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INNOVATIVE. DISINFECTION. PERFECTED.

# INPATIENT HOSPICE FACILITY ROOM CLEAN ASSESSMENT OVERVIEW

**PURPOSE:** Research component of ongoing Nimbus CoE at inpatient hospice facility

**GOAL:** Develop best practice recommendations for a cleaning protocol using current EVS standards and incorporating technology for the delivery of consistent, reliable disinfection protocol

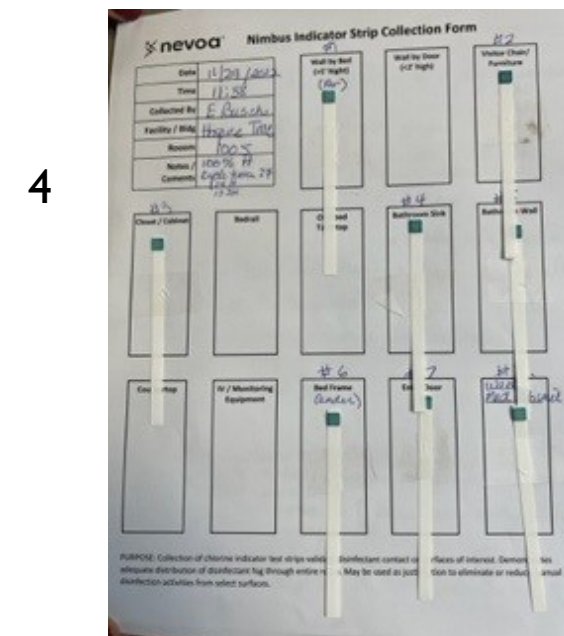
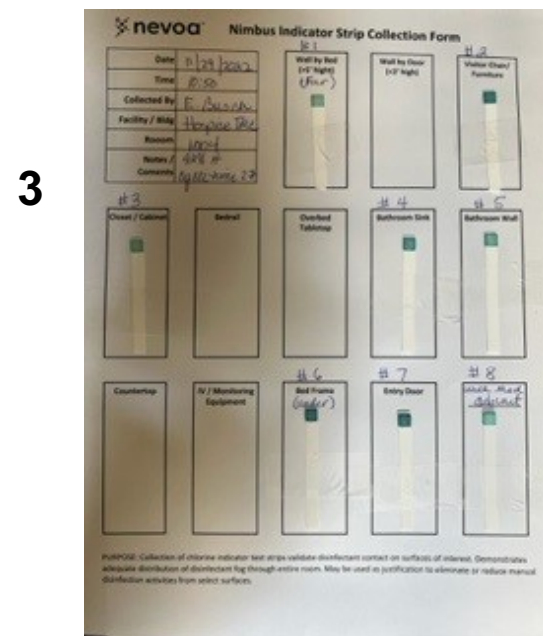
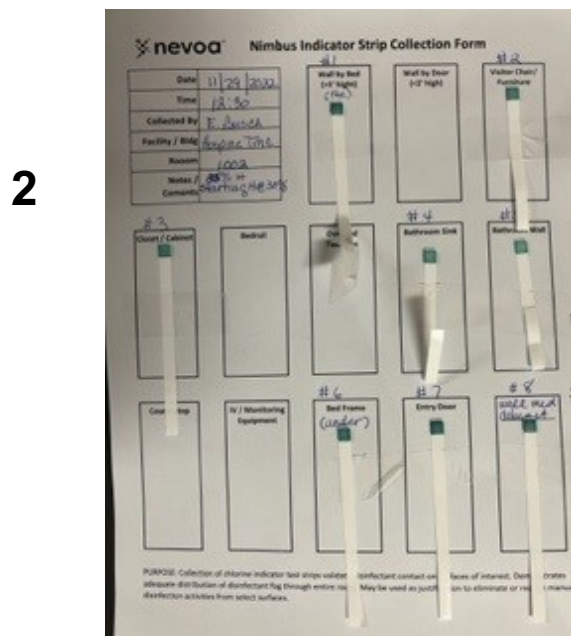
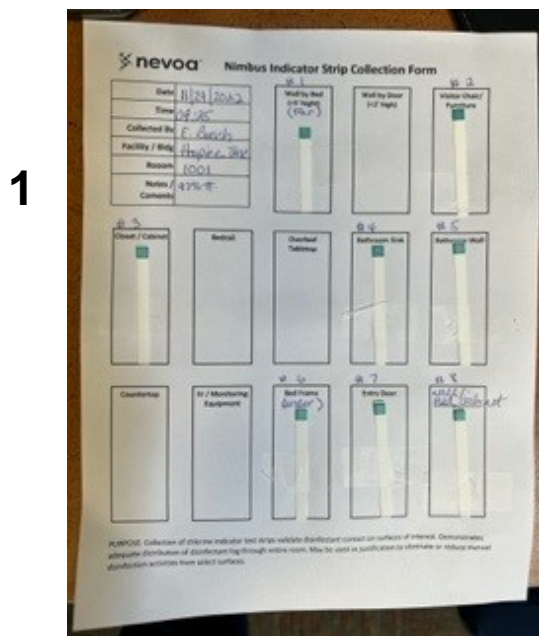
**ASSESSMENT:** 14-15 December, 2022

- Completed indicator testing for confirmation of adequate disinfectant surface contact
- Evaluated room environment including HVAC system for 3 different patient rooms
  - All rooms of similar size, configuration, equipment and furniture
- Observed EVS operational tasks for current cleaning/disinfection practice
  - Two standard and one isolation rooms
  - Two technician's practices observed
  - Variations in approach and techniques noted
- Documented times for completion of individual cleaning tasks; calculated total clean time
- Documented total room turn time (RTO)
- Developed recommendations for incorporation of Nimbus technology into disinfection protocol
- Solicited feedback from clinical and EVS teams on Nimbus use

# PRE-ASSESSMENT CHLORINE INDICATOR STRIP RESULTS

## Test strips placed in distal and key locations for demonstration of surface contact

- Locations: Wall behind bed (V), Visitor Chair (H), Armoire Cabinet (V), Bathroom Sink (H), Bathroom Wall (V), Under Bed (V), Entry Door Handle (V), Wall at Med Cabinet (V)



**H (horizontal) V (vertical)**

# ASSESSMENT DOCUMENTED OBSERVATIONS SUMMARY

Room Number	1016	1005	1013
TYPE	Standard	Isolation – C.diff	Standard
EVSTech INITIAL	S	S	A
CLEAN TIME	28.72 min	35 min	31 min
RTO TIME **	31.49 min	41 min	42 min
ITEMS MISSED	12 *	7	4
AREA MOST ITEMS MISSED	Main Patient Room	Main Patient Room	Main Patient Room

\* Total includes one missed pillow but total of 10 missed were noted for actual total of 21 missed items;  
 Bathroom Shower Curtain missed in all 3 rooms.

\*\* RTO (total time from start of clean until room available)



# ASSESSMENT CONCLUSIONS

- Two EVS technicians demonstrated distinct variations in room cleaning routines and practices
  - 7-23% of room items were missed in manual cleaning process
  - Shower curtains, ceilings and high walls were not cleaned in any of rooms
- Average room clean time was 31.57 minutes
- Isolation room clean time was 35 minutes
  - No noted difference in protocol, disinfectant or items cleaned in isolation vs standard room
- Average RTO (room turnover time) and availability for next patient: 38.33
  - Does not include bed linen and personal items removal conducted ahead of cleaning start time (estimate 5-10 addition min)
- Addition of Nimbus to process adds 16 minutes to total RTO; however, technician gains total of 36.47 minutes in labor efficiency time and all room surfaces are 100% disinfected.

## SUMMARY: EVS INCORPORATION OF NIMBUS TECHNOLOGY

- **Nimbus will disinfect 100% of exposed room surfaces. While it does not replace manual cleaning, it should be considered, at minimum, to complete 23 of the identified 66 manual disinfection tasks (34%); included but not limited to:**
  - Armoire cabinet, closet and drawers, medicine cabinet, sharps container, O2 valve, suction unit, bed & telephone cords, inside nightstand and bed table drawers, lamps, under bed, doors, shower and room walls, ceilings, dispensers, pictures...
- **Nimbus technology deliverables to EVS protocol:**
  - Controlled, repeatable disinfection to 100% of exposed room surfaces; eliminates technique variation
  - 12.47 minutes reduced labor activity per room (40% of 31.57 total time)
  - Disinfection of missed items and those not addressed in routine manual practice (ceiling, high walls, curtains, blinds...)
  - Allows EVS technician to conduct other daily tasks during Nimbus cycle time and prepare next room for Nimbus deployment