

# Family Medicine Updates



From the Society of Teachers  
of Family Medicine

*Ann Fam Med* 2009;7:374-375. doi:10.1370/afm.1028.

## fmCASES: COLLABORATIVE DEVELOPMENT OF ONLINE CASES TO ADDRESS EDUCATIONAL NEEDS

Family medicine educators are realizing their dream: a set of online cases to teach the core curriculum of the family medicine clerkship, fulfilling the goal of a 10-year journey. In 1998, 65 STFM members met to discuss sharing of Web-based curricular materials. As education becomes more competency-based, educators needed to find ways to meet the Liaison Committee for Medical Education's (LCME) ED-2 and ED-8 standards.

Clerkship directors need to ensure there are comparable educational experiences and evaluation methods across all instructional sites (ED-8) and that each clerkship specify the numbers of patients (since revised), as well as the major disease states/conditions that all students must encounter in order to achieve the course's learning objectives (ED-2). If a student does not encounter patients with a particular clinical condition, the student should be able to remedy the gap by a simulated experience. ED-2 is especially challenging for family medicine since most clerkships use a decentralized model with many sites, making standardization problematic. Leong et al have shown that computer-assisted online cases are effective learning tools and can be successfully integrated into clerkship.<sup>1</sup>

A task force was charged to explore using computer cases to address these requirements and to enhance learning for the students. A group of educators with the common vision of collaborative development of high quality online cases that would meet the educational needs of both STFM educators and students formally established the STFM Group on Online Cases in 2006. These cases are designed to teach the national curriculum defined by STFM and provide the resource for clerkship directors to meet LCME standards.

The goal is to develop a product that is:

- high quality, meeting national standards, peer reviewed, and current
- serving the needs of STFM educators and medical students

- responsive to end users
- affordable
- sustainable
- a system to recognize and reward participation
- providing scholarship and academic productivity for writers and reviewers publishing a case

## The Timeline

**2006 Year of Exploration.** The group explored opportunities for partnership to develop online cases to share and became a formal "STFM Group" in August 2006.

**2007 Year of Assessment.** The group carefully and intensively evaluated their options. After a pilot study and much deliberation, the STFM Board of Directors approved the partnership with the Institute for Innovative Technology In Medical Education (iInTime) in November, 2007. iInTime is a nonprofit company that developed CLIPP (Computer-assisted Learning in Pediatrics Program), the highly successful product to teach the pediatrics national curriculum.<sup>2,3</sup> With the agreement signed between STFM and iInTime, fmCASES (Family Medicine Computer-assisted Simulations for Educating Students) was born.

**2008 Year of Planning.** Two leadership groups, the Advisory Group (Shou Ling Leong (chair), Stacy Brungardt, Scott Fields, Alec Chessman, and John Waits) and the Project Development Group (Shou Ling Leong, Alec Chessman, John Waits, Jason Chao, and Stephen Scott) were formed to lead the project. Their tasks included defining the curriculum matrix and case outlines, developing 5 pilot cases, and recruiting case authors.

**2009 Year of Development.** A training workshop for case writers was given at the Predoctoral Conference in January 2009. Authors developed their cases with mentoring from the Family Medicine Project Development Group (fmPDG). Cases are scheduled to be completed by July 2009, followed by peer review. Pilot testing of the cases is offered to interested schools. The cases will be available by subscription in summer 2010.

## fmCASES

Using the Family Medicine Curriculum Resource (FMCR), the list of topics from the NBME Task Force, and the Future of Family Medicine as resources, 29 cases have been designed covering common topics for the Family Medicine Clerkship. fmCASES also models the principles, themes, concepts, core values, and uniqueness of family medicine. Some of the patients in the cases are linked to form family units to illustrate

these concepts, which include the biopsychosocial model; comprehensive, whole-person care; continuity of care; context of care; and coordination/complexity of care. Students will learn at a virtual clerkship site that has features of the future of family medicine's new model practices (EMR, team approach). The patient-centered medical home is woven into the cases. These objectives are actively modeled by the 5 preceptors in the practice, the students, and other members of the health care team. This style of caring for the virtual patients and family members is applied across all cases to illustrate a model practice.

fmCASES was developed to foster self-directed and independent study, emphasize and model clinical problem-solving, and teach an evidence-based and generalist approach. The cases utilize the ilnTime Learning System (ILS) Virtual Patient Pedagogy Blueprint. Simulating a patient encounter in the office, the case unfolds with the preceptor "teaching" the topic using direct and interactive teaching. It incorporates dialogue, questions and answers, and diagnostic networks to stimulate clinical reasoning and critical thinking. Hyperlinks, multimedia, and expert teaching are used to enhance the quality of the cases. The cases are designed to be learning tools to allow students to learn without negative consequences. Student logs are tracked, however, and data are available for evaluation of the cases as teaching tools.

fmCASES will help standardize the educational content and offer a consistent learning experience across training sites and times. It can be used for remediation for students. Outlines of the cases and a summary of the key teaching points will be provided at the end of the cases. This serves as a study guide for the students and a teaching guide for preceptors. The second phase of the project includes developing and refining families within clusters of cases, and teaching modules for common concepts/topics, such as evidence based medicine, cultural competencies, diversity, and communication skills.

### Collaboration

One of the exciting benefits of fmCASES is the ability to collaborate. Instead of working in silos, each teacher working separate from the other, and each discipline working alone, we will be collaborating with STFM colleagues from schools across the country, as well as colleagues from other disciplines. Pediatrics has successfully created and hosted CLIPP cases, and the majority of pediatric clerkships use them. Internal medicine is completing their SIMPLE (Simulated Internal Medicine Patient Learning Experience) cases using the same ilnTime Learning System. This creates a virtual patient curriculum spanning internal medicine, pediatrics, and family medicine under the umbrella of ilnTime. While

each discipline will have its own editorial board for their cases, there are excellent opportunities for the 3 disciplines to create a multi-disciplinary and multi-institutional research agenda. The future will bring continued opportunities for scholarship, an enhanced understanding of learning, and education promotion.

To learn more about the fmCASES, go to <http://www.fmcases.org/>. To learn more about ilnTime, visit <http://www.i-intime.org/index.html>.

*Shou Ling Leong, MD*  
*Pennsylvania State University*  
*Chair of the fmCASES Project Development Group*

### References

1. Leong SL, Baldwin CD, Adelman AM. Integrating Web-based computer cases into a required clerkship: development and evaluation. *Acad Med.* 2003;78(3):295-301.
2. Fall LH, Berman NB, Smith S, White CB, Woodhead JC, Olson AL. Multi-institutional development and utilization of a computer-assisted learning program for the pediatrics clerkship: the CLIPP Project. *Acad Med.* 2005;80(9):847-855.
3. Berman NB, Fall LH, Maloney CG, Levine DA. Computer-assisted instruction in clinical education: a roadmap to increasing CAI implementation. *Adv Health Sci Educ.* 2006;13(8):373-383.



*Ann Fam Med* 2009;7:375-376. DOI: 10.1370/afm.1011.

### VISION, VOICE, LEADERSHIP: ADFM'S NEXT PHASE

The Association of Departments of Family Medicine (ADFM) is evolving. ADFM's next phase is represented by our new logo with a tagline that captures our primary purpose: "Vision, Voice, Leadership." This symbol of the organization is our way of saying that ADFM is increasing its engagement with the issues facing family medicine, academia, and healthcare, while continuing to help Departments of Family Medicine succeed. ADFM is speaking with greater unity of voice on behalf of our members. It is focused on offering leadership and advocacy for our discipline and promoting development of new leaders, especially for Departments of Family Medicine. We summarize here briefly where ADFM has come from, how the organization works today, and where we envision it heading into the future.

### ADFM Early Days: Chair Support

ADFM was formed April 10, 1978, when a small band of department chairs signed the Articles of Incorporation.