REPORT OF THE MEDICAL STUDENT SECTION
GOVERNING COUNCIL

Report: C
(A-88)

Subject: Residency Work Hours and Supervision

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Referred to: Reference Committee B
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I. Introduction

The following is an informational report only to medical students about current initiatives dealing with the issues of resident work hours and supervision. The AMA has been studying the issue of resident physician working hours since 1986 when MSS Resolution 116 was adopted which asked the AMA to study the influence of various structures and methods used in residency training programs on the quality of patient care in teaching institutions.

The report consists of two parts. The first section deals with the response of national organizations of physicians, including the AMA, AAMC, and the ACGME. The second section highlights specific legislation or recommendations made in individual states. The recommendation herein are those of the bodies cited.

II. Medical Organizations' Response to the Problem

A. AMA

The response of the AMA to the issue of resident work hours and supervision was presented to the AMA House of Delegates at I-87 by the Council on Medical Education (CME) through CME Report C which was adopted as amended; the report included 11 principles and 6 recommendations plus a table documenting total hours worked per week by program specialty (see appendix). The CME continues to study the issue through its Task Force on Graduate Medical Education.

B. Accreditation Council on Graduate Medical Education

The ACGME received the report of its task force on resident supervision and hours of service at its meeting on February 8-9, 1988. Task force chairman, J. Lee Dockery, M.D. asked for and received Council

support for the six principles and seven recommendations drafted by the task force. The principles are consistent with General and Special Requirements now in force, but are restated in order to heighten the awareness of all participants in the graduate medical education enterprise. The recommendations of the task force were referred to the ACGME's Committee on Structure and Function where changes of the General Requirements are developed, or to the 24 Residency Review Committees (RRC) where changes of the special requirements originate. The first two recommendations were sent to the former; the remainder of the recommendations were directed to the RRC's.

The Chair of the ACGME has also reestablished a committee to begin a process that will lead to the revision of the General Requirements. To undertake this task the committee is to be made up of one representative from each of the ACGME's five member organizations, together with a public member, the chairman of the committee on Structure and Function and the chairman of the RRC Chairman's Council.

Following are the principles and recommendations of the ACGME Task Force on GME.

Principles

1. The education of physicians is the primary objective of residency training and is integrally related to patient care. Therefore, patient safety and delivery of high quality health care should be of paramount importance to all teaching hospitals and essential components of quality education.

2. Education is linked to and reflects medical practice today and in the future.

3. The quality of medical care provided by physicians following completion of training is directly related to the quality of that training.

4. Continuity of care is an important component of quality of patient care. Residents provide an important component of the

continuity of care by providing close hour-to-hour observation and contact with patients.

5. The attending physician bares ultimate responsibility for the continuity and quality of physician services.

6. Education and patient care are both best conducted when residents have appropriate amounts and levels of responsibility under supervision and appropriate schedules designed to maximize educational experience without producing counterproductive stress, fatigue and depression.

Recommendations

1. Section 1.3 (Facilities and Resources) of the General Requirements [see appendix] should be revised to add the following: (additions underlined, deletions in parentheses)

"...adequate facilities for residents to carry out their patient care and personal education responsibilities, <u>including adequate on-call, lounge and food facilities for residents while on duty and on-call</u>, ... (and) clinical support services such as pathology and radiology, <u>including computerized laboratory and radiologic information retrieval systems that allow immediate access to results, and IV services, phlebotomy services, and messenger/ transporter services in sufficient number to meet reasonable and expected demands, including evenings and nights</u>."

2. Section 5.1.3 (Supervision) of the General Requirements should be revised as follows: (additions underlined)

"5.1.3 <u>Supervision</u>: There must be institutional and program policies and procedures that ensure that all residents are supervised in carrying out their patient care responsibilities. The level and method of

supervision must be consistent with the Special Requirements for each program. Supervision of residents is a responsibility of the Program Director and teaching staff. It is the responsibility of the institution sponsoring a residency program to establish oversight to assure that programs meet the supervisory requirements of the applicable Special Requirements."

3. It is clearly the responsibility of the Program Director and faculty to supervise residents. Therefore, Residency Review Committees should be requested to define explicitly in the Special Requirements for their disciplines the specific requirements for supervision. The definition of these requirements should include the role of various faculty, the level of resident appropriate to provide supervision, the place of in-hospital and out-of-hospital supervision, response times when out of the hospital, and variations in the type and volume of patient care responsibilities peculiar to each specialty.

4. Each Residency Review Committee should be asked to review its Special Requirements and develop requirements regarding the frequency of duty and on-call assignments for residents in training. Such requirements should ensure:

   a) quality patient care in an optimal educational environment with adequate supervision.

   b) an adequate level of resident staff to prevent excessive patient loads, excessive new admission work-ups, inappropriate intensity of service or case mix, and excessive length and frequency of call contributing to excessive fatigue and sleep deprivation. Some ways of achieving an appropriate education environment are these:

i) Residents should be allowed to spend, on average, at least one full day out of seven away from the hospital.

ii) Residents on the average should be assigned on-call duty in the hospital no more frequently than every third night.

iii) There should be adequate backup if sudden and unexpected patient care needs create resident fatigue sufficient to jeopardize patient care during or following on-call periods.

5. Residency Review Committees should be asked to present the results of their review and revision of Special Requirements to the ACGME no later than March 1989.

6. Because of the changing pattern of medical practice with greater emphasis on critical management in the outpatient settings, some training and education should shift from inpatient services in intensive care units to outpatient ambulatory setting. Residency Review Committees should develop recommendations to reflect this change in medical practice to ensure the continuity of patient care in a favorable educational environment with adequate supervision.

7. The ACGME should appoint an ad hoc group with specific expertise regarding the standards for ambulatory education to develop information and recommendations to assist the RRC's in developing specific ambulatory requirements in the several specialties.

C. AAMC Recommendations on Housestaff Supervision and Hours

The report's major recommendations were adopted on February 25, 1988 and communicated by Robert G. Peterdorf, M.D., president of the AAMC through Memorandum #88-12 on March 8. The recommendations were the following:

1. Every teaching hospital should have governance and operational mechanisms to ensure that residency programs not only have inherent educational value but also enhance the quality of care provided to patients.

2. Teaching hospitals and residency programs need specific policies and procedures specifying the level of supervision which faculty and other supervising physicians exercise over residents at each level of training.

3. Every teaching hospital should adopt general guidelines for residents' working hours according to specialty, intensity of patient care responsibilities, level of experience, and educational requirements. In order that decisions about the care of patients are not impaired by fatigue, residents hours actually worked should not exceed 80 hours per week when averaged over four weeks.

4. Teaching hospitals and residency programs should have policies which prohibit unauthorized moonlighting. The total working hours for residency and authorized moonlighting should not exceed 80 working hours per week when averaged over four weeks.

5. The ACGME should inform each Residency Review Committee that it must include in its program surveys an assessment of the policies and operating procedures that provide for direct and indirect resident supervision by program faculties.

6. Surveyors should examine residents' schedules and visiting review committees should include an assessment of the working hours assigned

to residents in determining a program's accreditation status. Changes in resident hours should be phased in gradually, enhancing the quality of patient care and preserving the educational goals of residency programs.

7. All public and private purchasers of hospital support services should support teaching hospital efforts to ensure high quality patient care by reimbursing the hospital for all of the incremental costs incurred as a result of altering resident supervision and assignment policies.

D. American Board of Medical Specialties Recommendations on Supervision and Working Conditions during Residency (August 12, 1987)

One person must be designated as the Program Director by the institutional governing board. The Program Director must have responsibility for all educational programs and the quality of patient care related to educational programs, and must have authority over staff and resources to discharge that responsibility.

Each patient in the institution must have a legally constituted attending physician who is responsible for the patient's care.

Each Residency Review Committee must propose Special Requirements to outline the specific needs to discharge the above described responsibilities of that specialty.

The Program Director must ascertain that the residents are:

1. Sufficiently knowledgeable and skillful to assess the patient's clinical state and deal with it promptly. Residents may provide medical care only when such care involves services which they are judged competent to provide by the Program Director.

2. Sufficiently well supervised so that errors based on inexperience are unlikely to happen or can be rapidly reversed. Contemporaneous supervision must be sought by residents who

have been given authority to provide medical care. Appropriate attending supervisory physicians must be available 24 hours a day.

3. Not impaired by fatigue. At no time should there be sustained or frequently repeated periods of work to the point of exhaustion of the resident. A work schedule which will cause excessive fatigue is a work week generally more than 90 hours and an excessive number of continuous hours in any given day. Each Residency Review Committee must propose specific definitions for that discipline which take into account work hours and rest to avoid excessive continuous service.

4. Not distracted by moonlighting or outside positions which interfere with educational and work activities. Moonlighting, if not prohibited, must be strictly regulated and reported to the Program Director who should make reasonable determinations as to the possibility of the moonlighting affecting the resident's physical and mental performance adversely.

III. States' Response to the Problem

A. New York

The issue of resident working conditions and supervision in teaching hospitals has received much publicity due to the consideration by a New York Grand Jury of the death in a teaching hospital of a young person which might have been prevented by more systematic supervision of a junior house officer. In part to respond to the issues raised by the Grand Jury and because these issues represent ongoing concerns of the New York Health Department, the Commissioner of Health, Doctor David Axelrod, appointed an Ad Hoc Advisory Committee which was charged to address a variety of issues associated with the Grand Jury report. The Committee studied the organization and delivery of care in the emergency departments of hospitals of New York State; the supervision of trainees in residency programs; the working conditions of residents, and other issues.

The Committee issued the following recommendations on supervising physicians in the Report of the New York State Ad Hoc Advisory Committee on Emergency Services on October 7, 1987 (the so-called "Bell Committee"):

1. The attending physician who admits his/her private patient to the hospital has the principal obligation and responsibility at all times for the patient's care and residents' supervision.

2. Patients who are admitted to the hospital who do not have a prior arrangement with a physician for their care (e.g., service patients) will become the responsibility of an attending physician.

3. There shall be at least one emergency department attending physician on duty 24 hours a day, 7 days a week. In addition to supervision in the emergency department, there must be supervision in the hospital where there are residents in training in the acute care specialties of anesthesiology, family practice, medicine, obstetrics, pediatrics, psychiatry and surgery 24 hours a day, 7 days a week, by licensed and currently registered physicians, who are residency trained and board prepared or certified on these specialties, or who have completed a minimum of four post-graduate years of residency training. These physicians shall be present in person in the hospital to supervise the residents in their specific discipline and in sufficient numbers to meet reasonable and expected demand.

In hospitals that can document that the patients' attending physicians are readily available in person, the in-house supervising physicians may be in their final year of board preparation or have completed a minimum of four post-graduate years of residency training as defined by specific hospital policy.

4. There must be clearly cited hospital policies which define explicitly the chain of command, the flow of responsibility in that chain, the

sharing of responsibility and the generic principles governing independent vs. supervised medical practice, i.e., when residents are expected to call for help, when on-site and in-person supervisors are expected to intervene.

The Committee issued the following recommendations on the working conditions of residents and the issue of ancillary help:

1. Residents and attending physicians who have direct patient care responsibilities in hospitals which have emergency medical departments of over 15,000 visits per year, shall not work for more than 12 consecutive hours per rotation in the emergency services.

2. Individual residents who have direct patient care responsibilities in areas other than the emergency department shall have a scheduled work week which will not exceed an average of 80 hours per week over a 4 week period and should not be scheduled to work as a matter of course for more than 24 consecutive hours with one 24 hour period of non-working time per week. Teaching hospitals will develop specific policy dealing with schedules and limits of responsibility of individual residents during consecutive working hours including the responsibility for the evaluation of new patients.

   This recommendation applies to anesthesiology, family practice, medical, surgical, obstetrical, pediatric, or other services which have high turnover, and acutely ill patients. For those other services, or psychiatric hospitals where the night calls are infrequent and it is clear that rest time is adequate, a modification is acceptable but must be documented.

3. In no case shall a resident who has worked the maximum consecutive hours as a resident, work additional hours as a physician in patient professional services in a different

hospital in a consecutive fashion. Violation of regulations bearing on this recommendation will be referred to the Office of Professional Conduct.

4. All teaching hospitals, including voluntary, municipal, proprietary and county hospitals, must have available at all times IV services, phlebotomy services, and messenger/ transporter services in sufficient number to meet reasonable and expected demands.

5. All teaching hospitals, including voluntary, municipal, proprietary and county hospitals, must have in place by 1992 a computerized laboratory and radiologic information retrieval system, which will allow instant access to results.

6. All the recommendations are based on the understanding that the Department of Health will make available to hospitals the necessary funds to implement the recommendations.

On April 7, 1988 the State Hospital Review and Planning Council Code Committee revised the above recommendations dealing with resident staff to the following (also see appendix):

Section 405.4 Medical Staff

(b) Organization

Item (6) In order that the working conditions and working hours of physicians and post-graduate trainees promote the provision of quality medical care, effective July 1, 1989, the hospital shall establish the following limits on working hours for certain members of medical staff and post-graduate trainees:

(i) In hospitals with over 15,000 visits to an emergency service per year, assignment of post-graduate trainees and attending physicians shall be limited to no more than twelve consecutive hours per rotation in the emergency service.

(ii) Schedules of post-graduate trainees with inpatient care responsibilities shall meet the following criteria:

(a) the scheduled work week shall not exceed an average of eighty hours per week over a four week period;

(b) such trainees shall not be scheduled to work for more than twenty-four consecutive hours.

(c) for departments other than anesthesiology, family practice, medical, surgical obstetrical, pediatric or other services which have a high volume of acutely ill patients, and where night calls are infrequent and physician rest time is adequate, the medical staff may develop and document scheduling arrangements other than those set forth in clauses (a) and (b) of this subparagraph.

(iii) The medical staff shall develop and implement specific policies relating to the schedules and limits of responsibility of individual post-graduate trainees during consecutive working hours including, but not limited to, responsibility for evaluation of new patients.

(iv) In determining limits on working hours of post-graduate trainees as set forth in subparagraphs (i) and (ii) of this paragraph, the medical staff shall require that scheduled rotations be separated by not less than eight non-working hours and that post-graduate trainees shall have at least one twenty-four hour period of non-working time per week.

(v) Hospitals employing post-graduate trainees shall adopt and enforce policies governing dual employment. Such policies shall require at a minimum, that each trainee notify the hospital of employment outside the hospital and the hours devoted to such employment. Post-graduate trainees who have worked the maximum number of hours permitted in subparagraphs (i) - (iv) of this paragraph shall be prohibited from working additional hours as physicians providing professional patient care services at another hospital, health care facility, or home health services agency.

(f) Post-graduate trainees

Item (2)

(iv) Post-graduate trainee privileges, regardless of whether the individual is full-time, part-time, or rotating status, shall be modified based upon written criteria and individual review and approval of each trainee

Item (3)

(iii) Effective July 1, 1989 for post-graduate trainees in the acute care specialties of anesthesiology, family practice, medicine, obstetrics, pediatrics, psychiatry and surgery, supervision shall be provided by physicians who are board certified or admissible in those respective specialties or who have completed a minimum of four post-graduate years of training in such specialty. There shall be a sufficient number of these physicians present in person in the hospital 24 hours per day

seven days per week to supervise the post-graduate trainees in their specific specialties to meet reasonable and expected demand. In hospitals that can document in that the patients' attending physicians are readily available in person when needed, the on-site supervising physicians may be in their final year of post-graduate training.

The committee also included the following regulation on medical student activities in the hospitals. This regulation was substantially modified from that in the originally proposed Committee Report in 1987:

"Medical students, in the course of their educational curriculum, may take patient histories, perform complete physical examinations and enter findings in the medical record of the patient with the approval of the patient's attending physician. All medical student entries must be countersigned within 24 hours by an appropriately privileged physician. Medical students may be assigned and directed to provide additional patient care services under the direct in person supervision of an attending physician or authorized senior post-graduate trainees. The hospital, in cooperation with the medical staff and the medical school, shall guarantee such appropriate supervision and documentation of all procedures performed by medical students. In addition, specific identified procedures may be performed by medical students under the general supervision of an attending physician or authorized senior post-graduate trainee provided that the medical staff and the medical school certify each individual's competence to perform such procedures. Documentation of supervision and competence of medical students shall be incorporated into the quality assurance system of the hospital and its affiliation agreement with the medical school. In all such patient care contacts, the patient shall be made aware that the individual performing the procedure is a student."

The Department of Health announced that these recommendations will go into effect in July, 1989. The New York legislature has yet to identify and provide the money needed to finance the hours changes. State officials have little more than gross estimates of the cost. New York hospitals estimated the cost at roughly

$200 million to implement the regulations. The Committee recommendations also have to be rewritten into regulation form and checked with the health department's legal department to make sure they do not contradict other state rules. The recommendations would be part of a massive rewriting of the New York state hospital code.

B. California

Legislation developed by Sen. Joseph Montoya (D, Whittier) to restrict medical residents' hours was recently introduced into the California Assembly by Rep. Jackie Speier (D, San Mateo). Speier's bill sets a 12-hour limit per shift on residents' work in the emergency room, a 16-hour limit per shift in the rest of the hospital, and a 72-hour limit of work per week. There would be an exception to the daily hour limits for specialty services which average two or less admissions per resident physician admitting team within a 24-hour period averaged yearly, and whose residents cover less than 50 patients per team. Residents would be on call overnight in the hospital no more than once every three nights, and they would need to take at least two days off every 12 days. Only those hours actually worked by resident physicians on long-range call from home, from the time they are paged, shall be counted as part of the weekly total hours worked. Surgical residents completing a procedure and other residents treating an "acutely ill patient whose care may be compromised by the resident physician's departure" would be excepted from the hours limitations. A small residency program might also be excepted, if it developed its own hours limits and got approval from the hospital and a resident representative. The bill also says that residents' pay cannot be reduced if and when it goes into effect. The bill would apply to all interns, residents and fellows.

In January 1988, California began a detailed survey of residents' hours, conducted by the State Board of Medical Quality Assurance. Survey forms were sent out to 7,000 residents, asking then to detail their duties, their hours of work and offtime during November 1987. Directors of the state's 700 residency programs were also asked to detail their work schedules for November and some specific policies, such as on residents' moonlighting and fatigue.

In a survey of 177 residents by the California House Officer Medical Society, which is an affiliate of the California Medical Association, two-thirds said they would like to work a maximum of 60 to 80 hours a week. Other respondents were almost equally divided between limits of 40-50 hours and 100-130 hours. Three-quarters of the residents said they worked 60-100 hours a week, 9% worked more than 100 hours and 17% worked less than 60 hours. Three-quarters of the respondents said fatigue had compromised their ability to provide quality patient care. Of these residents, 79% reported deficits in interpersonal skills, 63% in charting directions, 60% in patient management and decision making, and 45% in technical skills. More than 80% said that they were adequately supervised "almost always" or "most of the time," while 18% reported being adequately supervised "sometimes." No resident reported being supervised "almost never."

C. Massachusetts

After the Massachusetts Department of Consumer Affairs announced plans to set up a commission to review residents' overwork last fall, the deans of the state's medical schools successfully proposed a study. As one part of that study, a report was written by Harvard's Ad Hoc Committee on Stress and Fatigue in Residency Training which proposes the following guidelines:

- the number of admissions per resident on call should be limited

- patients admitted exclusively for cardiac catherization, renal biopsy, colonoscopy, and other such procedures should be considered for admission to a unit not staffed by residents

- residents should work no more than 16 hours straight

- all rotations should include "protected time" devoted to teaching conferences and sessions "point of contention," disagreements and other concerns

- the program should provide orientation sessions, individual meetings with advisors to get feedback, and confidential counseling

D. Hawaii

State Senator Jane McMurdo (D, Kahului) introduced her bill on the regulation of residents' work hours on February 2, 1988 and held hearings on the bill, but an aide to the sponsor said it will probably go nowhere this year since it missed an important legislative deadline. McMurdo was also expected to introduce a resolution proposing that the state study the conditions of its 365 residents. Under the Hawaii bill, residents and attending physicians working in emergency rooms of hospitals with more than 100 acute care beds would be prohibited from working more than 12 consecutive hours, and they would need to take 12 consecutive hours off each shift. In hospitals of the same size, residents working outside the ER in primary care, surgery, and perhaps other services with "high turnover and acutely ill patients" would be limited to an average work week of no more than 80 hours during a four week period. Also, they could not be scheduled for more than 24 consecutive hours more than once every two weeks, and they would have to be off duty 24 hours straight once a week. These non-ER rules are specifically limited to programs affiliated with the University of Hawaii, the only medical school in the state. The bill would also include residents' moonlighting at other facilities within the hours maximums.

E. Pennsylvania

Officials at the Pennsylvania Medical Society were optimistic that two residents' hours bills in the Pennsylvania legislature will fail. A bill introduced on October 14, 1987 by Rep. Michael Dawida called for a strict 12-hour limit on shifts for emergency room residents and a 16-hour shift for other residents. Another bill introduced November 9, 1987 would restrict all residents to 16 hours work in one facility and restrict overnight call in the hospital to every fifth day.