

# Competency-Based Education, Entrustable Professional Activities, and the Power of Language

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**E**diting a journal is all about language. Authors' thoughts and experiences—their message—must be translated into text, revised, and edited to convey to the readers the concepts intended by the authors. Some concepts are complex and need powerful language to be expressed.

A competency-based education movement is dominating graduate medical education reform around the world in the 21st century. This movement can be viewed as a struggle to formulate the values of the medical profession in words that enable a new perspective on curricula, training, and assessment. Without new language, this innovation would not have been possible. The 7 roles of the CanMEDS competency framework (medical expert, communicator, collaborator, health advocate, manager, scholar, and professional), now prevalent around the world, represent powerful language. By comparison, the Accreditation Council for Graduate Medical Education (ACGME) core competencies seem linguistically less powerful but also serve to structure new perspectives about residency training.

The word *competency* has caught on quickly and is now being used ubiquitously. Do all of us, however, give it the same meaning? If asked how the competencies are different from knowledge-skills-attitudes (KSA), many consider the competencies to be “more integrated” than the KSAs are.<sup>1,2</sup> At the same time, ACGME has called the terms *medical knowledge, interpersonal and communication skills, and professionalism* each “core competencies.” Lurie<sup>3</sup> has recently elaborated on how the blurred language around competencies has not contributed to improved assessment practices in medical education and suggests that the idea of “assessment of competencies” should be abandoned. Others disagree and call for enhanced professional development of faculty in this area.<sup>4</sup> The difficulty with the competencies is that the language used to date has been inadequate in facilitating the translation of competency domains into training practices and the monitoring and assessment of trainees. The need to capture these important qualities of physicians in language has led to

detailed descriptions that can be too long or too theoretical to be practical.

As far back as the 1950s, Miller<sup>5</sup> argued that human working memory is limited and cannot contain more than  $7 (\pm 2)$  independent elements at a time. To use an elaborate framework of competencies, subcompetencies, and milestones while observing trainees may cause cognitive overload. If clinical educators cannot comprehend the competency concept and all of its new language, they may not be able to effectively assess trainee competencies.

Here, is where the *entrustable professional activity* (EPA) concept emerges. The EPAs were designed to link competencies to clinical practice and make them feasible.<sup>6</sup> The EPAs—tasks or responsibilities that can be entrusted to a trainee once sufficient, specific competence is reached to allow for unsupervised execution—are now being defined in various health care domains.<sup>7-10</sup> Because EPAs represent what physicians do in daily practice, the new language can be briefer and less complicated.

This issue of the *Journal* contains 6 articles devoted to EPAs. In addition to this editorial, they include a perspective on the entrustment process,<sup>11</sup> an exploration of the attributes of competence that enable entrustment decisions,<sup>12</sup> and a succinct description in one of this issue’s Rip Outs.<sup>13</sup> Hauer et al<sup>14</sup> and Shaughnessy et al<sup>15</sup> applied the EPA concept to internal medicine and family medicine and identified 30 and 76 EPAs, respectively. Although there is no single correct mode of description and application of EPAs, as long as it serves the purpose of identifying the “professional activity” to be mastered and certified, different views of the nature of EPAs may be applicable.

Although the description of EPAs by Shaughnessy et al<sup>15</sup> pertains to the management of specific medical conditions, they do not specify *what is done* other than “management.” By staying somewhat closer to the intended definition of EPA,<sup>6</sup> Hauer et al<sup>14</sup> have focused on a more limited number of comprehensive, critical tasks that should apply over multiple patient conditions.<sup>14</sup> The more limited number of EPAs may serve better to formalize entrustment decisions. When put in practice, by applying some of the “nuts and bolts” of this issue’s “Rip Out,”<sup>13</sup> educators may discern which approach is most useful in their own setting.

One of the most elaborate applications of EPAs to date is provided by the Royal Australian and New Zealand

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College of Psychiatrists (RANZCP).<sup>9,16</sup> The RANZCP has included both general activity-focused EPAs and specific medical condition EPAs in psychiatry training, in a staged curriculum description: general activities, such as “producing discharge summaries and organizing appropriate transfer of care,” “communicating with a family about a young adult’s major mental illness,” “violence risk assessment and management in forensic psychiatry,” and “interviewing Māori,” and medical conditions, such as “care for a patient with delirium,” “initiating an antipsychotic medication in a patient with schizophrenia,” and “[management of] comorbid mental health and substance use problems.”

A different aspect of working with EPAs is provided by Cianciolo and Kegg,<sup>11</sup> and by Wijnen-Meijer et al<sup>12</sup> in this issue. Both articles focus on understanding how clinical supervisors come to decisions of entrustment. This, too, is a linguistic exercise that makes clear that mastering EPAs to the level of entrustment does not merely involve observed skill and knowledge. Wijnen-Meijer et al<sup>12</sup> show how discernment of one’s own limitations, taking responsibility, and dealing with mistakes are among the qualities educators take into account when making entrustment decisions. Again, different authors have sought to indentify these qualities with different wording,<sup>17,18</sup> but much of the underlying concepts seem similar. Cianciolo and Kegg<sup>11</sup> take this a step further by suggesting a tentative, theoretical model of how entrustment decisions may come about, by drawing on literature outside of medical education.<sup>11</sup>

Language used to specify and evaluate EPAs will vary because different groups may interpret the practical application of competence differently. Ultimately, what is most important is that the formulations enable supervisors to certify that trainees can execute an EPA at supervision level 4 (distant, reactive supervision only).<sup>13</sup> Formalized entrustment decisions (a nicely elaborated example is provided in the RANZCP EPA Handbook<sup>16</sup>) may lead to the rethinking of EPA formulations.

As publications emerge with listings of EPAs, language also serves the purpose of providing transparency across settings, institutions, and countries. It would be wonderful if trainees being certified at supervision level 4 could be acknowledged as such outside their own local setting.<sup>13</sup> Clearly, this requires a common language within medical disciplines and perhaps even across disciplines. How will the family medicine resident who received a statement of awarded responsibility for “managing the patient with an alcohol addiction”<sup>15</sup> compare with the Australian psychiatry resident, entrusted with unsupervised execution of the EPA “[management of] substance abuse patients”<sup>16</sup>? How will the EPA “develop and implement a safe discharge plan for a patient from the acute care setting” in internal medicine<sup>14</sup> compare with the RANZCP EPA “producing

discharge summaries and organizing appropriate transfer of care”<sup>16</sup>?

If competencies, milestones, and EPAs are to become the language in postgraduate curricula, it will be of utmost importance to use common definitions and have a common understanding of what the terminology means. Only that transparency will enable the field to transcend local interpretations and stimulate interinstitutional, national, and international collaboration and exchange. The mini-theme within this issue of the *Journal* can then set the stage for future research.

## References

- 1 van Merriënboer JJG, van der Klink MR, Hendriks M, eds. *Competencies: from Complications Toward Agreement* (in Dutch). Utrecht, the Netherlands: Educational Council of the Netherlands; 2002.
- 2 Albanese MA, Mejicano G, Mullan P, Kokotailo P, Gruppen L. Defining characteristics of educational competencies. *Medical Educ.* 2008;42(3):248–255.
- 3 Lurie SJ. History and practice of competency-based assessment. *Medical Educ.* 2012;46(1):49–57.
- 4 Holmboe ES, Ward DS, Reznick RK, Katsufakis PJ, Leslie KM, Patel VL, et al. Faculty development in assessment: the missing link in competency-based medical education. *Acad Med.* 2011;86(4):460–467.
- 5 Miller GA. The magical number seven plus or minus two: some limits on our capacity for processing information. *Psychol Rev.* 1956;63(2):81–97.
- 6 ten Cate O. Entrustability of professional activities and competency-based training. *Med Educ.* 2005;39(12):1176–1177.
- 7 Mulder H, ten Cate O, Daalder R, Berkvens J. Building a competency-based workplace curriculum around entrustable professional activities: the case of physician assistant training. *Med Teach.* 2010;32(10):e453–e459. doi: 10.3109/0142159X.2010.513719.
- 8 Jones MD, Rosenberg A, Gilhooly JT, Carraccio CL. Perspective: competencies, outcomes, and controversy—linking professional activities to competencies to improve resident education and practice. *Acad Med.* 2011;86(2):161–165.
- 9 Boyce P, Spratt C, Davies M, McEvoy P. Using entrustable professional activities to guide curriculum development in psychiatry training. *BMC Med Educ.* 2011;11:96. doi:10.1186/1472-6920-11-96.
- 10 Chang A, Bowen JL, Buranosky RA, Frankel RM, Ghosh N, Rosenblum MJ, et al. Transforming primary care training-patient-centered medical home entrustable professional activities for internal medicine residents (published online ahead of print September 21, 2012). *J Gen Intern Med.* doi:10.1007/s11606-012-2193-3.
- 11 Cianciolo AT, Kegg JA. Behavioral specification of the entrustment process. *J Grad Med Educ.* 2013;5(1):10–12.
- 12 Wijnen-Meijer M, van der Schaaf M, Nillesen K, Harendza S, ten Cate O. Essential facets of competence that enable trust in graduates: a Delphi study among physician educators in the Netherlands. *J Grad Med Educ.* 2013;5(1):46–53.
- 13 ten Cate O. The nuts and bolts of entrustable professional activities. *J Grad Med Educ.* 2013;5(1):157–158.
- 14 Hauer KE, Kohlwes J, Cornett P, Hollander H, ten Cate O, Ranji S, et al. Identifying entrustable professional activities in internal medicine training. *J Grad Med Educ.* 2013;5(1):54–59.
- 15 Shaughnessy AF, Sparks J, Cohen-oshner M, Goodell KH, Sawin GL, Gravel J. Entrustable professional activities in family medicine. *J Grad Med Educ.* 2013;5(1):112–118.
- 16 [RANZCP] Royal Australian and New Zealand College of Psychiatrists. 2012 *Fellowship Program: EPA Handbook*. Melbourne, VIC, Australia: RANZCP; 2012:1–61. <http://www.ranzcp.org/Files/ranzcp-attachments/PreFellowship/2012-Fellowship-Program/EPA-Handbook.aspx>. Published online May 21, 2012. Additional EPAs approved August 2, 2012, and November 21, 2012. Accessed December 28 2012.
- 17 Kennedy TJ, Regehr G, Baker GR, Lingard L. Point-of-care assessment of medical trainee competence for independent clinical work. *Acad Med.* 2008;83(suppl):S89–S92. doi:10.1097/ACM.0b013e31813c8b7.
- 18 Sterkenburg A, Barach P, Kalkman C, Gielen M, ten Cate O. When do supervising physicians decide to entrust residents with unsupervised tasks? *Acad Med.* 2010;85(9):1408–1417.