Staff Adherence Differences Across Standard and Isolation Precautions

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Background

- **Standard precautions** are precautions used by staff for all patient care
  - Includes **hand hygiene (HH)** before entry and upon exit from patient rooms, and performing personal risk assessment to gauge which appropriate PPE during regular patient care in the absence of a specific PPE order
    - Hand hygiene alone can prevent up to **50%** of all healthcare-associated infections[1]
- **Isolation precautions** are additional, pathogen-specific requirements healthcare workers must follow when their patients are infected with or colonized by certain microbes to limit the spread of disease[2]
- Because of the increased risk of disease transmission, deficiencies in adherence to standard precautions or isolation precautions are cause for **citation and remediation** from the Joint Commission[3]

Objective

- Observe and record hospital staff compliance with standard precautions and all forms of isolation precautions at Henry Ford Genesys Hospital in Grand Blanc, MI

Methods

- Record **standard precautions** among staff:
  - whether HH is performed upon and exit from patient rooms and whether PPE is worn for activities that warrant it (i.e. emptying a urine bag and performing suction)
- Observe patient rooms with isolation precaution orders from physician or Epidemiology Department
  - **Contact precautions**: must have caddy outside room stocked with gowns and gloves; contact precautions sign visible on door; staff must wear PPE in room; staff must perform HH upon entry and exit from room
  - **Enhanced contact precautions:** all of the above precautions for contact, except the only acceptable HH is soap and water; enhanced contact precautions sign visible on door
  - **Droplet precautions:** must have caddy outside room stocked with gowns, gloves, and masks; have droplet precautions sign visible on door; staff must wear PPE in room, including mask; staff must perform HH upon entry and exit from room
  - **Airborne precautions:** must have caddy outside room stocked with gowns and gloves; have airborne precautions sign on door; patient must be in negative pressure room; negative pressure room must be checked daily; staff must wear PPE in room, including PAPR or N95 mask
- Observations conducted ~ every other day (MWF or TR)

Results

- Total of **84** standard precaution observations and **256** isolation precaution observations

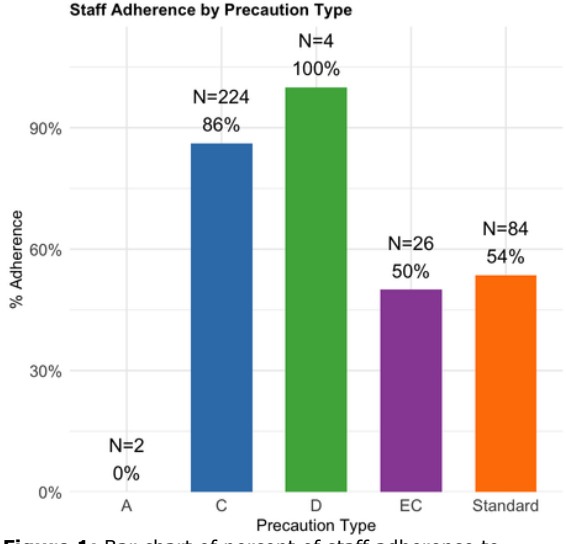


Figure 1: Bar chart of percent of staff adherence to precautions by type. A = Airborne, C = Contact, D = Droplet, EC = Enhanced Contact

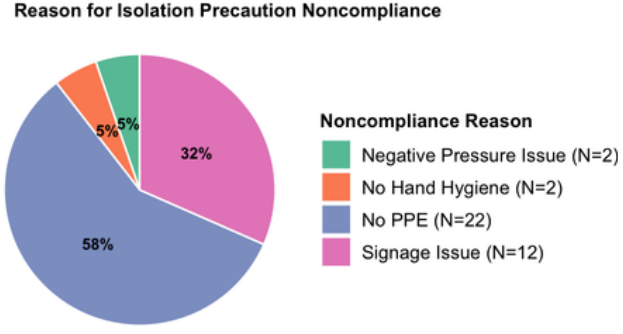


Figure 2: Pie chart of observed noncompliance reason for isolation precautions. Reasons include issue with negative pressure room for airborne precautions (N=2), HH noncompliance (N=2), no PPE worn by staff (N=22), and incorrect or no isolation precaution sign on the door (N=12).

- Standard precaution noncompliance reasons were all HH-related (N=38), except for one case in which a staff member was observed performing suction with no gloves or other PPE (N=1)

Limitations

- Far more isolation precaution observations were collected than standard precaution observations because observations of caddies outside patient rooms were non-discriminately recorded as isolation observations, while standard precaution observations were only observations of staff members
  - Isolation precaution adherence may be overestimated because properly stocked caddies were counted as compliant isolation observations even when no staff members were directly observed.
- Immediate education was provided to noncompliant staff members.
  - Observer effect likely improved hand hygiene performance among staff who recognized the observer throughout the project

Conclusion

- HH improvement needs to be targeted as it is foundational to stopping disease transmission
  - A focus on i**mproving the culture around HH compliance** and observations is necessary, as education moments may feel confrontational and lead to defensive attitudes from staff members
    - There is a similar **culture issue surrounding use of PPE** that needs to be addressed
  - **Visual cues** near hand sanitizer dispensers and sinks, as well as on patient doors may improve HH rates as well
  - Positive reinforcement methods, such as assigning a rotating **HH and PPE champion** to each unit may help improve HH

- HF Genesys is in a **transitional stage** moving from Ascension to HF isolation precaution policies and signs, as well as moving from AllScripts to Epic EMR. This is the perfect time for **staff re-education** on where to find isolation precaution information in a patient chart, and what sign to use.

Bibliography

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