

Implementation of a shared decision making model in NICU to achieve zero healthcare associated blood stream infections

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Purpose

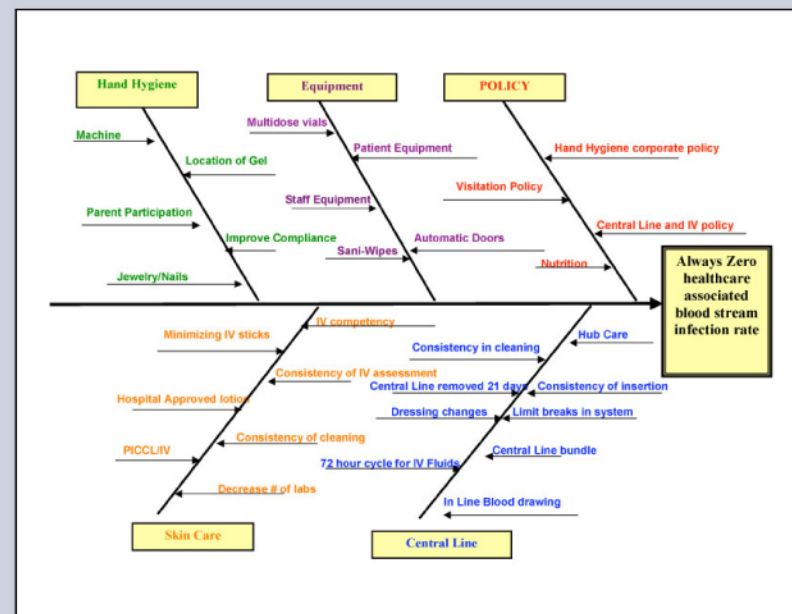
To evaluate the impact of shared decision-making by the health care team to choose and implement evidence-based strategies to achieve an *Always Zero* healthcare associated blood stream infection rate in our NICU.

Significance

The literature supports increased newborn mortality with blood stream infection (HCABSI). A program to reduce HCABSI improves long term patient outcomes, decreases length of stay and reduces total health care costs.

Strategy and Implementation

A multidisciplinary team including nursing, physicians, respiratory therapy, and infection control established a task force to review clinical practice, root causes and prevention of healthcare associated blood stream infections. Based on a literature review, the team identified potential sources of infection including patient equipment, environment, hand hygiene and education. The findings were shared with the multidisciplinary team through journal clubs and team meetings. The team collaborated with staff to prioritize strategies to reduce blood stream infections. Strategies included the development of a skin care protocol emphasizing the reduction of skin punctures, nutrition education, and increased hand hygiene monitoring. Equipment strategies included improved hub cleaning, in line blood drawing, and central line care with implementation of a central line bundle, and PICC line insertion. General cleanliness of the individual bed space for the baby was also improved.



FRANKLIN SQUARE HOSPITAL CENTER
NICU
Phlebotomy Skills Performance Checklist

Name: _____ Date: _____
Instructor/Trainer: _____ Initials: _____ Signature: _____

Instructor/Trainer must initial the appropriate column after observation of the nurse performing each task:

Skill	Performance		Comments
	Ready	Needs Improvement	
Part I. IV Insertion Technique			
1. Introduces self to family			
2. Identifies patient using 2 hospital identifiers per NICU policy			
3. Explains procedure to family as appropriate			
4. Follows Standard Precautions			
5. Cleanses appropriate equipment			
6. Cleanses infant in snugly or requests assistance of a second staff member			
7. Selects site and cleanses site with Chlorhexidine/alcohol prep using a back and forth friction motion for 30 seconds. Allow drying. Remove chlorhexidine with alcohol or saline (dependent on gestational age and skin integrity). Avoid areas with compromised circulation.			
8. Selects appropriate needle for assignment			
9. Applies tourniquet above the area where catheter is to be inserted. Demonstrates proper use of tourniquets to standardize the result.			
10. Positions needle bevel up			
11. Anchors vein prior to needle insertion			
12. Inserts needle at a 15-30 degree angle, observing for flashback. Thread catheter and release tourniquet. Withdraw needle and activate safety feature. Then place one quarter turn to lock in place.			
13. Stabilize catheter with sterile dressing, covering insertion site and catheter hub			
14. While tying, periodically flushes with a small amount of normal saline solution to ensure patency			
15. Demonstrates tying. Places a strip of tape over the hub and secures gloves with clear tape. Do not place tape over insertion site, as it will obscure observation of the site for infiltration and redness. There should be no tape placed directly on the infant's skin.			
16. A padded bandaid may be necessary to prevent dislodging of the catheter. Do not place tape directly on the infant's skin when securing catheter to the arm. Use the arm support.			

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the test:

17. Observes IV site closely for redness, swelling or bulging of skin.
18. Indicates safety features and disposal of vital materials properly.
19. Reassesses IV site within 30 minutes. Documented hourly on flow sheet the assessment of IV site and the amount of fluid infused.
20. Documents insertion site, skin catheter used and patient tolerance of procedure on the NICU narrative portion of the flow sheet. Initials and date. Complete patient care and document on PIPP section of the flow sheet.

Part III. Blood Cultures (Done by RNs and Physicians in NICU)

1. Reuses blood culture equipment is not identified as defective.
2. Identifies patient using 2 patient identifiers per NICU policy.
3. Wipes bottle with an alcohol prep (alcohol 70% or all 70%).
4. 20/40/60 performs skin asepsis using a 30 sec. scrubbing motion with betadine and alcohol. Allows area to dry completely.
5. Inoculates bottle.
6. Fills bottle with 1 mL of blood.
7. Applies composite generated labels but does not cover the printing on labels.
8. Blood enters on back side of collection, date and time of collection, amount in mL and phlebotomist's initials.
9. Prepares specimen for transport to lab via the Diagnostic tube system, aware that it is to be sent in a separate bio-hazard bag.
10. Documents patient tolerance of procedure on the NICU narrative section of the flow sheet. Completes pain score and documents on PIPP section of the flow sheet.

IV. Drawing Blood by Heed Stick

1. Verifies laboratory testing by reviewing order.
2. Assembles equipment as needed.
3. Explains procedure to family and identifies patient using 2 identifiers.
4. Positions hand antiseptic.
5. Selects appropriate site for performing the venipuncture.
6. Applies heat warmer for 3 minutes.
7. Performs pain assessment and interventions as appropriate.
8. Wipes on gloves.
9. Tourniquet infant supine or side-lying.
10. Applies chlorhexidine/alcohol site

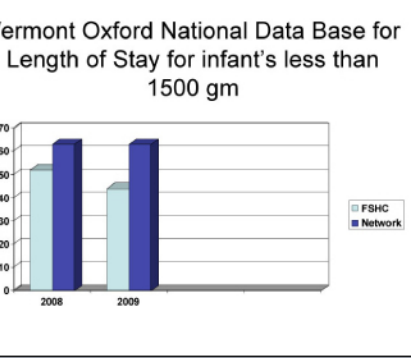
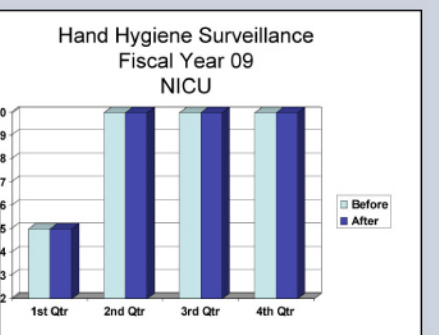
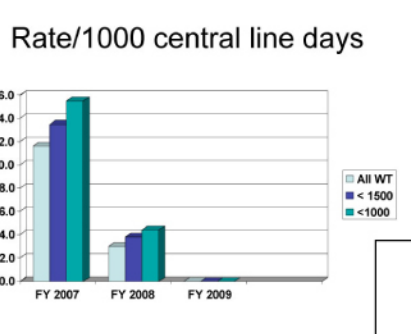
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Evaluation and Outcomes

Implementation process began July 2007 and all initiatives completed by November of 2008. Our HCABSI rate for central lines was a rate of 11.6 in FY 07, 3.1 in FY 08 and 0 in FY09. Utilizing shared decision-making enhances team focus on effective and safe patient care and with compliance in care practices.

Infection Control Surveillance

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Name																																
History #																																
UA Line																																
Location																																
Manipulation/Location/Initials																																
Dressing change/Initials																																
IV Line																																
Name																																
Location																																
Manipulation/Location/Initials																																
Dressing change/Initials																																
PI/CCL																																
Name																																
Location																																
Manipulation/Location/Initials																																
Dressing change/Initials																																
Ventilator																																



Quality Review Feedback Tool

Unit Name: _____ Date: _____ Time: _____
Title: _____

Check Observation/Category: Check One
 True Patient Identifiers Hand Hygiene PPE

Observation: Check One
 Compliant - Job well done - Thank you for keeping our patients safe!
 Non-compliant

Name of Observer (Optional): _____ Date: _____

Great Job! Congratulations, your documentation has been reviewed/you have been observed in your clinical practice for the above stated category and were noted to practice safe, effective and clinical care in accordance to our hospital policies and procedures. Thank you for your continued demonstration of excellent quality care, role modeling of clinical excellence and providing our patients with a safe environment.

In reviewing your documentation/observation of your clinical practice, it has been noted that one of the above categories needs improvement.

Comments: _____

Please refer to the policies listed below, located on Starport that relate to the identified area of deficiency. All the policies listed can be found under Clinical Policies and they have links to the Hospital or Safety Manual.

Two Patient Identifiers: "Patient Identification Policy for Clinical Care" (note there is a separate policy for NICU) - please review 3.B, the Procedure for this measure.
Hand Washing: There are two policies for this item: "Hand Hygiene Guidelines" - please review both the policy and Procedure for this item - it is a total of one page. "Hand Antiseptics in NICU" - review if concern was identified in the NICU.
PPE: There are two policies for this item: "Personal Protective Equipment" - review items 3.D Hand Protection and 6.0 Respiratory Protection. "Infection Control - Isolation Precautions" - review Section 2 (reviewing your specific issue) for fundamentals of Isolation Precautions; then review Section 3 (again reviewing your specific issue), Recommendations.

Repeated episodes of reckless disregard for patient safety will result in disciplinary action.

DC20710-5 (7/08)

References

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