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The graduate medical educational enterprise

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As members of the health care community, we have a staggering task: to manage the health care needs of the public and provide high-quality care at a lower cost. The statistics show that we are not currently succeeding with this task. Any way the numbers are presented, the return on its investment in health care is poor for the USA compared to other nations around the world.[1] In February 2009, the Institute of Medicine highlighted the current structure of US health care as untenable secondary to high cost, poor outcomes, shortages and underutilization of health professionals, and a lack of access to care. The current state and traditional models of health care in the USA need to be reassessed.

Educational programs around the country have instituted changes with an attempt to become interdisciplinary and focus on team training.[2] In 2005, the *National Educational Dialogue* stated, "Students educated in an environment of mutual respect and collegiality among disciplines will be more likely to practice *collaborative* health care [italics added]."[3] Instilling relevant skills and improving the health care system require active participation in multidisciplinary teams, focusing on the needs of patients and populations being served by the health system.[4,5] In addition to being more effective, team-based medicine appears to be more efficient.[6,7]

In 2010, Miller et al described their vision of a new model for continuous learning in the health professions.[8] Physicians and other professionals will assess practice outcomes, identify learning needs, and engage in continuous learning to achieve the best care for their patients. The learning should be embedded in the workplace and linked to patient needs. Additionally, individual providers, teams, and institutions would undertake these requirements. Health professionals should be trained in this new model from the start of the educational experience and specifically not after they have completed "siloed" training within their individual disciplines. This change would lead to true interprofessional education; sharing facilities and coursework[8] would help management of academic health systems recognize that an existing asset, its educational enterprise, can facilitate its main mission: to restore, maintain, and promote the health of the population it serves.

These needed changes have been slow in development, however. Limiting the promulgation of this ideal are many factors, including a lack of educational models, resistance to change, and failure to conceptualize health professions education (HPE) as a contributor to the bottom line, as well as the mission and vision of the institution. Professions outside of medicine who may serve as examples are lawyers, pilots, and accountants. Each of these professions has trainee systems in place that not only help these organizations carry out their missions but also enhance the quality of organizational outcomes, thereby making their training programs a contributor to the mission. Applying these similar principles to HPE should make it a competitive advantage for health systems.

Historically, education of physicians and other health professionals has been considered part of the moral duty of being a physician (as articulated in the Hippocratic oath). When analyzed in that framework, education is a moral duty rather than a business asset. Inherent in HPE, however, is "service" to the patient, which is crucial to the learning process. Experiential learning that derives from service is the basis for active learning and reflection

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(e.g., seeing and treating a new patient), which creates new understandings and behaviors. If we define learning as the process whereby knowledge is acquired through the transformation of experience, service is an extremely important part of the learning experience.[9] Therefore, the moral duty may be the impetus for education, but that does not negate the measurable contributions to the institutional mission.

Consequently, recognizing experiential learning or service as part of the education value equation increases the asset value of education without additional resource investment. Programs are labeled assets because of their added economic value (i.e., measure of the benefit of a good or service to an agent) to the organization and are anticipated to bring the organization future benefit. Therefore, HPE is an asset because it produces trained health care providers who help health systems conduct their missions and provides economic value.

A corporation's return on an asset is a measure of its success. As HPE models are transforming,[10] redefining the measures of success in HPE is a necessity. The pursuant challenge is that HPE asset valuations are unique to academic health systems; however, they have the potential to provide value. There is a gap between the realized and potential value of HPE as an asset, and to close the gap, new measures of HPE asset valuation are needed.

As an example from graduate medical education (GME), let us consider the following perspectives of health system corporate management on financial (actual monetary value) and nonfinancial (intangible) asset valuation:

- In GME, residents contribute to the quantity of clinical care and significantly impact the clinical revenue of academic health systems.[11,12]
- Replacing the service provided by residency programs would cost more—that is, the cost of a resident vs the cost of an advanced practice professional vs the cost of faculty.[13,14]
- In the current GME landscape, housestaff-championed quality improvement interventions and formation of housestaff quality councils are increasingly more prevalent at academic health systems. The resident-led groups are implementing quality and patient safety change, ultimately benefiting patients, the health care delivery system, and resident training.[14–16]
- For the academic enterprise, the GME value includes resident research productivity. Because residents are required to pursue scholarly activities, including research, they advance knowledge and evidence and contribute to the investments toward extramural funding. Research focused on health outcomes or disparities has an even greater impact and exemplifies integration of the clinical, research, operational, and education enterprises. Teaching faculty also benefit from the GME enterprise through faculty development programs in instruction, assessment, and leadership.

Our national health care sector needs more solutions to meet the demands of the people and populations that we serve. Alignment of HPE toward our health system and national health goals is long overdue. HPE is an existing health system asset and, if effectively used, can help serve patient and public needs. Relatedly, HPE should no longer be known only as an altruistic venture but instead should be embraced as a service that is inherent in educating the next generation of health professionals, recognizing education as an asset with value both tangible and intangible. By doing this, as suggested by the Institute of Medicine, we will be much further along the path of emphasis on health, wellness, early disease intervention, and patient empowerment and focused on the full range of physical, mental, and social support needed to improve health and minimize the burden of disease.

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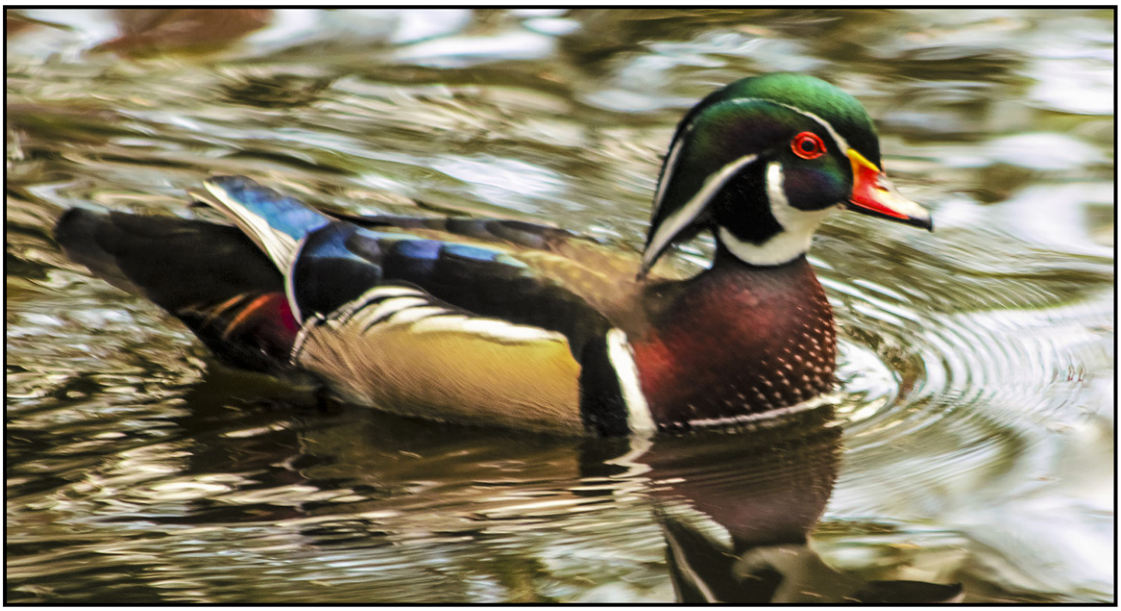
Avocations



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