Observer Role Impacts Directly Observed Hand Hygiene Compliance on Medical-Surgical Units

The Problem
At BIDMC, hand hygiene (HH) measurement was previously calculated by product usage corrected for patient census, validated by direct observation data by independent observers from Infection Control/Hospital Epidemiology (IC/HE). In 2014, product usage estimates on inpatient medical-surgical units were replaced by direct observations performed by unit-based observers from Patient Care Services (PCS). In FY15, discrepancies were noted between data collected by IC/HE and PCS, particularly on medical-surgical units.

Goal
To compare HH compliance between IC/HE and PCS observers to ensure accuracy of PCS-collected data and to reduce the discrepancy between groups in order to better target hand hygiene improvement projects.

The Team
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The Interventions
- IC/HE trained PCS leadership in HH observation using standardized HH guidelines and templates
- Both groups collected ≥ 10 opportunities for HH on room entry and on exit
- Data captured multiple personnel types and varying times of day
- IC/HE performed 8 snapshot data collection sessions over a 6-week period for each unit
- PCS performed 1 session per unit monthly
- Observers:
  - IC/HE: 10 rotating, independent observers
  - PCS: members of the unit team, typically nursing leaders and educators involved with multiple unit-based quality metrics
- Differences in HH compliance were tested using a two-sample test of proportions

The Results/Progress to Date

HH opportunities across 14 medical-surgical units: IC/HE (2347) and PCS (4037)
IC/HE data demonstrated a combined HH compliance of 61% compared to 85% as observed by PCS (p<0.001)
HH compliance observed by IC/HE was lower than PCS in all 14 units, with differences among individual units ranging from 8% (ICHE 72% vs. PCS 80%) to 47% (ICHE 44% vs. PCS 91%)

Lessons Learned
- At BIDMC, HH measurement by direct observation by PCS observers yielded consistently higher compliance compared to that by IC/HE observers.
- When using unit-based observers for HH measurement, especially recognized unit leaders, regular validations with independent observers should be performed to ensure accurate measurement of actual HH performance.

Next Steps
- Meetings were held with unit leadership to review HH data from both sources
- In FY16 IC/HE conducts observations on all inpatient units with the same frequency (6 times per year) for more regular comparison with PCS data

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