National Quality Improvement Conference

Greening Our Operating Theatre

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Problem Statement

- Many pages of checklists were needed per week to document the checks done by OT staff for OT equipment, Operating table, NGEMR accessories and electronic appliances.
- Staff are assigned to send checklist for printing and assemble in sets for each OT.
- These checklists are kept in the central drawer for OT staff to take. Assigned staff will go round the OT at the beginning of the month to collect the old checklists and check that new checklists are in place.

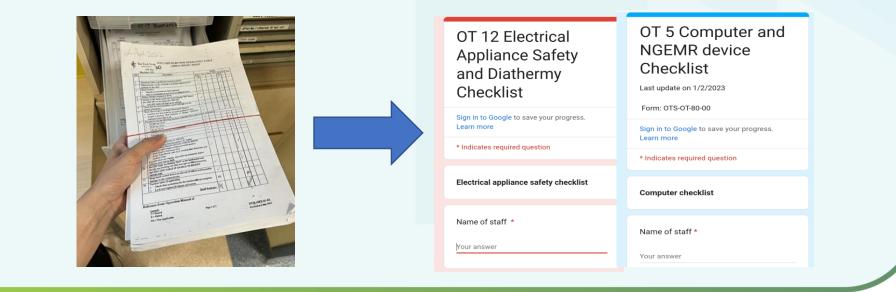
Potential Solutions

- 2 prong approach to encourage accountability of staff in charge of the OT and promote environmental friendly principles for a greener OT.
- To replace paper checklists into electronic forms that allow export into excel forms for easy data management and storage.
 Better overview of completion of checklists to eliminate/ avoid time spent on tracing staff who did not complete the checklists.
 Paper checklists were redesigned into electronic format and represented by QR codes. This was piloted in 1 OR before it was spread to the next 10 OT in the second month.
- \succ Old checklist are reviewed and check for completion.
- Need to trace staff who missed or had errors on the documentation to complete.
- > Avg time spent per month for 2 staff nurse =240 mins
 - \circ assembling and setting the checklists = 60 mins.
 - \circ collecting and reviewing used checklist for completion -150 mins
 - = 150 mins.
 - \odot locating staff to complete checklist= 30 mins

Project Aim

Achieve zero paper daily equipment checklist documentation in General Surgery Operating Theatres in 3 month's time.

Lessons Learnt



Outcomes & Impacts

Good Outcome

- Improved teamwork and communication among discipline staff.
- ➤ Efficient tracking of incomplete checklists.
- Remove the need for storage of used and unused checklists.
- Teamwork of GS staffs and the support from senior management is important.
- Use of google form to complete checklists allows staff to read through the description intently instead of 'ticking through the forms'.
- Change is achieved through careful planning and the support from key stakeholders are vital for a seamless transitioning process.
- Clear dissemination of new work process is integral to have support from ground staff for sustainability.
- Timely updates and resolving staff concerns is essential to facilitate change.

- \succ Time saved reinvested to clinical.
- Environment friendly initiative, align with department and hospital goals for greener healthcare.
- Spread to other disciplines for more savings.
 Value:
- An estimated monthly savings of \$5.10 per month from printing costs for 10 GS Operating theatres. (Printing costs: \$0.03 per page x 17 pages per checklists= \$0.51 each GS OT)
- Departmental savings of approximate \$61.20 per year from unnecessary cost incurred to print paper OT (GS) checklist.
- Manpower savings of 2 staff nurse after factoring in about an hour in total needed to check the e checklists = 0.16 FTE (\$1200 per month).