The Education Centered Medical Home: A new curricular model for the 21st Century

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Need and Opportunity

- The historical paradigm for medical education has favored the separation of basic sciences from clinical medicine during the four-year curriculum. In addition, students' exposure to patients has been traditionally kept to a minimum during the first two years of medical school. When medical students are finally presented with clinical responsibilities, there are few opportunities for team-based care and even fewer experiences with longitudinal follow-up of patients spanning years.
- The paucity of delivery models in Medicine that include personal longitudinal patient care, team-based medicine, quality-driven medical management has led to the development of the Patient Centered Medical Home (PCMH) model. Many believe the PCMH delivery model to be one of the better care paradigms in the evolution of medicine.
- Reform in Medicine for the 21st Century is not limited to models of delivery and payment. Organizations such as the Carnegie Foundation and the American Academy of Family Physicians have campaigned for Medical Educators to rethink the current paradigm for medical education. The vision is that newer curricular models will result in physicians better equipped to improve the health of individuals and communities.
- To this end, FSM has created and launched the pilot phase of the Education-Centered Medical Home.

ECMH Pilot Phase Vital Signs

- Pilot Project Initiated during Academic 2011-2012
- Four Participating Clinics active since September, 2011
  - NMFF: 2 Student Clinics
  - PCC-Austin: 2 Student Clinics
  - PCC-Austin South: 2 Student Clinics
  - Children's Memorial Hospital: 1 Student Clinic
- Total Number of Students Enrolled: 55
- Faculty Preceptors: 1-2 per Clinic
- Clinic Size: Eight Students (2 per Class)
- Sessions per month: 2 per student group
- Patients seen per clinic: 6-10
- Additional Activities:
  - Grand Rounds Once per month
  - Orientation and Physical Exam "Boot Camp
  - Blog and electronic digest
- Assessment: Initial student surveys and patient surveys are being distributed.

Goals and attributes: Seven Pillars of the ECMH

Our philosophical infrastructure as adapted from the Joint AAP,AAFP,ACP, AOA Joint Principles

Personal Physician:
Definition: Each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care.

Whole Person Orientation:
Definition: The personal physician is responsible for providing for all the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes for all stages of life: acute care; chronic care; preventive services; and end-of-life care.

Care Coordination and Integration:
Definition: Care is coordinated and/or integrated across all elements of the complex health system (e.g. subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g. family, public and private community based services). Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it, in a culturally and linguistically appropriate manner.

Payment and Medical Economics:
Definition: Payment appropriately recognizes the added value provided to patients who have a PCMH. Recognizes and values work that is done outside of face-to-face visit. Pays for care coordination, ancillary providers and community resources. Supports adoption of HIT for quality improvement. Supports provision of e-communication. Recognizes values of physician work associated with remote monitoring of clinical data using technology. Maintains fee-for-service (FFS). Recognizes case mix differences. Allows shared savings from reduced hospitalizations. Allows for quality bonus or incentive payments for measurable improvement.

Physician-Directed Medical Practice:
Definition: The personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.

Enhanced Access to Care
Definition: Access to care is available through systems such as open-access scheduling, extended hours, and new options for communications between patients, their personal physician and practice staff.

Quality and safety are hallmarks of the medical home:
Definition: Advocacy for attainment of optimal, patient centered outcomes defined by collaborative care planning process. Evidence based medicine and clinical decision support tools guide decision making. Physicians accept accountability for quality improvement (QI) through voluntary engagement in performance measurement and improvement. Patients actively participate in decision making and patient feedback is sought to assure expectations are being met. HIT is used to support optimal patient care performance measurement, patient education and enhanced communication. Practices go through a voluntary recognition process to demonstrate that they have PCMH capabilities. Patients and families participate in quality improvement activities at the practice level

The Seven Pillar are not just part of a vision.
- Educational expectations for each pillar have been created for medical students according to their level of training.
- FSM competency requirements are linked to each pillar
- Ongoing educational activities all tie in such as monthly grand rounds.

ECMH Grand Rounds: The first four sessions

PCMH Pillar #1: **Personal Physician**
Faculty Moderator: Micheal Fleming, MD
Topics for the month and required reading list:
Continuity as an organizing principle in education
Does continuity matter?
Communication deficits between providers threatening continuity
Primary care & the community health center

PCMH Pillar #2: **Physician-Directed Medical Practice (Teamwork)**
Faculty Moderator: Kevin O'Leary, MD
Topics for the month and required reading list:
Interdisciplinary patient care: does it matter?
Crew resource management and high-risk teams

PCMH Pillar #3: **Whole Person Orientation**
Faculty Moderator: David Baker, MD
Topics for the month and required reading list:
Persistence of healthcare disparities
Literacy and health outcomes
Patient self-management

PCMH Pillar #4: **Quality Care**
Faculty Moderator: Steven Persell, MD
Topics for the month and required reading list:
Do we provide quality care?
Measuring quality: Public reporting
Medical team training review

Some advantages of ECMH Model

- Early and comprehensive student exposure to patient care.
- Longitudinal follow-up of patients.
- Empowers students to "Take ownership" of patients longitudinally.
- Early and comprehensive educational exposure to team-based medicine and net-driven medical information technology.
- Early educational exposure to Continuous Quality Improvement, its design, implementation and monitoring.
- Early educational exposure to the factors that positively affect the relationship between a physician and his or her patients.
- Ability to positively affect the clinical outcomes of both individuals and communities over a four year period as a result of student cohort patient care and focused community interactions.

Assessment Opportunities

The ECMH paradigm will close the loop on the many assessment tools that are lacking in the traditional model:

•True 360º assessment: Availability of patient/peer/preceptor data that is not just circumstantial, but longitudinal and oriented towards competencies and Quality Improvement.

•Patient outcomes assessment: The ability to monitor the progress of the patient as measured by the interactions between the student and the patient. For the first time ever, the ability to monitor medical student clinical outcomes.

•Effectiveness of model assessment: A sizeable medical home is able to provide data for operational effectiveness as well as clinical outcome data.

Looking Forward

- During the pilot phase we are monitoring multiple metrics and outcomes. While initial data is focused on participant satisfaction, patient satisfaction and CQI; we plan to monitor multiple patient outcomes. The ultimate measure of success is the improvement of patient outcomes.
- We are hoping to grow the number of medical homes from 4 to over 40 in order to accommodate all FSM Medical Students.
- We are hoping to achieve an ongoing practice of 8-10 patients per student. If we are successful, the overall medical home would achieve a pool of over 5,000 to 6,000 patients.

References

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- American Academy of Family Physicians. Primary care physicians call for medical school curricula that prepare graduates of patient-centered medical home. January 18, 2011. http://www.aafp.org/online/en/home/media/releases/2011newsreleases-statements/medical-school-curricula-pcmh.html

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ECMH: Longitudinal Management, Student Empowerment, Physician-Patient Relationship Building, 360º assessment, Patient Outcomes Assessment, Continuous Quality Improvement, Comprehensive Care, Team Approach