VIEWPOINT

The Challenge of the Accreditation Council for Pharmacy Education's Standard Four: Identifying, Teaching, Measuring

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The Accreditation Council for Pharmacy Education approved new standards for the doctor of pharmacy degree (Standards 2016),¹ the educational outcomes in which are based on the American Association of Colleges of Pharmacy's Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes 2013.² The center used a broad approach in seeking input on defining the outcomes, and the majority of the feedback suggested inclusion of "an affective domain that would address personal and professional skills, attitudes, and attributes required for the delivery of patient-centered care." This affective domain has been further delineated as self-awareness, leadership, innovation and entrepreneurship, and professionalism.²

The key element of professionalism is that "the graduate is able to exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society."¹ Professionalism is the domain most familiar to pharmacy education. It was systematically examined in 2003,³ and since that time, numerous papers have been published on professionalism that further describe it, demonstrate teaching professionalism, and discuss how to measure it. Altruism, accountability, excellence, duty, honor, and integrity are commonly accepted as traits of a professional.³ These characteristics can be behaviorally anchored, observed, and evaluated by faculty members and preceptors both in the classroom and in practice experiences. Instruments have been developed to measure professionalism,⁴ and it has been assessed across the curriculum.⁵ Teaching professionalism can occur through direct instruction. Pharmacy education demonstrates this in laboratory courses and through the use of the humanities,^{6,7} but teaching professionalism most commonly occurs through mentoring and providing role models.⁸ Pharmacy education has a broad body of literature to draw from in planning to meet the educational outcome of professionalism.

Leadership is also familiar to pharmacy education. According to Standards 2016, the key element of leadership is that "the graduate is able to demonstrate responsibility

for creating and achieving shared goals, regardless of position."¹ There have been numerous calls to develop pharmacy leaders over the past several decades, and pharmacy education has responded. Leadership skills and competencies can be defined⁹ and taught. Various courses and cocurricular activities have been developed and described in the literature.¹⁰⁻¹² Objective and subjective measures have been used to assess change in students' knowledge about leadership skills, satisfaction with the course or activity, and increased confidence.¹⁰⁻¹² Standards 2016, however, calls on pharmacy education to provide evidence that graduates can "demonstrate responsibility for creating and achieving shared goals, regardless of position."¹ This level of competency may be difficult to achieve within a 3-4 year curriculum and equally difficult to measure.

Self-awareness is a relatively newer concept to pharmacy education. The educational outcome in Standard 2016 for self-awareness call for graduates who are "able to examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth."¹ Self-awareness is embedded with self-assessment and reflection, both critical elements in the continuous professional development model that ACPE has adopted. This model is built on the premise that all learning must begin with a reflection or self-assessment of learning needs, followed by a plan for learning. Then comes the learning experience, an evaluation of the learning, and finally its application.¹³ This concept has been extensively examined in other health professions, in particular, medical education. Pharmacy education is beginning to explore and understand the dimensions of self-assessment, its value in critical thinking, and how to improve these skills through reflective writing.¹⁴⁻¹⁷ Rubrics have been developed and used to structure and evaluate self-awareness through reflective writing.¹⁸ Colleges and schools of pharmacy have been using portfolios as a framework for students to reflect on their learning and to collect evidence that documents their learning.¹⁹ This practice provides a sound foundation

for achieving the educational outcomes required by this standard.

Finally, for the Standards 2016 domain of innovation and entrepreneurship, the graduate should be able “to engage in innovative activities by using creating thinking to envision better ways of accomplishing professional goals.”¹ Embedded in this domain are two elements: risk taking and creativity. Anecdotal, pharmacy and pharmacy education are not known for either of these characteristics. Some work has been accomplished in measuring students’ proclivity toward entrepreneurship, and some discussion on teaching students these skills has occurred.^{20,21} However, more work is needed in this area to help pharmacy education deliver on this educational outcome and determine levels of competency. We need to look toward other professions to help us determine how to further define this domain, teach it, and measure it.

The guidance document for ACPE Standards 2016 goes on to say “several groups within the academy are working to develop comprehensive descriptions of these important concepts and more standardized approaches to assessment. Colleges and schools are encouraged to share mechanisms they develop to assess Standard 4 elements through scholarship publications and presentations.”²² This statement is a challenge to all of us to think critically about these four domains, use existing literature, develop curricula, and develop cocurricular activities to help students achieve these critical educational outcomes for their success and ultimately for better patient outcomes.

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