

Using Technology in your Fellowship Program Steven Barczy, MD

There are many ways that technology can be incorporated into a fellowship program to promote a competency-based education, track milestones and meet accreditation requirements. Broad categories on how this is done include 1) use of teaching technology and electronic educational products to cover curriculum content, 2) use of residency/fellowship program management software, and 3) use of electronic evaluation tools (web-based documents, phone applications, simulation cases). This handout will touch upon the aforementioned areas but its primary objective is to stimulate discussion and promote sharing of resources and strategies via targeted questions.

Facilitator question #1: ***What percentage of your faculty educators comfortably uses learning technology in their day-to-day interactions with fellows? What strategies do you employ to promote use of just-in-time learning technology by your faculty educators?***

Facilitator question #2: ***Are there education products that you use in your training program that are particularly engaging and effective?***

1. TEACHING TECHNOLOGY RESOURCES. These can further characterized as using technology during instruction (e.g. Electronic blackboards, PowerPoint presentations, audience response systems) and employing electronic educational products into your curriculum. In the first case, faculty development is necessary to help faculty educators use “new “and varied technology to promote learning. Learning technology can be an education barrier if used improperly (e.g. poorly-designed PowerPoint slides). Regarding learning products, the repository of case studies, Power Point presentations, small group manuals and web-based modules has grown enormously in recent years. Increasingly program directors and faculty are using resources developed at other institutions that are in the public domain (e.g. materials located on POGOe). Peer review processes with web based rating provides educators a metric to discern how certain products may meet their teaching requirements.

Facilitator question #3: ***Do you use program management software in your Fellowship program (e.g. MedHub, e-Value)? What are the advantages and challenges of such software?***

2. TRAINING PROGRAM MANAGEMENT SOFTWARE. Many proprietary products have become available to graduate medical education offices. These are typically "all-in-one" programs that track duty hours, manage schedules, facilitate online evaluations and serve as electronic portfolios for trainees. They go beyond simple databases and can also serve as decision support tools to track learner competencies and outcomes. The decision to use this type of product is often made at the

institutional level rather than individual program level. This means that sometimes the components of the product may be predetermined and not always relevant to an individual program.

*Facilitator question #4: **Have you used technology to make it easier for faculty and fellows to complete their evaluations?***

*Facilitator question #5: **How do you envision tracking clinical milestones using education technology?***

3. ELECTRONIC EVALUATION TOOLS. There has been a trend towards replacing paper-based evaluation with electronic documents and tools. These may be web-based evaluations that use radio buttons or more sophisticated approaches such as phone applications for checklists or Mini-CEX tools. Reminders to complete these assessments can be sent to faculty evaluators via e-mail, text message or even social networking modalities. Furthermore with the advancement of simulation requirements for training programs, there are many methods for video recording interactions with patients or standardized patients for use in evaluation and/or teaching. The ACGME expects that our competency-based curriculum is mapped across evaluation methods and more recently clinical milestones.