

# Northern Haida Gwaii Hospital Emergency Department Organization Project (5S)

## AIM

## STATEMENT :

- to reduce duplicate and redundant stock, estimated 40% of current stock
- to increase efficiency of stocking by at least 30%
- to decrease frequency that staff need to look in more than one place for supplies by 50%
- to increase satisfaction of users of the space

## ► BACKGROUND

The Northern Haida Gwaii Hospital is a rural facility with combined residential, acute, and emergency areas. The emergency room sees clients of all ages and all variations of health concerns.

The Emergency Department has undergone numerous isolated improvements but remains disorganized and simultaneously over- and under-stocked, which increases risk to clients.

Dr. Caroline Walker identified this as a concern with the physician team, and other inter-professional team members agreed that it is a priority.

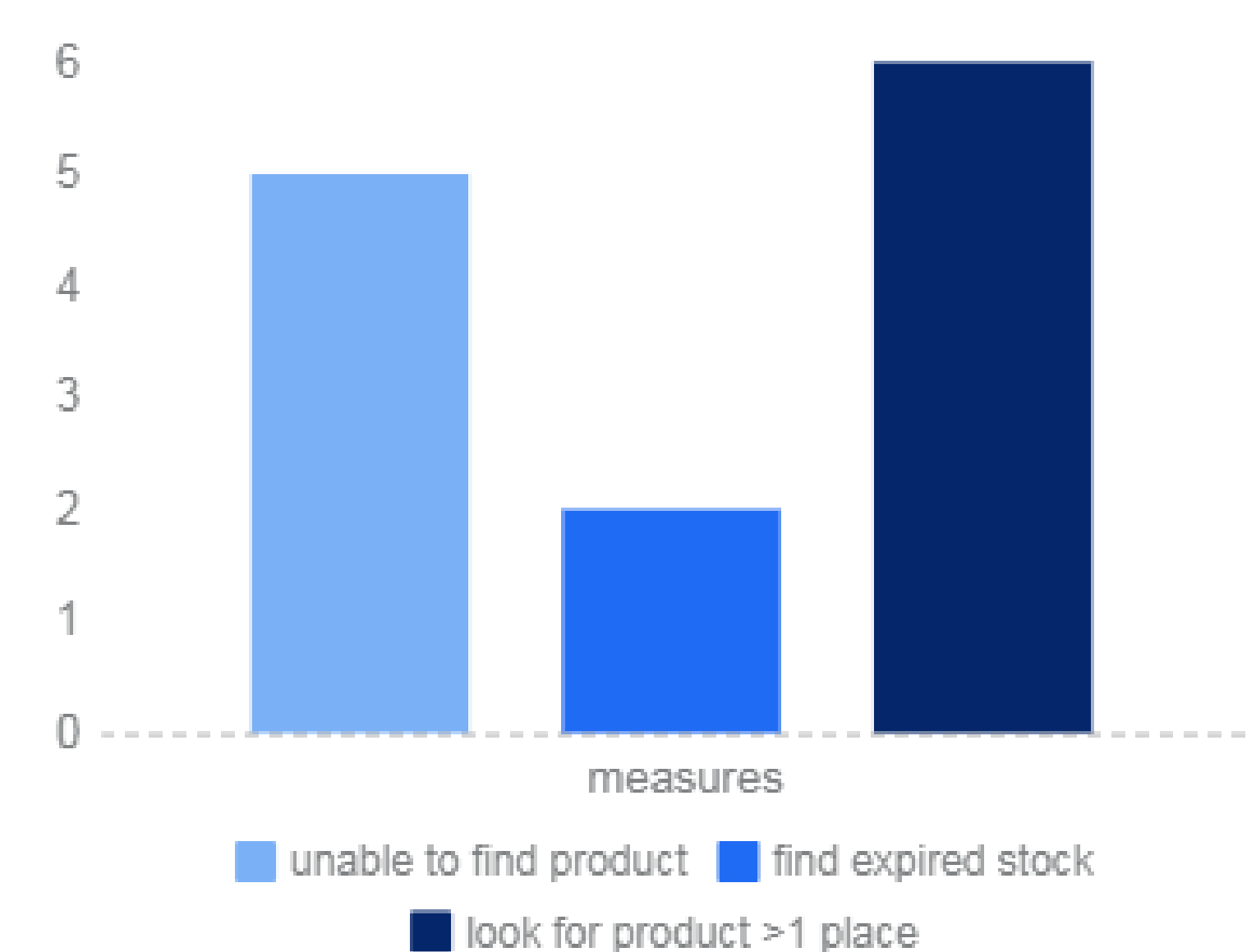
## ► CURRENT STATE

Nurses request stock from stores, who deliver product to the department. A different nurse then puts it away. This results in numerous locations of items, overstock, and incorrect product use.

Patients are affected when staff can't find emergency equipment quickly. The design of the department and overstocking has resulted in storage in patient rooms, who are then interrupted when items are needed from the room they are in.

Unfortunately, the problem does extend beyond the ED, however to address the entire building was beyond the scope of this project. This is a widespread problem since the move into this building 9-years ago after design and construction issues, followed by a rushed move.

Current State: One Week Picture



## ► RESULTS

39 expired types of product removed during 5S  
2 individual expired products found at audit 1 month post- 5S  
89 Products discontinued from stock due to being inappropriate, redundant, or outdated

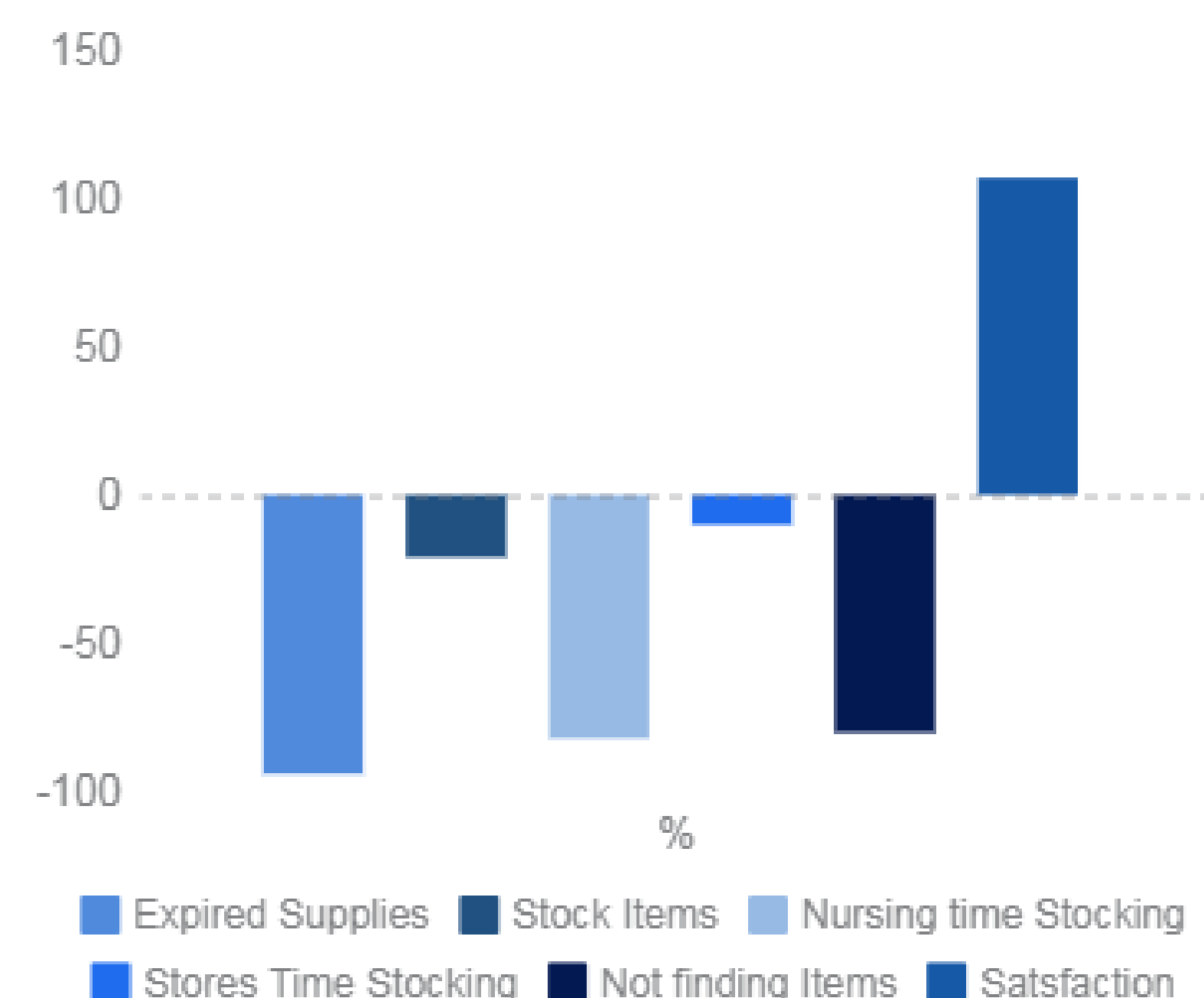
- examples include: combitubes, tracheostomy trays, 3 varieties of wrist splint, soft collars

Average nursing time spent stocking in the ED decreased 82%

Average stores time spent stocking in the ED decreased 10%

Frequency of not finding necessary supplies reduced from average 5 times/week to 1/week

Staff satisfaction doubled from a mean of 4/10 to 8.3/10



## ► CHANGE IDEAS

Our goal is to improve accessibility of stock, reducing search attempts by half by Oct 31st; reduce wasted time in the supply chain system by half; and reduce overstock or redundancy by 75% by Nov 9<sup>th</sup>.

A Lean 5S approach was used to improve the space and develop a Kanban system. Changes were made through consultation with the users of the space and a coordinated approach that considered the entire department but tackled individual areas to manage the size of the project.

Critical success factors were the unanimous agreement that the current state was inefficient; Barriers are primarily to sustainability, given that this site continues to have high levels of turnover in both bedside and management levels.

The active team included representatives from nursing, physicians, stores, midwifery, and administration. Potentially impacted groups and off-site partners were lab and X-ray staff, infection control, wound care, trauma care, pediatrics, diagnostic imaging, and sterile supplies processing.



## ► PATIENT/CUSTOMER

- decreased risk of delayed care
- decreased risk of use of outdated supplies
- increased efficiency of department:
  - decreased time spent stocking by clinicians
  - decreased time spent stocking by stores staff
- decrease in redundant items on unit
- more professional and tidy appearance for staff and those seeking care



## ► NEXT STEPS / SUSTAINING THE GAINS

This project was done with existing space and supplies, with no budget for purchasing tools or equipment. A modern stocking system is the next step, such as Acart and mobile carts that can take supplies to the patient. Furthermore, sustainability will be challenging when other areas of the same building remain cluttered and do not use the same stocking system. A lean approach to ward stock, and ultimately, the stores department will increase consistency and support sustainability.

This project also identified many opportunities for continuous quality improvement that are smaller in scope and reasonable for a small team to tackle in a few days.

A solid sustainability plan is essential, as this is the major challenge faced given high turnover. The new state has been integrated into the orientation process. Tools have been made to maintain minimum and maximum supply levels, and existing checklists have all been modified to be consistent with the future state. An auditing system was put into place with staff, management, and the local QI Committee. Changes are anticipated, and an application-type system is in place so that they can be considered in a broader context by all who may be affected.

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