

The Veterans Affairs Shift Change Physician-to-Physician Handoff Project

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Article-at-a-Glance

Background: Few studies on the safety or efficacy of current patient handoff systems exist, and few standardized electronic medical record (EMR)-based handoff tools are available. An EMR handoff tool was designed to provide a standardized approach to handoff communications and improve on previous handoff methods.

Methods: In Phase I, existing handoff methods were analyzed through abstraction of printed handoff sheets and questionnaires of internal medicine residents at Department of Veterans Affairs medical centers (VAMCs). In Phase II, the handoff tool was designed, and the software was tested and revised through user feedback and regular conference calls. Phase III involved postimplementation systematic abstraction of printed handoff sheets and questionnaires of internal medicine residents. Two VAMCs participated in abstraction of printed handoff sheets, with four VAMCs responding to the questionnaires.

Results: Handoffs were abstracted for 550 patients at baseline and 413 postimplementation. Improvements were found in consistency of information transfer for all handoff content, including code status, floor location, room number, two types of identifying information, typed format, medication, and allergy lists ($p = .01$). The 63 and 51 questionnaires completed pre- and postimplementation, respectively, showed improvement in perceptions of ease of use, efficiency, and readability ($p < .05$) and in perceptions of patient safety and quality ($p < .01$) without causing omission ($p < .01$) or commission of information ($p = .02$).

Discussion: This standardized EMR-based handoff software improved data accuracy and content consistency, was well-received by users, and improved perceptions of handoff-related patient safety, quality, and efficiency. A final version of the software was incorporated into the national EMR software program and made available to all VAMCs.