

## Changes in medical errors after implementation of a handoff program.

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Starmer AJ, Spector ND, Srivastava R, et al. Changes in medical errors after implementation of a handoff program. *New Engl J Med.* 2014;371(19):1803-1812. doi:10.1056/NEJMsa1405556.

<https://psnet.ahrq.gov/issue/changes-medical-errors-after-implementation-handoff-program>

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The number of [handoffs](#) a patient experiences while hospitalized has almost certainly increased at academic institutions after the implementation of [duty hour restrictions](#), posing a significant threat to patient safety. In response, The Joint Commission required that all hospitals maintain a standardized approach to handoff communication, and in 2010 the Accreditation Council for Graduate Medical Education required that all residents receive [formal handoff training](#). This multicenter study demonstrates that implementation of a standardized handoff bundle—which included a mnemonic ("[I-PASS](#)") for standardized oral and written signouts, formal training in handoff communication, faculty development, and efforts to ensure sustainability—was associated with a 23% relative reduction in the incidence of preventable adverse events across 9 participating pediatric residency programs. This improvement was achieved through a very high level of resident engagement in the revised handoff process, but did not negatively affect resident workflow. This rigorously designed and analyzed study establishes the I-PASS model as the gold standard for effective clinical handoffs and demonstrates the value of [methodologically stringent](#) approaches to addressing patient safety issues. A case of a delayed diagnosis due to poor handoffs is discussed in a past AHRQ WebM&M [commentary](#).