

Health Information Technology: The Missing Milestone?

Michael Langan, MD, and Clint Allred, MD

Dr. Langan is director of the Primary Care Track and Dr. Allred is chief internal medicine resident at The Ohio State University Wexner Medical Center.

In February 2009, the American Recovery and Reinvestment Act (ARRA) was signed into law. One of its components included a \$19 billion stimulus program to promote the adoption and use of health information technology (HIT).^{1,2} The HIT components of the stimulus package, recognized as Health Information Technology for Economic and Clinical Health (HITECH), demonstrate the conviction among government officials and medical experts alike that electronic information systems are essential to improving the health of America.^{1,2} The importance of HIT and electronic health records (EHRs) is further emphasized by financial incentives granted to clinics and hospitals who demonstrate “Meaningful Use” (MU) of certified EHRs to improve patient care. It can be argued that the future of medicine is tightly interwoven with HIT. Considering this clear governmental emphasis placed on HIT, one wonders how the medical community is preparing for this evolving aspect of health care. From a medical education perspective, how are graduate medical education (GME) programs preparing trainees to successfully develop HIT skills? Furthermore, how are GME programs planning to *evaluate* HIT competency among their trainees?

The landscape of internal medicine residency evaluation has recently been revamped through the new Accreditation Council for Graduate Medical Education (ACGME)/American Board of Internal Medicine (ABIM) milestone project.³ This project has been intentionally designed to assess the development of the resident physician in key dimensions of the elements of physician competency.³ Further, the Alliance for Academic Internal Medicine (AAIM)

Redesign Committee has proposed 16 end-of-training entrustable professional activities (EPA) to help program directors achieve the goals of competency-based medical education.⁴ It is impossible to measure everything that is applicable to training, but upon review of the milestones and EPAs, there is no obvious mention pertaining to a trainee’s competence with respect to HIT. Should this cause pause considering the clear emphasis that has been placed on EHR implementation and HIT development? Will the residency classes of 2014 and beyond enter the workforce ill prepared, or at least suboptimally evaluated, to provide “meaningfully useful” care? Will program directors be able to confidently entrust professional HIT activity to their graduating residents?

Interestingly, the Meaningful Use criteria incentive program administered by the Centers for Medicare and Medicaid Services (CMS) also follows a sort of graduated milestone completion of stages of escalating performance to receive the promised financial incentives. Meaningful Use criteria encompass such areas as communicating with patients through the EHR, strategically employing electronic patient registries, mining data for population management, addressing point of care alerts, and managing complex medication and problem lists among many other objectives.⁵ Review of such wording certainly seems to be written in a very similar language as the ACGME/ABIM milestone language.

At first glance, there is no formal sub-competency among the 22 existing ACGME/ABIM sub-competencies that truly measures a trainee’s HIT skill set. However, upon careful review of the sub-competencies,

one might conclude that HIT competence is *indirectly* measured. Perhaps it is scattered and hidden within the milestone language. Below is a list of the sub-competencies that at least resemble a measurement of competence as it may relate to HIT:

1. *Sub-competency 13: “Learns and improves via performance audit.”* One might focus here to assess a trainee’s use of the EHR to improve the quality of health care at both the individual and systems level for high-priority health conditions. This also parallels the proposed EPA #13 (“Improve the quality of health care at both the individual and systems level”).⁴
2. *Sub-competency 15: “Learns and improves at the point of care.”* This specifically outlines a trainee’s ability to “utilize information technology with sophistication” in its descriptor of an entrusted resident. Certainly “sophistication” is left open for subjective interpretation but at least aims at recognizing ability to do so within the evolving HIT climate. This can also be strategically linked to EPA #15 of “demonstrat[ing] personal habits of lifelong [perhaps evidence-based Pubmed-savvy] learning.”⁴
3. *Sub-competency 22: “Appropriate utilization and completion of health records.”* This might allow for the assessment of managing complex problem and medication lists within the EHR, which is certainly of meaningful use. In order for this to be an effective measurement of the desired competence, more specific and

continued on page 2

IN TRAINING

continued from page 1

deliberate language may need to be employed within the sub-competency itself.

Thus, inference of HIT competence can be implied in the sub-competencies and extrapolated to EPAs. Supposing this to be the case, though, can the assumption be made that HIT is even a thought when evaluators are completing end-of-rotation assessments of trainees and when program directorates are preparing annual clinical competency statements?

Ultimately it seems that the main objective of the milestone project, EPAs, and MU incentive program is to better prepare physicians to provide high-quality, safe, and cost-effective care to society. As medical care becomes more tightly

intertwined with HIT, it seems reasonable to ponder how this generation of physicians can be successfully trained and evaluated in this novel realm and whether or not the newly adopted ACGME/ABIM milestones adequately enough and directly enough assess HIT competence. This is not meant to be a call for a 23rd sub-competency evaluating HIT expertise, but then again, perhaps it is.

References

1. Reddy R. Attaining meaningful use of health information technology in a residency program: challenges and rewards. *Hawaii Journal of Medicine and Public Health* 2012, Vol 71, No 10.
2. Blumenthal D. Stimulating the adoption of health information technology. *N Engl J Med* 2009; 360:15.
3. The Internal Medicine Milestone Project: <http://www.acgme.org/acgmeweb/portals/0/pdfs/milestones/internalmedicinemilestones.pdf> (accessed February 26, 2014).
4. Internal medicine end of training EPAs. <http://www.im.org/AcademicAffairs/milestones/Pages/EndofTrainingEPAs.aspx> (accessed February 25, 2014).
5. Centers for Medicare and Medicaid Services. http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html (accessed February 26, 2014).

SGIM