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# Reduction of healthcare-associated viral infections during COVID-19 pandemic

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## BACKGROUND

- Healthcare-associated viral infections (HAVI) are a common cause of preventable harm, particularly in pediatric patients.
- We utilized routine hospital-wide surveillance data for HAVIs at CHOP in order to assess the impact of enhanced public health and infection prevention measures on rates of HAVI during the COVID-19 pandemic.

## METHODS

- Patient cases of HAVI were detected through routine house-wide microbiologic surveillance.
- Compliance with institutional prevention bundle measured through use of Kamishibai-card (K-card)rounding
  - Included modifications for COVID-19

| Bundle Element | HAVI Prevention Bundle | COVID-19 Prevention Elements |
|---|---|---|
| Hand Hygiene | WHO 5 Moments | Increased vigilance by staff |
| Visitor Screening | Screen all visitors for symptoms<br>Sick caregivers encouraged to leave the bedside<br>Limited Visitation during viral season | Only 2 healthy caregivers allowed |
| Staff Illness Procedures | Adhere to employee sick policy<br>Follow GI cluster procedures | Increased vigilance to symptoms<br>Use of COVID hotline to review employee symptoms |
| Isolation Precautions | Adhere to isolation policy | Adhere to isolation policy |
| Personal Protective Equipment | Wear appropriate PPE | Universal masking<br>Universal eye protection<br>PPE monitors |
| Environmental Cleanliness | Keep inpatient rooms clean and clutter free<br>Clean all shared patient equipment | Increased education to staff about use of hospital disinfectant<br>Hydrogen peroxide technology |

Figure 1

## RESULTS

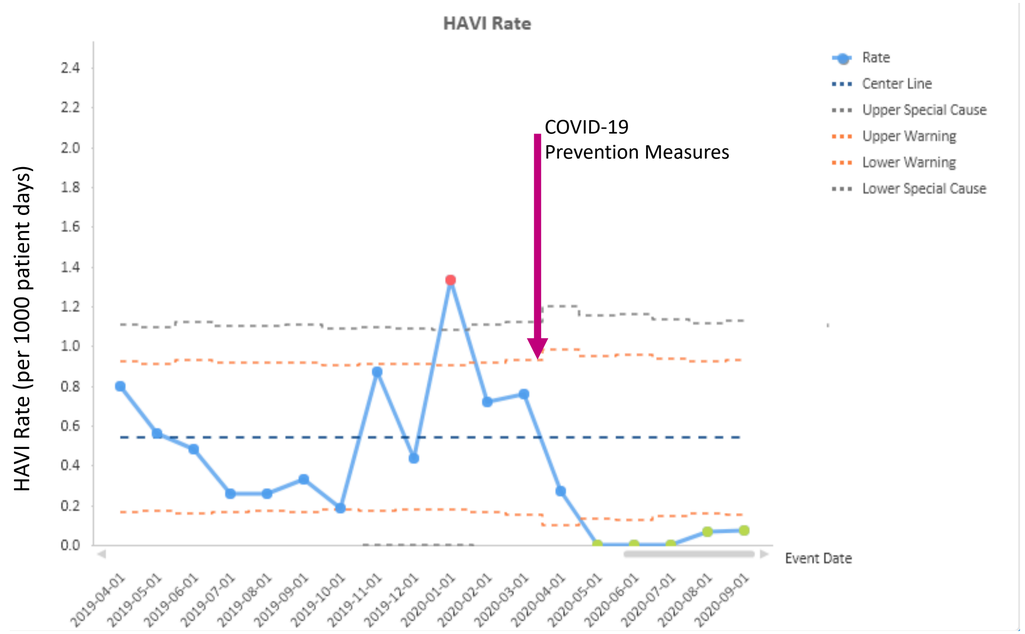


Figure 2

- Inpatient hand hygiene compliance was between 99-100% during this period, with a centerline shift up
- Bundle compliance ranged from 83-93% in this period, with a mean of 88.7% compliant, measured by the HAVI K-card

## CONCLUSIONS

- Intensification of routine infection prevention practices aimed at minimizing the transmission of COVID- 19 may also reduce rates of HAVI.
- Decrease in our institutional HAVI rate compared to the same time last year
- Ongoing measurement of the HAVI rate throughout the pandemic to determine if this reduction can be sustained
- Continue certain intensified bundle elements in non-pandemic hospital operations