

Family Matters: does this mean the end of 24-hour on-call shift for Canadian residents?

Sophie Maurice MD Jessica Beaton MD Victor Ng MSc MD
 On behalf of the Section of Residents of the College of Family Physicians of Canada

The purpose of this article, produced by the Section of Residents, is to inform residents in Canada of the changes that are happening in Quebec with respect to institutional on-call shift. This article is not in any way a statement of position.

Long-standing tradition

According to long-standing tradition, residency must be a hardship, and working for periods of longer than 24 hours without a break is a rite of passage. Supervisors sometimes boast that “in their time” they had to do rounds the next morning, after performing 24-hour on-call shifts. In other words, they were working shifts of more than 36 hours! For many years, no one questioned this tradition. But are these hours really necessary? Isn't it time to re-think how we work in order to provide our residents with a better quality of life and a better learning environment and, most important of all, to provide our patients with a better quality of care?

Change

This is precisely what is happening in Quebec. Several universities have taken the first step, and 24-hour institutional on-call shifts are slowly being phased out and replaced with on-call shifts of 12 to 16 hours. Various types of schedules are being provided to the resident coordinator in each institution, who then adapts the working environment to the most realistic of these schedules.

This is not a new topic. Indeed, it is being debated around the world.¹ For years, researchers in the United States and Europe have conducted studies demonstrating that 16-hour on-call shifts are more efficient and provide the same coverage with the same number of residents without compromising either the quantity or the quality of training. After 20 hours, a resident is often distracted and less able to assimilate what he or she is learning.

Those who are in favour of the status quo say that the longer the exposure, the better the training.^{2,3}

They argue that residents benefit from the longer hours, which provide more exposure to different situations and that cutting hours would mean extending the length of training. Some also argue that training settings desperately need the labour residents provide in order to make the health care system operate efficiently. Those who want shorter continuous hours say that they prevent medical errors and preserve the quality of resident training.^{4,5}

Why in Quebec?

Why is Quebec changing its on-call hours? The debate heated up more than 3 years ago when a resident physician filed a grievance to the effect that 24-hour on-call shifts were illegal, violated his rights, and violated the Canadian Charter of Rights and Freedoms and the Quebec Charter of Rights and Freedoms. This grievance triggered a series of legal cases that are still before the courts. At the same time, the Fédération des médecins residents du Québec is attempting to negotiate a new collective agreement with the Quebec government. The Fédération wants a new clause added to the collective agreement that would limit institutional on-call shifts to 16 hours. If the agreement goes through, other provinces might revisit their on-call policies.

In 2010, 2 Quebec institutions took part in a pilot project to test on-call schedules with the new 16-hour limit. The findings were conclusive. Other Quebec institutions are slowly modifying their schedules, too.

What would a schedule with 12-hour to 16-hour on-call shifts look like?

Several schedules have been developed to meet the new limit. Let's take the example of a resident who should do 3 24-hour on-call shifts in a month. With the new schedules, these on-calls are often concentrated within 1 week. Here is the example of a week of on-call shifts of a maximum of 16 hours:

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	MONDAY
Clinic	Clinic	No clinic On call from 5 PM to 8 AM	Day after on-call shift	No clinic On call from 5 PM to 8 AM	Day after on-call shift	On call from 8 AM to 8 PM	Clinic

This resident would not have any other on-call shifts during the month, and his or her rotation would follow its normal course.

This is but one example. The training settings are developing their own schedules based on their needs and taking into account the types of on-call coverage their residents are performing (wards, emergency, intensive care), transfers, and the number of residents who are available. For example, 1 institution developed a schedule in which the residents do 1 month of night on-call shifts and then do not have any night on-call shifts for the rest of the year.

The possibilities are endless. All that is required is imagination, a good grasp of the needs of the training settings, and an openness to changing the schedule later on, if it proves to be less than ideal.

Conclusion

This is a brief overview of what is happening in Quebec. The 24-hour institutional on-call shift is far from being a thing of the past in Canada. We need to stay open and flexible as these changes are being considered. Residents in other provinces will certainly watch what is happening in Quebec with great interest. Dear colleagues, is this a discussion you need to have in your training setting? 

Drs Maurice and Beaton are members of the Communications Subcommittee of the Section of Residents. **Dr Ng** is Chair of the Section of Residents.

Competing interests

None declared

References

1. Fletcher KE, Underwood W 3rd, Davis SQ, Mangrulkar RS, McMahon LF Jr, Saint S. Effects of work hour reduction on residents' lives: a systematic review. *JAMA* 2005;294(9):1088-100.
2. Marcus CL, Loughlin GM. Effect of sleep deprivation on driving safety in housestaff. *Sleep* 1996;19(10):763-6.
3. Mazotti LA, Vidyarthi AR, Wachter RM, Auerbach AD, Katz PP. Impact of duty-hour restriction on resident inpatient teaching. *J Hosp Med* 2009;4(8):476-80.
4. Jeanmonod R, Jeanmonod D, Ngiam R. Resident productivity: does shift length matter? *Am J Emerg Med* 2008;26(7):789-91.
5. Lockley SW, Barger LK, Ayas NT, Rothschild JM, Czeisler CA, Landrigan CP, et al. Effects of health care provider work hours and sleep deprivation on safety and performance. *Jt Comm J Qual Patient Saf* 2007;33(11 Suppl):7-18.

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