HOD ACTION: Council on Medical Education Report 4 adopted and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 4-A-15

Subject: Guidelines for Students Shadowing Physicians
         (Resolution 310-A-13, Resolution 913-I-13)

Presented by: William A. McDade, MD, Chair

Referred to: Reference Committee C
             (Daniel B. Kimball, Jr., MD, Chair)

Resolution 310-A-13, “Medical Facility Regulations for Students Shadowing Physicians,” introduced by the Georgia Delegation and referred by the House of Delegates (HOD), asked that our American Medical Association (AMA) develop standard criteria for students to shadow physicians in medical facilities. The resolution noted that high school and premedical students are “strongly encouraged” by medical school admissions committees to have clinical shadowing experience. However, the Health Insurance Portability and Accountability Act (HIPAA) and other regulations (e.g., those dealing with patient rights, privacy and confidentiality) often serve as impediments to many physicians who might otherwise provide student shadowing experiences. In addition, individual hospitals may have standards for shadowing of physicians by students, but these vary widely from one institution to the next, with no recognized national standard in place.

Resolution 913-I-13, “Pre-Medical School Shadowing,” submitted by the Washington Delegation and referred by the HOD, asked that our AMA (1) promote the development of programs that assist physicians in providing premedical shadowing opportunities; and (2) communicate to the Association of American Medical Colleges that for medical schools which have the premedical shadowing requirement, aiding these underprivileged students in getting their shadowing is an obligation of the medical school. Testimony at the I-13 meeting on this resolution supported the need for appropriate guidelines for providing premedical school shadowing opportunities. In addition, increased opportunities for shadowing may help increase diversity in medicine by raising awareness among individuals from diverse backgrounds of the possibility of medicine as a career. It was suggested that such programs may contribute to improved motivation and experience, leading to increased matriculation and lower attrition rates. Questions were raised, however, as to the responsibility of medical schools to offer shadowing opportunities.

In response to these two resolutions, Council on Medical Education Report 8-A-14, “Guidelines for Students Shadowing Physicians,” asked that our AMA: (1) encourage wide dissemination of the Association of American Medical Colleges’ clinical shadowing guidelines to interested parties, including K-12 students, premedical students, health professions advisors, hospitals, medical schools and physicians and (2) encourage all physicians to provide shadowing opportunities to premedical students. The report also called for AMA Policy D-295.941, Facilitating Access to Health Care Facilities for Training, to be amended by addition to state that the AMA “work with the Association of American Medical Colleges and other national organizations to expedite, wherever possible, the standardization of requirements in regards to training on HIPAA, drug screening, and health requirements for premedical and medical students, and resident and fellow physicians who are being educated in hospitals and other health care settings.”
At the A-14 HOD meeting, mixed testimony was heard on CME Report 8 during the reference committee hearing. It was noted that the amount of paperwork required of physicians to offer a shadowing opportunity is onerous. Accordingly, this report was referred for a more thorough review of physician shadowing and the appropriate mechanisms to ensure that individuals from underprivileged and under-represented minority groups are afforded equal opportunity to participate in shadowing experiences.

BACKGROUND

It is important to differentiate shadowing from volunteering. Volunteering offers an opportunity to help (without compensation) in a health care setting; duties might include filing paperwork, answering phones and similar functions. Shadowing, in contrast, is strictly observational but directly related to the provision of clinical care, with the student observing as the health professional provides care to patients. This may occur in varied clinical settings, including hospitals, outpatient clinics, long-term care facilities and/or office practices. Observation always occurs under the appropriate supervision of a licensed physician or other licensed health care professional. (Note: This report does not cover what are often referred to as observerships, which are often undertaken by international medical graduates [IMGs] as they seek to gain exposure to and understanding of the practical and sociocultural aspects of U.S. medical education and health care. The AMA has previously developed guidelines for such programs; these are available via the AMA website at ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/international-medical-graduates/observership-guidelines.page?).

The benefits of a shadowing experience for the student include exposure to the day-to-day realities of medical practice and tangible evidence (for admissions committees) of their commitment to becoming a physician. For example, a summertime medical program for high school students at the University of Oklahoma College of Medicine, which included a shadowing component, resulted in “increased understanding of the medical school application process, the medical curriculum and the medical field, and an increase in students’ likeliness to choose a medical career.” Similarly, a study of premedical students in a shadowing program at Stanford University found “significant increases in familiarity with physician responsibilities and in understanding physician-patient interactions.”

Such experiences, however, may raise ethical issues for patients in the clinical setting. The author of a June 2011 commentary in *JAMA*, for example, stated that any potential benefits of shadowing from the student perspective “are eclipsed by potential damage to the patient-physician relationship.” Further, a review published in *Academic Medicine* in January 2013 called for further research and the creation of objective outcomes measures. The authors proposed “developing guidelines and introducing a code of conduct for pre-medical students, to enhance the consistency of shadowing experiences and address ethical and practical considerations.”

In addition, these authors found scant medical literature on shadowing and its impacts on students, physicians and patients. Indeed, a recent PubMed search using the term “physician shadowing” returned 75 results (available at: ncbi.nlm.nih.gov/pubmed/?term=physician+shadowing), the majority of which are not relevant to this report. One study that is relevant examined the impact of an academic summer research, shadowing and mentorship program on college students interested in medicine and surgery. The authors surveyed 48 participants in the program, with 44 respondents, and found that “proficiency in all categories assessed improved considerably, including medical terminology, abstract writing, statistical analysis, graph and table construction, article writing, and video production. During the last 5 years, participants coauthored 112 national presentations (29 video presentations), 46 published abstracts, and 57 peer-reviewed published articles. Ninety-two
percent developed more favorable opinions of a career in medicine; 8 percent believed the 
experience deterred them from a career in medicine because of lifestyle and study demands. 
Seventy-seven percent believed the program promoted a career in surgery; 82 percent believed it 
elevated their goals to become leaders in American medicine.” They concluded that such programs 
for college and graduate students can lead to improved academic productivity and attainment of 
career goals, and that academic surgeons can play an influential role in this regard.5 

Shadowing, and the concerns surrounding it, is a frequent subject of discussions on the email 
listserv of the National Association of Advisors for the Health Professions (NAAHP). Advisors 
note that, as regulations tighten in health care settings, developing and overseeing clinical 
educational and shadowing experiences has become more challenging than in the past. Some of the 
issues that may dissuade physician offices and hospitals from serving as sites for clinical 
shadowing include concerns over potential liability, HIPAA regulations, lack of time or staff for 
oversight, and ethical concerns, including informed consent and patient confidentiality. 

In some areas, students are required to complete a training program prior to entering into a 
shadowing experience, to include HIPAA certification, criminal and child abuse background 
checks and drug testing. The authors of a 2011 letter to JAMA proposed three broad guidelines to 
ensure that medical ethics and legal requirements are not compromised during shadowing 
experiences: “First, the student must complete HIPAA regulations, the physician must judge if the 
appointment is appropriate for observing, and the physician should specify boundaries for 
educational dialogue and note taking. Second, on being introduced to the patient, the pre-medical 
student should clearly identify himself or herself as a college student observing to learn more about 
a medical career. It is deceptive to say he or she is a member of the team or working with the 
physician. Third, the patient should be told that there is no obligation to allow the observation and 
refusal is understandable. These criteria would prevent misrepresentation and create 
transparency—ethical principles that can never be introduced too early in an education.”6 

In summary, shadowing should be clearly defined (as separate from volunteering, for example, or 
observerships). A limited number of studies on shadowing have been published in the peer-
reviewed literature; more research may help quantify the benefits (and costs) of shadowing. 
Existing studies have shown that students who undertake a shadowing experience become more 
familiar with the practice of medicine and how physicians interact with patients in the clinical 
setting. This raises the question, however, of possible negative impacts on the patient-physician 
relationship and the need for ethical guidance in this arena. Additional concerns, for the physician, 
include potential liability and lack of time or staff for oversight of students.

THE PROFESSION’S RESPONSIBILITY FOR PROVIDING SHADOWING EXPERIENCES 

In theory, physicians are willing to engage and train the next generation of practitioners and 
provide career guidance for college and university students aspiring to become physicians. In 
practice, however, this inclination often collides with the reality of modern medicine, in which 
physicians are under significant time and performance pressures. In addition, the regulatory, legal 
and ethical issues cited above may cause even the most altruistic physician to reconsider taking on 
this additional “unfunded mandate.” Often there are also first and second-year medical students 
who want to shadow; these students may have priority, given a physician’s busy schedule. 

Most medical schools have admissions criteria that medical school applicants should have 
completed a certain number of hours in shadowing/observership (some recommend at least 40 
hours). Accordingly, as proposed in Resolution 913-I-13, it may be appropriate to encourage
medical schools to help premedical students meet this requirement by ensuring availability of shadowing programs.

Such programs are particularly needed with regard to students from underrepresented minority populations, who may lack the resources and connections to obtain the needed experience. Not providing ready access to such experiences could mean that shadowing requirements have the unintended effect of further disenfranchising minority and economically disadvantaged students and reducing the number of medical school matriculants from these sectors of society.

Furthermore, students enrolled in resource-poor K-12 schools and undergraduate education systems may face increased barriers to attaining medical shadowing experiences; special outreach to such students may be warranted to facilitate access to shadowing opportunities.

The AMA is helping address these concerns through its Doctors Back to School (DBTS) program (ama-assn.org/go/dbts), launched in 2002 by the AMA Minority Affairs Section and the Commission to End Healthcare Disparities. Through the program, minority physicians and medical students volunteer at local schools to introduce youth to professional role models. DBTS aims to show children and adolescents, especially those from underrepresented racial and ethnic groups, that medicine is an attainable career option for everyone.

Nationwide, a number of schools have taken up the challenge to increase the number of physicians from minority populations through providing shadowing experiences, similar to the University of Oklahoma program noted above. One such offering is the Summer Medical and Dental Education Program (SMDEP). This free, six-week summer academic enrichment program that offers freshman and sophomore college students intensive and personalized medical and dental school preparation (available at: oregon.gov/oha/oei/Documents/Strategies_for_PipelineProgs.pdf).

Formerly known as the Minority Medical Education Program, SMDEP was established in 1988 by The Robert Wood Johnson Foundation to increase the number of highly qualified medical school applicants from minority groups underrepresented in medicine. Over the years, the program has broadened its initial focus on specific minority groups to include students from rural and economically disadvantaged backgrounds, regardless of race or ethnicity. Today, the program encompasses 11 sites nationwide:

• Case Western Reserve University School of Medicine
• Columbia University College of Physicians and Surgeons
• Duke University School of Medicine
• Howard University College of Medicine
• Rutgers New Jersey Medical School
• University of California, Los Angeles, David Geffen School of Medicine
• University of Louisville School of Medicine
• University of Texas Medical School at Houston
• University of Virginia School of Medicine
• University of Washington School of Medicine
• Yale University School of Medicine

In addition, the University of Washington School of Medicine website (uwmedicine.org/education/md-program/admissions/applicants/shadowing) offers information on shadowing to prospective students and lists helpful national, regional, and state resources.
DEVELOPMENT OF SHADOWING GUIDELINES

In response to the need for a more comprehensive approach, the Association of American Medical Colleges worked in close collaboration with the AMA and the NAAHP, among others, to develop shadowing guidelines for premedical students. The recommended guidelines (aamc.org/download/356316/data/shadowingguidelines2013.pdf), released in 2013, include student learning objectives and responsibilities, a model physician-student agreement, a student code of conduct, and a student agreement on confidentiality and privacy of patient information.

Another organization that provides information on shadowing is the American Association of Colleges of Osteopathic Medicine (aacom.org/InfoFor/applicants/becoming/Pages/ShadowaDO.aspx). Similar to allopathic medical schools, colleges of osteopathic medicine encourage applicants to learn more about the profession by identifying an osteopathic physician to shadow. Many DOs’ offices will host a premedical student for one or two days.

EXISTING AMA POLICY

The AMA does not have existing policy on shadowing, but it does have significant policy related to increasing opportunities for underrepresented minorities to enter the field of medicine, including:

H-350.960, Underrepresented Student Access to US Medical Schools
Our AMA: (1) recommends that medical schools should consider in their planning: elements of diversity including but not limited to gender, racial, cultural and economic, reflective of the diversity of their patient population; and (2) supports the development of new and the enhancement of existing programs that will identify and prepare underrepresented students from the high-school level onward and to enroll, retain and graduate increased numbers of underrepresented students. (Res. 908, I-08)

D-350.995, Reducing Racial and Ethnic Disparities in Health Care
Our AMA’s initiative on reducing racial and ethnic disparities in health care will include the following recommendations: … (3) Promoting diversity within the profession by encouraging publication of successful outreach programs that increase minority applicants to medical schools, and take appropriate action to support such programs, for example, by expanding the "Doctors Back to School" program into secondary schools in minority communities. (BOT Rep. 4, A-03; Reaffirmation A-11)

E-9.121, Racial and Ethnic Health Care Disparities
(6) Increasing the diversity of the physician workforce may be an important step in reducing racial and ethnic health care disparities. Physicians should therefore participate in efforts to encourage diversity in the profession.

In addition to these policies addressing racial/ethnic diversity, AMA Policy D-295.941, Facilitating Access to Health Care Facilities for Training, calls on the AMA to “work with the Association of American Medical Colleges and other national organizations to expedite, wherever possible, the standardization of requirements in regards to training on HIPAA, drug screening, and health requirements for medical students, and resident and fellow physicians who are being educated in hospitals and other health care settings.” This particular policy, however, specifies medical students and resident/fellow physicians, not premedical or K-12 students.
SUMMARY AND RECOMMENDATIONS

In many cases, shadowing for a given K-12 or premedical student is valuable and could make the difference between a successful career in health care or a missed opportunity. As part of its mission, the AMA could encourage physicians to “pay it forward” to the next generation by offering the opportunity for shadowing. A list of hospitals and physicians willing to allow students to shadow would be useful, but that would be a more substantive role than the AMA can assume, is outside the scope of the AMA’s strategic focus areas, and would entail a significant fiscal investment.

Other ways to further improve shadowing include: 1) an agreed-upon metric for all medical schools specifying the required quantity and quality of shadowing experiences for applicants; 2) similar standardization among medical schools, hospitals and physicians offering shadowing experiences as to the content and length of such programs; 3) development of HIPAA training modules for premedical students; and 4) a national “shadow for a day” event, to create more awareness of the need for shadowing, particularly as it relates to increasing physician diversity. Again, as noted above, such activities are outside the scope of the AMA’s work, but the AMA might encourage other appropriate organizations (including the AAMC and/or NAAHP) to undertake this work.

The development of clinical shadowing guidelines by the AAMC is timely and should help increase nationwide standardization of shadowing experiences for premedical students. The AMA should encourage awareness and use of these guidelines and call upon medical schools, physicians and others to help ensure availability of shadowing opportunities, particularly for students from underrepresented populations.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolutions 310-A-13 and 913-I-13 and that the remainder of this report be filed.

1. That our American Medical Association (AMA) encourage physicians in both private practice and academic settings to provide shadowing opportunities to students interested in a career in medicine—particularly those from underrepresented populations—as part of the physician’s commitment to the future of the profession. (Directive to Take Action)

2. That our AMA encourage physicians to adopt the most appropriate shadowing model to the needs of the practice/institution and the student(s). (Directive to Take Action)

3. That our AMA endorse the clinical shadowing guidelines for students from the Association of American Medical Colleges as one model for such students and help disseminate this document to K-12 students, premedical students, health professions advisors, hospitals, and physicians. (Directive to Take Action)

Fiscal Note: $500.
REFERENCES


