Press Release

Hospital patients suffer in shift shuffle

Shorter hours for residents and multiple patient care handovers result in poorer continuity of care

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Patient handovers have increased significantly as a result of the restrictions on the number of hours residents are allowed to work. Multiple shift changes, and resulting consecutive sign-outs, during patient handovers are linked to a decrease in both the amount and quality of information conveyed between residents, according to a new study by Dr. Adam Helms from the University of Virginia Healthsystem in the US and his colleagues. Their work¹, which characterizes the complex process of resident sign-out in a teaching hospital, appears online in the *Journal of General Internal Medicine*², published by Springer.

Multiple shift changes lead to a decrease in continuity of care for patients. Inadequate hand-off of care, or sign-out, leads to interns and residents feeling unprepared for events that happen during cross-cover periods, and in some cases adverse events for patients.

Dr. Helms and colleagues looked at the quality of current resident sign-out processes that occur as patients are handed over to another resident during shift changes, and identified effective strategies for improvement in a US teaching hospital.

The researchers analysed 89 residents’ existing attitudes towards the current and ideal sign-out process. System engineers then observed actual sign-outs. The authors also interviewed five residents, whose sign-out process was rated superior by their peers, to determine best sign-out practice.

They found wide variations in the methodology used by residents for sign-out. As many as 40 percent of residents did not expect to make any decisions about patients during cross-over periods. For day shifts, the average duration of sign-outs was just over two minutes versus only one minute for the subsequent night shift sign-out for the same patients. In addition, active problems, treatment plans and lab results were discussed less frequently during the night compared with day sign-out.

The five residents voted best at sign-out identified five key strategies for best practice: discussing acutely ill patients first; minimizing discussion on straightforward patients; limiting plans to active issues; using a systematic approach; and limiting error-prone chart duplication.

Dr. Helms concludes: "The apparent degradation of information that occurs with multiple sequential sign-outs during a 24-hour period is striking and has not been previously reported. Initiating an educational curriculum for sign-out at teaching hospitals is critical, not only for establishing a standardized process for sign-out, but also for creating a culture of patient ownership among cross-covering physicians."

Reference

2. The *Journal of General Internal Medicine* is the official journal of the Society of General Internal Medicine.

The full-text article is available to journalists on request.
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