NICU SUPPLY ROOM RE-ORGANIZATION A Sowner/

MG 9/22/09

11/16/09 1/08/10

December

Rapid Improvement Event

55 training for NICII team

Waste walk, ideal state attributes

Man carts Supply room painting and cleaning

Build carts, with labeling of all items

Creation of item location guide

1/22/10

2/4/10

I. Problem

Present system of storage and maintenance of NICU supplies is problematic. As currently organized, the supply system causes disruptions to work flow and inefficiencies. The goal of this long-term project is to improve the system for obtaining and storing NICU supplies to improve work flow and patient

I. The Team

Jane Smallcomb (Nurse Manager), Susan Young (CNS), Jennifer Powell (RN), Jennifer Reader (RN), Donna Curran (RN), Carol Langford (RN), Nina Koyama (RT), Laura Tannenbaum (NNP), Mary Quinn (NNP), Rosanne Buck (NNP), Jessica Marsh (PCA), Michelle Ignaciuk (PCA), Jocelyn Egan (PCA). Maria Ramos (Par Stocker). Gayle Matheson (Manager), Greg Dumas (Pharmacist), Pam Dunleavy (UC), Lynne Colburn (UC), Ryan Erskine (Distribution), Jenine Davignon (BT), Munish Gupta (MD), DeWayne Pursley (MD)

II. Current Condition





· Supplies organized by function

· Logical organization of items

all items

· Better labeling

identified as such

Excess stock removed

· Avoid supplies on floor

of larger equipment

· Frequently used items co-located

· Supply room guide with locations of

Outside ordered supplies clearly

Will also need to improve storage











III. Analysis

CURRENT STATE vs. FUTURE STATE From Staff Input

Problems with Current State Features of Ideal Future State

- Organization -supplies arranged haphazardly -can be difficult to find
- -some supplies under desks Availability -supplies often under-stocked
- -occasionally over-stocked
- Efficiency: -can be hard to find items

 Most supplies are in supply room, bedside carts, nutrition room, med room, and RT room. Storage room holds equipment as well as supplies

- •Some constraints limit where supplies can be stored
- common procedure equipment → bedside carts;
- needles need to be stored securely:
- large equipment → storage room.
- •Two different systems in place for obtaining supplies: through distribution and outside orders through NICU. Outside order items are stored in separate area in supply room from distribution items; distinction between outside order items and distribution items not clear to staff

Some considerations:

- •Different carts (rather than drawer-based) likely better for easier visualization and organization of supplies.
- •? System to identify supplies from distribution and those from outside orders?
- •Try to minimize outside orders? Shift more to distribution?

IV. Goals/Targets

Start with SUPPLY ROOM. Other areas to be addressed subsequently. Target reorganization of supply room by 12/09, other areas in early 2010. Measure improvement by staff satisfaction, time for obtaining supplies, and costs of wasted/expired supplies

V. Countermeasures/Implementation

Pre-planning / Planning NICII team formation Lean training, MICU/11R presentations

September – October

Brainstorm: current condition, ideal

Metrics (time studies, staff satisfaction) Initial comprehensive supply list Idea system for staff inpu

Planning Manual inventory counts x 2 Final comprehensive NICU supply list Par level meeting - par levels, AKA

October - November

Decide storage system - type of carts Supply room planning - carts, sizes Bin labels, photographs

Resources / Costs

- ~300 hrs clinical nursing • ~60 hrs NICU leadership
 - ~230 hrs BT
- ~230 hrs Distribution
- ~\$2400 for carts/supplies

Returns

- 13 items removed
- ~\$4200 worth of items returned

VI. Follow Up







STAFF SURVEY - % Agree or Strongly Agree*

Satisfied with current status of NICU supply

Can find supplies easily when needed

Items in supply room organized logically

Supplies available when needed

Bubble CPAP supplies (RT)

New admission supplies (RN)

Umbilical catheter supplies (MD/NP)

Supplies generally easily accessible

Supply rooms generally neat and clear

Supply room system allows efficient workflow

TIME TO GATHER SUPPLIES - Average time

Business Transformation

METRICS

* Possible responses: strongly disagree, disagree, neutral, agree, strongly agree





Pre-RIE

(11/09, N=93)

10%

18%

10%

29%

69%

27%

66 sec

89 ser

58 sec





Staff Comments (Examples)

"The new setup is more logical; I spend less time obtaining supplies, '

"Supply rooms look beautiful, clean, & are very practically organized."

'The new system is awesome."

"Running out of many things, especially at night." "Since 'LEAN', we have been running out of supplies more

"We ran out of basic supplies on the weekend."

"I hope the same can be done for the nutrition room - it needs it." "Outside storage room is still terrible."

Lessons Learned

Same staff should be involved with planning and improvement

Pre-planning is labor intensive, particularly inventory counts, setting par levels, and obtaining all pictures and labels. Value of 2nd inventory count is unclear.

A comprehensive accurate list of all supplies is a must

Better education of team around goals and design of bin/cart system could have made cart building more efficient - could have used Gemba visits to other supply rooms as part of improvement event

Leaving some space on shelves for changes/additions useful. Need to be able to rapidly adjust par levels that are found

Next Steps

Optimize system for making adjustments to supply room, including adjusting par levels and adding and removing supplies. Optimize system for ongoing staff input.

Address shortage of items on evenings and weekends. Extend reorganization to other supply storage areas, including nutrition room, bedside carts, and storage room.

53 sec For More Information Contact

Post-RIE

(12/09, N=105)

94%

56%

93%

94%

53 sec

58 sec

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