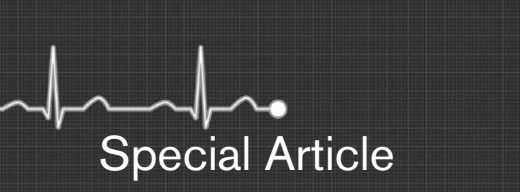

Entrustable Professional Activities and Curricular Milestones for Fellowship Training in Pulmonary and Critical Care Medicine: Executive Summary from the Multi-Society Working Group

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Abstract: Assessment of graduate medical trainee progress via the accomplishment of competency milestones is an important element of the Next Accreditation System of the Accreditation Council for Graduate Medical Education. This article summarizes the findings of a multisociety working group that was tasked with creating the entrustable professional activities and curricular milestones for fellowship training in pulmonary medicine, critical care medicine, and combined programs. Using the Delphi process, experienced medical educators from the American College of Chest Physicians, American Thoracic Society, Society of Critical Care Medicine, and Association of Pulmonary and Critical Care Medicine Program Directors reached consensus on the detailed curricular content and expected skill set of graduates of these programs. These are now available to trainees and program directors for the purposes of curriculum design, review, and trainee assessment. (*Crit Care Med* 2014; 42:2290–2291)

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The authors have disclosed that they do not have any potential conflicts of interest.

The full version of this executive summary can be accessed at: http://journal.publications.chestnet.org/article.aspx?articleid=1883349.

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DOI: 10.1097/CCM.0000000000000615

The Accreditation Council for Graduate Medical Education (ACGME) is in the midst of a major revision of the way graduate medical education programs are accredited, which they term the *Next Accreditation System* (NAS) (1, 2). The philosophy guiding the design of the NAS is that training programs should be evaluated based on their educational outcomes, i.e., how well their trainees perform, rather than the previous focus on a program's process and structure.

An important feature in the NAS is how trainees, including fellows in critical care, pulmonary, or combined fellowship programs, are to be evaluated. The six, broad core competencies that the ACGME has required all trainees to master have now been parsed into 24 subcompetencies (3). These are more concrete and observable than the somewhat amorphous core competencies. Fellows will be assessed on their progress in each of these subcompetencies through a series of milestones: discrete, observable skills that advance from serious deficiencies to ambitious goals. Conceptually, each fellow may advance at a different pace in each subcompetency domain, but all should reach a level allowing unsupervised practice by the time the fellowship is complete. Program directors must report each fellow's level on all 24 milestones biannually to the ACGME. These milestones will also be reported to the American Board of Internal Medicine (ABIM) to confirm an individual's eligibility to sit for the board examination. Hence, these are termed *reporting milestones*. For the ACGME, the aggregated performance of individual trainees reflects the performance of their training program. Reporting of milestones (just 22 in number at the residency level) began for residency training in internal medicine in July 2013, and is scheduled to begin for internal medicine subspecialties in July 2014.

The 24 reporting milestones are generic and common for all subspecialties of internal medicine. Each subspecialty has been charged with developing a detailed curriculum specific to the field, termed *curricular milestones* in the ACGME parlance. Finally, each subspecialty has been asked to create *entrustable professional activities* (EPAs) (4, 5), which are activities that a member of that professional field can be expected to perform independently after completing training. Described in lay language, the activities are what the public, funding agencies, and professional peers should be able to trust a training program graduate to execute as a clinician in pulmonary or critical care medicine practice. The curricular milestones provide the road map, and the EPAs provide the destination, for fellowship training.

To create the curricular milestones and EPAs for pulmonary and critical care medicine, the American College of Chest Physicians, American Thoracic Society, Society of Critical Care Medicine, and the Association of Pulmonary and Critical Care Medicine Program Directors convened a working group in March 2013. The group consisted of two representatives for each of these societies. Representatives were appointed based on experience in medical education, training program leadership, development of the reporting milestones for subspecialties, or prior curriculum development in pulmonary and/or critical care.

The working group held conference calls every other week and met in person in September 2013. Foundational documents consisted of prior published curricula in critical care medicine and pulmonary medicine (6), the program requirements from the ACGME (7–9), and the year-end fellow evaluation forms from the ABIM (10, 11). The group used the Delphi process to first propose, and then reach consensus on, the elements comprising the curricular milestones and EPAs. The resulting tables were organized by the six ACGME core competencies, with separate lists for pulmonary training programs and critical care training programs. Finally, consolidated tables were provided for combined pulmonary/critical care programs. Draft documents were circulated to the sponsoring societies for review, as well as to the directors of all US fellowships in pulmonary, critical care, and combined programs. In the end, 18 and 13 final EPAs described the overarching activities of a pulmonologist and medical intensivist, respectively, and 20 EPAs encompassed the activities of a combined specialist. The curricular milestones were much more granular and numerous. The revised, final document and tables have been published in full in *Chest* (12).

Because the working group was not empowered to alter the ACGME program requirements, the members could not delete requirements with which they may have disagreed. Instead, they attempted to harmonize some of the discrepancies between the requirements of the ACGME and ABIM to provide users with a single source for curricular design and education. The result perhaps was not ideal to any individual, but represented the best a consensus process can achieve. Anticipating that this document will be periodically revised as medical care evolves, the working group hopes that future revisions of the ACGME program requirements in pulmonary and critical care can be based on the group's final document, rather than vice versa.

These curricular milestones and EPAs will be useful for program directors and clinical faculty, as they provide a checklist of the knowledge, skills, and attitudes that fellowships in pulmonary/critical care must teach. They also provide specific elements upon which trainees can be evaluated, the results of which can inform, support, and document the progress on the reporting milestones. For trainees, the milestones may serve a similar purpose, providing a detailed list of what they should learn and, based on the EPAs, what they should be able to execute upon graduation. Lastly, these EPAs succinctly explain to the public, to legislators, to payers, and to our colleagues who we are and what we do.

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