The Impact of Clutter in the Physical Work Environment on Inpatient Nurses

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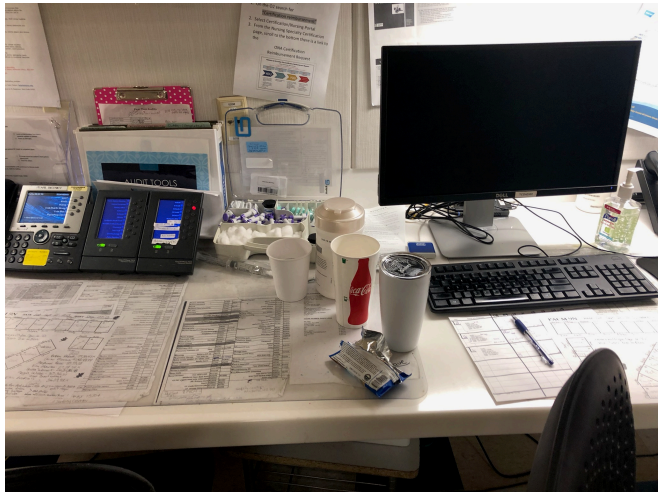
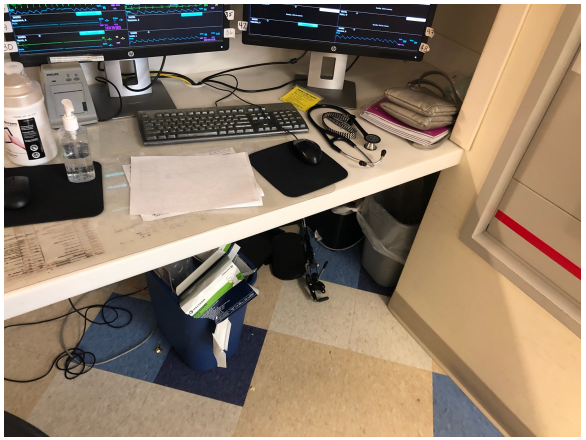
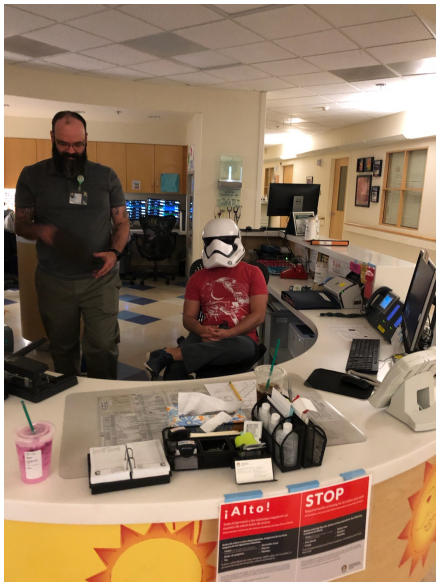
DISCLOSURES

We do not have anything to disclose.

BACKGROUND







BACKGROUND

- Lack of uniformity in how units within DCH are organized/maintained
- Perception of lack of organization on 9N
- Staff overwhelmingly voted to work on organization and cleanliness as a unit goal for the year
- Perception of stress related to the cluttered physical work environment

- Significance: Increase in nurse productivity and decrease in stress levels

PICO(T) QUESTION

In pediatric nurses in an acute care setting (P), how does an organized physical work environment (I) compared to one that is disorganized or cluttered (C), affect nurse stress and productivity (O)?

Evidence Retrieved

Total: 12 articles

Research Evidence				
Non-experimental	Quasi-experimental	Experimental	Systematic Reviews	Meta-analysis/ Meta-synthesis
4 Articles <5yrs: (good quality)	0	1 Article <5yrs: (Good quality) 1 Article 6yrs old:(good quality)	1 Article <5 yrs: (good quality) 1 Article 12yrs old: (good quality)	0

Non-Research Evidence		
Expert Opinion	Organizational (QI/financial data)	Clinical Practice Guidelines
3 Articles ranging 9-12yrs old: (high quality)	1 Article <5yrs: (good quality)	0

- Databases searched: Pubmed, Google Scholar, CINAHL
- Key words used: Environment, Design, Nursing Staff, Hospital, Ward, Stress, Psychological, Job Satisfaction, Satisfaction, Facility design
- Limits used (e.g., language, years, human, age): 5yr restriction (eventually broadened to 15yrs d/t lack of applicable articles. (only 5/ 12 are 5yrs<)).

Evidence Summary

- A nurses work environment plays a large role in the ability to provide quality care.
- The concept of stress reduction is highly relevant to nursing.
- The effects of stress related to a clean & organized unit is not well defined by the evidence.

Evidence Summary

- 5S: A simple but highly effective set of techniques that remove waste from your work environment through:
  - ✓Better workplace organization/workflow
  - ✓Visual communication and management
  - ✓Standardization
  - ✓General cleanliness
  - ✓Increased worker's morale and pride

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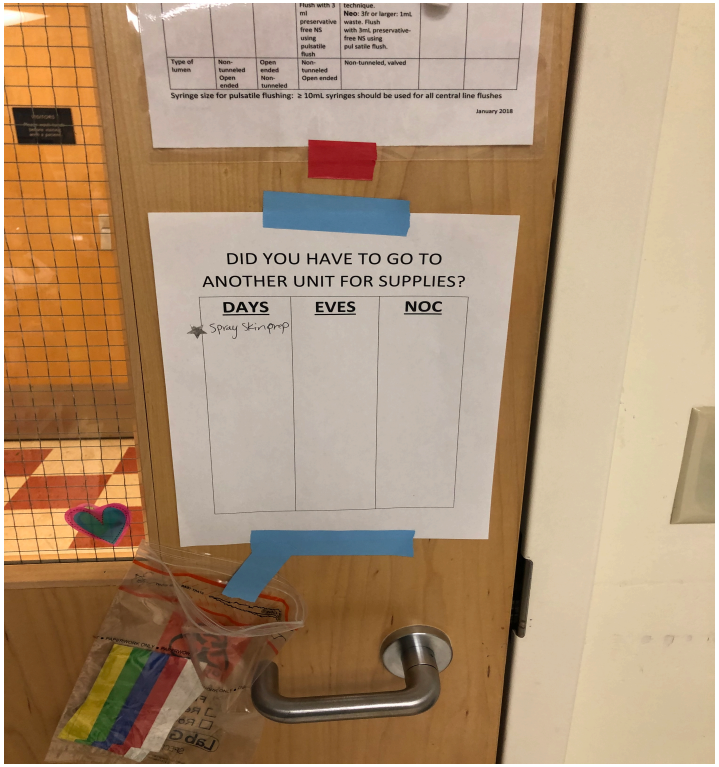
ACTION PLAN

- Identified the problem
- Studied the current condition
- Identify root cause
- Confirmed understanding of current condition
- Envisioned the future state
- Created consensus
- Created implementation & follow-up plans
- Obtained approval
- Implementation
- Following up

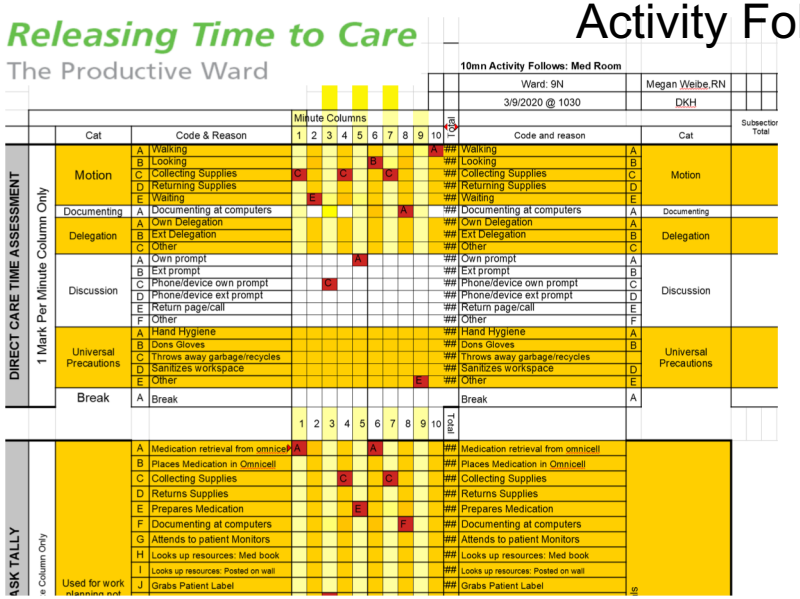
	Metric	Operational Definition	Source of Data	Data Collection Frequency	Data Aggregation (frequency & level of analysis – unit, pt. pop)	Feedback Plan (to what stakeholders, & when)
PROCESS	The identified physical work environment (Nursing station) will be free of clutter 90% of the time.	Nursing Station free of hanging papers & walls, garbage/supplies on counters	Audit forms to track abnormalities	Q shift	56% of the time over 1 month the nurses stations were free from clutter	Discuss with champion's what things are left out the majority of the time and target those things.
	Reduce waste in unnecessary trips to retrieve supplies from other care areas by 30%.	Ensure properly stocked supplies present on unit.	Dot poll tracker	Period of 2 weeks.	TBD	TBD
	Reduce waste in productivity of charge nurse through movement to attend to telemetry monitors by 50%.	Reducing amount of times charge nurse is distracted in completing tasks by silencing monitor	Spaghetti Diagram, Event Sampling	Pre intervention, post intervention - Paused d/t Covid	TBD	TBD
OUTCOME	Decrease nurse stress by 30%.	Nurse perception of stress r/t physical work environment.	Likert Style Survey	Pre/Post-Intervention Survey (5 months)	See below	Complete Post Intervention Survey
	Increase nurse productivity by 30%.	Ability for the nurse to complete job duties with minimal waste.	Spaghetti Diagram, Activity Follows, Dot Poll Tracker	Pre/Post Intervention	Plan-monitor Incremental OT & Meals and Breaks data.	TBD

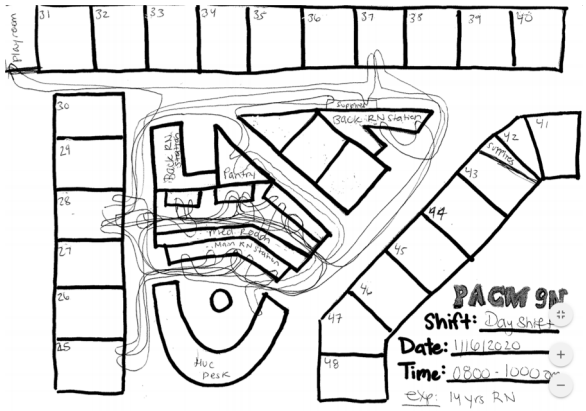
Methods for Data Collection



Dot Poll

Activity Follows

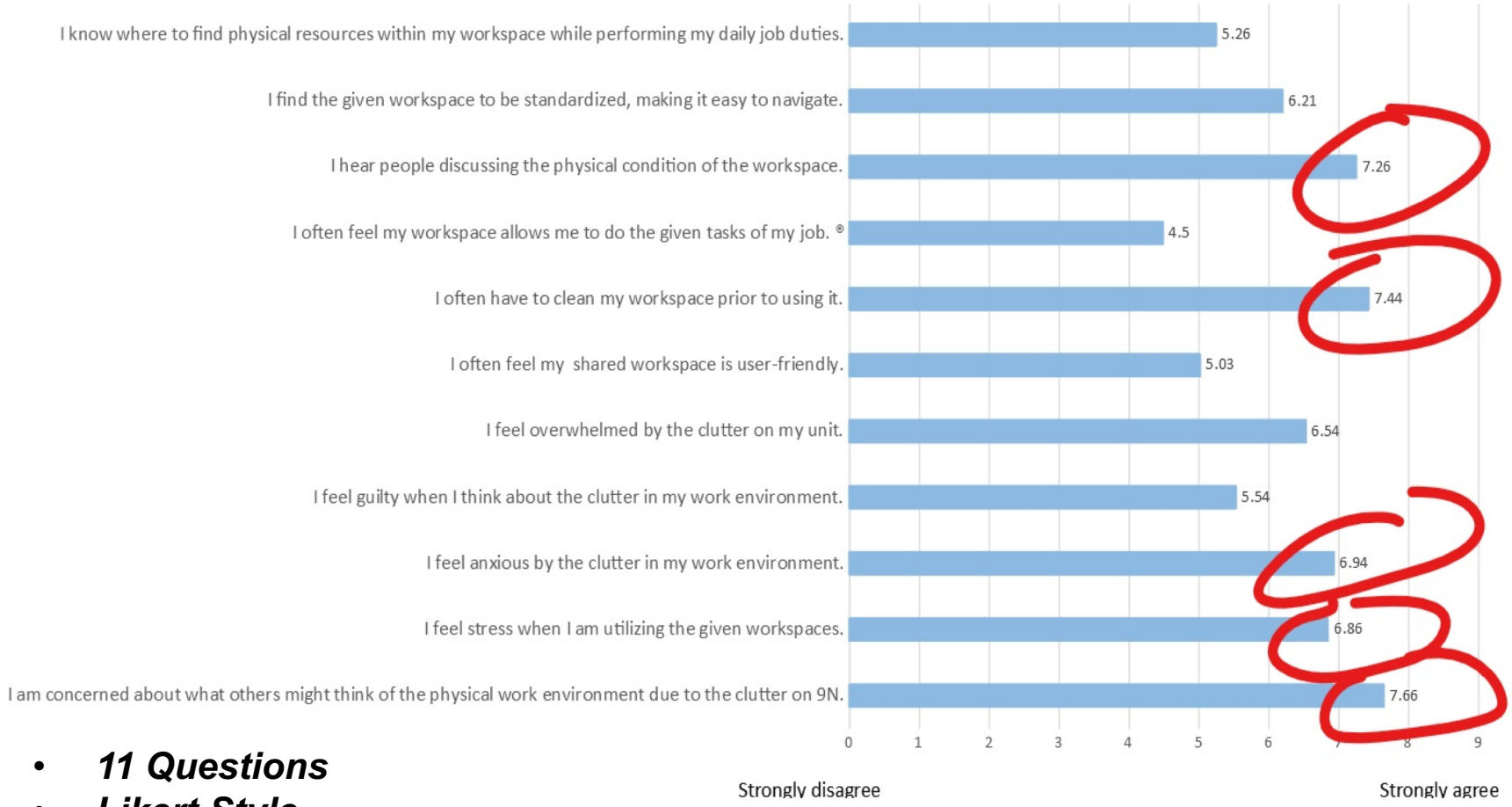




Spaghetti Diagram

Posted 1/14/20

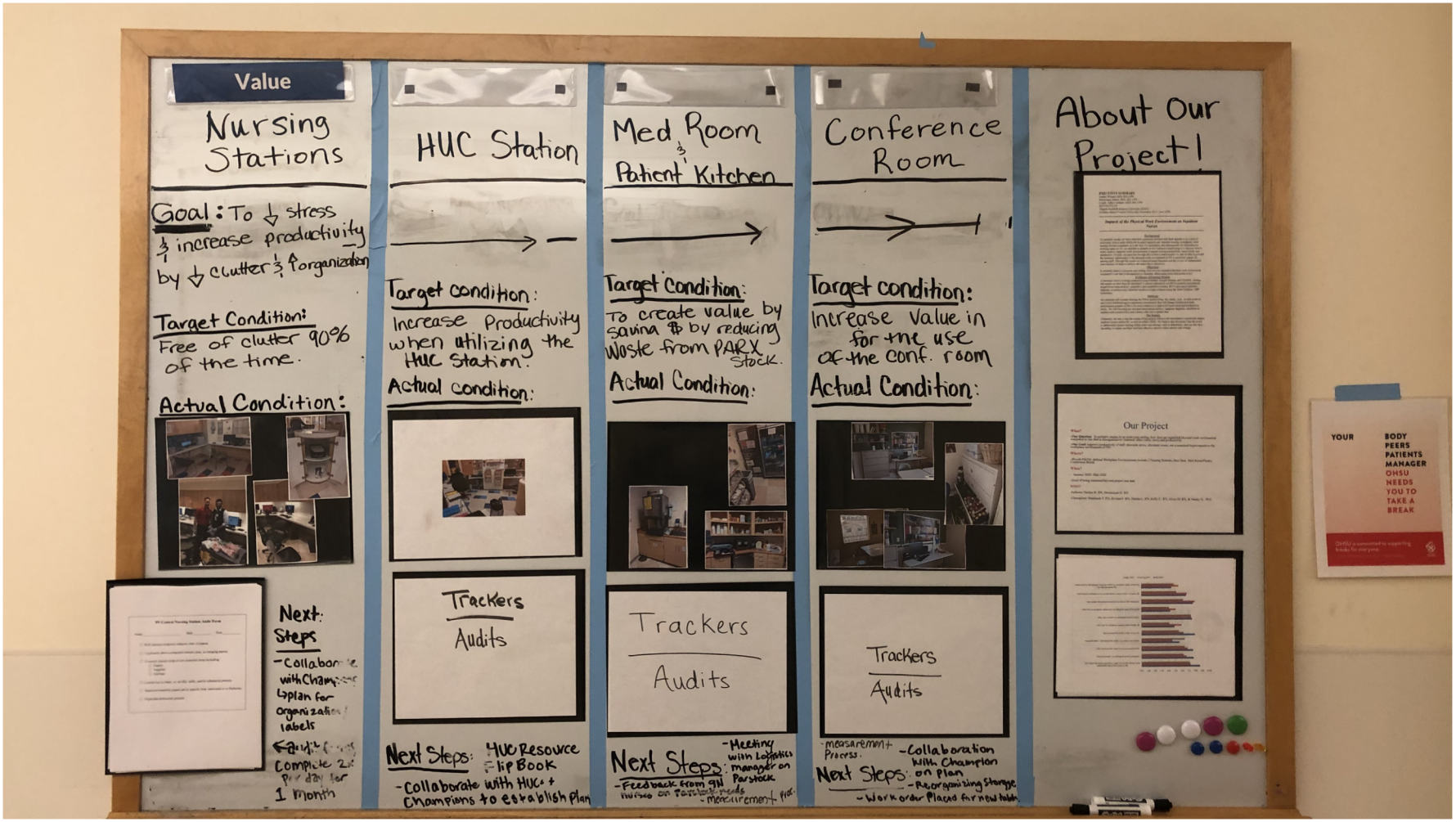
Baseline Survey Preliminary Data



- ***11 Questions***
- ***Likert Style***
- ***Adapted from ICD CQLS***
- ***n=35***

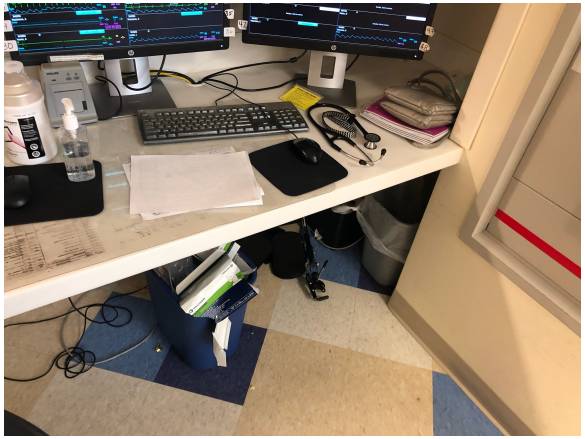
76% Response Rate

"Knowing How You Are Doing" Board



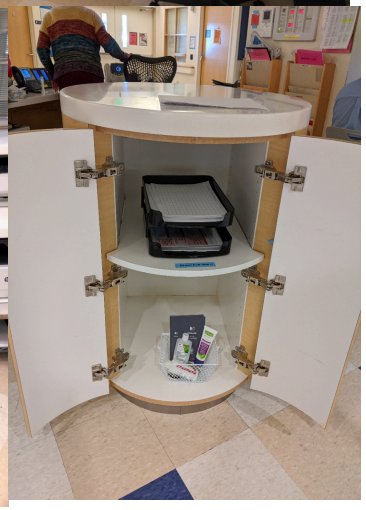
Interventions: Small Test of Change

- Front Nursing Station: Telemetry Monitors
- Jan. 2020
- Coordination with CTS & ITG



Interventions

- Front Nursing Station
  - Cabinets
  - Desk tops
  - Flip books
  - Organized rounder



Interventions: Nutrition Room

RESULTS

- 56% of the time the nurses stations were clear from clutter in the first month

- Increased productivity which added VALUE to the organization.

Return on Investment

- Phase 1 interventions added VALUE
- Plans to analyze incremental OT and missed meals & breaks
- Phase 2 (ParEx) working with Logistics to determine at this time the COST savings!

CHALLENGES

Moving Forward

- Ideally 6-10 months based on COVID restrictions and availability of logistics for Phase 2.
- Interventions: Leveraging Champions
  - Parstock Revisions/ Med room.
  - Nutrition Room
  - Conference Room
- Continue with data collection
- Complete Surveys assessing nurse stress

POTENTAIL IMPLICATIONS FOR PRACTICE

- Unable to identify results d/t inability to complete project
- Implication with Covid-19 Pandemic
  - Hygiene
  - Stress management
  - Financial implications
- Versatile- applicable to all areas of nursing
- Culture shift within the unit

CONCLUSION

- Next Steps from this safe resting place
- Focus on our environment is critical

QUESTIONS & DISCUSSION

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