## LETTER TO EDITOR

## In Reference to "The Effect of Hospitalist Continuity on Adverse Events"

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Congratulations once again to Dr. Kevin O'Leary and his team at Northwestern Memorial Hospital for adding yet another thoughtful piece of research to the debate around continuity of care and team dynamics with their study "The Effect of Hospitalist Continuity on Adverse Events" published in the March 2015 issue of the *Journal of Hospital Medicine*. However, I believe it would be unfortunate for their current negative study on frequency of adverse events to cause us to lose sight of the potential centrality of continuity of care to overall quality and efficiency and the need for further research.

I would like to add a perspective from our institutions' experience, where fragmentation of care is common, with a focus on effects of continuity on work productivity. I would also like to comment in the context of the bigger scheme, where I believe there is a great deal of evidence that continuity of care is highly desirable for multiple reasons. Continuity in the inpatient setting has been shown to have effects on: (1) provider satisfaction, (2) length of stay, (3) efficiency, safety/medical errors, and (4) cost of care, patient satisfaction and readmission rates.<sup>2</sup>

For example, a study by Chandra et al.<sup>3</sup> showed improved continuity using the Creating Incentives and Continuity Leading to Efficiency model, which decreased LOS and reduced mean total charges by 20%. There is also evidence from the outpatient setting that greater continuity has been associated with better hypertensive control, lower risk of hospitalization, fewer emergency department visits, higher patient satisfaction, and higher physician satisfaction.<sup>4–8</sup>

Not captured in any of the literature I am aware of to date is the effect on work productivity of care fragmentation. According to data from an unpublished time study at our institution, each change of service to a new provider required an average of 12 extra minutes for rounding on each new patient to be evaluated, which

included both time spent studying the chart as well as extra time spent reassessing the patient at the bedside. When we restructured our service to improve continuity by increasing the number of patients admitted and followed by the same provider (from 14% to 31%), we reduced the number of providers per stay from 2.4 to 2.1, and reduced the number of annual handoffs by 3600, and found that a total of 900 hours, or 0.45 full-time equivalents (FTE) per year, were saved for our program of approximately 30 FTEs.

Although the study by O'Leary et al. is an important contribution to the literature, more research needs to be done on the effects of fragmentation and the benefits of continuity. Although safety and adverse events are among the most important indicators to look at, they also may represent a weak and hard to pick up "signal" without a multicentered and statistically high-powered study. Extending the study of continuity's effects, including efficiency, safety, costs, provider and patient satisfaction, and readmissions, is well worth further effort.

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