Middle-of-the-night medicine is rarely patient-centred

It is all but a truism that the level of health care provided in hospitals on weekends or evenings isn't on par with that provided on weekdays.

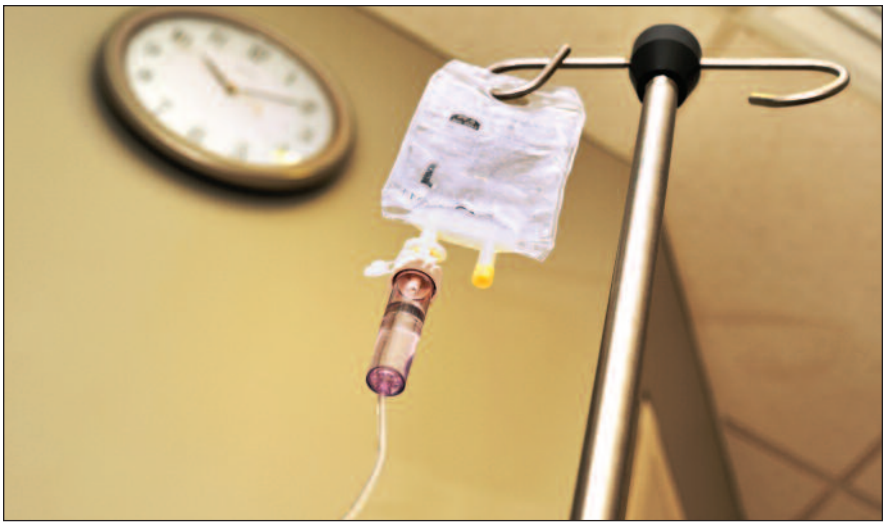
As Jesse Gruman, president of the Washington, DC-based nonprofit Center for Advancing Health says, "anybody who's been in the hospital knows that it's kind of banker's hours after six o'clock. You feel really vulnerable if something happens at night because of the sparseness and responsiveness of the night staff."

Hospitals are "just maintaining" after regular business hours, she says, adding that it's not unusual for patients to wait several hours for diagnostic imaging tests because radiology departments are poorly staffed and other hospital staff are busy dealing with urgent care patients. "You're just kind of sitting there in the hall in your blanket," she says in describing her own experiences in receiving cancer treatment.

The variations in the nature and quality of care patients receive during the day, as compared with that received on nights and weekends, have left many North American hospitals scrambling to find means of ensuring more equivalent levels of care, and experimenting with various staffing models and measures, including a trend in the United States toward the use of "nocturnists" to oversee night and weekend care.

Although it seems all but self-evident and a given that the level of care varies by the time of day or day of week because of such factors as staffing levels, there actually appears to be few evaluative studies on the issue. But one study found that the rate of heart attack survivals to discharges was 14.7% at night as compared with 19.8% for daytime/evening (*JAMA* 2008;299[7]:785-92).

Anecdotal evidence has been as compelling for some hospital administrators. In fact, it can be eye-opening, as Dr. David Shulkin, former president and CEO of the Beth Israel Medical Center in New York City, New York, once said of his facility after watching its operations around the clock (*NEJM* 2008;358:2091-93). "Like many hospital executives, I've come to appreciate the fact that I work in two distinct places, although they share the same address," he wrote. "Although these facilities appear to be one and the same, they in fact represent two very different medical environments."



After the clocks in a hospital strike 6 pm, "it's kind of banker's hours" and patients often feel vulnerable because of the sparseness of staff, says one health advocate.

Yet solutions aren't readily apparent, or easily implemented.

Many hospitals in the United States are increasingly turning to nocturnists — physicians who only have nighttime responsibilities — as the solution.

"The doctor coming on duty at night will plan to be in the hospital all night, plan to stay awake, expect to work. So that's what's different about the nocturnist idea," says Dr. John Nelson, medical director of the hospitalist practice at Overlake Hospital in Bellevue, Washington, who popularized the term "nocturnist" in the 1990s and "never imagined that it would become an almost standard part of medical lexicon."

Typically, nocturnists work fewer hours and receive extra compensation for their willingness to toil in the night. At Overlake, for example, they work seven consecutive nights and then get two weeks off. "I think what our doctors do is hard and we want them to have liberal amounts of time off to compensate for that."

Nelson adds that the evolution toward nocturnists was inevitable. Patient volumes increased so dramatically that the notion of having a doctor assigned to a specific patient and available on-call at home all night essentially became unworkable. "'In case something happens' is no longer the way it works," he says. "Something does happen every night."

Better that a patient see a nocturnist, than wait to see a physician who may be more familiar with his file but is struggling to overcome sleep deprivation from being on-call at night, Nelson says. "I go home knowing that I'll be able to sleep and that my patients have easy access to someone who's awake, already in the building, and you know, one flight of stairs away."

Gruman says it only makes sense for patients to be seen by someone who knows how to manage night time spikes and get the most out of reduced staff and services. "I can't help but think there aren't tricks and skills that can be applied more appropriately by someone who really specializes in the night time. It really is about safety, about using resources wisely, and

reducing the sense of vulnerability that patients have."

Yet, while US facilities appear to be moving toward the appointment of nocturnists as a solution to variations in care by time of day or day of week, the response in Canadian hospitals appears more piecemeal.

The Canadian Healthcare Association declined comment on the issue, so it is difficult to determine whether there are commonalities in the responses of Canadian hospitals. But it appears that hospitals are essentially being left to their own devices to find solutions and that most of their responses are based on some measure of shift work or differential pay for physicians willing to work nights or weekends.

In comparison with the US, "I don't think that after-hour coverage is as well funded in Canada," says Dr. David Wilton, president of the Canadian Society of Hospital Medicine and a hospitalist at the Vancouver General Hospital in British Columbia.

Rather than providing designated monies to bolster night staffing levels, governments typically suggest that hospitals and physician associations shift available resources around to accommodate the need, Wilton adds.

That's certainly the case in BC, where a spokesperson for the BC Ministry of Health writes in an email that "with respect to our contracted arrangements for 24/7 care, such as Emergency Departments or Hospitalists, it is left to the physician group to weight time periods (night, weekends, holidays) as they deem best appropriate for care. It is our understanding that the rates we pay are sufficient to allow this flexibility."

But Wilton says that Canada's single-payer health care system makes it more difficult to provide financial incentives. "It has to be a policy decision rather than a response to market force. So what we need to do is raise awareness amongst people in the administration."

Instead, most hospitals fiddle with some manner of shift work. At the Vancouver General, for example, almost all physicians must work one week of evenings (4 pm until midnight), followed by four weeks of day shifts. Medical issues that crop up after midnight are either handled by phone or by an overnight critical care outreach team "followed by the MRP [most responsible physician] as soon as possible."

"What we're seeing here is that groups are evolving out of necessity to incorporate nocturnist-type work into their general work rotation, but we're not incentivizing it," Wilton says. "You don't get fewer shifts because you're the evening person or more compensation because you're the evening person. You're sort of doing it because you're obligated to it as part of your clinical compliment."

Wilton adds that other jurisdictions have looked to such solutions as 24-hour in-house hospitalist coverage or province-wide on-call coverage programs. But the location and size of a hospital often limits its flexibility, he says.

Further complicating the matter are such issues as hospital teaching responsibilities; legal disputes over resident working hours and a general demand for shorter shifts.

The training issues can be thorny. "Given the fact that duty hours are changing, how do we adapt? How do we make sure we're training very competent physicians with this change," says Dr. Kevin Imrie, vice-president, education, Royal College of Physicians and Surgeons of Canada, adding that the same services and staff aren't available at night so residents working night shifts may not get the same experience.

Imrie adds that "one of the things that's very, very clear is that as you restrict shift lengths, you are going to increase the potential risk of discontinuity of care." Some of that risk may be overcome by effective handovers during shift changes, which become increasingly important as hospitals develop more concrete programs to improve night and weekend care, he says.

Gruman forecasts that the change won't come easy. Developing a new framework will not be simple for hospitals because they are "big clunky machines" that don't like change, she says.

But it's important to view care variations by hour of day or day of week from a patient perspective, Gruman adds. "Your experience of being ill is a 24-hour experience. It doesn't just happen during business hours." — Erin Walkinshaw, Ottawa, Ont.

CMAJ 2011. DOI:10.1503/cmaj.109-3953

Highlights of CMA's 144th annual general meeting

Health care funding model flawed, blue-ribbon CMA panel argues

Alternative models for health care financing, including "user fees, franchises and various insurance schemes" are needed if Canada's health care system is to avoid privatization, according to a Canadian Medical Association advisory panel struck to recommend means to improve governance of the health care system and to generate resources to ensure the system's sustainability.

The Report of the Advisory Panel on Resourcing Options for Sustainable Health Care in Canada, released at the CMA's annual general meeting in St. John's, Newfoundland and Labrador also called for increased provider competition and less micromanagement of the health system by government.

A discussion of a range of alternative ways of funding the system is imperative, the report states. "At present, apart from Medicare services, individuals either pay privately for all or a large part of supports across the continuum of care, or forgo them for cost reasons. This is equitable and also creates the wrong incentives, as individuals naturally turn first to the services for which they do not pay anything, even though other interventions might be faster, better for them and less costly to society as a whole."

More private delivery of health care services should occur within a framework