Commentary: The Accreditation and Certification System After Next

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In the United States, medical and surgical specialties are determined by 2 important self-regulatory tools: accreditation of training programs by the Accreditation Council for Graduate Medical Education (ACGME) and board certification of individual specialty physicians by a board of the American Board of Medical Specialties (ABMS). These programs evolved during the past 75 years to become arguably the most respected evidence in the world of professional qualifications and competence in the medical and surgical specialties. This commentary looks ahead to the new accreditation and certification system after next.

Beginnings

More than 75 years ago, physician specialists began setting standards for competence in specialty practices by establishing medical specialty board certification. The standards for certification included successful completion of a graduate medical education program, recommendations of physician mentors, and passing a written examination and, in some cases, an oral examination conducted by members of the specialty board. In 1982, the medical specialty community determined that it was important to have an independent organization to accredit graduate medical education programs. The ACGME was established, with a Residency Review Committee (RRC) for each of the 24 ABMS member boards. The RRCs wrote and applied standards for the accreditation of physician training programs.

Collectively, ACGME program accreditation and ABMS board certification help ensure public accountability and self-regulation for the benefit of individual patients and the public. Completion of an ACGME-accredited residency program is a requirement for most board certifications, and many RRCs use board pass rates to measure the program's educational effectiveness.

Accreditation of physician education programs and certification of physicians have facilitated the evolution from apprenticeship to standardized training with measureable outcomes of graduates' competence. I propose that these processes will evolve into the most important professional self-regulating tools demonstrating public accountability. The accreditation and certification programs after next have the potential to standardize training and certification of competence into formal and reliable self-modulating, continuously improving, service learning that can be replicated across the United States and, potentially, across the world.

From Apprenticeships to Standardized Graduate Medical Education Programs

The apprenticeship model of graduate medical education (GME) dominated in the United States until the past 30 years, and it remains the dominant form of education throughout the world. In an apprenticeship, a mentor takes on a protégé, and by working together the learner acquires the master's tacit knowledge. All new medical specialties begin this way, with little standardization and accountability for the quality of the training. As the number of apprenticeships in the particular practice increases, a small group of learners and mentors codify their knowledge and methods. As more join the faculty and a recurring schedule of learning experiences is added, the apprenticeships evolve into residency or fellowship programs. When a new field is ready to be recognized by the profession as a new specialty, its founders apply to the ACGME to establish standards and accredit the training, and they apply to an ABMS member board to establish a specialty or subspecialty certification. These 2 processes assure objective, external peer regulation of the training and public accountability for the competence of certified practitioners in the new specialty.

By the end of the last century, US program accreditation and specialist certification had advanced from apprenticeships to standardized training programs. ACGME accreditation uses site visits to verify that programs deliver prescribed conferences and teaching rounds and a didactic course of knowledge topics, as well as to count the number and types of patients that residents should diagnose and treat. Accreditation standards established limits for service so that residents were not used to meet institutional service needs without receiving an education, and they set limits on duty hours to assure rest and sleep necessary for safe practice.

The Next Programs: Competency-Based Education and Certification

In 1999, signaling a move from accreditation based on program structure to one based on the measured

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educational outcomes, the ACGME defined 6 general competencies for resident education. The AMBS adopted these same competencies as a construct for certification evaluation. The first 4—medical knowledge, patient care, professionalism, and communications and interpersonal skills—have been recognized for years as essential aspects of medical competence. Two new competencies—systems-based practice and practice-based learning and improvement—acknowledged that patient care emerges through the cooperation and organization of individuals who apply agreed-upon technologies and methods in a cycle of hand-offs from one responsible party to another. These new competencies extended the educational objective for individual learning and self-improvement to include competence in influencing and changing the delivery system.

Measuring the general competencies in individual graduates is implicit in outcomes-based education. Acquiring and updating medical knowledge can be measured through standardized examinations and ongoing evidence of participation in continuing education. Measures of professionalism, communications and interpersonal skills, and clinical skills rely on direct observation and rating by an experienced observer during interactions with real patients or during simulations, such as Objective Standardized Clinical Examinations. Measures of systems-based practice include measures of process and outcomes in a particular context of care, of teamwork and collaboration, and of coordination of care across divisions within the system. Evaluation of practice-based learning and improvement adopts methods from the artistic fields, such as a portfolio of improvement activities.

The ACGME Outcome Project drove the academic medical profession to seek accountability for educational outcomes: graduates who are competent to deliver high-quality care in diverse systems, and who will continue to learn and improve their care systems throughout a lifetime of practice. For its part in advancing professional accountability, the ABMS changed its certification to incorporate measures for how well individual physicians practice the competency habits. To assure ongoing accountability for demonstrating competence, ABMS boards limited the duration of certification and developed Maintenance of Certification (MOC) for demonstrating continuing learning, improvement in practice performance, and honing competence over a lifetime of practice.

As the accreditation system changes to outcome-based standards, some structural elements must certainly remain. Eliminating requirements designed to protect residents from overwork or undertraining seems unlikely until reliable outcome measures for working conditions and resident satisfaction can be established. Educational requirements for written curricula, conferences, and evaluation processes will become more relaxed. We have learned that rigid standards often impede creativity in taking advantage of a unique context for professional development. As measures of outcome excellence become available, programs will be freed from microregulations. Medical specialty boards are actively developing measures of competence beyond the written examination. They are redesigning the certification machinery to measure and recognize the competencies of specialist physicians at the end of GME through certification and over a lifetime through MOC.

The Accreditation and Certification Systems After Next

Arguably, the most important standard for accreditation of resident education is evidence of high-quality patient care provided by the institution sponsoring the program. It is not credible that quality clinical education can occur in an environment that produces substandard medical care. It is equally unbelievable that an institution that lacks habitual examination of its outcomes and fails to work diligently to improve them can reliably train medical specialists.

Focusing heavily on educational requirements without also demanding high-quality medical care diminishes the quality of the clinical education. When teaching hospitals and clinics are regarded primarily as classrooms or learning laboratories, we become distracted from improving the systems for patient-centered, timely, and safe care. In these systems, unsatisfactory patient outcomes may be blamed on poor resident performance, and satisfactory outcomes attributed to good resident performance. This interpretation misses the central premise that outcomes of systems-based care result from the collective and integrated work of many people, processes, methods, and technologies.

The second problem arising from accreditation based mainly on educational outcomes is breeding the concept that residency programs are like graduate school, differing only in that they involve practical application of knowledge and skills. From this perspective, patient care plays second fiddle to the educational needs of residents. Residents regard their clinical rotations as matriculation into specific courses of study. More appropriately, the resident assignment on a rotation should be a work assignment to participate as a care provider in a stable, integrated microsystem of patient care. Learning should occur through the clinical microsystem's team, applying its own practice-based learning and improvement. Without such a focus on patient-centered care and practice-based learning on how to improve it, residents may label difficulties with follow-up, continuity, and integration of care as ''systems problems.'' These systems problems may be seen as being beyond the scope of education or responsibility of the physician to influence them. When problems occur, residents and faculty adopt a hands-off attitude regarding the microsystem and welcome the perspective that rotations are time-limited, unrelated, temporary interactions with patients and teams of caregivers, and if uninteresting or difficult, they will end with the beginning of the next rotation.

The third problem imposed by focusing too heavily on the educational aspects of residency is that patients and

their clinical information risk becoming audiovisual aids for teaching facts, concepts, and procedures to residents and students. This problem manifests in bedside rounds when a patient is used as an object for demonstrating physical findings or for the ''patient's story'' of an interesting illness. Although the intention of these rounds is respectful and humane, the focus on learning physical examination and communication skills fails to advance the process of care for the patient. The conflict between service and education may cause ''good patient care'' to become an idealized concept, rather than real-life, full participation in high-performing microsystems designed to achieve the best possible patient outcomes.

Evolution to "Programs After Next" Calls for New Measures of Competence

As accreditation evolves from a focus on educational structures and processes to one that incorporates educational and clinical outcomes, measures that provide formative and summative evaluations, such as board pass rates, may be used to assess the quality of a program. There are other important measures we might consider adding to an outcomes-based accreditation dossier. They include faculty peer ratings for clinical and educational performance. The American Board of Internal Medicine has demonstrated that peer ratings are a robust, reliable, and valid measure of the competence of physicians. Including peer measures would be internal to the institution and residency program, but it could also function as an external measure when administered by a dispassionate third party. Faculty satisfaction with educational and patient care experiences could serve as a measure of the effectiveness of the reflective learning practiced in the program. Patients rating their experience with their doctors' professionalism and interpersonal competence and the competence of faculty, residents, and staff is an important measure of the quality of care and the quality of the educational environment. In the future, we may base accreditation decisions on outcomes measures of specific disease treatment and conditions managed by the staff of the institution seeking accreditation for its programs. Another structural and process measure being developed will evaluate how teamwork and functional teams are used in teaching institutions' care systems. Residency education can no longer be thought of as education of the physician only. To realize competence in the 6 domains and the Institute of Medicine aims for quality care, we must tear down the silos of professional education and look at the process of care from an integrated approach.

Putting It All Together

What would the incorporation of health care quality measures, physician performance, and microsystem performance into an accreditation and certification decision look like? Both processes would be based on reports of quality measures for the care delivered, measures of integration, teamwork, and the institutionalized habit of continuous learning from practice to improve the system of care. Measures for accreditation would include the reports of patients, residents, and graduates and, most importantly, reports from faculty and other members of the health care team. There could also be ''hard'' indicators of sponsoring institutions' efforts to continually improve the quality of medical care.

The certification program after next is already underway in new models of MOC in which physician specialists solicit feedback from their patients and peers and evaluate the outcomes of their practice and demonstrate their application of improvement methods to improve measured outcomes in the future. In the future, all board-certified physicians will use MOC to demonstrate their continuing competence and the habit of practice-based learning and improvement through measurement and reporting the outcomes of the care they deliver.

The greatest challenge to the accreditation and certification systems after next may involve overcoming strongly held beliefs about physician autonomy. The new systems require celebrating the interdependence of individuals working within systems of care. The accreditation and certification system after next could be cybernetic. The ACGME's accreditation review and decisions in such an imagined future need only document that self-evaluation, comparison to benchmarks, and improvement of educational and patient care performance are operational, institutionalized processes in the program and its sponsoring institution. Detailed regulations about the structure and function of the training programs would give way to institutional self-knowledge and self-regulation derived from constant appraisal of how well the institution meets its customers' needs (patients and residents). Accreditation and certification then would become processes of public and professional accountability for progress through perpetual improvement toward the ideal of perfection.