

# Creating Entrustable Professional Activities to Assess Internal Medicine Residents in Training

## A Mixed-Methods Approach

David R. Taylor, MD, MHPE; Yoon Soo Park, PhD; Christopher A. Smith, MD; Jolanta Karpinski, MD, MEd; William Coke, MD; and Ara Tekian, PhD, MHPE

**Background:** Competency-based medical education has not advanced residency training as much as many observers expected. Some medical educators now advocate reorienting competency-based approaches to focus on a resident's ability to do authentic clinical work.

**Objective:** To develop descriptions of clinical work for which internal medicine residents must gain proficiency to deliver meaningful patient care (for example, "Admit and manage a medical inpatient with a new acute problem").

**Design:** A modified Delphi process involving clinical experts followed by a conference of educational experts.

**Setting:** The Royal College of Physicians and Surgeons of Canada.

**Participants:** In phase 1 of the project, members of the Specialty Committee for Internal Medicine participated in a modified Delphi process to identify activities in internal medicine that represent the scope of the specialty. In phase 2 of the project, 5 experts who were scholars and leaders in competency-based medical education reviewed the results.

**Measurements:** Phase 1 identified important activities, revised descriptions to improve accuracy and avoid overlap, and as-

signed activities to stages of training. Phase 2 compared proposed activity descriptions with published guidelines for their development and application in medical education.

**Results:** The project identified 29 activities that qualify as entrustable professional activities. The project also produced a detailed description of each activity and guidelines for using them to assess residents.

**Limitation:** These activities reflect the practice patterns of the developers and may not fully represent internal medicine practice in Canada.

**Conclusion:** Identification of these activities is expected to facilitate modification of training and assessment programs for medical residents so that programs focus less on isolated skills and more on integrated tasks.

**Primary Funding Source:** Southeastern Ontario Academic Medical Organization Endowed Scholarship and Education Fund and Queen's University Department of Medicine Innovation Fund.

*Ann Intern Med.* 2018;168:724-729. doi:10.7326/M17-1680

Annals.org

For author affiliations, see end of text.

This article was published on Annals.org on 17 April 2018.

The introduction of competency-based medical education is the most substantial change in residency education in generations (1). It arose in response to calls for educational reform, which demanded assurance that graduates moving into unsupervised practice be prepared to deliver the competent care patients deserve (2-4). Competency-based medical education aims to deliver this accountability by seeking rigorous evidence of proficiency in learners rather than simple completion of defined training experiences (1, 5). Ideally, residency training would reliably capture the abilities of residents, identify areas for improvement, direct learning, and predict future performance (6). This goal demands a robust approach to assessing residents that is focused on their ability to perform authentic clinical tasks.

Descriptions of competence have become highly detailed, including those in the Next Accreditation Sys-

tem and Milestones Project of the Accreditation Council for Graduate Medical Education in the United States and the CanMEDS initiative of the Royal College of Physicians and Surgeons of Canada (Royal College). These efforts aimed to produce descriptions of clinical competence that clarify the desired outcomes, support more specific assessment, capture learner progression, and provide stronger assurance of achievement. Despite this attention to educational principles and increased detail, intense debate continues with regard to the effectiveness of these approaches for reliably assessing learners' preparedness for practice (7-13).

In the United States, the internal medicine milestones are organized around the 6 core competencies (patient care, medical knowledge, systems-based practice, practice-based learning and improvement, professionalism, and interpersonal and communication skills) (14). Ideally, implementing the milestones in training programs helps direct feedback and learning for residents and enables richer, more reliable measures of clinical performance (15). Data are now emerging to support aspects of their use in assessment during residency training (15, 16).

Despite these successes, shortcomings have emerged (7, 9). Focusing resident assessment on detailed skills risks failing to capture how they integrate

### See also:

Web-Only  
Supplement

these skills into the primary goal of delivering high-quality clinical care. For example, it is important that residents are able to “establish a therapeutic relationship with patients and caregivers” and “engage in collaborative decision-making” (17). However, it is more important for graduates to be able to integrate these skills into professional work, such as leading complex family meetings (13, 18).

Over the past decade, there has been increasing recognition that the goal of competency-based medical education requires measures that reliably assess residents' performance when doing actual professional work. Entrustable professional activities (EPAs) describe the core work of a discipline that physicians are trusted by society to deliver safely and competently. These are the tasks we entrust residents to perform under supervision until they are deemed competent to perform them without supervision. Examples include admitting and managing a medical inpatient with a new acute problem on a medical floor and leading a family meeting (19). These activities are not intended to replace milestones. Instead, they combine milestones to describe how physicians integrate these skills to perform higher-order clinical work (20).

Entrustable professional activities offer important advantages. Reporting is simplified because there are far fewer EPAs than milestones. They more reliably capture higher-order professional competence because they focus on the integrated whole instead of the parts. Furthermore, they are tangible and intuitive to the clinicians who are responsible for assessing residents. Thus, EPAs have the potential to address many of the limitations that have been noted for milestones.

Competence by Design is the model for competency-based medical education of all residents that is being introduced by the Royal College to reform postgraduate medical education in Canada (21). In this model, residents progress through 4 defined stages of training, in contrast to the traditional model that is defined by postgraduate years (Figure). The stages are named “transition to discipline,” “foundations of discipline,”

“core of discipline,” and “transition to practice.” In the new model, EPAs are defined for each stage. These stage-specific activities describe the professional work that residents must consistently and competently perform to progress to the next stage of training. The model also provides detailed descriptions of the skills required to perform each activity. This model incorporates the benefits of EPAs for assessment and quality assurance, incorporates them into the progressive learning that occurs during residency, and includes existing milestones to help teachers provide specific feedback on skill development. In this article, we describe how EPAs were created for internal medicine residents in Canada.

**METHODS**

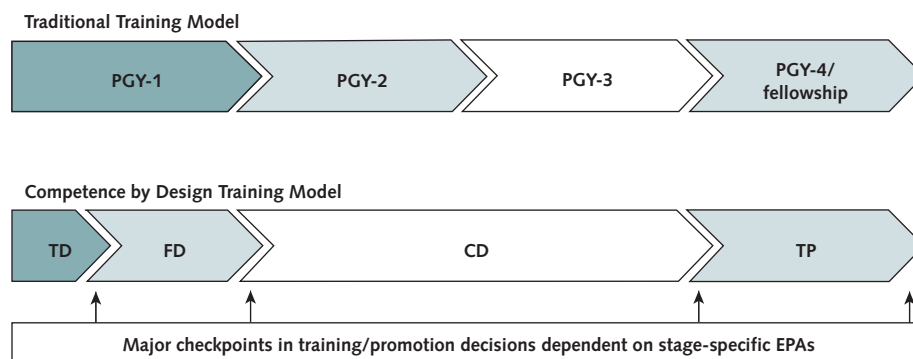
We present a detailed description of the methods, statistical analysis, and results in the **Supplement** (available at [Annals.org](http://Annals.org)). The project was divided into 2 phases (**Supplement Figure 1**, available at [Annals.org](http://Annals.org)). In phase 1, experienced clinicians defined the clinical content and activities that might become EPAs. In phase 2, experts who were scholars and leaders in competency-based medical education revised the activities so they were consistent with published information from other groups working on similar projects.

**Phase 1**

We identified candidate activities from 3 sources: a 2-day workshop held by the Royal College in April 2015 to develop candidate activities, publications in the English-language peer-reviewed literature (19, 22), and the results of a similar process at 1 academic center. After elimination of duplicates, 65 unique activities remained.

We recruited members of the Specialty Committee for Internal Medicine at the Royal College for phase 1 of the project because they offer a representative mix of internal medicine practitioners, including community and academic internists, subspecialist and general in-

**Figure.** Comparison of residency training models.



Traditional training models place promotion points in residency at regular times in the calendar year. Competence by Design uses time but focuses promotion decisions on the demonstration of competence in the EPAs required at each stage, thus allowing for early or late promotion depending on resident performance. CD = core of discipline; EPA = entrustable professional activity; FD = foundations of discipline; PGY = postgraduate year of training; TD = transition to discipline; TP = transition to practice.

ternists, and internists from all of Canada's geographic regions. A modified Delphi survey was used to help participants reach agreement about which candidate activities they preferred (23, 24). We administered each round of the survey anonymously using an online service (FluidSurveys). The survey asked participants to rate the importance of including each activity, the need to revise the activity's description, whether the activity overlapped with another activity, and to which stage of training the activity belonged. The first round was completed during a conference in which participants received training before taking the survey, collaborated on revising the candidate activities, and developed detailed descriptions of each activity after the round was completed. We defined a consensus as 80% or more of participants wanting to include an activity and 20% or fewer wanting to revise it (24). We eliminated an activity when more than 50% wanted to exclude it. When an activity did not meet inclusion or exclusion criteria, a subset of 6 participants revised its description on the basis of survey responses, and the revised activity was included in the next round with a summary of the responses and an explanation of how revisions were made. We concluded this phase of the project when survey responses indicated that further rounds were unlikely to achieve greater agreement.

## Phase 2

In phase 2 of the project, we recruited 5 education experts who had Canadian or international backgrounds and had scholarly experience or were national leaders in competency-based medical education for internal medicine or non-internal medicine undergraduates or postgraduates. We asked phase 2 participants to use standards that were published in the medical education literature to evaluate all of the activities that were not excluded by phase 1 participants (18, 21, 25, 26). We conducted this evaluation using an online survey, which administered a 14-item rubric that we designed specifically for this project (Supplement Figure 2, available at [Annals.org](https://annals.org)) (27). We collated the results and presented them to the group during a conference held in June 2016, where we asked participants in open session to identify which activities met the definition and structure of EPAs (18, 25, 26) and to revise activities that did not meet those standards.

## Final Review

We presented the results of phase 2 to the Specialty Committee for Internal Medicine, where final consensus was reached through group discussion.

## Role of the Funding Source

The funding sources had no role in the design, conduct, or analysis of this study and were not involved in writing this article or the decision to submit it for publication.

**Table 1.** The Entrustable Professional Activities for Internal Medicine Residency in Competence by Design

### Transition to discipline

- Performing histories and physical examinations and documenting and presenting findings across clinical settings for initial and subsequent care
- Identifying and assessing unstable patients, providing initial management, and obtaining help
- Performing the basic procedures of internal medicine

### Foundations of discipline

- Assessing, diagnosing, and providing initial management for patients with common acute medical presentations in acute care settings
- Managing patients admitted to acute care settings with common medical problems and advancing their care plans
- Consulting specialists and other health professionals, synthesizing recommendations, and integrating these into the care plan
- Formulating, communicating, and implementing discharge plans for patients with common medical conditions from acute care settings
- Assessing unstable patients and providing targeted treatment and consulting as needed
- Discussing and establishing patients' goals of care
- Identifying personal learning needs while caring for patients and addressing those needs

### Core of discipline

- Assessing, diagnosing, and managing patients with complex or atypical acute medical presentations
- Assessing and managing patients with complex chronic conditions
- Providing internal medicine consultation to other clinical services
- Assessing, resuscitating, and managing unstable and critically ill patients
- Performing the procedures of internal medicine
- Assessing capacity for medical decision making
- Discussing serious and/or complex aspects of care with patients, families, and caregivers
- Caring for patients who have experienced a patient safety incident (adverse event)
- Caring for patients at the end of life
- Implementing health promotion strategies in patients with or at risk for disease
- Supervising junior learners in the clinical setting

### Transition to practice

- Managing an inpatient medical service
- Managing longitudinal aspects of care in a medical clinic
- Assessing and managing patients with uncertain diagnosis and/or treatment
- Providing consultations to off-site health care providers
- Initiating and facilitating transfers of care through the health care system
- Working with other physicians and health care professionals to develop collaborative patient care plans
- Identifying learning needs in clinical practice and addressing them with a personal learning plan
- Identifying and analyzing system-level safety, quality, or resource stewardship concerns in health care delivery

## RESULTS

### Phase 1

The 65 candidate activities were reduced to 29 during the first round of the Delphi survey and eventually increased to 31 after revisions in the final round resulted in some activities being combined and others being split. The level of consensus improved with each survey round (Supplement Table 2, available at [Annals.org](https://annals.org)). At the end of the third round, we determined that 17 of the 31 activities met inclusion criteria and none met exclusion criteria. Statistical analysis and participant

comments suggested that additional survey rounds would not meaningfully advance consensus.

## Phase 2

The phase 2 participants revised 27 of the 31 activities. Of the 27 activities, 10 required major revisions to the description, but 17 required only minor changes. After these revisions, the phase 2 participants agreed on a list of 29 activities.

## Final Review

The Specialty Committee for Internal Medicine reviewed the work of the phase 2 participants in detail, made 1 minor change in wording for 1 activity, and unanimously agreed to accept the 29 activities selected by the phase 2 participants as EPAs (Table 1).

## DISCUSSION

Over the past 2 decades, some educators have strongly criticized competency-based approaches to medical education for deconstructing the complex and nuanced activity that is clinical practice into collections of “small discrete tasks” (11–13, 28, 29). This approach has largely reduced the privileged role of those who teach residents to completing lengthy checklists and signing logbooks (7, 12, 13, 30). These critics argue that this approach undermines the ultimate goal of our professional training programs, which is to produce graduates who deliver exceptional, all-inclusive patient care (9, 11, 12, 28, 30, 31). They further point out that this approach has made the bureaucratic burden of graduate medical education excessive (7, 13). Although feedback to help residents improve should be highly focused and specific (32), judgments about higher-order clinical competence would be strengthened by a more general approach (33). Highly detailed competency frameworks have given us a better understanding of the skills and abilities that underlie clinical work, and they also support curricular development and design and help direct specific and focused feedback. However, they have not yet adequately supported assessment of professional competence or achieved the quality assurance that competence-based approaches aim to provide. It is becoming increasingly apparent that shifting resident assessment to include higher-level professional activities centered on the work clinicians do in practice has the potential to address these criticisms and move competency-based education closer to its outcomes-based goal.

In this article, we describe the creation of EPAs for internal medicine residency training in Canada (Table 1). We expect that adoption of these activities will address criticisms by refocusing resident assessment on authentic professional work. We also anticipate that including EPAs in resident assessment will drive decisions about promoting residents from each stage of training to the next stage. For example, in earlier stages of training, residents will be assessed primarily on their ability to care for patients with acute illness and common, straightforward presentations in predominantly inpatient settings. In later stages, they will be assessed

on more complex patient care activities that span acute and chronic conditions, inpatient and outpatient settings, and the full range of medical presentations. In the final stage, they will be assessed on their ability to work within the health care system. We hope that this process will move resident assessment from simple lists of subordinate skills to assessment of the range of activities that internists are entrusted with in clinical practice.

Adopting EPAs for resident assessment raises 2 key questions. First, what constitutes successful performance of an EPA in a single encounter? Second, how are assessments integrated at the program level to make overall decisions on competence for a given EPA? The answers recognize that EPAs are more than combined competencies—they are the core professional acts we perform to provide safe and effective clinical care. They are the tasks that patients trust clinicians to perform and teachers in turn trust residents to perform under varying degrees of supervision. When assessment becomes a measure of trust, the key question is, “Do you consider the resident trustworthy to perform the same task for a similar patient with less or no supervision?” Teachers regularly answer these questions when they observe the resident and either loosen or draw in the reins (34). These judgments naturally translate into the level of supervision that residents are afforded. Therefore, we expect teachers to rate resident performance on EPAs using entrustment scales (Table 2).

For example, one of the EPAs is “assessing, resuscitating, and managing unstable and critically ill patients.” Consider a scenario in which a resident leading the resuscitation of a patient with ventricular fibrillation arrest follows algorithms appropriately but does not reliably make good decisions when unexpected circumstances complicate the resuscitation. In addition, she needs to improve her ability to communicate effectively in fast-moving, high-stakes situations like this one. On the basis of these observations, her supervisor might rate this resident as requiring indirect, reactive supervision or even direct supervision despite a successful resuscitation effort that might otherwise have been rated as meeting expectations. In addition to rating the resident globally, the supervisor should also provide clear and specific feedback on how the resident can improve. This feedback is facilitated by using selected milestones mapped to this EPA that are relevant for this learner (Supplement Figure 3, available at [Annals.org](http://Annals.org)). One of the milestones is, “Apply closed loop commu-

**Table 2.** Example of an Entrustment Scale Used to Assess Resident Performance on an Entrustable Professional Activity\*

Rating	Level of Supervision Entrusted to the Resident for the Activity
1	Observe only, without performing the activity
2	Perform the activity with direct, proactive supervision
3	Perform the activity with indirect, reactive supervision
4	Perform the activity without supervision
5	Supervise junior learners performing the activity

\* Adapted from reference 29.

nication in urgent or crisis situations to work effectively with physicians and other colleagues in the health care professions.”

Entrustable professional activities do not reference specific medical conditions or clinical presentations. This may seem to be a weakness, but including both case-specific details (such as a specific diagnosis) and general types of clinical encounters (such as admission to the hospital) would produce a list of activities so long that it would be impractical. This limitation highlights the dilemma between the need for content-specific information when assessing resident performance and the need for an assessment system that does not require lengthy and time-consuming checklists. The assessment system we propose overcomes this problem by collecting relevant case-specific details, such as patient presentation and diagnosis, clinical setting, and case complexity, during each assessment. For example, a supervisor would begin a resident's assessment by documenting a few key features of the presentation (unstable cardiac rhythm) and the focus of care (resuscitation). The supervisor would then move on to assess the resident's performance on the relevant EPA.

Programs making decisions about higher-order competence must attest that a resident is capable of a particular task across a breadth of presentations and settings. To accomplish this, programs track residents to ensure they are consistently achieving satisfactory ratings across a representative case mix, different assessors, and relevant clinical settings. Assurance of competence depends on a resident demonstrating a pattern of trustworthy care across the range of EPAs and across various clinical situations.

This project has limitations. One is that the EPAs we created likely reflect the practice patterns of the people involved in their development. Despite the diversity of the developers who participated in this project, not all types of internal medicine practice in Canada were fully captured; for example, our EPAs seem to emphasize inpatient care over ambulatory care. This will need to be addressed in future revisions. Another limitation is the move away from detailed lists of behaviors toward entrustment ratings, which requires all assessors to share a common understanding of what is entrustable. The reliability of this approach has yet to be tested.

In conclusion, adoption of EPAs has the potential to advance the goal of competency-based medical education by refocusing assessment in residency on authentic professional work. The EPAs presented here were developed using rigorous methods and achieved broad consensus among clinicians and educators, and we expect that they will form the backbone for workplace-based assessment in internal medicine training in Canada.

From Queen's University School of Medicine, Kingston, Ontario, Canada (D.R.T., C.A.S.); University of Illinois at Chicago, Chicago, Illinois (Y.S.P., A.T.); University of Ottawa and Royal College of Physicians and Surgeons of Canada, Ottawa, Ontario, Canada (J.K.); and Royal College of Physicians and Surgeons of Canada, Ottawa, Ontario, Canada (W.C.).

**Acknowledgment:** The authors acknowledge the participation and contributions of the members of the Specialty Committee for Internal Medicine and thank Drs. Mark Roberts, Marcy Mintz, Heather MacDonald-Blumer, and Thomas Maniatis for revising EPAs during the Delphi process.

**Grant Support:** This research was supported by grants from the Southeastern Ontario Academic Medical Organization Endowed Scholarship and Education Fund and the Queen's University Department of Medicine Innovation Fund.

**Disclosures:** Authors have disclosed no conflicts of interest. Forms can be viewed at [www.acponline.org/authors/icmjje/ConflictOfInterestForms.do?msNum=M17-1680](http://www.acponline.org/authors/icmjje/ConflictOfInterestForms.do?msNum=M17-1680).

**Reproducible Research Statement:** *Study protocol and statistical code:* Not available. *Data set:* Available from Dr. Taylor (e-mail, [taylor@queensu.ca](mailto:taylor@queensu.ca)).

**Requests for Single Reprints:** David Taylor, MD, MHPE, Department of Medicine, Queen's University, 94 Stuart Street, Kingston, Ontario K7L 3N6, Canada; e-mail, [taylor@queensu.ca](mailto:taylor@queensu.ca).

Current author addresses and author contributions are available at [Annals.org](http://Annals.org).

## References

1. Frank JR, Snell LS, Cate OT, Holmboe ES, Carraccio C, Swing SR, et al. Competency-based medical education: theory to practice. *Med Teach*. 2010;32:638-45. [PMID: 20662574] doi:10.3109/0142159X.2010.501190
2. Sabatino F. Training of health care professionals must change, says Pew Commission director. *Hospitals*. 1991;65:50-2. [PMID: 1993532]
3. World Health Organization. *Changing Medical Education: An Agenda for Action*. Geneva: World Health Organization; 1991.
4. Neufeld VR, Maudsley RF, Pickering RJ, Turnbull JM, Weston WW, Brown MG, et al. Educating future physicians for Ontario. *Acad Med*. 1998;73:1133-48. [PMID: 9834695]
5. Aggarwal R, Darzi A. Technical-skills training in the 21st century [Editorial]. *N Engl J Med*. 2006;355:2695-6. [PMID: 17182997]
6. Holmboe ES, Sherbino J, Long DM, Swing SR, Frank JR. The role of assessment in competency-based medical education. *Med Teach*. 2010;32:676-82. [PMID: 20662580] doi:10.3109/0142159X.2010.500704
7. Witteles RM, Verghese A. Accreditation Council for Graduate Medical Education (ACGME) milestones—time for a revolt? *JAMA Intern Med*. 2016;176:1599-1600. [PMID: 27668812] doi:10.1001/jamainternmed.2016.5552
8. Holmboe ES, Call S, Ficalora RD. Milestones and competency-based medical education in internal medicine. *JAMA Intern Med*. 2016;176:1601-2. [PMID: 27668953] doi:10.1001/jamainternmed.2016.5556
9. Stillman MD. Training for the 21st century? *Ann Intern Med*. 2014;160:800-1. [PMID: 24711077] doi:10.7326/M13-2358
10. Kothari NK. Training for the 21st century? [Letter]. *Ann Intern Med*. 2014;161:760. [PMID: 25402519] doi:10.7326/L14-5023
11. Norman G. Editorial—outcomes, objectives, and the seductive appeal of simple solutions [Editorial]. *Adv Health Sci Educ Theory Pract*. 2006;11:217-20. [PMID: 16832705]
12. Huddle TS, Heudebert GR. Taking apart the art: the risk of atomizing clinical competence. *Acad Med*. 2007;82:536-41. [PMID: 17525535]

13. Malone K, Supri S. A critical time for medical education: the perils of competence-based reform of the curriculum. *Adv Health Sci Educ Theory Pract.* 2012;17:241-6. [PMID: 20838880] doi:10.1007/s10459-010-9247-2
14. Caverzagie KJ, Iobst WF, Aagaard EM, Hood S, Chick DA, Kane GC, et al. The internal medicine reporting milestones and the next accreditation system. *Ann Intern Med.* 2013;158:557-9. [PMID: 23358671] doi:10.7326/0003-4819-158-7-201304020-00593
15. Li ST. The promise of milestones: are they living up to our expectations? *J Grad Med Educ.* 2017;9:54-7. [PMID: 28261394] doi:10.4300/JGME-D-16-00694.1
16. Hauer KE, Clauser J, Lipner RS, Holmboe ES, Caverzagie K, Hamstra SJ, et al. The internal medicine reporting milestones: cross-sectional description of initial implementation in U.S. residency programs. *Ann Intern Med.* 2016;165:356-62. [PMID: 27159244] doi:10.7326/M15-2411
17. Accreditation Council for Graduate Medical Education; American Board of Internal Medicine. The Internal Medicine Milestone Project. July 2015. Accessed at [www.acgme.org/Portals/0/PDFs/Milestones/InternalMedicineMilestones.pdf](http://www.acgme.org/Portals/0/PDFs/Milestones/InternalMedicineMilestones.pdf) on 19 February 2018.
18. ten Cate O, Scheele F. Competency-based postgraduate training: can we bridge the gap between theory and clinical practice? *Acad Med.* 2007;82:542-7. [PMID: 17525536]
19. Hauer KE, Kohlwes J, Cornett P, Hollander H, Ten Cate O, Ranji SR, et al. Identifying entrustable professional activities in internal medicine training. *J Grad Med Educ.* 2013;5:54-9. [PMID: 24404227] doi:10.4300/JGME-D-12-00060.1
20. Choe JH, Knight CL, Stiling R, Corning K, Lock K, Steinberg KP. Shortening the miles to the milestones: connecting EPA-based evaluations to ACGME milestone reports for internal medicine residency programs. *Acad Med.* 2016;91:943-50. [PMID: 27028030] doi:10.1097/ACM.0000000000001161
21. Royal College of Physicians and Surgeons of Canada. Competence by Design. 2014. Accessed at [www.royalcollege.ca/rcsite/cbd/competence-by-design-cbd-e](http://www.royalcollege.ca/rcsite/cbd/competence-by-design-cbd-e) on 9 October 2015.
22. Caverzagie KJ, Cooney TG, Hemmer PA, Berkowitz L. The development of entrustable professional activities for internal medicine residency training: a report from the Education Redesign Committee of the Alliance for Academic Internal Medicine. *Acad Med.* 2015;90:479-84. [PMID: 25406600] doi:10.1097/ACM.0000000000000564
23. Keeney S, Hasson F, McKenna H. *The Delphi Technique in Nursing and Health Research.* 1st ed. Oxford, UK: Wiley-Blackwell; 2011.
24. Waggoner J, Carline JD, Durning SJ. Is there a consensus on consensus methodology? Descriptions and recommendations for future consensus research. *Acad Med.* 2016;91:663-8. [PMID: 26796090] doi:10.1097/ACM.0000000000001092
25. Ten Cate O, Chen HC, Hoff RG, Peters H, Bok H, van der Schaaf M. Curriculum development for the workplace using entrustable professional activities (EPAs): AMEE guide no. 99. *Med Teach.* 2015;37:983-1002. [PMID: 26172347] doi:10.3109/0142159X.2015.1060308
26. ten Cate O. Entrustability of professional activities and competency-based training. *Med Educ.* 2005;39:1176-7. [PMID: 16313574]
27. Taylor DR, Park YS, Egan R, Chan MK, Karpinski J, Touchie C, et al. EQual, a novel rubric to evaluate entrustable professional activities for quality and structure. *Acad Med.* 2017;92:S110-7. [PMID: 29065031] doi:10.1097/ACM.0000000000001908
28. Leung WC. Competency based medical training: review. *BMJ.* 2002;325:693-6. [PMID: 12351364]
29. Ten Cate O, Hoff RG. From case-based to entrustment-based discussions. *Clin Teach.* 2017;14:385-9. [PMID: 28971576] doi:10.1111/tct.12710
30. Glass JM. Competency based training is a framework for incompetence. *BMJ.* 2014;348:g2909. [PMID: 24769452] doi:10.1136/bmj.g2909
31. Talbot M. Monkey see, monkey do: a critique of the competency model in graduate medical education. *Med Educ.* 2004;38:587-92. [PMID: 15189254]
32. Shute VJ. Focus on formative feedback. *Rev Educ Res.* 2008;78:153-89.
33. Park YS, Zar FA, Norcini JJ, Tekian A. Competency evaluations in the next accreditation system: contributing to guidelines and implications. *Teach Learn Med.* 2016;28:135-45. [PMID: 26849397] doi:10.1080/10401334.2016.1146607
34. Kennedy TJ, Lingard L, Baker GR, Kitchen L, Regehr G. Clinical oversight: conceptualizing the relationship between supervision and safety. *J Gen Intern Med.* 2007;22:1080-5. [PMID: 17557190]

**Current Author Addresses:** Drs. Taylor and Smith: Department of Medicine, Queen's University, 94 Stuart Street, Kingston, Ontario K7L 3N6, Canada.

Drs. Park and Tekian: College of Medicine, Department of Medical Education, University of Illinois at Chicago, 808 South Wood Street, Chicago, IL 60612.

Dr. Karpinski: Royal College of Physicians and Surgeons of Canada, 774 Echo Drive, Ottawa, Ontario K1S 5N8, Canada.

Dr. Coke: Trillium Health Partners, 100 Queensway West, Mississauga, Ontario L5B 1B8, Canada.

**Author Contributions:** Conception and design: D.R. Taylor, Y.S. Park, A. Tekian.

Analysis and interpretation of the data: D.R. Taylor, Y.S. Park, A. Tekian.

Drafting of the article: D.R. Taylor, Y.S. Park.

Critical revision of the article for important intellectual content: D.R. Taylor, Y.S. Park, C.A. Smith, J. Karpinski, A. Tekian.

Final approval of the article: D.R. Taylor, Y.S. Park, C.A. Smith, J. Karpinski, W. Coke, A. Tekian.

Provision of study materials or patients: D.R. Taylor.

Statistical expertise: D.R. Taylor, Y.S. Park.

Obtaining of funding: D.R. Taylor.

Administrative, technical, or logistic support: D.R. Taylor, J. Karpinski, W. Coke.

Collection and assembly of data: D.R. Taylor, Y.S. Park, W. Coke.