Beyond Flexner Site Visit Report

University of Oklahoma School of Community Medicine Site Visit: April 12-15, 2011

Site Visit Team

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Introduction

Beyond Flexner, a W.K Kellogg Foundation-funded study at the Department of Health Policy of the George Washington University School of Public Health and Health Services, explored unintended consequences of the Flexner Report with a focus on innovative models of medical education that address social mission. The Beyond Flexner Study began with the development of an Advisory Committee consisting of sixteen leaders in medical education and health policy. The research team and Advisory Committee identified eight core modalities that stand out as essential elements in the social mission of education, and selected six medical schools which have demonstrated a commitment to strengthen their contribution to health equity.

The University of Oklahoma-Tulsa School of Community Medicine was chosen to participate in this study because of its commitment to the concepts and principles of community medicine as enshrined in the name of the school. OUSCM has developed an innovative curriculum, a track record of service to the surrounding community, and an institutional commitment to social accountability. A team of four individuals, Drs. Fitzhugh Mullan, Jennifer Lee, Roger Strasser, and Hershey Bell, traveled to Tulsa for a three day visit in April, 2011. This visit consisted of multiple group and individual interviews based on a standard Beyond Flexner site visit template including site visits to partnering hospitals and community health centers and the medical student managed clinic.

We would like to express our appreciation to the OUSCM leadership, faculty and students for their cooperation and help towards achieving the goals of the site visit. Special thanks to Dr. Gerald Clancy for arranging a highly successful visit and for his support of the Beyond Flexner Study.

Findings

1. The importance of Gerry Clancy's leadership in the development of the new mission

The importance of Dr. Gerry Clancy's personal leadership in driving the initial change to the School of Community Medicine (OUSCM) simply cannot be overstated. Over and over again, leaders and administrators returned to how Dr. Clancy catalyzed the changes happening at OU-Tulsa. Specific aspects of his leadership that surfaced include:

a. His passion and commitment to the mission

Dr. Clancy is a dynamic leader who is dedicated to the mission and vision of OUSCM. He articulated and was able to inspire others to join with him in creating innovative mission-critical initiatives. Across the board, students, staff, administrators, and faculty talked about his commitment and how it influenced them:

"He was really committed to the social mission of the medical school and how do you take a university and its medical school and bring its resources to actually solve social determinants of health issues in a community."

"I was so inspired by him. He is an inspirational leader."

"There is no question he was the brains and the driving force behind the creation of it."

"When Gerry Clancy was hired about 10 years ago, I was immediately attracted to the vision that he brought and as soon as opportunity to be part of the leadership team arose, I jumped with both feet."

"Dr. Clancy is so passionate in the way he talks about the program and made me excited about the opportunity to come here."

b. Dr. Clancy is inclusive, accessible, and open to ideas; good at building partnerships and convening entities with sometimes disparate interests

Across the OU-Tulsa campus, students, staff, and faculty talk about how easily they can access both Dr. Clancy and Dean Duffy. Non-medical faculty also commented on Clancy's willingness to reach out and work with them. A community health leader not affiliated with OU called the process Dr. Clancy has started "absolutely, painfully inclusive." He goes on to say, "I've never felt as much a part of the development of a large master plan as I have here."

Dr. Clancy forges bridges where none have been known to exist and can identify opportunities. Clancy currently serves as president of the Tulsa Chamber of Commerce an unusual role for an active academic leader and former medical school dean. He has a close relationship with the George Kaiser Family Foundation (GKFF), and is able to leverage relationships effectively and take advantage of opportunities to help advance his vision. He also works to build active partnerships with outside entities, such as the various hospital systems and OSU. As one individual put it, "He welcomes everybody. If you've got a role to play, he'll listen to it."

c. Dr. Clancy's actions effectively further the mission of OUSCM

Dr. Clancy's vision for OUSCM is ambitious, but he has articulated and distributed a written plan to realize the vision and has already begun to implement it. As a community leader put it, while Dr. Clancy is inclusive, "He doesn't wait... for 100% consensus because if you do, it dies." Clancy is credited with driving the creation of the Bedlam evening and longitudinal clinics, the IMPACT team, and school based clinics, which have already begun to improve access to care in the area.

Dr. Clancy has also been effective in recruiting people who share his vision and allowing non-aligned leaders to leave. Dr. Clancy's recruitment of health informatics expert, David Kendrick, was cited as a big success for OU.

Dr. Clancy's leadership in the presence of roadblocks is also revealing. For example, one week before the groundbreaking on an OU specialty care complex in impoverished north Tulsa, a newspaper ran a front page editorial headlined, "Is North Tulsa Being Pimped by OU?" The article critisized OU for focusing only on the provision of health care, and not addressing other social determinants such as education and jobs. In response, Dr. Clancy reached out to the authors, north Tulsa leaders, and legislators to determine ways the school could help address other health determinants.

Although school and community leaders all agree that Dr. Clancy's leadership was critical in propelling the initial changes at OU-Tulsa, they are divided as to whether Dr. Clancy is now integral to its sustainability. There is an understanding that "One person cannot make all of this happen...they can get it started but they can't achieve the final result alone." Some say that OU now has enough capacity to move forward even without Dr. Clancy at the helm. Others doubt whether key partnerships could continue to exist without Dr. Clancy's direct involvement. What is clear is how prominent a role Dr. Clancy played in the entire venture and how many aspects of his leadership style proved to be effective in moving his vision forward.

2. Creating a shared vision and changing the culture

The School of Community Medicine has been remarkably successful at communicating its mission, to improve the health of the Tulsa community. Several strategies have helped in this regard:

a. Using a common language

In Tulsa, the shorthand for understanding the mission of OU is "drinking the Kool-Aid." It was striking how often references to Kool-Aid emerged from interviews and focus groups with representatives both within and outside of OU. While not everyone agreed they had drunk the Kool-Aid, they uniformly expressed an understanding of what it meant. It was impressive that the OU mission was clear to so many, whether they supported it or not.

b. Summer Institute and faculty, student, and staff academies spread the mission

There are a number of initiatives in place that reinforce the importance and significance of the mission. The Summer Institute, in particular, is an innovative and distinctive feature of the school and has had a major impact on many students, faculty, and staff who participated in it. Students remain connected with the faculty that they meet in the summer institute and these role models reinforce the social accountability mission. Participation by faculty and students from other disciplines makes the experience even more unique by encouraging cross-disciplinary relationships and transmitting the school's mission across departments. Ongoing academies for students and faculty serve multiple educational and career development purposes, but also help sustain interest in the school's overarching mission. The development of an academy experiences demonstrates the school's commitment to ensuring that all disciplines understand the mission.

c. Grounding the mission in data

One reason the school has been successful in articulating the mission is it is built on a clear problem and is supported by data. Early on, Dr. Clancy and others actively sought out data on health indicators in Tulsa that would help tell the story of Tulsa's health inequities. Many, including the philanthropist George Kaiser, felt that the data provided a moral imperative to act.

3. Culture of collaboration

OU-Tulsa is remarkably effective at promoting interdisciplinary collaboration. This was evidenced by Bedlam longitudinal clinic where medical, nursing, pharmacy, and social work students care for patients in teams. This is also seen in the involvement of faculty and students from multiple departments in the various academies. Faculty members from the departments of social work and architecture in particular have felt valued and included in the OUSCM's educational and community programs.

Several factors have encouraged this culture of collaboration. First, Dr. Clancy and Dean Duffy's leadership styles and personal efforts emphasize inclusion. Second, the OU-Tulsa campus is small enough so that students and faculty from various departments can regularly interact with ease. Finally, there is less bureaucracy and a general acceptance of cross-disciplinary collaboration, compared to other campuses. As one faculty member put it, "Here I don't hit roadblocks."

4. The importance of philanthropy

There is general agreement that a \$50 million donation from the George Kaiser Family Foundation (GKFF) was critical in enabling the transition to a school of community medicine. As one leader said, "we couldn't have done any of this without philanthropy." While all appreciate the generous gift, one faculty member expressed concern that a weakness of the school is its dependence on philanthropy and its associated limitations.

5. The school's mission is not owned or spearheaded by family medicine

The family medicine department has not played a significant leadership role in the community mission of OUSCM, aside from allowing use of their clinic space for the Bedlam clinic. OU also does not see the school's singular mission as training more primary care physicians, although it recognizes and values primary care and hopes to promote it. The school instead focuses on meeting the overall health needs of the community and on training physicians who will be sensitive to those needs and work in underserved areas.

Background

State Demographics

Oklahoma is the 28^{th} most populous and 20^{th} largest state in the US, with a population of approximately 3.8 million people and land area of 69,000 square miles.¹ The state is largely rural, although almost half of the population (45%) is concentrated in urban areas.² Out of 77 counties, 68 counties are considered rural and 53% of the population resides in 9 counties.³ The most populous cities are the capital, Oklahoma City, followed by Tulsa. From 2000 to 2010, the population of Oklahoma grew by 8.7%, compared to national growth of 9.7%.⁴ Most of the state's growth from 2000- 2010 was in the non-white population. As of 2010, 72% of the population was white (3% increase since 2000), 8.9% were Hispanic (85.2% increase), 7.4% were African American (6.4% increase), 8.6% were American Indians (17.7% increase), and 1.7% were Asian (39.1% increase).³ Despite growth in minority groups, the state is still less diverse than the national profile, with the exception of American Indians (8.6% v 0.9%) and mixed race groups (5.9% v 2.9%).

Economy

Oklahoma's state GDP of 2008 was ranked 29^{th} in the nation at \$146 billion.⁵ At \$42,822, Oklahoma ranked 45^{th} in the nation for household income and 7^{th} in the nation for percent of population living below poverty (15.9%).⁶ Minorities in the state experience the highest rates of poverty with 30.1% of African Americans, 28.8% of Hispanics, 21.7% of Native Americans and 21.7% living under the poverty line.⁷ The poverty rate in rural Oklahoma (18.7%) is higher than in urban areas of the state (14.7%).⁸

Tulsa Background

In 2007, Tulsa County had an estimated population of 585,000 individuals. Whites comprised 77% of the population. African Americans were the largest minority group at 12% (compared to 8% in Oklahoma), followed by 9% Hispanic (7% in Oklahoma). While many cities in Tulsa County grew from 2000 to 2007, the city of Tulsa decreased in population by 2.3%.⁹ Minority populations are growing more rapidly, especially the Hispanic population, which increased by 63.5% from 2000 to 2007. There are disparities in income by race in Tulsa with White and Asian households having a median income of more than \$50,000, compared to less than \$25,000 for African American households and \$35,389 for Hispanic households. Although the poverty rate of Tulsa County is lower than that of the state (14.2% v 15.8%), over 30% of African Americans live below the poverty level--three times the White population in poverty. Twenty-two percent of the American Indian and Hispanic population live below poverty.²²

An analysis of health indicators in Tulsa revealed striking disparities by zip code. Certain zip codes in northern and western Tulsa were shown to fare worse on indicators including overall mortality rates, premature birth, sexually transmitted diseases, and access to care. These zip codes correspond to areas with high poverty rates.

Health indicators

The 2008 State of the State's Health Report showed Oklahoma to have the second highest death rate due to heart disease (261.7 per 100,000) in the country.¹⁰ Deaths due to cerebrovascular disease (58.2 per 100,000) and chronic lower respiratory disease (62.5 per 100,000) are also higher than the national average (46.6, 43.3 respectively). Oklahoma is among the five worst states for diabetes prevalence and deaths due to diabetes, with significant disparities in diabetes among American Indians and African Americans.¹¹ More than 1 in 8 babies (13.5%) born in Oklahoma were premature in 2008, compared to a national average of 12.7%.¹² In 2009, Oklahoma scored an "F" in the March of Dimes Premature Birth Report Card, and was one of only two states whose score worsened from 2008 to 2009.

Health care system

In 2009, 19% of Oklahomans under the age of 65 were uninsured.¹⁴ Approximately 18.3% of Oklahomans (504,000 individuals) in 2009 could not see a doctor due to cost.¹⁵ According to the *Commonwealth Fund State Scorecard*, Oklahoma scored 50th out of 51 in health system performance when states' health care systems were graded against benchmarks for access to care, quality, cost, and health outcomes.¹⁶ Oklahoma also scored poorly in access to care, prevention and treatment, health equity, avoidable hospital use and cost, and health status. The *United Health Foundation America's Health Rankings* rated Oklahoma's overall health 46th in the nation due to factors such as the high prevalence of smoking and obesity and limited availability of primary care physicians.¹⁷

Health care workforce

The Oklahoma Healthcare Workforce Center reports that the state will experience a shortage of 11,000 health care personnel by the year 2012.¹⁸ By 2015, Oklahoma will need more than 2,000 additional primary care physicians to care for the state's underserved population.¹⁹ In 2009, there were 196.4 active physicians per 100,000 population and 76.2 active primary care physicians per 100,000 population in 2008. This places Oklahoma in 44th and 41st place, respectively, compared to other states.²⁰ Overall, the American Medical Association ranks Oklahoma as last in the nation for physicians to patient ratio.¹⁹ Five rural counties have only one physician providing primary care services.²¹

History of OUSCM

The University of Oklahoma College of Medicine was founded in 1900, emerged as a four-year degree-granting school in the early 1900s and awarded its first degree in 1911 (The University of Oklahoma School of Community Medicine, 2010). The University of Oklahoma College of Medicine has two educational tracks; one in Oklahoma City and the other in Tulsa. The Tulsa-

based educational track (now known as OUSCM, but formerly known as the OU College of Medicine-Tulsa), was originally created by the Oklahoma legislature in 1972 to increase the number of primary care physicians in Oklahoma. The first class was admitted in 1974 (The University of Oklahoma School of Community Medicine, 2010).

In 1999, a \$10 million gift from the Charles and Lynn Shusterman Family Foundation was used to purchase a 60 acre plot, and by 2002, all OU academic programs in Tulsa had moved to the Schusterman Center campus. In 2005, an influential research study highlighted significant disparities in health outcomes and access between north and south Tulsa. In response to the study, the Lewin Group was commissioned by the school to develop a strategic plan for coordination and delivery of health care services to the medically indigent population of greater Tulsa.

In 2008, the George Kaiser Family Foundation made a \$50 million gift to rebrand OU-Tulsa as the OU School of Community Medicine, a medical school with a mission to improve the health status of the entire community. As part of the agreement with GKFF, the OUSCM committed to focus academic efforts on improving the health of the Tulsa region, and to serve as the planning, organizing and coordinating unit for initiatives to improve the region's health status.

Social Mission Modalities

The remainder of this report will focus primarily on the education of medical students at OUSCM. What follows is a compendium of the school's activities categorized by social mission modality:

Cultivation of the pipeline or "supply chain"

At this stage in its development, OUSCM appears to have little active engagement in development of the pipeline. This may be partly because direct admission to the OUSCM only began in 2010 and admissions practices are still largely controlled by the Oklahoma City campus.

Although the OUSCM enrolls one of the highest percentages of Native American students in the country, this seems to be more a product of the demographic makeup of Oklahoma's population than a result of active cultivation or recruitment of Native American students. The school enrolls few Hispanic and African American students.

School administrators note that likely as a result of Tulsa's history, outreach with the African American community must be approached with caution and sensitivity. Another challenge is that high-achieving African American students are often recruited by top tier medical schools on the east and west coasts. OUSCM has developed partnerships with two area high schools that are predominantly African American, and a part-time African American recruiter familiar with the community is working to establish a medical interest group for students at these schools.

Additionally, OUSCM organizes the OU-Tulsa Explore Health Care: High School Career Days, which are held once each semester and offer high school juniors and seniors the opportunity to interact with current students in nursing, medicine, allied health professions, and pharmacy. OUSCM is also developing ways to engage undergraduate students in health-related summer internships.

Indirectly, the school based health clinics in elementary schools may contribute to the pipeline, although few medical students or residents rotate through these clinics. Having physicians, nurses, and PAs visible in schools on a regular basis may spark interest in health careers among youth, but there is not currently an active program to cultivate or maintain interest.

At this time, there did not seem to be a specific focus on recruiting Hispanic, low-income (from any background), or rural students. The Hispanic population growth in Tulsa is relatively recent, so one interviewee noted that the community may be too young to target for pre-med outreach.

Student admissions

Admissions process

Currently, the admissions process is handled jointly by the OU College of Medicine in Oklahoma City and the OUSCM. Previously, there was no difference in the admissions process for either campus. After the first two years in Oklahoma City, students who wanted to spend their clinical years in Tulsa would simply elect to do so. For the first two years of OUSCM's existence, from 2008-10, the students who did not have to undergo a separate admissions process to enroll in the school. Students may or may not have chosen the Tulsa track based on the changes associated with its rebranding as the School of Community Medicine, although the leadership at the OUSCM did work to recruit interested students from those admitted to Oklahoma City. One medical student noted that they knew about the change and said, "I came very specifically because it was the School of Community Medicine... because I believed in the mission." Other students acknowledged that they did not pay much attention to the changes in Tulsa, or that there was some confusion about what it meant. Beginning in 2010, students who applied to OU could express interest in OUSCM on the initial medical school application.

To be considered for OUSCM, students are required to fill out a supplemental application. If selected for an interview by OU in Oklahoma City, students attend the typical admissions interview in the morning, and have an additional interview with the OUSCM admissions committee in the afternoon where they can meet OUSCM students, staff, and attend a luncheon. The afternoon interview lasts thirty minutes and attempts to assess the student's sense of social mission and their future career goals. The Tulsa admissions committee looks for a stated commitment to the mission of the OUSCM and evidence of service in the student's background. The admissions committee also considers whether the student comes from an underserved background or is an underrepresented minority.

In order for an individual to be accepted into the OUSCM, they *must* be accepted by both OU-Oklahoma City and the OUSCM. A rejection by the primary Oklahoma City admissions committee precludes the applicant from attending the OUSCM. If a student is accepted to

Oklahoma City but rejected by the OUSCM, they can still attend the main campus medical school. The primary admissions committee does include faculty from OUSCM, but administrators acknowledged that conflicts can arise during the process as a result of the two campuses' differing goals. At times, applicants supported by OUSCM admissions representatives are eliminated by the primary admissions committee based on quantitative criteria such as the MCAT.

Effects of OUSCM on recruiting

It is unclear whether the reputation of OUSCM will help or harm recruiting efforts. Several medical students acknowledged having encountered misperceptions and stigma against the OUSCM in the community. One student reported that a private physician asked whether he was concerned about having the title "School of Community Medicine" on his diploma, and if he really wanted to attend a school that was going to set him up for a career in primary care. Another student talked about the "stigma" of a school of community medicine as obligating students to choose primary care. This bias creates concern that as OUSCM distinguishes itself from Oklahoma City, the school will be viewed as a lesser institution.

While misperceptions and stigma persist, there are also favorable perceptions. One student spoke about attending a conference where the OUSCM was recognized for its positive impact on the community and used as a model for the development of a free clinic. Another student noted that prospective students seem more aware of and interested in the mission of the OUSCM. Several students felt that the mission this was a selling point of the school.

The mission of the OUSCM has been useful in recruiting residents. Residency leaders note that it is often difficult to recruit to Tulsa from the coasts and that the community focus of the school can be effective in attracting residents who share the same mission. Additionally, several faculty members noted that they were drawn to OU-Tulsa specifically because of the school's community focus.

The OUSCM employs a full-time recruiter who focuses on schools and states where most of the OU students come from, including every premed counselor in Oklahoma, schools in Kansas, Texas, California and Nevada. Recruiting efforts are also targeted to Vanderbilt in Nashville, St. Louis, and Chicago.

Future considerations

The transition from a two-year campus to an independent, fully accredited four-year medical school will have a major impact on the admission process. The OUSCM hopes to one day have full control of the admissions process, which would enable weighting the MCAT less-heavily and developing an in-depth interview and application process to better assess whether past experiences indicate true commitment to the mission of the OUSCM. Additionally, administrators are interested in increasing the role of humanities and arts-related pre-requisites as a way to better identify students who may be aligned with the values of the school.

Despite the fact that not all students actively selected Tulsa for the community medicine focus, they do recognize that the school is different. It is clear to students that patient-centeredness and a strong desire to understand the social determinants of health are important values espoused by the Tulsa school. It is evident to existing students that as time passes, students are coming to Tulsa more for community medicine than for geographic or other considerations.

Structure of curriculum

At present, the OUSCM core curriculum is not significantly different from the Oklahoma City curriculum. In fact, it is an LCME requirement for the clinical experiences to be equivalent to the main campus. A new curriculum is being developed for when the OUSCM becomes its own accredited four-year school. Despite these requirements ,OUSCM has distinguished itself by adding significant community medicine experiences which greatly enhance the curriculum and help fulfill the mission of the school.

Basic Science Curriculum

All OUSCM medical students spend the first two years on the Oklahoma City campus, where basic science courses are conducted. In 2010 the college adopted a new integrated, systems-based pre-clinical curriculum. Classroom and laboratory studies are complemented with clinical demonstrations and case studies, problem and team based learning, and an online curriculum. The pre-clinical curriculum includes early exposure to patients in the integrated Clinical Medicine I and II courses. Students learn interviewing skills on actual and standardized patients, and work with local physicians and clinical faculty throughout the first and second year. The second year curriculum concludes with a Capstone course designed to facilitate the integration of concepts introduced during the systems-based courses.

Clinical Curriculum

OUSCM students spend their third and fourth year on the Tulsa campus. The third year consists of 48 weeks of required core clerkships, including 6 weeks of pediatrics; 6 weeks of OB/GYN, 6 weeks of psychiatry; 8 weeks of internal medicine; 8 weeks of general surgery; 4 weeks of family medicine; 4 weeks of neurology, and 4 weeks of elective. The fourth year is comprised of a required 4 week ambulatory care experience; 4 weeks of geniatrics; and a 4- week preceptorship under the guidance of a physician in a rural Oklahoma community. The remainder of the year is made up of clinical electives.

Community Medicine Components

Outside of the core curriculum, the OUSCM currently includes several major components that are linked to its community medicine mission—the Bedlam longitudinal clinic, the Bedlam evening clinic, the summer institute and the student academy. These three components add a greater understanding of poverty, promote practice in interdisciplinary teams as part of the student run Patient Centered Medical Home and provide in-depth involvement in medical informatics and population management.

Summer Institute

Students begin their medical school experiences with a six day immersion in community needs and planning called the Summer Institute. The Institute includes first and second-year students from the OU Colleges of Medicine (including physician assistant students), Social Work, Pharmacy and Nursing, and faculty members from across the OU campus. The seminar is designed to immerse students in the Tulsa community. Participants learn through experiential activities about the barriers to healthy living and health care access in the Tulsa community, with a particular focus on the patient perspective and social determinants of health.

The institute runs from 7:30a-5:30p for one week. The Institute is based on the "Theory U" developed by MIT researcher Otto Scharmer, and includes the following components:

- **Poverty Simulation** Twenty "actors" represent community resources such as the police, utility companies, and employers, while 120 participants step into the role of individuals living in poverty. The participants then interact with the various community resources to learn about the many barriers facing the poor.
- Shadowing and interviewing patients who have difficulty accessing health care
- **Dialogue groups** Groups of four to six students conduct interviews at over 70 community agencies in the city including social service agencies, police departments, jails, public health department, child abuse centers, etc. They are given questions to ask such as, what could your organization accomplish if you were at your best? What gifts do you have that the community does not know about?
- **Photovoice** Lay people take photos that represent their daily lives (i.e. what they eat, where they live, where they work) and a few individuals are interviewed about their pictures

According to Dr. Clancy, the Summer Institute was intentionally structured to be students' first exposure to medicine and patients. He felt it was important to impress upon students early on the mission of OUSCM and to shape their understanding of the health care challenges in the community.

One medical student called the Summer Institute "a fantastic experience... one of the most important weeks of medical school." Reactions from physician assistant students were mixed. One student said that the "poverty simulation became a game" and was not that useful. Another student, however, reported that the Institute "opens up your compassion" and is helpful in learning about community resources.

According to one faculty member, after the Summer Institute,

There are pretty dramatic shifts in the attitude of...the medical student...who fundamentally believes poverty is a choice and that if people would just go to work everything would be ok...they have a week experiencing what life is really like and they say I didn't know...I had no idea what happens to people.

Conversely, an administrator commented that, "Some people can't buy it. They can't go there. It's too far out of their comfort zone."

To help assess the overall impact of the Summer Institute, Julie Miller-Cribbs, associate professor and assistant director of the OU School of Social Work, is conducting a longitudinal study of students' altruism over time. To date, student experiences in this Summer Institute have been shown to help maintain higher levels of altruism than those that did not participate.

The Summer Institute can also make a significant an impression on faculty members. For several staff and faculty, the institute has been a decision-maker, prompting the individuals to either leave the OUSCM or embrace the renewed mission.

Bedlam evening clinic

Dr. Gerry Clancy started the Bedlam evening clinic in 2003 to help address the needs of the working uninsured who lacked access to care in the evening hours. The clinic runs on Tuesday and Thursday evenings and was designed to meet acute care needs. The clinic is staffed by OU faculty from the schools of medicine, nursing, PA, and pharmacy, along with students from each of the schools and volunteer physicians from the community.

Working at Bedlam evening clinics is not mandatory, but all students participate. Students can earn up to 80 academic credit hours if they sign up at the beginning of the third year, participate in 30 evening clinic sessions during the third and fourth years, keep a log of their patients, and write a five-page reflective paper about the experience.

Bedlam longitudinal clinic

Students are required to participate in the Bedlam longitudinal clinic in the third and fourth year. The clinic is held every Tuesday afternoon and is designed for management of patients with chronic illness who were referred from the evening acute care clinics. The patient is assigned to a provider team composed of one faculty member (internists, family medicine, or med/peds), four to five third-year medical students, four to five fourth-year medical students, three nursing students (one senior, two junior), a social work student and faculty member, and a pharmacy student and faculty member. The same team works together in the clinic every other week and cares for the same panel of about 50 to 80 patients with chronic illness. Each student carries their own panel of about 10 to 15 patients.

Students referenced the Bedlam longitudinal clinic as having made a profound impression on them. One aspect of the experience that students found both challenging and engaging was the autonomy they had in caring for their own panel of patients. One student was impressed by "medical students in their third and fourth year being able to basically lead a team of health care

providers toward patient care." Another student noted that unlike other clinical settings, there were no interns and residents and, "...you get to basically be the boss." A student who was not going into primary care still appreciated the Bedlam longitudinal clinic: "I really enjoyed the opportunity to work there because I don't think I'll be working in that field ever again and it helps me to get a feel for what it's like and learn skills that I definitely want to have."

The other influential aspect of the clinic was exposure to patients and the challenges they face in managing chronic illnesses. As one student put it:

Medical students often lose a sense of empathy as they go through the process...for me the best thing about the Tulsa program is it has allowed me to maintain empathy...that probably did diminish somewhat those first and second years when I was so stressed out and then having the Bedlam clinic opportunity in the 3rd and 4th year allowed me to reconnect to that...When you have your own patients who are completely uninsured and you hear their life stories and you hear how hard it was for them to just get to clinic that day you can't help but remember this is why you're doing this.

Another student acknowledged *not* having "come in with a drive to be a public servant..." but still felt changed by the experience of the longitudinal clinic. As the student noted:

I think the Bedlam longitudinal clinic will definitely impact my career...just being the primary caregiver for a panel of 10-12 patients and being responsible for their care...I've been able to take a step back... and really start thinking how can we really improve this patient's life not only medically but from a social standpoint as well.

Another unique aspect of the clinic is its integrated multidisciplinary. As described by one faculty member:

Students are learning the role of a PCP providing chronic illness care...in the context of this very rich team of professional faculty and students of medicine, nursing, social work, and pharmacy...The nursing, social, work, pharmacy, and medical students are in the room at the same time. It's not parallel play. It's an integrated experience.

Another student reflected:

At Bedlam you also learn the importance of the medical team...rather than just the physician being the primary care giver. You have to consult social work, and the pharmacy students and the nursing students are absolutely essential to the care of your patient. And you can apply that to the hospitals when you are on wards. You can't just write the orders and give the medications. That's not going to help your patient get better....you have to think of that whole team approach. That's one of the huge benefits we get from here. That team thinking is integrated in every decision we make and that will carry on in our practice.

Finally, according to another student, "I can't fathom...how some practices run without a social worker."

Student Academy

The student academy was described as the "academic fulcrum" for the Bedlam clinical experience. Students are required to attend the meetings one Friday per month. The purpose of the academy is to teach skills the students will need to work in the Bedlam evening and longitudinal clinics.

Medical Informatics

The Beacon Communities health information exchange grant awarded to the Tulsa region has allowed the students in the OU School of Community Medicine to be at the forefront of medical informatics. The students use advanced health information systems to manage their own populations of patients and to facilitate more efficient care through web-based consultation initiatives between primary care physicians and sub-specialists.

IMPACT Team

During the IMPACT team (Integrated Multidisciplinary Program of Assertive Community Treatment), students spend one week rotating with a multidisciplinary team that provides wraparound services for the seriously mentally ill. Students travel with the team to visit patients where they live—whether it is in a home or a shelter. According to staff, students benefit from seeing the patient's living environment, because it helps them understand the barriers some individuals face in accessing care. It also helps students develop increased sensitivity toward the mentally ill. According to one IMPACT team staff, "you can see the light bulbs going off."

Future curriculum

The curriculum for the 4-year SCM is still in development but the general structure has been assembled. The curriculum is divided into three phases:

Phase 1: Preclinical (20-22 months)

OUSCM will adopt the clinical presentation (Calgary) model which uses clinical reasoning as the framework for knowledge and skills acquisition. Phase will conclude with a capstone and preparation for USMLE Step 1 in May of the second year.

Phase 2: Clinical clerkship

The clinical experience will be based in a patient-centered care curriculum. It will be divided in four 12-week blocks including growth and development, inpatient medicine, ambulatory medicine, chronic illness, and end of life. The final week of each block will be a transition period that includes classroom-based skills development, standardized patients, simulator sessions, and ethics. The goal is to provide a clinical experience that highlights competencies needed for each phase of care and encourages relevant departments to work together in helping students achieve those competencies. This approach evolved from an assessment of how care is likely to be organized in the future

and a desire to design an educational program that is responsive to an evolving health care system.

Phase 3: Begins May 1st of 3rd year

Phase three includes two months of a required sub-internship (chosen by the student), 8-10 week online seminar course, a capstone (8 weeks) reinforcing basic science of clinical medicine, internship preparation, presentation of scholarly work, and four to five months of elective which may include one month of emergency/disaster medicine.

The online seminar will take place during the time frame when students are interviewing for residencies. It will be modeled after executive-style online courses and will include periodic in-person seminars and a rigorous, mentored, but flexible online academic curriculum. This curricular innovation was proposed as an alternative to a clinical rotation in an effort to provide students with the flexibility to complete residency interviews while still benefiting from online instruction.

The new curriculum is scheduled to launch in 2014. The curriculum planning committee estimates it will take 18 months to recruit the estimated 16 to 20 faculty necessary for the new curriculum. The hiring process for a new assistant dean of curriculum and evaluation has already begun. The GKFF has pledged funds to aid in hiring new faculty.

To help meet the need for faculty, the OUSCM is also looking to the University of Tulsa (TU) as a partner in delivering preclinical education during the first two years. OUSCM has already successfully partnered with TU to launch a physician assistant program, which graduated its first class in 2010.

Location of clinical experience

Currently, most of OUSCM's core clinical curriculum mirrors that of the Oklahoma City campus, and takes place during years three and four in conventional hospital settings. OUSCM supports clinical rotations at community hospitals including St. Francis Hospital, St. John Hospital, and Hillcrest Medical Center.

OUSCM is not affiliated with a university hospital. One non-medical faculty member believes this is positive because "residents and doctors have to practice in the community hospitals....They don't have a place to hide. They have to work within the rubric of the community hospitals here." At least two of the medical school faculty, however, wished OUSCM had a stronger hospital or health system partner to aid in financial sustainability.

One challenge faced by OUSCM is managing the educational experience of students placed with physicians in the community who may not embrace the school's mission. Even if community physicians are supportive or at least neutral to the OUSCM's mission, they may not have the necessary depth of understanding to teach principles of community medicine. As one hospital administrator put it, "The teaching faculty do understand the mission. The other 80% of the docs...who have less exposure to students...they haven't seen the Kool-aid, let alone drunk it."

Much is expected to change when the school moves to a four-year model. At present, most community medicine instruction occurs outside of the core curriculum through the Summer Institute, Bedlam clinics (particularly the longitudinal clinic), and IMPACT team.

Tuition Management

Part of the partnership between the OUSCM and GKFF included a multi-million dollar grant program for medical students, residents and faculty physicians to incentivize service in medically underserved areas. About \$7.5 million was made available to students in the form of scholarships and loan repayment. Loan repayment programs in exchange for practice in underserved areas in Tulsa are available to medical and PA students, resident physicians, and junior faculty. Junior faculty members are also eligible to receive funding during their first 3 years at OUSCM. The OU loan repayment programs can be applied to providers working in any underserved area throughout Oklahoma.

A limited number of full (tuition and fees) merit based scholarships are available to attract and reward students admitted early in the admissions cycle. There is usually one student per class who receives a merit based scholarship. No service obligation is attached to this scholarship. Public health scholarships are also available, and cover educational expenses (including fees, books) for coursework completed through the University of Oklahoma College of Public Health. No clinical service obligation is required for this scholarship.

Mentoring/role modeling

OUSCM does not have a formal mentoring program, but there are a variety of informal opportunities. During the Summer Institute, students interact closely with faculty in small groups generally composed of two faculty and two students. Additionally, according to one faculty member, Bedlam Longitudinal Clinic faculty often develop a core advising and mentoring relationship with the students on their team.

Additionally, the importance of the medical school leadership as role models cannot be overstated. The students repeatedly refer to Dr. Clancy's passion and dedication to the mission of the school. For many, Dr. Clancy himself was a primary factor in the decision to attend OUSCM. Dr. Clancy and Dean Duffy are also respected for their accessibility to students. As one student put it, "the access we have to the deans is remarkable." Another student said, "I can walk into Dr. Clancy's office and he knows exactly who I am."

When pressed about other role models beyond the school leadership, examples were provided less readily. One student talked about her impressions of one of the faculty:

Dr. Adelson is an excellent role model. He's a dermatologist...he could make millions of dollars. Instead, he spends his Thursday nights giving hours upon hours of time to Tulsa's uninsured. I've never seen a specialist who has so much impact on the community. "

Another student noted that there are clearly some faculty who are passionate and committed to the mission, but implied that this might be a growing minority for now. As he put it, "in the same way the students are evolving, I think the faculty is evolving too."

There was no mention of the impact of residents on students.

Post-graduate engagement

At this point in time, there seems to be little happening in the way of post-graduate engagement at the OUSCM. The school does plan to track graduates' specialty choice and practice setting. The school has only graduated two years of students since becoming the OUSCM and has yet to graduate any students selected through an independent admissions process.

Very few OUSCM graduates stay for the internal medicine residency program at OU-Tulsa. Most of the internal medicine residents are osteopathic or international medical graduates. In the past two years, only two students of the roughly 30 each year who graduated from OUSCM went into internal medicine.

Challenges

1. Lack of racial/ethnic diversity

We observed a lack of racial/ethnic diversity in the student body and faculty. Faculty noted both difficulty in recruiting minority faculty and students, and the relative lack of diversity in Oklahoma (with the exception of the Native American population) as contributing factors. OUSCM hopes to improve minority student recruitment upon becoming a four-year institution.

2. Current students not choosing primary care

Few OUSCM students pursue or plan to pursue primary care. This could be the result of numerous factors—current students were not specifically selected for the OUSCM program; the school does not seem to overtly promote primary care (with the exception of the Bedlam clinic); and, there may not be as many faculty role models practicing primary care.

3. Limited emphasis on rural health

Given the mission of the school, it is surprising that the OUSCM curriculum does not have a stronger emphasis on rural health. OUSCM does offer a family practice rural residency program based in Ramona, Oklahoma, but this program often struggles to fill its two positions each year. According to Dr. Clancy, OU's lack of emphasis in this area is partly intentional since Oklahoma State University, the osteopathic medical school in Tulsa, has taken a lead role in rural medicine.

4. Financial sustainability

One of the biggest challenges to the OUSCM is long-term financial sustainability. Philanthropy was able to jumpstart the OUSCM, but it is unclear how the school will develop a long-term business plan that supports its mission. Some see opportunities through health reform, stronger partnerships with local hospitals or health systems, additional philanthropic support, or partnerships with other universities such as University of Tulsa.

5. Moving to the four-year school

The other major challenge that OUSCM faces is the transition to a four-year college. This will require significant restructuring and presents logistical challenges such as the development and implementation of a new curriculum, implementing an independent admission process, achieving accreditation, and hiring additional faculty.

6. Involving residency programs and other community physicians

While OUSCM has made substantial progress in articulating and spreading its mission throughout the campus and medical school, there are a few important gaps. To date, there has not been a concerted effort to involve residents in the mission. This may have to do with the importance of residents to the financial viability of clinics, which relates to the question of overall financial sustainability. The school also faces the challenge of promoting its social mission to students when community physicians who may not embrace this mission are an integral part of their education.

7. Relationship with University of Oklahoma-Oklahoma City

Although the relationship between OUSCM and the Oklahoma City campus can sometimes be strained, university leadership has been generally supportive of the OUSCM. As the OUSCM continues toward a four-year model and distinguishes itself further from Oklahoma City, this relationship may come under strain, especially if conflicts arise around funding or control of the admissions process.

Conclusion

Interviewees were divided as to whether the OU experiment could be replicated. Some felt it could not be replicated without Gerry Clancy, the GKFF funding, or within the context of a larger, more dispersed and bureaucratic academic setting. Others felt confident it could be replicated. Most agreed that there were components of the OUSCM that could be adopted at other institutions and would be valuable in their own right—for instance, the Summer Institute and the Bedlam longitudinal clinic.

Under the leadership of Gerry Clancy, the University of Oklahoma School of Community Medicine has embarked on an ambitious mission. Educating socially minded physicians is just one aspect of a much larger effort to use the University of Oklahoma-Tulsa as a planning, organizing, and coordinating hub to improve the health of Tulsa. So far, there is evidence that OU has been successful in progress to this goal.

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