Project Title

Nurse-LED Male Urinary Catheterization in The Emergency Department: A Quality Improvement Initiative

Project Lead and Members

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Project Members: SSN Tan Yilian, SSN Farah Ang, SSN Tan Cai Feng, SN Tran Thi Dung, Dr Goh Ee Ling

Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group(s) Involved in this Project

Nursing, Medical

Applicable Specialty or Discipline

Urology, Nursing

Aims

To train ED nurses in performing male urinary catheterization to reduce waiting time for IDC insertion and improve quality of care.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

A pre-intervention survey aids in addressing the nurses' concerns prior to commencement of the quality initiative project. Constant communication with ground staff and encouraging feedback allows us to fine tune our training process. We create a positive learning environment through sharing personal experiences.

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Access To Care (Waiting Time)

Keywords

ARU, Male, Urinary, Catheterization, ED, Urine, IDC

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NURSE-LED MALE URINARY CATHETERIZATION IN THE EMERGENCY DEPARTMENT: A QUALITY IMPROVEMENT INITIATIVE

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☐ SAFETY
☑ QUALITY
☑ PATIENT EXPERIENCE
☐ PRODUCTIVITY
☐ COST

Background / Aim

Background

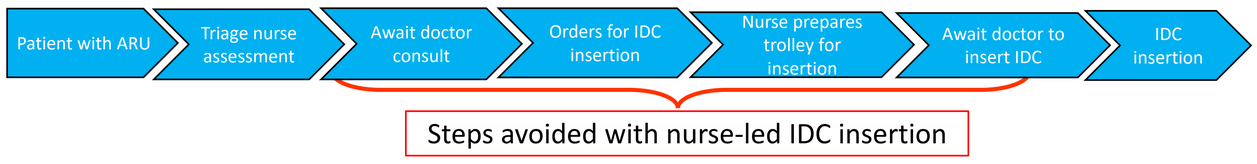
- Acute Retention of Urine (ARU) is the commonest urological complaint in the Emergency Department (ED).
- This results in extreme pain and obstructive uropathy leading to renal impairment. These complications can be reduced with expedient insertion of indwelling urinary catheter (IDC).
- Our ED sees between 10 to 15 cases weekly with average time to IDC insertion at 66 minutes. The longest time to IDC insertion was up to 254 minutes.
- Currently, ED nurses are not trained in performing male urinary catheterization

Aim

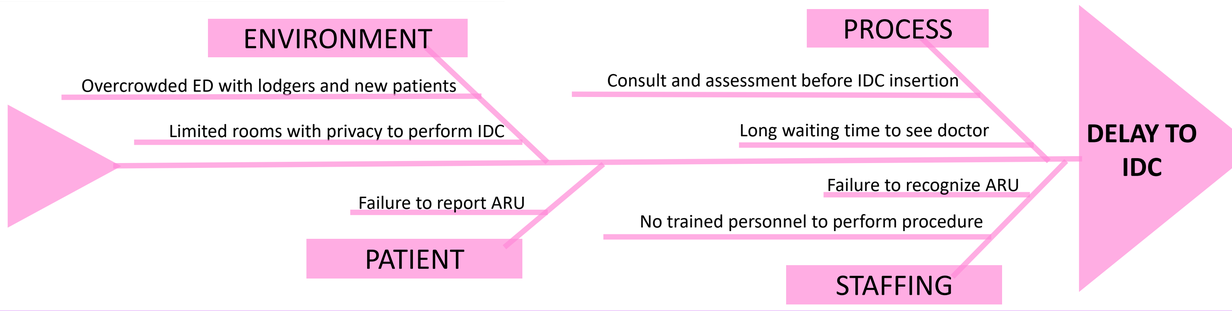
- To train ED nurses in performing male urinary catheterization to reduce waiting time for IDC insertion and improve quality of care.

Analyze Problem

Current workflow for Patients presenting with ARU

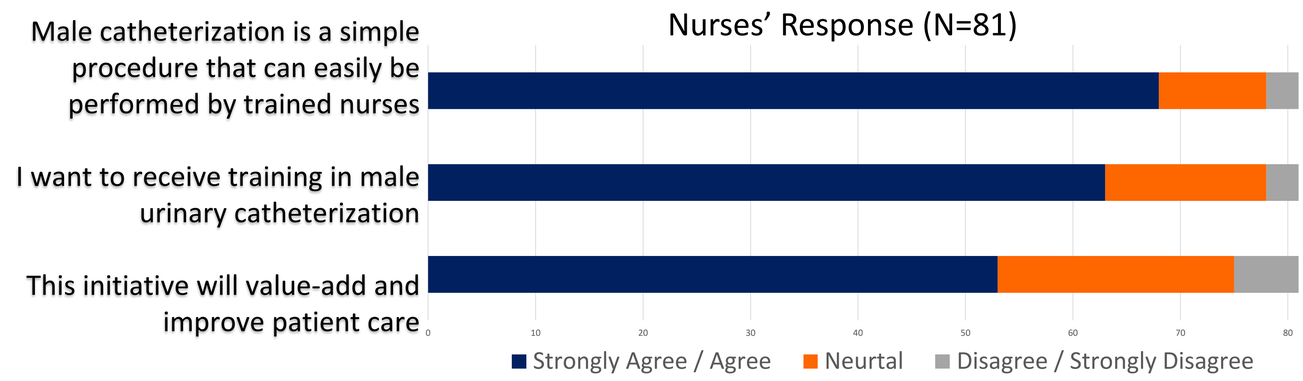


What are the probably root causes?



Pre-Intervention Survey

- We explored perspectives of our nurses via an anonymous online survey prior to implementation.
- Response rate was 60% (81/135)
- Our survey findings are:
  - ➢ Almost 65% viewed male IDC insertion as easy procedure
  - ➢ Over 75% express interest to receive training
  - ➢ Majority believed the initiative can value-add and improve patient care
  - ➢ Concerns among nurses included increase nursing workload, fear of procedure complications and lack of training.



Intervention

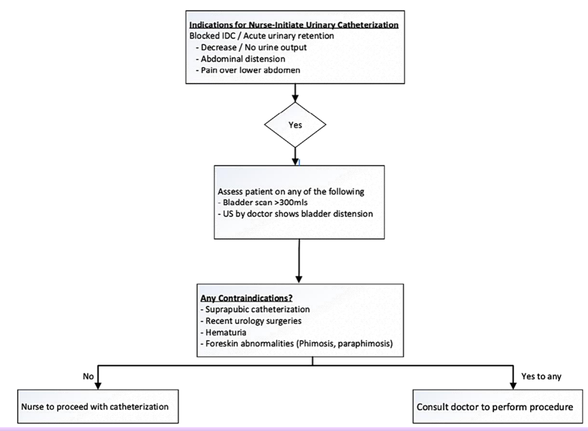
- We implemented a 3-phase training program and a clinical workflow for nurse-initiated male urinary catheterization.
- Monthly training sessions were conducted over a 10-month period and training rate of nearly 50% (67/135) was achieved.

eLearning modules
- Self directed
- Released two weeks prior to classroom competency

Classroom competency
- Led by trainers
- Address queries

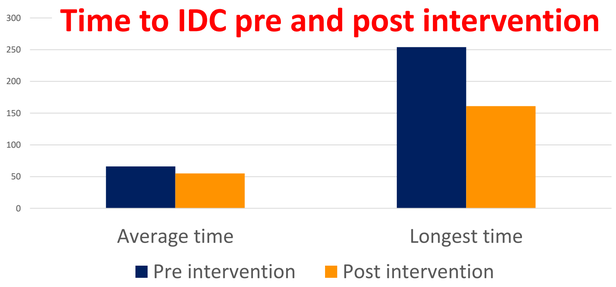
On Job Training
- OJT supervised practice
- Complete 5 successful insertions

Workflow for Nurse-Initiated Male Urinary Catheterization



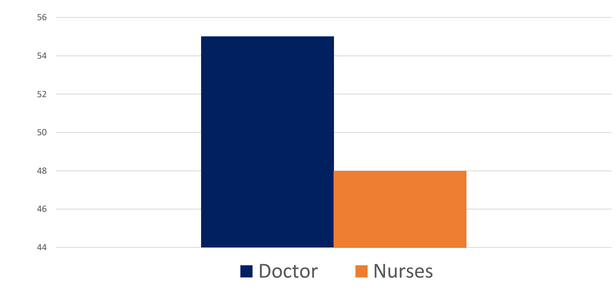
Results

- We collected data 12 weeks before and 12 weeks after intervention.
- Our nurses performed 20.6% (19/92) of male IDC for patients with ARU.
- Time to IDC insertion is defined as: 'time of completed triage to time of IDC insertion'.



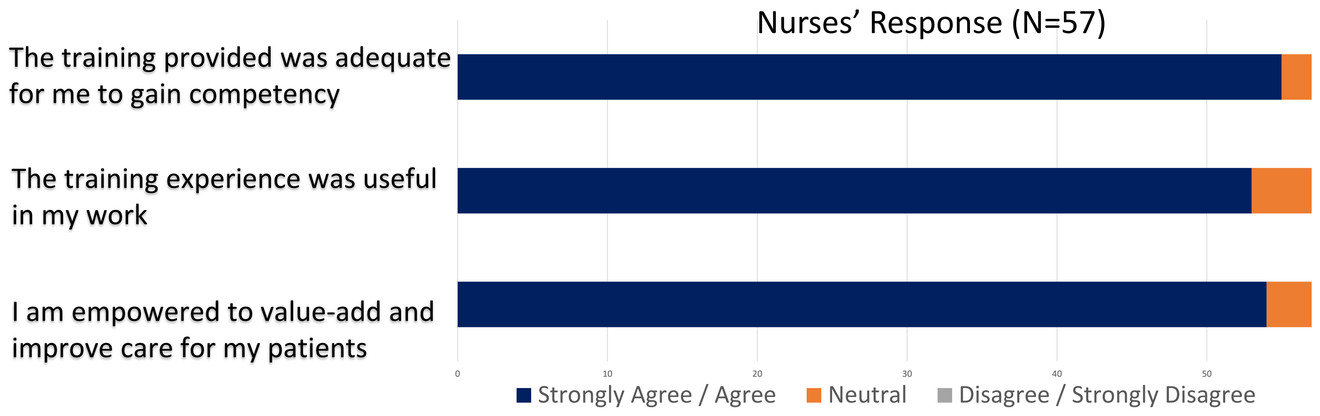
Our average time to IDC have improved 16.6%, from 66mins to 55mins.

Longest waiting time to IDC have improved 36.6%, from 254mins to 144mins.



Average time to IDC insertion was 7 min shorter for nurse-performed IDC as compared to doctor-performed IDC - 48min vs 55min.

- We conducted an anonymous survey to gather feedback on the QI initiative.
- Response rate was 85% (57/67).
- Our survey findings are
  - ➢ More than 96% agree that training was adequate and useful in their work
  - ➢ Almost 95% felt empowered to value-add and improve patient care
  - ➢ More than 80% rated the initiative 4 and above (out of 5)
  - ➢ Positive feedback – 'It is a good skill to have when the patient is in ARU and there is a need to insert IDC fast', 'Good practice to enhance patient care', 'Good opportunity for the knowledge', 'Trainers were experienced and supportive throughout'



Conclusion

- Nurse-led male urinary catheterization in ED have improved time to IDC insertion. With increasing number of ED nurses receiving training, we expect further improvement in wait time to IDC insertion
- The training program has provided our nurses both competency and confidence in a new procedure
- The QI initiative has empowered our nurses to improve patient care and increase their job satisfaction

Ng Teng Fong General Hospital

Jurong Community Hospital

Spread Changes, Learning Points

What are/were the strategies to spread change after implementation?

- We recruited a group of highly motivated trainers who actively engage ground nurses to acquire the skills
- Feedback was constantly elicited to evaluate quality and effectiveness of training
- Trained nurses help to share their learning experience and provide encouragement for ambivalent nurses to sign up for training

What are the key learnings from this project?

- A pre-intervention survey aids in addressing the nurses' concerns prior to commencement of the quality initiative project
- Constant communication with ground staff and encouraging feedback allows us to fine tune our training process
- We create a positive learning environment through sharing personal experiences