Back to the Basics: A Hand Hygiene Initiative
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**Background**

**Background and Significance:** Hand hygiene (HH) awareness has changed in the wake of COVID-19, and literature suggests that poorer hand hygiene compliance can be directly linked to habits developed during the COVID-19 pandemic. Proper hand hygiene is the primary source for prevention of healthcare-associated infections (HAI’s). Direct observation of hand hygiene compliance is the gold standard despite possible limitations, including potential for bias.

- As a result of staff turnover, staffing vacancies, and volume surges the safety coach program at ECU Health Duplin had diminished in productivity/data collection.

- In 2022 Hand Hygiene data was not readily available/not clinically significant, therefore, hand hygiene compliance rates across ECU Health Duplin were unknown.

- Baseline data was collected by the Duplin Quality Team, and HH compliance across ECU Health Duplin was found to be 54%.

**Aim:** By developing a covert hand hygiene observation program, and publically reporting the data collected, hand hygiene compliance will improve to a minimum of 80% by the end of FY23 (September 2023).

**Collaborative Team Members:**
- Caroline Rust, CIC - Infection Preventionist
- Julie Teachey, MSN, RN - QNS
- Dana Rousay, CPHQ
- Krista Horne, MSN, RN - Director of Education & Quality
Methods

- Baseline evaluations conducted by QI team:
  - Review of the existing HH collection methods both within ECU Health and within other organizations
  - The statistical significance of pre-existing data at ECU Health Duplin
- Covert hand hygiene (HH) observers trained utilizing an education session with both return demonstration and written testing.
  - Opportunities audited at ECU Health Duplin:
    - Before room entry or patient contact
    - After patient contact or upon room exit
- Data collected utilizing: \( \text{HH Adherence} = \frac{\text{Actions}}{\text{Opportunities}} \times 100\% \)
- HH data collected covertly 24/hrs a day in all patient care areas.
- Interventions introduced throughout the 10- month intervention phase:
  - Staff education
  - poster contests
  - Hand hygiene rounding on all units
  - Public Reporting with HH Scorecard
  - Unit led barrier discussions
  - Ancillary department huddles
  - Physician & leadership presentations.

Project Duration:
- October 2022- November 2023

The study was conducted in 3 data phases:
- Baseline evaluation (2 months- no data)
- Baseline Data Collection (2 months)
- Intervention phase (10 months)
- Post-Intervention Data Collection (2 months)
Results

(Phase 1) PDSA 1: Baseline Data Collection
- Development of HH training/audit materials
- QI Department and Round 2 of Covert HH observers trained
- Baseline Data collected & Assessed
- Interventions Established for Phase 2

(Phase 2) PDSA 2: Intervention Phase
- Leadership Introduced to the QI Project
- Baseline Data Presented Hospital Wide
- Public reporting score card developed
- Staff education developed and implemented
- Poster Contests Held
- HH Rounding on all patient care areas
- QI Team participated in unit led barrier discussions
- QI Team attended Ancillary department huddles
- Physician Leadership shared and championed the project amongst their peers

(Phase 3) PDSA 3: Post-Intervention Data Collection
- Passive data collection continued with utilization of covert HH observers
- Continued public reporting

Program Timeline
Duplin Hand Hygiene Project: Covert Data

Plan
Do
Act
Study

PDSA 1: Baseline Data Collection
PDSA 2: Intervention Phase
PDSA 3: Post-Intervention Data Collection
Conclusion/Summary of Findings

▪ Our goal of 80% HH compliance was approached during the intervention phase, but not reached.
▪ Engagement & focus drive change.
  ▪ During the intervention phase, HH adherence was on the rise.
  ▪ During the post-intervention phase, while data was still being reported, drift was experienced without constantly keeping the topic at the forefront of rounding initiatives.
▪ Solutions to contributing factors are being explored in greater depth.
  ▪ In multi-bay areas HH dispenser locations are more limited, and not placed in ideal locations.

Future Phases:

▪ **Patient Facing Initiatives:**
  ▪ Scripted patient admission language/rounding language. “It’s ok to ask.” – Ask us if we have washed our hands, or ask us to wash our hands.
  ▪ Patient Education about hand washing and disease prevention

▪ **Outpatient & Ancillary Initiatives:**
  ▪ Team member scripting, for outpatients about hand washing.
  ▪ Increased covert HH observers from engaged ancillary team members.