


Using High-Technology to Enforce Low-Technology Safety Measures: The Use of Third-party Remote Video Auditing and Real-time Feedback in Healthcare

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Abstract

Background. Hand hygiene is a key measure in preventing infections. We evaluated healthcare worker (HCW) hand hygiene with the use of remote video auditing with and without feedback.

Methods. The study was conducted in an 17-bed intensive care unit from June 2008 through June 2010. We placed cameras with views of every sink and hand sanitizer dispenser to record hand hygiene of HCWs. Sensors in doorways identified when an individual(s) entered/exited. When video auditors observed a HCW performing hand hygiene upon entering/exiting, they assigned a pass; if not, a fail was assigned. Hand hygiene was measured during a 16-week period of remote video auditing without feedback and a 91-week period with feedback of data. Performance feedback was continuously displayed on electronic boards mounted within the hallways, and summary reports were delivered to supervisors by electronic mail.

Results. During the 16-week prefeedback period, hand hygiene rates were less than 10% (3933/60542) and in the 16-week postfeedback period it was 81.6% (59627/73080). The increase was maintained through 75 weeks at 87.9% (262826/298860).

Conclusions. The data suggest that remote video auditing combined with feedback produced a significant and sustained improvement in hand hygiene.
