IOM Panel Revisits Issue of Resident Work Hours

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Contributing Writer

WASHINGTON — Five years after the establishment of across-specialty rules to limit resident work hours, the issue of trainee schedules in teaching hospitals is again under the microscope as a continuing threat to patient safety—and this time an Institute of Medicine committee has been forewarned that specific "workable" solutions are needed.

The schedules in teaching hospitals "belie virtually all the tenets of providing good health care. How can we profess to provide the best possible quality of care when we know we have staff members who are operating at levels of sleep deprivation so severe that they are similar to someone driving under the influence of alcohol?" Dr. Carolyn Clancy, director of the federal Agency for Health Care Research and Quality, asked at a meeting sponsored by the Institute of Medicine.

"If we don't give members of Congress some workable solutions, they'll come up with their own," she told members of the IOM's Committee on Optimizing Graduate Medical Trainee Hours and Work Schedules.

The committee, which held the first of four workshops in December, was formed at the request of Rep. John D. Dingell (D-Mich.) and colleagues on the House Committee on Energy and Commerce as part of an investigation into preventable medical errors. The IOM will publish a report including strategies and actions for implementing safe work schedules in February 2009.

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The issue of resident works hours received relatively little attention in the IOM's landmark 1999 report on medical errors, experts said at the workshop, despite several decades of research on the effects of sleep deprivation on human performance and research more specifically showing an impaired ability of interns to read EKGs after long shifts.

Since then—and especially within the past several years—various studies have demonstrated the effects of sleep deprivation in medical residents and have shown that reductions in work hours can reduce errors, physicians told the committee.

A prospective, national survey of more than 2,700 interns, for instance, showed that residents were seven times more likely to report a harmful fatigue-related error when they worked five or more 24-hour shifts in a month than when they worked no 24-hour shifts. They were four times more likely to report a fatal error.

And in a randomized controlled trial, residents had twice as many EEG-documented attention failures at night when working the traditional schedule of 24- to 30-hour shifts than when working an "intervention" schedule of a 16-hour maximum. Both studies were led by researchers at Harvard University.

Dr. Christopher P. Landrigan, who directs the Sleep and Patient Safety Program at Brigham and Women's Hospital, Boston, said the Harvard research has also shown that residents working 24- to 30-hour shifts make five times as many serious diagnostic errors as do those scheduled to work 16 hours or less. They're also twice as likely to crash their cars, and they suffer 61% more needlestick injuries, he told the IOM committee.

Limits instituted by the American Council on Graduate Medical Education in 2003 mark shifts of 24-30 hours as acceptable. The council's "common duty hour standards" call for a 24-hour limit on continuous duty, with an additional 6 hours allowed for continuity and the transfer of care, as well as an 80-hour weekly limit averaged over 4 weeks. Programs can request an increase of up to 8 hours a week and can apply for further exemptions. Residents must also have a minimum rest period of 10 hours between duty periods, 1 in 7 days free from patient care responsibilities, and in-house call no more than every third night, averaged over a 4-week period, the standards say.

The American Council on Graduate Medical Education says it has issued citations to individual programs for duty hour violations and has done resident surveys that demonstrate a compliance rate of 94%. Others argue, however, that enforcement is inadequate and that an independent body is needed to ensure compliance with the rules. Culture and tradition are so entrenched, they say, that too little has changed and that residents routinely underreport hours for fear of retaliation.

"I'm a resident who said one thing on a survey and did another thing in real life," Dr. Sunny Ramchandani, past chair of the AMA Residents and Fellows Section, told the IOM committee. "I'd have a 30-hour shift, work at least 34 hours, and report 16."

Part of the problem is that residents' workloads tend to remain the same even when shifts are shortened. Surveys of faculty and program directors taken by the American College of Physicians indicate that, even under the current rules, there is often less time for both formal and informal education, less time for ambulatory training, less time at the bedside, and a loss of continuity in care.

"Changing duty hours means changing everything," from work flow and coverage strategies to transfer-of-care techniques and the "very fundamentals of how patients are treated" and what residents are responsible for, said Dr. Ethan Fried, director of graduate medical education at St. Luke's–Roosevelt Hospital Center in New York.

Hospitals in New York state have been dealing with work hour limits and supervision requirements since 1988, several years after the death of Libby Zion in a teaching hospital spurred the state to take action.

Changes made at Dr. Fried's hospital mean that a patient may now be admitted by one team of residents, treated by another, and discharged by yet another. "And it's up to educators to help residents integrate these experiences," he said. "I [still] don't know whether I can."

In Europe, the IOM committee was reminded, physicians and other health care workers are prohibited from working more than 13 hours straight or more than 48-56 hours per week. And for decades, physicians in New Zealand have worked with 16-hour shift limits and 72-hour weekly limits.

Different methods of graduate medical education financing and other health system differences make comparisons difficult, however. Here in the United States, Dr. Fried said, "with duty hour restrictions coming at the same time as patient volumes have increased, as acuity (of illness) in teaching hospitals has increased, and even as our treatments have become higher-stakes treatments, we have the perfect storm." ■

FYI

Drug Court Treatment Grants

The Substance Abuse and Mental Health Services Administration is accepting applications for Grants to Expand Substance Abuse Treatment Capacity for Drug Courts. Up to 18 grants will be funded for up to $300,000 each. This program will enhance substance abuse treatment services in "problem-solving" courts that use the treatment drug court model for defendants and offenders. The application deadline is April 10, 2008. To download the grant announcement, visit www.samhsa.gov/Grants/2008/ti_08_007.aspx.

Help Preschoolers Turn Off the TV

The TV Time kit is available to encourage parents to control television privileges. The kit contains viewing tickets in 15-minute intervals, as most preschool TV shows have two 15-minute episodes. The child deposits the tickets into a special box, and a timer allows the child to see when 15 minutes have elapsed. Kits cost $19.50 plus shipping and handling and include 32 colorful TV tickets, a box for depositing tickets into, and 2 movie tickets. For more information, visit My Child, My Parent, LLC at www.mytvtime.com.

Evidence-Based Practices on the Web

A Web page developed by the Substance Abuse and Mental Health Services Administration features 37 sites containing information on evidence-based interventions for the prevention or treatment of mental and substance abuse disorders. The page—A Guide to Evidence-Based Practices on the Web—also provides access to reviews of current research findings. Users can browse for information by content area, age group, or treatment setting by visiting www.samhsa.gov/ebpWebguide.

Impact of Hurricanes Katrina and Rita

The report entitled "Impact of Hurricanes Katrina and Rita on Substance Use and Mental Health" says that adults who were forced to leave their homes for 2 weeks or more during the two natural disasters were much more likely to report problems with substance abuse than those who were not similarly dislocated. The report, which is available for free from the Substance Abuse and Mental Health Services Administration, can be found at www.oas.samhsa.gov/2k8/katrina/katrina.cfm.

AIDS/HIV, Drug Abuse Program Grants

The Substance Abuse and Mental Health Services Administration is accepting applications for grants to strengthen ethnic communities' drug abuse treatment, outreach, and prevention services administered in conjunction with HIV/AIDS treatment. For more information, visit www.samhsa.gov/Grants/2008/ti_08_006.aspx.

Quality Reporting Web Site

The Centers for Medicare and Medicaid Services has reorganized the Web site for the Physician Quality Reporting Initiative to provide easier access to 2008 information. The site also includes downloadable documents with quality measurement specifications for providers. For more information, visit www.cms.hhs.gov/PQRI.

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