Can Instituting Enhanced Measures (EM) during Influenza Season Reduce Healthcare Associated Influenza Infections (HAIIs)

Carlene A. Muto, MD, MS; Ashley Querry, BS, CIC; Janina-Marie Tatar, BS, MT (ASCP)

Background

Influenza Infection Prevention Precautions

- Patient with UI
- + RVP for Influenza
- Flagged for Influenza
- For other Respiratory Virus
- + RVP for Other Respiratory Pathogens
- - RVP
- Discontinue Droplet/Contact Precautions
- Continuous Droplet/Contact Precautions

Influenza Infection Prevention Precautions

- RVP-Ordered, Tagger’s Auto Order for Droplet/Contact Precautions
- + RVP for Influenza
- Flagged for Influenza
- For other Respiratory Virus
- Flagged for Respiratory Pathogens
- Discontinue Droplet/Contact Precautions
- Continuous Droplet/Contact Precautions

Background – UPMC Influenza Cases

- Despite infection prevention precautions, an increase in HAI was observed in 2013-2014
  - 7 cases on/before 1/31/2014
  - 2 cases had no evidence of PTPT

Because of a concern for HTPT of influenza, enhanced measures (EM) were implemented.

Objective

The objective of this study was to evaluate the effect of the EM on HAI secondary to HTPT

Methods - Definitions

- Cluster: ≥ 4 non-ventilated patients with confirmed II (PCR+) in isolation with no evidence of transmission (Ventilated patients are considered to have a closed respiratory system therefore, minimal risk of communicability)
- HAI w/ evidence of HTPT: HAI occurring in a unit with ≥1 other patient with confirmed II
- HAI w/ evidence of HTPT: HAI occurring in a unit with ≥2 other patient with confirmed II
- HTPT
- 2 HAIIIs on the same unit within 5 days OR ≥ 4 HAIIIs on the same unit collectively
- Influenza Critical Time Period: National Flu positivity ≥ 25% and pneumonia and influenza Mortality ≥15% above predicted
- Observer: an individual to monitor access to patient rooms, maintain personnel entry/exit logs, and enforce hand hygiene (HH) and personal protective equipment (PPE) utilization

Results

- Despite continued high FIDs, following the implementation of EM, there were only 2 HAIIIs neither of which were HTPT.
- Influenza vaccination among HCP remained unchanged (74%) during the study period

Conclusions

- FIDs is high during influenza critical time periods.
- EM such as HCP empiric masking and observers to track HH and PPE utilization may prevent HAIIIs despite high FIDs.
- Increased uptake of influenza vaccine among HCP may further decrease HAIIIs.

Can Instituting Enhanced Measures (EM) during Influenza Season Reduce Healthcare Associated Influenza Infections (HAIIs)