

Dilemmas in Family Medicine Education

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Feature Editor

Editor's note: Over the past several years I have had the privilege of providing the Dilemmas column to you. It has been a challenge, since the number of quality submissions has not been sufficient to provide a column in every issue. The immediate feedback provided by the various listserves (predoctoral, program directors, etc) has perhaps made this column less essential. In any case, this last contribution will be the final Dilemmas column. Let me take this opportunity to thank those who did actively participate and contribute and to say again to everyone that I have sincerely appreciated the opportunity to interact with all of you in this capacity.

Challenges and Pitfalls of Developing and Applying a Competency-based Curriculum

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The Accreditation Council for Graduate Medical Education (ACGME) has challenged medical educators to help promote public confidence in medical education and to ensure the production of competent physicians through the establishment of competency-based education standards. The challenge is to implement the six general competencies for all residency programs accepted by ACGME's Outcomes Project September 28, 1999. Our immediate challenge is to integrate these standards as measurable competencies into our daily teaching in such a way that we can ensure the outcome of competent physicians. The integration will require changing from our traditional evaluations that have focused on concrete knowledge areas such as medical

knowledge (the In-service Exam), procedural skills, and end-of-rotation summative evaluations. The change will challenge us to add the areas that have not been traditionally evaluated, such as the behavioral areas of self-learning/improvement, communication skills, professionalism, and others.

The first part of the process of integration is to understand the theoretical and practical basis of a competency-based educational system. Bell et al¹ elegantly summarized many of the important concepts of a competency-based curriculum in their seminal article, "Competency-based Education in Family Practice." Their 26 competencies (specific for family practice) form the underpinning for the six competencies from ACGME, and reading this article can assist us as we move toward modification of our residency curriculum to meet the ACGME challenge.

What are the obstacles to developing a competency-based curricu-

lum? Unfortunately, there are many: from issues of basic knowledge about the principles to the more complicated and practical issues of staffing time, educator time, education of educators, implementation strategies, evaluations technique development, and changing the educational culture, all in the face of shrinking health care education dollars. Given all these barriers, how can we meet the challenge set forth by the ACGME? The answer is to redesign our curriculum by modifying the six general competencies into goals/objectives and adding the measures (evaluation) to support the competencies.

Like any other curriculum design, the traditional way is a linear process starting with a needs assessment, then goal development, design of objectives, teaching strategies, and finally an evaluation method.² Unfortunately, many times this linear approach to curriculum development does not work. When resources are limited,

(Fam Med 2001;33(9):652-4.)

some proposed evaluation strategies that are resource dependent become difficult. It may make sense to start with the evaluation strategies and work in a circular fashion to review the goals and refine the objectives and teaching strategies. Given today's barriers, being flexible and willing to look outside the traditional curriculum box will help create innovative and practical approaches.

Understanding the idea of being competent is another one of the big barriers to implementation of the six general competencies. Stating that a learner is competent in a particular skill means that experts (teachers) certify that the learner is capable in this area without further educational support and meets an acceptable standard (ie, a definition) for this skill. At first glance and for many skills, this definition looks like a simple yes/no type of evaluation. The learner is competent or not. Unfortunately, there are many areas in medical education that are not simple yes/no processes, and a proficiency approach (scale from 1 to 10 as an example) is more appropriate. One of the challenges in evaluating competencies is where on the proficiency scale do educators denote achievement of being competent when mastery is neither necessary nor practical. We as educators in family practice would like all our learners to have complete mastery of family practice. However, unlike subspecialty medicine, one of the hallmarks of family practice is that of continued improvement, continued learning, and recognition of personal and professional limits. Setting the goal to achieve complete mastery is not only inconsistent with being a generalist but would impress the value of subspecialty care that is not helpful for family practice.

Finally, educators need to remember that behavior goals are much harder to define in yes/no or scale-based evaluation. Behavior

goals are less solid and much more difficult to grasp, particularly when trying to apply concrete evaluation methods. However, when an experienced faculty member is presented with a resident who is lacking in a behavioral skill (eg, professionalism or self-learning), the deficiencies become surprisingly clear.

The broad categories described by the ACGME are appropriate for family practice residents. Depending on how they are broken down, most of the basic proficiencies that family practice residents need to achieve are included. The categories are patient care, medical knowledge, self-learning and improvement, interpersonal and communication skills, professionalism, and practice management. Creating new evaluation methods for these competencies is our challenge.

Bell et al proposed a heavy dependence on direct observation as an evaluation method for a competency-based curriculum. Direct observation as an evaluation technique has been around for many years.³ Video precepting, one-way mirrors, or having the evaluator in the exam room are commonly used methods to accomplish direct observation evaluation. The strengths of direct observation are, simply put, what is seen is what is done. Direct observation can be used to provide formative feedback and evaluation rather than the traditional summative, end-of-rotation evaluation. Video precepting gives evaluators a good, detailed picture of a particular resident's ability but can be labor- and time-intensive tasks for faculty, particularly when done on a weekly basis as proposed by Bell et al. While video perception captures every moment of the physician-patient encounter, it does miss the important areas of professionalism (staff and colleague interaction) and self-learning/improvement.

In family medicine education, the faculty directly observe the residents delivering care in many

different situations. The faculty watch as they interview and interact with patients in the clinic, emergency room, and hospital. The faculty observe the residents' professional behavior and how the residents interact with staff, solve complicated problems, obtain and apply new knowledge, and perform procedures, etc. What the faculty generally does not do is formally evaluate the residents in a formative method for many to all of these directly observed encounters. Traditional evaluation occurs as a summative evaluation at the end of a rotation rather than encounter-specific evaluation. Video precepting occurs at specific preplanned times in most programs and often infrequently. Given all the direct observation that already occurs on a daily basis in all residency programs, is there a way to capture a formative and competency-based evaluation with a method that does not interfere or overtax the faculty or resident? The answer is probably yes, with a careful understanding of the limitations and the differences from the traditional video precepting.

A strength of video precepting is that it completely captures the entire resident-patient encounter. Faculty preceptors evaluating the residents during their regular clinic (or other settings) cannot hope to completely capture or evaluate to the detail that video precepting can. However, if applied carefully and using the intuitive clinical and teaching skills of the faculty, it can provide a frequent and formative evaluation with a low impact to faculty time and financial resources. A simple one-page evaluation form can be developed and tailored to identify competency in many areas, including professional behavior, independent learning, fundamental medical knowledge, clinical skills, etc.

Self-learning/improvement is one of the competencies that is more difficult to evaluate. An example of how to evaluate self-learning/improvement would be to monitor a

resident's ability to manage a clinic patient with an unknown or poorly understood medical diagnosis. If the resident is able to gather new medical knowledge (medical text, on-line resource, literature search) and apply it in a timely and appropriate fashion, the preceptor can certify competency for that encounter. Over time, as different faculty repetitively evaluate a particular resident, a clear picture of that resident's strengths and weaknesses should appear and can be addressed and followed. Certainly, programs are not just limited to the clinic setting for this type of direct observation evaluation. Other settings could have evaluation forms developed for observational encounters in the hospital, labor and delivery, and

others, providing a regular, competency-based evaluation system to help document residents through a variety of settings and skills.

In conclusion, application of the six ACGME general competencies and formatively evaluating them is a significant challenge to all residency programs. If done successfully, not only can a residency program improve its evaluation process but also at the same time solidly address and meet the challenge set forth by the ACGME Outcomes Project. Using a direct observation method that takes into consideration the competencies and the practicality of current resources is essential for this to succeed. Certainly there are other possible techniques to further evaluate residents. Hopefully,

the ACGME competencies directive will help generate the energy to try new, novel, and rewarding curriculum changes and evaluation methods.

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