



Are attending physician rotations costing hospitalized patients their lives?

Roger Ladouceur MD MSc CCMF(SP) FCMF, ASSOCIATE SCIENTIFIC EDITOR

According to a study published recently in *JAMA*, resident and intern rotation is associated with a statistically significant increase in mortality among hospitalized patients.¹ The authors reported that the mortality rates of patients exposed to rotation were almost double those of patients who were not exposed to rotation (4.0% vs 2.1% for the control group). Thirty-day and 90-day mortality rates were also higher: 15.5% and 22.8% for the rotation groups versus 9.1% and 14.0% for the control groups.

These results are troubling. They should cause program directors to think about how rotations are organized, whether they harm patients, and whether changes to the system are in order.


But it is too soon to sound the alarm. This is the first study to show an association between patient mortality rates and intern and resident rotation. Further, the study has a number of limitations. It is a retrospective study involving residents and interns performing rotations in internal medicine in 10 university-affiliated US Veterans Health Administration hospitals. Consequently, the strength of the evidence is weak. Before these results can be generalized to all academic programs, they must be confirmed or refuted by means of other prospective controlled studies conducted in other training settings.

However, even if these data are flawed, they call into question the organization of care in hospital settings. Because if these results prove to be conclusive for residents and interns performing rotations, what about family physicians who work in hospitals? In particular, what about hospitalists—family physicians who primarily care for hospitalized patients? It is hard to imagine how hospitalist rotations would not also have a negative effect on patient outcomes.

In recent years, we have witnessed a substantial shift in the way in which family physicians manage hospitalized patients.^{2,3} There was a time when family physicians provided care for their patients when they were admitted to hospital. Family physicians had a limited

number of hospitalized patients; they looked after their own patients, and hospitalization was just one of the forms of care they provided. Often they knew patients and their families well, having cared for them for years. And while they might have shared overnight and week-end on-calls with their colleagues to ease their workload and avoid a state of perpetual vigilance, they remained responsible for their patients' care and follow-up during hospitalization and afterward.

Now, hospitalists care for hospitalized patients. These physicians work according to a model similar to that of residents performing hospital rotations. That is to say, for a given period of time, usually a week, a single hospitalist cares for all patients admitted to a service or department. The hospitalist then transfers care of these patients to a colleague who cares for them the following week, until it is the first hospitalist's turn in the rotation again to look after the unit. These physicians work hard! When they go on duty, the volume of work ahead of them is incredible. They are responsible for all of the patients that their colleague has just handed over, in addition to all of the patients arriving from the emergency department, intensive care unit, and cardiology unit, as well as from other institutions and the community. It is a huge responsibility. It is difficult to imagine how, at the moment of transfer of care and regardless of the quality of the transfer, they can have full mastery of the care of these patients.

And so we need to ask ourselves whether the hospitalist rotation system has negative consequences for patients, as the resident and intern rotation system might have. In light of the results discussed above, it is time we talked about this. 

References

1. Denson JL, Jensen A, Saag HS, Wang B, Fang Y, Horwitz LI, et al. Association between end-of-rotation resident transition in care and mortality among hospitalized patients. *JAMA* 2016;316(21):2204-13.
2. Neimanis I, Woods A, Zizzo A, Dickson R, Levy R, Goebel C, et al. Role of family physicians in an urban hospital. Tracking changes between 1977, 1997, and 2014. *Can Fam Physician* 2017;63:221-7.
3. College of Family Physicians of Canada, Canadian Medical Association, Royal College of Physicians and Surgeons of Canada. *National Physician Survey, 2013. Results by FP/GP or other specialist, sex, age, and all physicians. Q10 Do you have active hospital privileges?* Mississauga, ON: College of Family Physicians of Canada; 2013. Available from: <http://nationalphysiciansurvey.ca/wp-content/uploads/2013/08/2013-National-EN-Q10.pdf>. Accessed 2017 Mar 7.

Cet article se trouve aussi en français à la page 265.