SINGHEALTH DUKE-NUS EDUCATION CONFERENCE 2019

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"To Improve Performance in Nursing Assessment for All SGH Nursing Students to A Median of 90% Within 12 Months"

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Background

The primary responsibility of SingHealth Alice Lee Institute of Advanced Nursing is to meet the learning needs of the nursing students while delivering safe care to patients.
Evaluation of nursing students' skill is important to bridge the gap between theory and practice. In the current situation, students show insufficient improvement in skill performance even after feedback by Clinical Instructors (CIs).

Mission Statement

To improve performance in nursing assessment for all SGH nursing students to a median of 90% within 12 months

Analysis of Problem

Baseline Data Collection

- 12 points data were collected (students' result) within 2 weeks using APIE checklist (Figure 1)
- Primary measurement was based on 2nd assessment result (Figure 2)
- Baseline median score was 60%

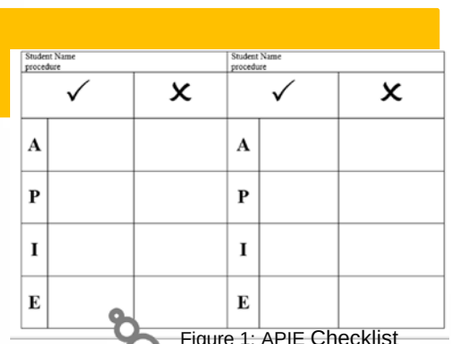


Figure 1: APIE Checklist

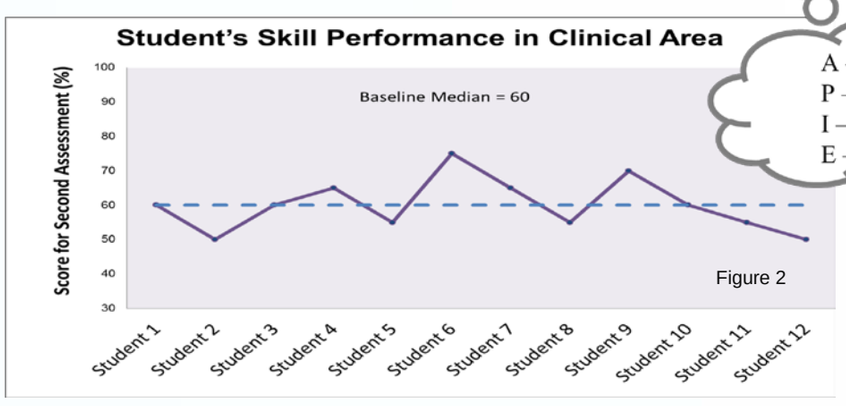
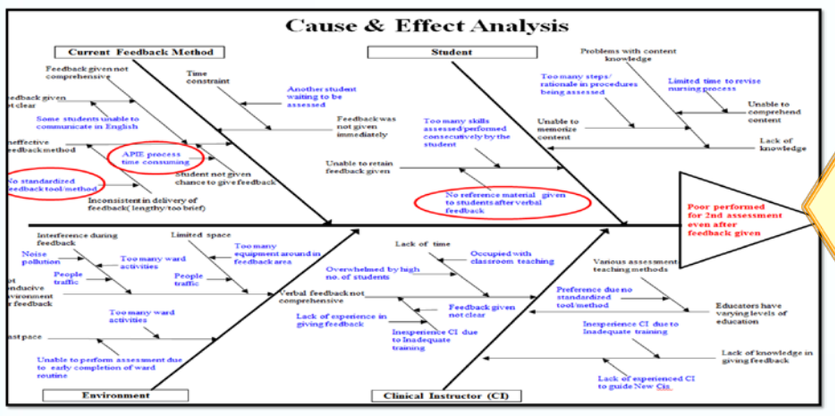


Figure 2

A – Assessment
P – Planning
I – Implement
E – Evaluation

Ishikawa Diagram

- Ishikawa diagram was used to identify the cause and effect analysis (Figure 3)
- Pareto analysis was conducted twice to determine the crucial 20% of root causes causing majority of the problem.



Top Causes:

- No reference material given to students after verbal feedback
- No standardized feedback tool / method
- APIE process is time consuming

Figure 3

Interventions / Initiatives

Brainstorming

- Silent brainstorming using post-it notes
- Each member brainstormed multiple solutions for each root causes. These were then grouped together
- 4 solutions were chosen by the team (Figure 4)

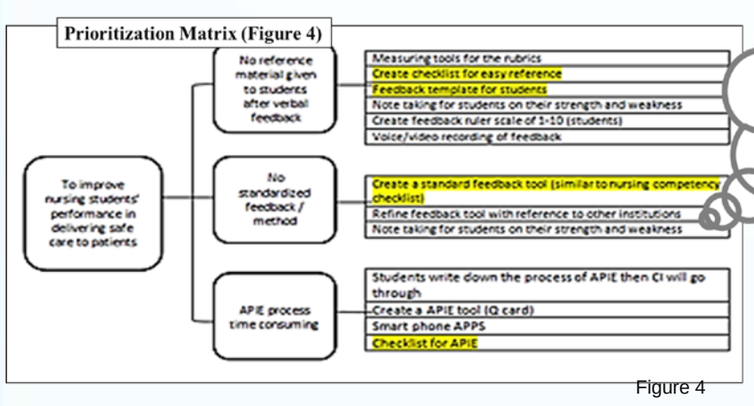


Figure 4

Solutions

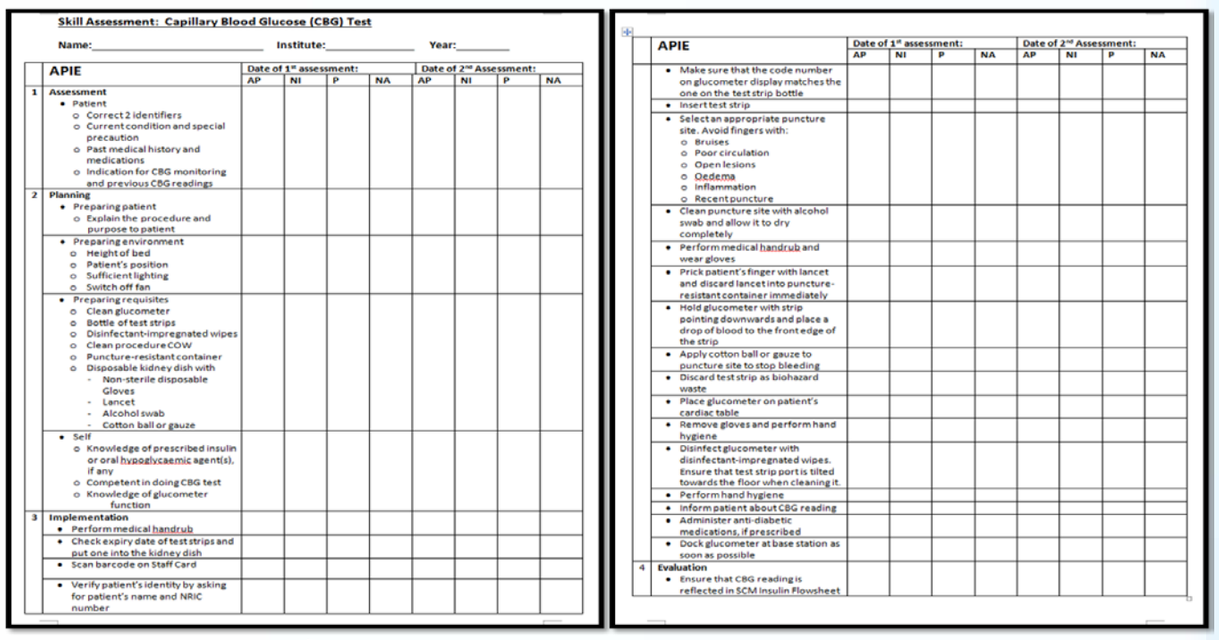
- Create checklist for easy reference
- Feedback template for students
- Create a standard feedback tool
- Checklist for APIE

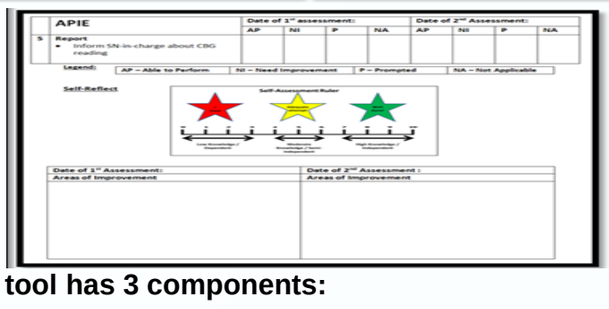
PDSA Cycle 1

Interventions / Initiatives

PDSA 1: Created "Skill Assessment Tool (Figure 5)

- Skill assessments tool is created based on hospital policies and academic institutions' nursing procedure checklist
- Tool was verified by Senior Nurse Educator
- It was used throughout all school institutions
- Assessments were done twice on the same nursing skill to monitor for any improvement
- "Skill Assessment Tool" is returned to student after the 1st assessment for reflection and revision before the 2nd assessment





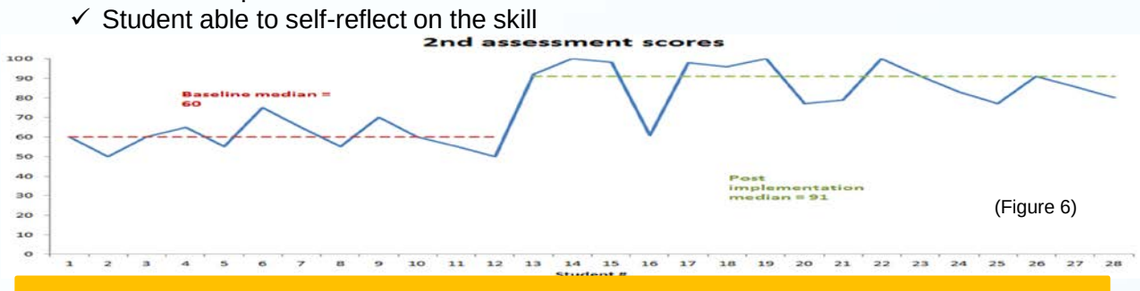
(Figure 5)

Skill assessment tool has 3 components:

- APIE component
  - ✓ Steps are broken down into details and clearly spelled out
  - ✓ Students were graded in different categories, AP for Able to Perform, NI for Need Improvement, P for Prompted and NA for Not Applicable.
- Student's self-scoring
  - ✓ Student will score their skill from 0-10
  - ✓ Zero to 3 is low knowledge or dependent. 4-6 is moderate knowledge/ semi-independent. And 7-10 is high knowledge or independent. Or they can use the colored star to rate themselves. Red is "I tried", Yellow is "Adequate Attempt" and Green is "Well Done".
- Self-reflect
  - ✓ Students are encouraged to write self reflection on the skill they performed.

Results

- Students' performance showed improvement to a median of 90% (Figure 6)
- Students displayed more confidence during the 2nd assessment
- Students' feedback on the skill assessment checklist:
  - ✓ Easy to follow through and understand the process
  - ✓ Aid them to reflect and revise on the area of improvement
  - ✓ The tool is effective and beneficial for them
- Survey collected from CIs
  - ✓ Easy to use and saves time
  - ✓ Consistency between different CIs evaluation
  - ✓ Able to compare between 2 assessment
  - ✓ Student able to self-reflect on the skill



(Figure 6)

Sustainability

- Skill Assessment Tool is utilized by the CIs in assessing all levels of nursing students in the clinical area
- It helps in assessing and guiding underperforming students
- More clinical skills assessment such as administration of nebulizer, oxygen therapy and insulin injection are being created
- It aids in guiding new CIs and preceptors in skill assessment of the students

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