

## Supplementary Material

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## Participating Academic Hospitals

Barnes-Jewish Hospital in St Louis, Missouri; Brigham and Women's Hospital in Boston, Massachusetts; Duke University Hospital in Durham, North Carolina; John H. Stroger, Jr. Hospital of Cook County, in Chicago, Illinois; Penn Presbyterian Medical Center in Philadelphia, Pennsylvania; Rush University Medical Center in Chicago, Illinois; University of California Irvine Medical Center in Irvine, California.

Table S1. Baseline Chlorhexidine Gluconate Bathing Protocols

Hospital	CHG Formulation	Vehicle/Material for Application	Dilution	Rinse/Wipe-off after Application
A	2% CHG-impregnated cloths	Polyester cloth, disposable	No	No
B	4% CHG liquid solution	Washcloth, unspecified	No	Yes
C	4% CHG liquid solution	Cotton washcloth, reusable	Yes	Yes
D	2% CHG-impregnated cloths	Polyester cloth, disposable	No	No
E	2% CHG-impregnated cloths	Polyester cloth, disposable	No	No
F	4% CHG foam	Cotton washcloth, reusable	No	Yes
G (Surveys 1, 2)	4% CHG liquid solution	Cellulose/Polyester cloth, disposable	No	Yes
G (Surveys 3-6)	2% CHG-impregnated cloths	Polyester cloth, disposable	No	No

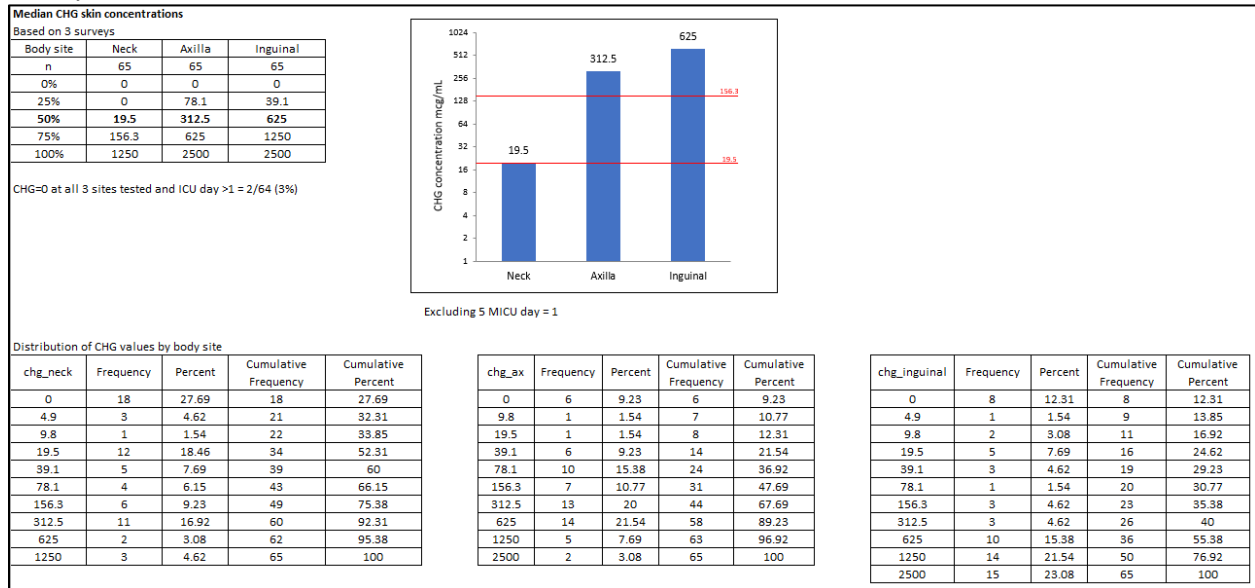
Note: CHG, chlorhexidine gluconate. 2% CHG-impregnated cloths, Stryker Corporation, Kalamazoo, MI; 4% CHG liquid solution or foam, Cardinal Health, Dublin, Ohio, Mölnlycke Health Care, Gothenburg, Sweden.

Table S2. New or Ongoing Activities to Improve Chlorhexidine Gluconate Bathing Practices During the Intervention Period

Activities	Hospital						
	A	B	C	D	E	F	G
Personnel							
Bathing staff assessments: bathing observations and documentation/feedback of bathing proficiency	X	X	X	X	X	X	X
Designation of staff CHG bathing champion(s)	X	X	X	X	X	X	X
Points of Education							
Better coverage of particular anatomic sites	X	X	X	X	X	X	X
Better standardization of bathing technique	X	X	X	X	X	X	X
Dwell time (1-2 minutes) before rinsing off CHG liquid/foam		X	X			X	
Using firm massage to bathe	X	X		X	X		
Other							
Disseminating feedback/resources to bathing staff	X	X	X	X	X	X	X
Modifying/emphasizing language around CHG bathing, e.g. specify that bathing is a requirement, or that bathing is a treatment	X	X		X	X		X
Review and removal of CHG incompatible products, e.g. lotions, soaps, deodorants	X	X	X	X	X	X	X
Review of CHG bathing data and feedback with ICU leadership and/or infection prevention teams	X	X	X	X	X	X	X

Note: CHG, chlorhexidine gluconate; ICU, intensive care unit. X indicates that the intervention was performed; gray boxes indicate not applicable. Hospitals A, D, E used 2% CHG-impregnated cloths; B, C, F used 4% CHG liquid solution or foam; G switched from 4% CHG liquid solution to 2% CHG-impregnated cloths after the second point prevalence survey; however all bathing observations were of 2% CHG-impregnated cloth bathing.

Figure S3: Example Feedback of CHG Skin Concentration Measurements After Baseline Point-Prevalence Surveys



Panel A: Sample Feedback Data Available for Intensive Care Unit Leadership and Staff

### Chlorhexidine Gluconate (CHG) Treatment: Don't Forget the Neck!

**How can we improve CHG treatments?**

1. Clean the neck (starting at the jawline) and move downward!
2. Make sure that all body sites are treated!
  - Follow the SAME order for each bath (See figure on right →)

**What do the CHG skin tests show?**

Neck: 25% missed  
Axilla and groin: 10% missed

**More CHG = Less Infection!**

**START CHG TREATMENT FROM THE JAWLINE**

- 1 Neck, shoulders, and chest
- 2 Both arms, hands, and axilla
- 3 Abdomen, then groin/perineum
- 4 Right leg and foot
- 5 Left leg and foot
- 6 Back of neck, back, and then buttocks

Skin may feel sticky for a few minutes (cloths contain aloe vera). Do NOT wipe off; allow to air dry. For face, use non-medicated cloth.

Panel B: Sample Feedback Flier for Bathing Staff. Adapted from: Universal ICU Decolonization: An Enhanced Protocol. Appendix E: Training and Educational Materials. Agency for Healthcare Research and Quality website. <https://www.ahrq.gov/hai/universal-icu-decolonization/universal-icu-ape3.html>.