HOD ACTION: Council on Medical Education Report 8 adopted as amended and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 8-A-13

Subject: The Changing Training Environment: Access to Procedural Training for Residents and Fellows
(Resolution 328-A-12)

Presented by: Mahendr S. Kochar, MD, Chair

Referred to: Reference Committee C
(A. Patrice Burgess, MD, Chair)

Resolution 328-A-12, The Changing Training Environment: Access to Procedural Training for Residents and Fellows, introduced by the Minnesota Delegation, Minority Affairs Section, and Nebraska Delegation and referred by the House of Delegates, asked that our American Medical Association (AMA):

1. Study the trends in numbers of residency training sites that also employ mid-level providers and/or concurrently train students of these mid-level programs;

2. Define a physician-in-training's role in the hospital and specifically make it a high educational priority for trainees to receive the needed exposure to procedures required for them to master competency in their specialty and that these exposures are not delegated to mid-level providers and mid-level provider trainees; and

3. Study the financial impact for institutional training sites of hiring more mid-level providers versus investing in a physician training program.

There was mixed testimony heard during Reference Committee C. While it is possible that the hiring of mid-level providers may have had an adverse effect or deprived medical students and residents in some needed training opportunities, their presence has also enhanced the education of students and residents and contributed to a better understanding of team-based care and coordination.

BACKGROUND

In July 2011, the Accreditation Council for Graduate Medical Education (ACGME) implemented new resident duty hour standards.[1] The standards retain the 80-hour limit per week (averaged over 4 weeks) implemented by the ACGME in 2003, but reduce shift lengths for first-year residents to no more than 16 hours and set stricter requirements for duty hour exceptions. In addition, the standards specify in greater detail the levels of supervision necessary for first-year residents; set higher requirements for teamwork, clinical responsibilities, communication, professionalism, personal responsibility, and transitions of care; establish graduated requirements for minimum time off between scheduled duty periods; expand requirements regarding patient care hand-offs; and call for alertness management and fatigue mitigation strategies to promote continuity of patient care and resident safety.[2] Although Public Citizen has repeatedly called for the Occupational Safety and Health Administration (OSHA) to regulate resident physician duty hours,[3] AMA policy

(D-310.964) supports oversight and enforcement of resident/fellow physician duty hours by the ACGME and believes that the ACGME is the most appropriate body to regulate and monitor resident duty hours in the context of multiple other factors including supervision, professionalism, and patient care quality. The AMA Council on Medical Education continues to monitor the enforcement and impact of the ACGME duty hour standard as it relates to patient safety and the optimal learning environment for residents.

The AMA also recognizes that institutions that sponsor residency training programs have found it difficult to maintain their net income, which has depended in part on revenue generated by resident service and Medicare-funded graduate medical education (GME) programs.[4, 5] The 1997 Balanced Budget Act capped the number of Medicare-funded GME positions at 1996 levels for almost all teaching hospitals.[6] While new US allopathic and osteopathic medical schools are opening and many medical schools are expanding their enrollments to meet the need for more physicians, core residency training programs are experiencing minimal growth due to limited federal funding.

There is mounting concern about the ability of the health care profession to handle the expected surge in demand for health care services due to the passage of the Patient Protection and Affordable Care Act (ACA) (P.L. 111-148) and the projected shortage of physicians (including primary care, general surgeons, and many other specialties) in the near future.[7, 8] In that regard, the AMA has continued to collaborate with the Association of American Medical Colleges and other key stakeholders to advocate for GME funding and alert Congress that cuts to GME funding will jeopardize the ability of medical schools and teaching hospitals to train physicians, as well as limit critical services to patients.[9]

EMPLOYMENT OF MID-LEVEL PROVIDERS

Many resident physicians train at teaching hospitals where they provide complex and acute care for the underserved, indigent, and elderly. Restrictions on resident work hours and minimal growth in residency training positions have decreased patients' access to medical services provided by residents.[10] This has impacted the ability for resident physicians to provide the same amount of patient care as in prior years, and this gap has been offset by expanding the number of non-physicians to care for patients. Advanced practice nurses (APNs) and physician assistants (PAs) have assumed increasing responsibility and independence in a variety of health care settings and are making significant and important contributions to patient care. There is substantial variation in the allocation of their clinical services by specialty, geography, employment setting, and other factors. There are also considerable gaps in the data describing their distribution and participation compared to physicians.[11]

Individual state licensing boards are responsible for ensuring, through licensure and certification, that health care professionals provide services commensurate with their training. The Joint Commission establishes medical staff and other credentialing procedures for non-physician practitioners in its Hospital Accreditation Standards. Hospitals can extend medical staff membership to APNs and PAs, and any other category of practitioner deemed eligible by the hospital so long as it complies with federal and state laws and accreditation standards. Current rules and regulations governing APN and PA qualifications, practice and prescription authority, and reimbursement vary greatly across states as well as in hospitals that may choose to exercise all the skills the law permits them to exercise or limit the privileges of independent practitioners.[12]

DEFINING THE "PHYSICIAN-IN-TRAINING" ROLE IN THE HOSPITAL

The AMA's role in defining the role of physicians-in-training is accomplished through AMA representation on the ACGME Board of Directors. The AMA and the appropriate medical specialty boards and specialty organizations also appoint about 6 to 15 volunteer physicians to the ACGME's 28 Residency Review Committees (RRCs). The function of the RRCs is to establish accreditation standards and to provide a peer evaluation of residency programs and subspecialties (or, in the case of the Institutional Review Committee, to provide a peer evaluation of sponsoring institutions). This includes preparing or revising the Common Program, specialty specific and Institutional Requirements to reflect current educational and clinical practice. The RRCs also initiate discussion in matters of policy, best practice, and innovation relating to GME.[13]

To maintain its accreditation, a medical training institution must establish how physicians will be trained to perform certain procedures. For example, the ACGME's Program Requirements for GME in General Surgery (Int.B.) provide the Definition and Scope of the Specialty and state:

> The goal of a surgical residency program is to prepare the resident to function as a qualified practitioner of surgery at the advanced level of performance expected of a board-certified specialist. The education of surgeons in the practice of general surgery encompasses both didactic instruction in the basic and clinical sciences of surgical diseases and conditions, as well as education in procedural skills and operative techniques. The educational process must lead to the acquisition of an appropriate fund of knowledge and technical skills, the ability to integrate the acquired knowledge into the clinical situation, and the development of surgical judgment.[13]

The ACGME currently has requirements in place that require residents to maintain a log of procedures that they are required to perform for their particular specialty. The RRCs are responsible for establishing the minimum number of procedures required, and residency programs are responsible for documenting that residents have performed a sufficient breadth of complex procedures to graduate qualified physicians. The ACGME also has requirements that prevent residents' progression through training if they are not receiving adequate clinical experiences.[13]

In July 2013, the ACGME will implement its next accreditation system (NAS) for 7 of the 26 ACGME-accredited residency core specialties (emergency medicine, internal medicine, neurological surgery, orthopedic surgery, pediatrics, diagnostic radiology, and urology), and the remaining specialties and the transitional year will be implemented in 2014.[14] The RRCs in these specialties will begin to collect milestones (developmentally based, specialty-specific achievements that residents are expected to demonstrate at established intervals as they progress through training) data. The milestones that are being developed within the NAS will include a procedural competency as part of the evaluation. Under this new system, theoretically, residents should perform the procedure until the required level of competency is achieved, at which point having a mid-level provider perform this procedure would be less detrimental to the resident's education. If the program cannot demonstrate that their residents are achieving competency in procedures, this would be noted in their evaluations.

In addition to milestones, other data elements that will be reviewed annually include ACGME resident and faculty surveys and operative and case-log data. This ongoing data collection and trend analysis will allow the ACGME to base its accreditation in part on the educational outcomes of programs and enhance its ongoing oversight to ensure that programs meet standards for high-quality education and a safe and effective learning environment.[14]

DISCUSSION

Residents and fellows learn while providing direct patient care in hospitals and clinics under the direct supervision of a teaching physician. While on duty, residents are the first-line contact for patient care issues and emergencies pertaining to patients on their service. Many types of residents (e.g., surgery, radiology, obstetrics, family medicine) also learn and perform surgical procedures under supervision and are engaged in the pre- and postoperative medical and surgical care of their patients.

It is becoming common practice in some institutions to shift procedural work to mid-level providers as residents comply with new duty hour restrictions. APNs and PAs are being trained to perform operating room and bedside procedures such as placement of central lines, catheters, intracranial pressure monitors, etc. However, in some cases, limited training has been available to residents and fellows who need to become proficient at performing these procedures.[15]

In its position statement to the Institute of Medicine, the American College of Surgeons states, "Optimum training of resident physicians, especially surgical residents, requires a longitudinal, comprehensive curriculum that focuses on the cognitive elements, technical skills, and judgment that are critical to providing safe patient care." The ACS also states, "Achievement of expertise requires sustained deliberate practice, and retention of skills requires periodic reinforcement."[16]

It has been argued that less time spent in the hospital will ultimately lead to less experienced and less competent physicians than in the era preceding work-hour restrictions.[17] A recent longitudinal study showed that half of all general surgery interns felt that the duty hour changes have decreased their coordination of patient care (53%), their ability to achieve continuity with hospitalized patients (70%), and their time spent in the operating room (57%).[15]

In another study among neurological surgeons, board certification test scores and levels of participation in national conferences declined after implementation of duty hour limits in 2003. The study also found that 96 percent of chief residents and residency program directors believed that the 80-hour limit had compromised resident training, and 98 percent believed that it had led to a decrease in surgical experience.[10]

Published studies on the impact of duty hour restrictions on surgery residents' ability to perform a sufficient number of surgical procedures to make them proficient and well qualified for independent practice are limited. Additional study is needed to evaluate the impact of reductions in duty hours on a physician's ability to train and perform the necessary procedures established by the RRCs.

RECOMMENDATIONS

The Council on Medical Education recommends that the following recommendations be adopted in lieu of Resolution 328-A-12, and the remainder of this report be filed.

1. That our American Medical Association (AMA) support the concept that procedural training is a critical portion of resident education and the augmentation of patient care by non-physician practitioners should not interfere with a resident's ability to achieve competence in the performance of required procedures. (New HOD Policy)

2. That our AMA ask the Accreditation Council for Graduate Medical Education to evaluate the trend in the number of cases, and roles in these cases, of graduating residents since the implementation and revision of duty hour restrictions to determine whether duty hour standards may have adversely impacted residents' ability to participate in a sufficient number of cases to make them proficient and well qualified for independent practice, and that this information be used to further refine change in resident education under the Next Accreditation System. (Directive to take Action)

Fiscal Note: Less than $500 to update policy

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