The Complexity of Hand Hygiene
Sharing the Love Load

Lori Moore, BSN, RN, MPH, CPPS
Objectives

• Discuss the disproportion responsibility between infection prevention and control professionals and hand hygiene behavior change of those at the bedside

• Describe why the nurse manager is better positioned to impact hand hygiene behavior

• Summarize how a paradigm shift can lead to improvements in hand hygiene

• Discuss the value of unit-led Just-In-Time coaching in providing a strong infrastructure upon which to improve unit-level safety culture
Why is Hand Hygiene Challenging?

**Complexity Theory**

- Healthcare systems are systems that are complex and adaptive
- Actions in delivering health care are not always predictable
- Variation results from unpredictability of behavior
- Some actions need to be predictable with a high level of reliability
- A few simple rules can guide complex behavior toward a goal
Why is Hand Hygiene Challenging?

### Complexity Theory

**Simple**
The mechanics of cleaning hands

**Complicated**
The development of innovative products for cleaning hands

**Complex**

**Hand hygiene within a healthcare system**
- Involves many individuals—all independent thinkers and decision makers
- The task that is performed the most in any healthcare setting:
  - **Unit level**
    - 24-bed ICU = 34,000 room entry/exit per week
    - 30 bed Med = 35,000 room entry/exit per week
  - **Hospital level (22 units, 500 beds)**
    - 520,000 room entry/exit per week
    - 74,000 room entry/exit per day
Why is Hand Hygiene Challenging?

• Hand hygiene responsibility and accountability typically falls on the shoulders of infection prevention and control professionals / quality personnel
  
  • The responsibility is disproportionate to the opportunities for hand hygiene
  
  • ICPs are not in a position of responsibility or authority over the individuals entering and exiting patient rooms who are the targets of behavior change / modification
  
  • Disadvantage in follow-up ability
Safety Culture

Organizational Level

Local Level
Relationship Building

Nurse Managers

*Strong impact on direct patient care providers*

- Create culture—leadership sets the culture
- Responsible and accountable for the care of the patient and outcomes (by anyone who provides care to the patient or the environment); ensure quality metrics
- Strong influence over performance
- Manage underperformance, set goals, plan for improvement
- Reside on the unit
- Inspire and empower unit staff to solve problems
- Ability to easily and often observe caregiver performance

Infection Prevention and Control Professional

*Impact on direct patient care providers*---

- Program management
- Global perspective
- Consultative role
- Interpretation of the 4 Moments in the context of workflow
- Hand hygiene education development and roll out
What Makes Sense?

1
INFECTION PREVENTION AND CONTROL PROFESSIONAL

Responsible for hand hygiene behavior of:

500
STAFF MEMBERS

10
NURSE MANAGERS

Responsible for hand hygiene behavior of:

50
STAFF MEMBERS

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Shifting the Paradigm

Working through others to influence behavior and safe patient care at the bedside

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# Front Line Leadership Engagement

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Nurse Managers became engaged with hand hygiene

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Just-In-Time Coaching

- Interact with frontline staff
  - Directly observe barriers to hand hygiene
  - Observe instances of noncompliance and ask caregivers why they did not clean hands
  - Provide reminders, feedback and education
  - Categorize directly observed and solicited barriers to hand hygiene
    - Tailor solutions to each barrier

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High Hand Hygiene Performance Can Be Achieved Despite Barriers: The Value of Pairing Direct Observation with Electronic Hand Hygiene Monitoring

Lori Moore BSN, RN, MPH, Jeff Quinn PhD, Robert Pelz MBA, PMP
GOJO Industries, Inc., Akron, OH

METHODS
A trained HH observer entered a nursing unit at 9 a.m. and gathered healthcare workers (HCWs) to determine perceived barriers and other factors felt to be contributing to the low unit HHP. The observer informed HCWs that workflow would also be observed to identify barriers. At 11 a.m. observation ended, and the HCWs were informed that the observer was leaving the unit. Unit-level HHP data was collected via an electronic monitoring system (EMS) before, during and after the observation period.

BACKGROUND
Identifying and eliminating hand hygiene (HH) barriers is imperative to increase HH performance (HHP). Complete elimination of barriers is unlikely, but the need to eliminate barriers to increase HHP may be overstated. This study examines the effect of direct observation (DO) on HHP in the presence of barriers. Results provide insights about the extent to which barriers limit HHP.

RESULTS
Reported barriers included an insufficient number and inconvenient placement of dispensers, empty dispensers, full hands and physician non-compliance, all of which were validated through DO. Without removing barriers, the unit achieved a 56 percentage point increase in HHP during the observation period. Staff were notified that observation was ending, and subsequently HHP decreased by 36 percentage points.

CONCLUSIONS
➢ This study demonstrates that HCWs can achieve high HHP despite barriers.
➢ Barriers to HH were present throughout the shift, even while the observer was present, but did not prevent staff from reaching high levels of HHP while being observed.
➢ Results show HHP differs greatly when an observer is present versus absent, an impact of the Hawthorne effect, that can only be measured with EMS, not DO.
➢ Units relying on DO may inaccurately assume that HHP is high when an observer is absent, but it is likely that rates are lower before and after periods of DO, further demonstrating the importance of EMS data to provide accurate estimates of HCW HHP.
➢ This study demonstrates that barriers are not a deterrent to a temporary increase in HH rates.

REFERENCE

For additional information contact: L. Moore, GOJO Industries, Inc., Email: moorel@gojo.com ©2017 GOJO Industries, Inc. All rights reserved
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Unit-Led Just-In-Time Coaching
One Hospital Unit's Journey

% Improvement Over Baseline

% Improvement over baseline

Linear % Improvement over baseline

Sr. Leadership Engagement

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The Journey Continues

% Improvement Over Baseline vs Months Post Installation

- Staff Education
- JIT Coaching
- Sr. Leadership Engagement
- Unit-Led JIT
- Night staff engaged
- Physician Engagement

% Improvement over baseline
Linear % Improvement over baseline

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Summary

- ICPs historically have held a disproportionate role in the task of changing hand hygiene behavior of care providers
- Nurse managers are best positioned to influence and impact behavior at the bedside
- This paradigm shift can lead to improvements in hand hygiene
- Unit-led Just-In-Time Coaching
  - When we have a unit full of independent problem solvers, we have created a culture of safety
Summary

- ICPs historically have held a disproportionate role in the task of changing hand hygiene behavior of care providers
- Nurse managers are best positioned to influence and impact behavior at the bedside

“You’ll know you’ve achieved a safe culture when you see someone low in the hierarchy—say, a new nurse—reminding a senior physician to wash his or her hands, and the physician responds by simply saying, “thank you,” then turns to the sink or gel dispenser.”

Robert M. Wachter, MD, *Understanding Patient Safety*
THANK YOU!
References


