for promotion and tenure has been thoroughly discussed by the Dean's Council. Department chairs are committed to documenting their faculty members' progress toward promotion and/or tenure as part of each faculty member's annual review. A new mentoring program matching senior and early career faculty members has also been developed and was implemented in October, 2010.
- Enhancements have been made in our already excellent faculty development program to ensure that all teachers, including residents and community based faculty, are familiar with the educational model employed in the first two years of the curriculum and that they understand institutional expectations regarding the learning environment and teacher-student relations.
- The associate dean for research is launching a series of "science mixer" sessions to enhance communication between researchers and clinicians to promote the development of clinical and translational research collaborations.

APPENDIX

LCME INSTITUTIONAL SELF-STUDY

Self- Study Committee Members PAGE 1
Year 3-4 Design Team Members PAGE 4

Self-Study Sub-Committee Members

Name	Faculty Title	Department	Academic Rank
Institutional Setting (I)			
Charles Miller, PhD (Chair)	Associate Dean of Research	Research	Professor of Biomedical Sciences
Armando Meza, MD	Associate Dean for Graduate Medical Education	Medical Education	Associate Professor of Medicine
(Co-Chair)			
Kallie Appleton, MSII	Student	PLFSOM	N/A
Travis Cosban, MSII	Student	PLFSOM	N/A
Alison Days, MD	Assistant Professor General Pediatrics	Pediatrics	Associate Professor of Pediatrics
German Hernandez, MD	Assistant Professor Nephrology and Hypertension	Internal Medicine	Assistant Professor of Medicine
Teresa Hines, MPH	Senior Director	Continuing Medical Education	
Susan Watts PhD	Associate Research Director	Emergency Medicine	Research Assistant Professor of Emergency Medicine
Education Program (II)			
David Steele, PhD (Chair)	Senior Associate Dean for Medical Education	Family and Community Medicine	Professor of Family and Community Medicine
Ralitsa Akins, MD, PHD	Associate Director, Clinical Skills and Clinical Simulation Center	Clinical Simulation Center	Associate Professor of Medical Education
Asa Black, PhD	Professor	Medical Education-Gross Anatomy & Neuroanatomy	Professor of Medical Education
Debra Bramblett, PhD	Assistant Professor	Medical Education- Microbiology	Assistant Professor of Medical Education
Martine Coue, PhD	Associate Professor	Medical Education-Cell & Molecular Biology and Genetics	Associate Professor of Medical Education
Brand Fuqua, MSII	Student	PLFSOM	N/A
Tanis Hogg, PhD	Associate Professor	Medical Education- Biochemistry	Associate Professor of Medical Education
Kathryn McMahon, PhD	Professor	Medical Education- Pharmacology	Professor of Medical Education

Lisa Montgomery, MSII	Student	PLFSOM	N/A
Zuber Mulla, PhD	Associate Professor	Obstetrics and Gynecology	Associate Professor of OB/GYN
Melchor Ortiz, PhD	Professor	Biomedical Sciences	Professor of Biomedical Sciences
Bhargavi Patham, MD, PhD	Assistant Professor	Medical Education- Pathophysilogy	Assistant Professor of Medical Education
Curt Pfarr, PhD	Associate Professor	Medical Education-Cell & Molecular Biology and Genetics	Associate Professor of Medical Education
Stephen Sandroni, MD	Clinical Professor	Medical Education-Internal Medicine	Professor of Medical Education
Gary Simpson, MD, PHD, MPH	College Master	Medical Education	Professor of Medical Education (No longer active)
Lindsey Smith MS II	Student	PLFSOM	N/A
Brain Tobin, PhD	Professor	Medical Education-Nutrition	Professor of Medical Education
Medical Student (III)			
Kathryn Horn, MD (Chair)	Associate Dean of Student Affairs, Associate Professor of Family Medicine	Family and Community Medicine	Associate Professor of Family and Community Medicine
Manuel Schydlower (Co-Chair)	Associate Dean of Admissions, Professor	Admissions	Professor of Pediatrics
Aparna Atluru, MSII	Student	PLFSOM	N/A
Angel Garcia, MD	Resident		N/A
Merle Ipson, MD	Associate Professor	Pediatrics	Associate Professor of Pediatrics
Jill Junkes, MSII	Student	PLFSOM	N/A
Charmaine Martin, MD	Clerkship Director, Assistant Professor	Family and Community Medicine	Assistant Professor of Family and Community Medicine
Kathryn McMahon, PhD	Professor	Medical Education- Pharmacology	Professor of Medical Education
David Osborne, PhD	Professor	Medical Education -Physiology	Professor of Medical Education
Tammy Salazar	Assistant Professor	Student Affairs	Assistant Professor of Family and Community Medicine
Faculty (IV)			

Hoi Ho, MD (Chair)	Associate Dean of Faculty Affairs and Development	Office of Faculty Affairs and Development	Professor of Medicine
Lorenzo Aragon, MD	Associate Professor, Medical Director	Family Medicine	Associate Professor of Family and Community Medicine
Elmus Beale, PhD	Professor	Medical Education-Anatomy	Professor of Medical Education
Richard Brower, PhD	Chair, Associate Professor	Medical Education- Neurology/Neuropsychiatry	Associate Professor of Medical Education
Rajkumar Lakshmanaswamy, PhD	Associate Professor	Biomedical Sciences	Associate Professor of Biomedical Sciences
Omosalewa Lalude, MD	Assistant Professor	Pediatrics	Assistant Professor of Medicine
Namrata Singh, MD	Associate Professor of General Pediatrics	Pediatrics	Associate Professor of Pediatrics
Patrick Tarwater, PhD	Professor	Biomedical Sciences	Professor of Biomedical Sciences
Susan Watts, PhD	Associate Research Director	Emergency Medicine	Research Assistant Professor of Emergency Medicine
Education Resources			
Frank Stout (Chair)	Associate Dean for Finance and Administration (Chair)		N/A
Neil Adams, MD	Associate Professor	Ophthalmology	Associate Professor of Surgery (No longer Active)
Aaron Bluitt	Assist Library Director	Library	N/A
Alex Garcia	Director of Student Affairs	Student Affairs	N/A
Alicia Gacharna	Department Administrator	Pediatrics	N/A
Alex Gardea	Facilities Director	Facilities	N/A
Kathryn Horn, MD	Associate Dean of Student Affairs, Associate Professor of Family Medicine	Student Affairs	Associate Professor of Family Medicine
Marti Juarez	Director of Finance	Finance and Administration	N/A
Tony Quintela	Lieutenant	Texas Tech Police	N/A
Benjamin Ramos MSII	Student		N/A
Jerry Rodriguez	IT Director	IT	N/A
Rebecca Ruddock	Library Director	Library	Faculty Associate
Garrett Simmons, MSII	Student	PLFSOM	N/A
Mary Spalding,	Associate Professor,	Family Medicine	Associate Professor of Family

MD	Medical Director		and Community Medicine
Olof Sundin, Ph.D.	Associate Professor	Biomedical Sciences	Associate Professor of Biomedical Sciences
Steve Wagner	Managing Director	Medical Practice Income Plan (MPIP)	N/A

Year 3-4 Design Team Members

Name	Academic Rank	Department	Faculty Title
Internal Medicine/Psychiatry			
David Steele, PhD (Chair-IM)	Senior Associate Dean for Medical Education	Family and Community Medicine	Professor of Family and Community Medicine
Dan Blunk, MD	Associate Professor	Psychiatry	Associate Professor of Psychiatry
David Briones, MD	Department Chair (Neurology)	Psychiatry	Professor of Psychiatry
Paul Casner, MD, PhD	Professor	Internal Medicine	Professor of Internal Medicine
Harry Davis, MD	Associate Professor	Internal Medicine	Associate Professor of Internal Medicine
Richard McCallum, MD	Department Chair	Internal Medicine	Professor of Internal Medicine
Dinorah Nutis, MD	Associate Professor	Internal Medicine	Associate Professor of Internal Medicine
David Osborne. PhD	Professor	Medical Education - Physiology	Professor of Medical Education
Stephen Sandroni, MD	College Master, Professor	Medical Education – Internal Medicine	Professor of Medical Education
Henry Weisman, MD	Associate Professor	Psychiatry	Associate Professor of Psychiatry
Gordon Woods, MD, MHPE	College Master, Associate Professor	Medical Education – Internal Medicine	Associate Professor of Medical Education
OB-GYN/Pediatrics			
John MacKay, MD (Chair- Peds)	Assistant Professor of Clinical	Emergency Medicine	Assistant Professor of Clinical Emergency Medicine
Ralitsa Akins, MD, PhD	Associate Professor	Medical Education – Pediatrics	Associate Professor of Medical Education
Lorenzo Aragon, MD	Associate Professor, Medical Director	Family Medicine	Associate Professor of Family and Community Medicine
Alison Days, MD	Associate Professor	Pediatrics	Associate Professor of Pediatrics
C. Antonio Jesurun, MD	Professor	Pediatrics	Professor of Pediatrics
Sanja Kupesic, MD, PhD	Professor	Medical Education – OB/GYN and Radiology	Professor of Medical Education
Marie-Martine Logvinoff, MD	Professor of Clinical	Pediatrics	Professor of Clinical Pediatrics

Heidi Lyn, MD	Assistant Professor	OB/GYN	Assistant Professor of OB/GYN
Kathryn McMahon, PhD	College Master, Professor	Medical Education- Pharmacology	Professor of Medical Education
Sonia Rebeles, MD	Assistant Professor	OB/GYN	Assistant Professor of OB/GYN
Liliana Stevceva, MD, PhD	Associate Professor	Medical Education	Associate Professor of Medical Education
			No Longer Active
Robert Suskind, MD	Professor	Pediatrics	Professor of Pediatrics
Family Medicine/Surgery			
Kathryn Horn, MD	Associate Dean of Student	Family and Community	Associate Professor of Family
(Chair- FM)	Affairs, Associate Professor of Family Medicine	Medicine	and Community Medicine
Neal Adams, MD	Associate Professor	Surgery	Associate Professor of Surgery No Longer Active
Asa Black, PhD	Professor	Medical Education-Gross Anatomy & Neuroanatomy	Professor of Medical Education
Miguel Pirela-Cruz, MD	Professor	Orthopaedic Surgery	Professor of Orthopaedic Surgery
Quentin Eichbaum, MD, PhD, MPH	College Master, Associate Professor	Medical Education – Pathology	Associate Professor of Medical Education
Susan McLean, MD	Associate Professor	Surgery	Associate Professor of Surgery
Angel Morales- Gonzalez, MD	Assistant Professor	Surgery	Assistant Professor of Surgery
Charmaine Martin, MD	Clerkship Director, Assistant Professor	Family and Community Medicine	Assistant Professor of Family and Community Medicine
Dale Quest, PhD	Associate Professor	Medical Education	Associate Professor of Medical Education
Mary Spalding, MD	Associate Professor, Medical Director	Family Medicine	Associate Professor of Family and Community Medicine
Critical Care			
Debra Ortega, MD (Chair)	Academic Assistant Professor	Anesthesiology	Academic Assistant Professor of Anesthesiology
Ahmed Badr, MD	Department Chair	Anesthesiology	Professor of Anesthesiology
R. Kirk Baston, MD	Assistant Professor	Medical Education	Assistant Professor of Medical Education
Harold Hughes, MD	Associate Professor	Internal Medicine	Associate Professor of Internal Medicine

Jorge Sainz, MD	Clinical Assistant Professor	Pediatrics	Clinical Assistant Professor of Pediatrics
Gary Simpson, MD, PhD, MPH	College Master, Professor	Medical Education	Professor of Medical Education No longer active
Brian Tobin, PhD	Professor	Medical Education – Internal Medicine	Professor of Medical Education
Alan Tyroch, MD	Department Chair	Surgery	Professor of Surgery
Capstone			
Kathryn McMahon, PhD (Chair)	Professor	Medical Education- Pharmacology	Professor of Medical Education
Steve Dougherty, MD	Professor	Surgery	Professor of Surgery
Quentin Eichbaum, MD, PhD, MPH	College Master, Associate Professor	Medical Education – Pathology	Associate Professor of Medical Education
Veronica Greer, MD	Assistant Professor	Emergency Medicine	Assistant Professor of Emergency Medicine
Armando Meza, MD	Associate Dean for Graduate Medical Education	Medical Education	Associate Professor of Medicine
Oscar Noriega, MD	Associate Professor	Family and Community Medicine	Associate Professor of Family and Community Medicine
Bahij Nuwayhid, MD	Department Chair	OB/GYN	Professor of OB/GYN
Gary Simpson, MD, PhD, MPH	College Master, Professor	Medical Education	Professor of Medical Education No longer active
Gordon Woods, MD, MHPE	College Master, Associate Professor	Medical Education – Internal Medicine	Associate Professor of Medical Education