Is the elimination of 24-hour resident call a good idea?

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YES

They make 36% more serious medical mistakes … they are nearly 6 times more likely to make serious diagnostic errors … and they are 2.3 times more likely to be involved in a car accident after a 24-hour institutional on-call."[1] Frankly, many new medical procedures are adopted, and new medications approved, based on much more debatable data!

On July 1, 2012, all of Quebec's residency programs adopted a system of 16-hour in-hospital calls. As described in an article entitled "End of 24-hour institutional on-call duty in Quebec,"[2] this change was the result of meticulous and sometimes laborious work. It sparked numerous debates and discussions over a period spanning more than 5 years. There were many questions: Will residents achieve their learning objectives? Will care be fragmented? Will residents be ready to work as supervisors if their hours are different during their training? Should training be longer?

On June 7, 2011, a Quebec arbitrator ruled that 24-hour in-hospital calls violated both the Canadian Charter of Rights and Freedoms (Article 7) and the Charter of Human Rights and Freedoms of Quebec (Article 1). Residents could no longer be required, under their collective agreement, to work 24 hours in a row, in the face of hard evidence that this practice was harmful to their health and the health of their patients. On August 20, 2012, the Canadian Medical Association voiced its support for the Canadian Association of Internes and Residents and the 16-hour institutional on-call.[3]

As a result, the collective agreement of the Fédération des médecins résidents du Québec was renegotiated and the residents' schedules were restructured to limit institutional on-call shifts to 16 hours, with a maximum of 6 on-call shifts per month. The number of hours of work per week is generally the same. Other parameters were incorporated into the collective agreement as well, including overnight institutional on-call shifts of a maximum of 12 hours, a limit to the number of consecutive nights worked, and a new definition of the term *weekend*.

Handovers

This change shone a light on a number of flaws in our system. For example, in certain specialties, handovers are more difficult. Some on-call models result in greater resident rotation, with a greater number of handovers, which can affect continuity of care. As a result, we need to review these models. It is estimated that, regardless of his or her specialty, a resident works an average of 72 hours per week. Performing this many hours of work by means of shorter on-call shifts means that residents must be at the hospital more frequently. Quality of life can suffer; there are concerns that residents will develop chronic fatigue.

Does this justify continuing to work with an obsolete system? Residents do not receive much training on handovers and handover methods are often quite archaic. When are we going to switch to electronic handovers? Yet, it would be a mistake to think that handover errors did not occur with the 24-hour institutional on-call system. Some care models optimize patient care: they provide for a consistent day team, without the awful day-after syndrome, *and* an overnight team that gets to know the patients. Some models completely avoid the use of residents outside of rotations. Program length is already in the process of being reviewed on the basis of the competency-based curricula, and chronic fatigue and quality of life are 2 very important factors to consider. Should we consider the European approach, which limits the number of hours per week?

Adequate training

Today's residents are tomorrow's supervisors; their training must prepare them for medical practice. There is no evidence to support the argument that residents must perform 24-hour institutional on-call shifts in order to fulfil their role as supervisors. In fact, there is evidence that working 24 hours in a row has harmful effects. This has already been demonstrated. We still need evidence to corroborate the other factors.

What we need to do now is to optimize the 16-hour institutional on-call system in order to prepare residents optimally for practice. We can do this by working on handovers and finding the model that works best in each setting, while bearing in mind resident quality of life and fatigue. We need to re-evaluate the content of our programs in order to determine whether it reflects new practices, new care models, and new teaching methods, regardless of the length of training.

Transitions are always challenging; they force us to change our routines. However, we cannot ignore the

continued on ***page 134***

Cet article se trouve aussi en français à la **page 136.**

YES *continued from* **page 132**

evidence. We know that our system has flaws; but we can proactively look for solutions. Every setting will need to look at its needs and adapt to this new reality, in terms of organizing the work and incorporating new teaching methods. What is the best way to achieve this? We do this by working together as we look at different approaches, generating the evidence we need to reflect on sound medical practice in the 21st century.

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Competing interests
None declared

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2. Lajoie MRB. End of 24-hour institutional on-call duty in Quebec. A measure even practising physicians are calling for. *Can Fam Physician* 2012;58:602-3 (Fr), e296-7 (Eng).
3. Papin F. *Fin de vie et heures de garde des résidents: l'AMC dans le sillage du Québec.* Montreal, QC: Profession santé; 2012.

CLOSING ARGUMENTS

- Residents are 2.3 times more likely to crash their vehicles after working 24-hour shifts.
- On July 1, 2012, Quebec's residency programs adopted 16-hour in-hospital calls, ending 24-hour calls that were detrimental to both resident and patient health.
- We still need to optimize the 16-hour institutional on-call. We can do this by working on handovers, finding the model that works best in each setting, and continuing to be mindful of resident quality of life and fatigue.

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