Physician Competencies for a 21st Century Health Care System

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Editor's Note: The ACGME News and Views section of JGME includes data reports, updates, and perspectives from the ACGME and its review committees. The decision to publish the article is made by the ACGME.

This article is a condensed version of Combes JR, Arespacochaga E. Lifelong Learning Physician Competency Development. American Hospital Association's Physician Leadership Forum, Chicago, IL. June 2012. The selected passages focus on graduate medical education.

The online version of this article contains an annotated list of resources related to the role of hospitals and to the role of the medical education community.

Background

Ongoing changes in demographics and health care financing will require reforms in health care delivery. An aging population and increasing rates of chronic disease, advances in medical science, health information technology's ability to make care safer and more efficient, skyrocketing costs, and the impact of the Patient Protection and Affordable Care Act (ACA) will require a rethinking of how care is delivered. As the Institute for Healthcare Improvement put forth in 2007, improving health care delivery in the United States requires a focus on 3 areas:

- improving the experience of care
- improving the health of populations
- reducing per capita costs of health care.¹

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DOI: <http://dx.doi.org/10.4300/JGME-04-03-33>

All care providers will need new skills and knowledge to reach this triple aim. As health care financing moves from volume-based to value-based payments, clinicians will be required to work in inter-professional teams, coordinate care across settings, utilize evidence-based practices to improve quality and patient safety, and promote greater efficiency in care delivery. The health care system will need to adapt to support these changes, and hospitals and health systems will need to acquire new competencies.

In the fall of 2011, the American Hospital Association (AHA) asked its regional policy boards, governing councils, and committees to review the Accreditation Council for Graduate Medical Education (ACGME) and American Board of Medical Specialties' (ABMS) competencies. Participants indicated how evident the 6 competencies were in physicians entering practice, and how important these competencies were in their organizations. They also discussed the skills physicians needed to practice and lead in a reformed health care environment and whether the ACGME/ABMS competencies appropriately represented these skills. The effort incorporated input from the AHA Board of Trustees, the Physician Leadership Forum advisory committee, an AHA Task Force, and the regional policy boards, governing councils and committees. The AHA also collected comments from numerous organizations involved in graduate and continuing medical education, accreditation and certification, including the ACGME, the ABMS, the Accreditation Council for Continuing Medical Education, the Association of American Medical Colleges, the American Medical Association, the American Osteopathic Association, and others.

Results

The survey and discussions highlighted gaps in the importance AHA members assigned to several competencies and their perceptions of the extent to which physicians entering practice evidenced these competencies (TABLE). Due to its importance to health care delivery and its inclusion by the Institute of Medicine in its list of competencies, AHA added informatics to the list of competencies.²

Added Competencies for Work in a Reformed Health Care Environment

Participants identified attributes important to practice in the 21st century not addressed in the ACGME/ABMS

TABLE AHA POLICY GROUP RANKINGS			
Competency/Skill	Overall Evidence Rating	Overall Importance Rating	Gap
Medical knowledge	4.56	4.86	−0.31
Patient care	4.09	4.91	−0.82
Practice-based learning	3.81	4.68	−0.88
Investigate evaluate, appraise, assimilate			
Improve patient care practices	3.83	4.81	−0.98
System-based practice	3.35	4.77	−1.42
Cost-conscious, effective medical care			
Promote patient safety	3.95	4.90	−0.95
Coordinate care with other providers	3.45	4.72	−1.26
Professionalism	3.95	4.71	−0.77
Interpersonal & communication skills	3.46	4.78	−1.32
Effective information exchange			
Work effectively with health care team	3.65	4.86	−1.20
Use of informatics	3.65	4.74	−1.09

competencies. Besides informatics, these included conflict management, palliative and end-of-life care, systems theory and analysis, customer service and improving the patient experience. To work in a reformed health care environment, physicians need to develop skills to lead and facilitate care teams, understand and use systems theory and information technology to improve quality and patient safety, and understand organizational behavior. AHA governance members noted that that increased inter-professional training and practice are necessary to allow physicians and other clinicians to work more collaboratively and understand the roles each could fulfill in providing patient care. Finally, they saw the need for additional education on population health management, options for palliative care, resource management, medical economics, organizational governance, and health policy.

Additional physician competencies needed for effective practice in a reformed health care system are shown in BOX 1.

Participants discussed initiatives in their own organizations to address some of the perceived gaps in physician education. Examples included leadership programs for physicians and administrators, multidisciplinary team training and team-based rounds, dedicated time for residents to learn administrative skills, and use of

simulation labs. Additional specific examples are provided in an online supplement to this article. Other institutions have initiated changes in management including physician employment models, service line management, and use of nonphysician practitioners. Some organizations have focused on cultural changes including drafting a code of conduct for all employees reflecting some of the competencies and fostering a culture of continuous learning.

BOX 1. PHYSICIAN SKILLS REQUIRED FOR THE NEXT GENERATION OF HEALTH CARE DELIVERY

- Leadership training
- Systems theory and analysis
- Cross-disciplinary training/multidisciplinary teams
- Understanding and respecting the skills of other practitioners
- Population health management
- Palliative care/end-of-life
- Resource management/medical economics
- Health policy and regulation
- Less “captain of the ship” and more “member/leader of the team”
- Empathy/customer service
- Time management
- Conflict management
- Giving performance feedback
- Understanding cultural and economic diversity
- Emotional intelligence

Suggestions for Improving the Impact of the Competencies

The AHA policy groups provided suggestions for how to improve the impact of the competencies through environmental and process changes. They felt that the entire health care sector needed to foster a continuous learning environment. Participants recommended added professional development for faculty on how to teach and evaluate the competencies, to provide a more uniform base and ensure that residents receive similar training regardless of training site. They felt it was important to place greater weight on the nonclinical competencies. Several institutions reported success with using 360-degree feedback for residents, and with postresidency orientation to new settings of care to help close the gaps between training and real world needs. They also suggested adding requirements for medical staff appointments and reappointments linked to the competencies. Finally, members emphasized that accreditation and evaluation of residency programs should include the integration of residents into the quality and patient safety programs of the hospital.

AHA Task Force

In October 2011, the AHA assembled a Task Force of physicians and other clinicians to review the results of the AHA policy discussion and recommend approaches to improve the focus and impact of the competencies. The Task Force felt that the competencies should be embraced by all providing care, but focused its work on the existing physician competencies and their broader adoption and use. It noted that, while the 6 competencies were essential to good patient care, they were not equally emphasized in physician training and practice. Task force members strongly believed that fully ingraining the competencies into the fabric of health care delivery would improve quality and the patient experience, reduce costs, and assist in coordinating care for individuals with chronic conditions.

The Task Force felt that hospitals, as sites of a significant amount of physician training and practice, could be leveraged to encourage full adoption of the competencies. Members also emphasized the need for additional feedback from patients, clinical staff, hospitals, and others to shape efforts to teach and assess the competencies, and influence the educational system to ensure all viewpoints are included. Finally, the group felt that focus on the competencies should begin with admission to medical school, be emphasized in resident training, and remain a required part of continuing medical education.

Recommendations

The task force proposed a two-pronged approach:

- Recognition of the roles and responsibilities of hospitals and of the delivery system to fully value the competencies and ingrain them into their practice; and,
- Recommending ways to influence medical school selection and education, postgraduate training, and ongoing professional development.

The Task Force made several specific recommendations (BOX 2). These are aggregated into undergraduate, graduate and continuing medical education, to collectively ensure the best possible groundwork is set for the development on each competency during training and practice.

Discussion

ACGME is working with its review committees, specialty medical organizations, and specialty boards to develop the educational milestones, specific benchmarks of skills and knowledge residents in every specialty must achieve at certain stages in their education. The milestones will offer documentation of residents' progress on the 6 competencies. While the competencies should be part of the educational system, certain skills should be emphasized earlier in training and others later. Systems-based practice and practice-based learning lend themselves to emphasis during and following residency training. As with all medical education, mastery of the core competencies is a continuous process. Completion of residency training should be considered a beginning rather than an end of education.

To communicate the recommendations to the educational community, AHA members suggested that case examples from successful hospital efforts to incorporate the competencies into residency programs and continuing education should be collected, shared, and highlighted in publications for broader awareness. An appendix with specific examples is provided as a web-based addendum to this article. AHA members also suggested broad sharing within the hospital community through the national organization and state and metropolitan hospital associations. This effort is intended to stimulate thinking about how hospitals can begin to ingrain the competencies into their organizations and help support efforts to move towards greater adoption of the competencies beyond medical schools, residency programs, and practicing physicians' maintenance of competency efforts.

Conclusion

Health care delivery in a reformed health care system will need to utilize the full professional capabilities of all members of the clinical team, practicing within their recognized disciplines, and a clear respect and understanding of the skills of the different allied health

BOX 2: TASK FORCE RECOMMENDATIONS

Hospitals

- It is essential that hospitals create an environment that fosters the development of and continuously supports the competencies so that they are not an isolated activity, but rather ingrained in every transaction and exchange.
- Hospitals should provide feedback to physicians on their demonstration of the competencies and offer them improvement tools. Peer dynamics, medical staff credentialing and privileging committees, and reappointment processes could all provide an opportunity to demonstrate the value of the competencies.
- Hospitals have a role in educating and involving physicians in their quality improvement and patient safety projects. Early involvement of students and residents, as well as a drive to include all clinicians, will enhance the ability of the system to improve.
- Hospitals should encourage grand rounds to include all members of the team.
- Physicians should be involved in the full scope of the delivery of health care and fully understand the business of health care.
- Use of simulation centers should be increased not only for procedure-based training, but for team-based training and education as well as communication and interpersonal skills.
- Encourage grand rounds including all members of the team, to partner clinicians and administrators to provide clearer perspective on the roles of each team member.

The Delivery System

- Population health science and the greater use of information technology should be encouraged. Payment models will need to encourage and value the competencies.
- Periodic review and updates to the competencies should be considered.
- While the recommendations below are divided into categories based on where the primary focus should be, whether in medical school, graduate training, or ongoing development, each recommendation should be touched upon as early as appropriate to ensure that the best groundwork is set for the development on each competency at later points. Conversely, while some of the competencies are listed under medical school and residency, lifelong learning and continuous improvement should be emphasized.

Medical Education

While medical education reform cannot address all of the existing problems in health care delivery, changes will help prepare the next generation of clinicians to lead reform into the future. Changes need to be approached in light of workforce shortages among physicians and ensure that changes made do not further exacerbate the shortage.

- Broaden the reach of medical school admissions and develop tools to evaluate applicant attributes beyond basic sciences knowledge to look for those that are exemplified by high-performing physicians. Consideration should be given to the traditional pre-med curriculum and whether there are changes needed to reflect the competencies more accurately.
- Decompress educational load and broaden the modes of education. Including expanding the curriculum around the science of teamwork, quality improvement, culture of innovation, and safety, and the use of social media and other technologies to expand learning opportunities.
- Further ingrain all competencies into the value structure of medical training. Practice of the competencies should be incorporated into every health care interaction and steps should be taken to ensure that both educators and mentors have the training to impart and evaluate successful achievement of the competencies.

Graduate Medical Education

Residency training faces many of the same challenges in imparting the competencies as medical school curricula and should include the same emphasis on ingrain the competencies into the culture of the residency program. As foreign medical school graduates apply for and participate in programs in the United States, attention should be paid to ensure they have received the same training regarding the competencies as required in U.S. medical schools.

- Study implications of different medical career paths on the educational structure. To ensure a broad array of physicians exemplifying the core competencies best suited to their practice, medical schools should review the traditional educational structure to see if there are adaptations for the different career paths available to today's physicians.
- Use interprofessional training to strengthen care delivery. Understanding the skills other nonphysician clinicians allows physicians to best use the resources of the health delivery system to provide maximum benefit for the patients.
- Quality and patient safety need to be an integral part of residency programs.
- Training should reflect the wide variety of environments in which health care is practiced.
- Focus on patient wishes.

Patient-centered health care will continue to increase and drive care delivery models and physicians will need the communication skills and knowledge to help guide their patients. Increased opportunities should be afforded to residents to enhance their skills as advisers, counselors, and navigators to help patients make informed decisions when facing complex treatment choices. In addition, exposure to palliative and end-of-life care programs will allow residents to provide the full range of options that best meet the needs and wishes of their patients.

Continuing Medical Education

- Development of the competencies is an ongoing process and should be approached over a lifetime.
- Continuing medical education can offer a unique opportunity for rapid response to emerging gaps in training given that accreditation is renewed yearly.
- Increased availability and simplicity of attaining continuing medical education credit for involvement in practice/hospital-based improvement projects and efforts around systems-based practice.
- Embracing the use of evaluation and tools to improve within the scope of practice evaluation and continuous improvement efforts.
- The influence of professional societies could impact the valuation of the competencies among the physician community. Societies should consider elevating proficiency with the competencies in their maintenance of certification requirements.

professionals. This will enhance the ability for health care delivery teams to function effectively and could be facilitated through joint education and training programs.

The medical education community, accreditation and certification organizations, along with the AHA and others play a key role in improving education. Using the competencies as a common framework, this document

helps stimulate dialogue on the ways the community can collaborate to advance the competencies in the health care delivery system.

References

- 1 Berwick D, Nolan T, Whittington J. The Triple Aim: Care, Health, And Cost. *Health Affairs*. 2008;27(3):759–769.
- 2 Institute of Medicine. Health Professions Education: A Bridge to Quality Washington, DC: National Academy of Sciences, 2003.