

## **Project Title**

Create Awareness & Cost Saving On AAMI Level II Gown Usage in Ward B13

## **Project Lead and Members**

Project lead: Sarathamani Rethenam

Project members: Zaiton Binte Abu Bakar, Yvonne Sii Yong Pheng, Geeta Rajoo, Ma

Rothessa C T, Terry Teo, Helen Ng

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

## **Healthcare Family Group Involved in this Project**

Healthcare Administration, Nursing

## **Applicable Specialty or Discipline**

Infection Control

## **Aims**

To decrease the usage of AAMI Level IV yellow gowns in ward B13s and to reduce the cost with an alternative type of gowns by 50% within a year.

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Lessons Learnt**

To constantly source for alternatives that can aid in the reduction of cost for supplies.

Ring fence the supply AAMI level IV gowns for pandemic situations, airborne and highly infectious cases.

## **Conclusion**

See poster appended/ below

## **Project Category**

Training & Education, Team Based Learning

## **Keywords**

Awareness, Reduce Cost, Barrier Gown Usage, Appropriate PPE use

## **Name and Email of Project Contact Person(s)**

Name: Sarathamani Rethenam

Email: [Sarathamani\\_Rethenam@nuhs.edu.sg](mailto:Sarathamani_Rethenam@nuhs.edu.sg)



# CREATE AWARENESS & COST SAVING ON AAMI LEVEL II GOWN USAGE IN WARD B13

NC SARATHAMANI R, NC ZAITON AB, SSN YVONNE S, SSN GEETA R AND SSN MA ROTHESHA

❑ SAFETY  
❑ QUALITY  
❑ PATIENT EXPERIENCE

✓ PRODUCTIVITY  
✓ COST

## Define Problem, Set Aim

### Opportunity for Improvement

Ward B13s (MRSA Ward) had the highest usage of the AAMI level IV yellow gowns. From April 2019 to March 2020, the total cost for the yellow gowns in Ward 13s was SGD 2940. In order to decrease the usage of AAMI level IV gown, AAMI level II gowns can be used as an alternative. The AAMI level II gown, which has a lower cost, can be used by healthcare staffs when performing care for MDRO patients and for housekeeping duties.

### Define the scope

MMD statistics showed that Ward B13s (MRSA Ward) had the highest usage of the AAMI level IV yellow gowns. Thus, we embarked on a journey to look for alternative gowns with good productivity and low costs.

### Aim

To decrease the usage of AAMI Level IV yellow gowns in ward B13s and to reduce the cost with an alternative type of gowns by 50% within a year.

**Abbreviations:** MRSA-methicillin-resistant staphylococcus aureus

AAMI-Association of the advancement of Medical Instrumentation

## Establish Measures

### Outcome Measures

The cost of yellow and blue gown usage in ward B13

### Process Measures

Number of blue gown (Total number of blue gown usage per month)

Number of yellow gown (Total number of yellow gown usage per month)

### Balancing Measures

Monitor the pre and post yellow gown usage



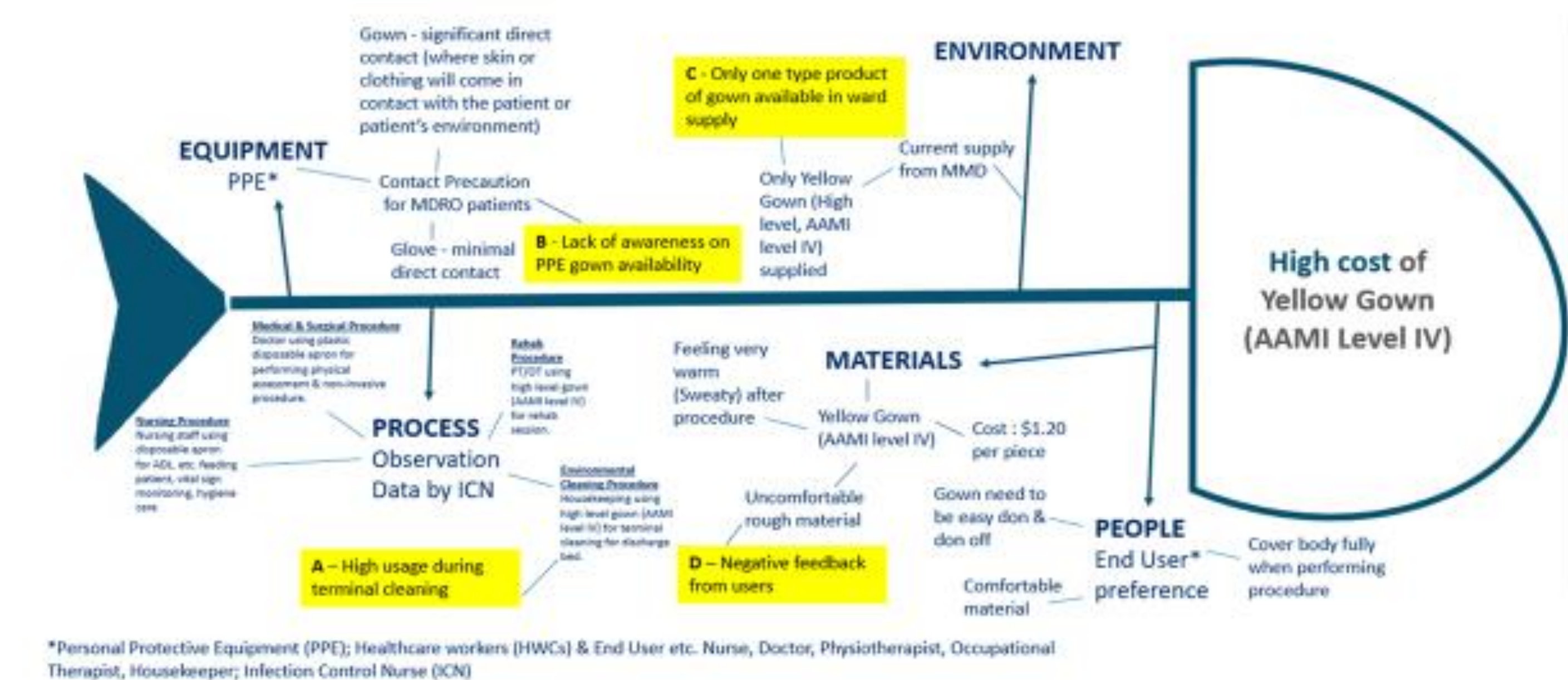
Cost of Yellow gown usage in MRSA Ward B13 April 2019 – March 2020



Yellow gown usage in April 2019 to March 2020 – SGD 2940

## Analyse Problem

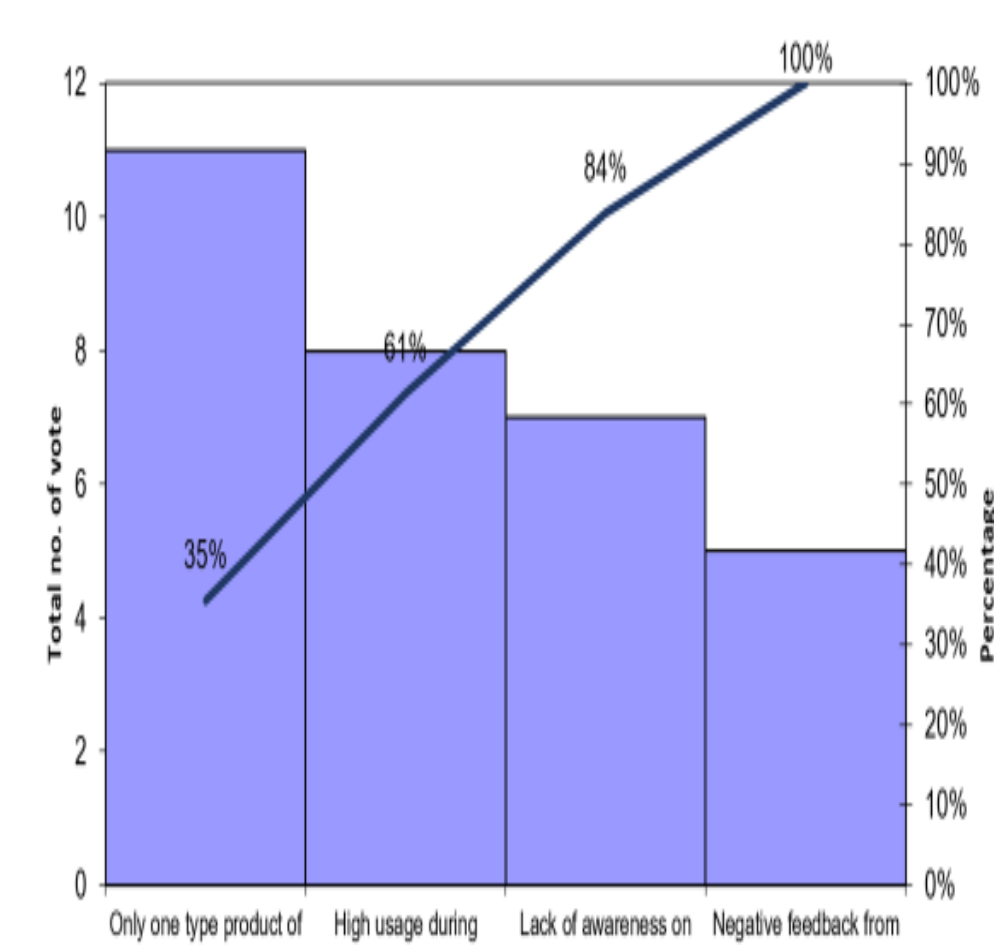
### Problem Analysis (root cause)



### Problem Analysis (Potential solution)

ROOT CAUSE	POTENTIAL SOLUTION
<b>Root Cause A</b> High usage of level IV gowns during terminal cleaning.	1 Alternative gowns for cleaning procedures
<b>Root Cause B</b> Lack of awareness on PPE gown availability	2 Provide education on appropriate use for different gowns 3 Review the PPE selection workflow for improvement
<b>Root Cause C</b> Only one type of gown is available.	4 Source for alternative gowns 5 Provide more types of gown
<b>Root Cause D</b> Negative feedback from users	6 Gather feedback from users 7 Provide continuous education on proper gown usage in infection control practices

### Pareto chart



## Select Changes

Review current PPE selection workflow for improvement and conduct user feedback session. Identify alternative gowns with lower cost for cost saving. Provide group teaching for staffs in ward B13s on the PPE selection workflow.

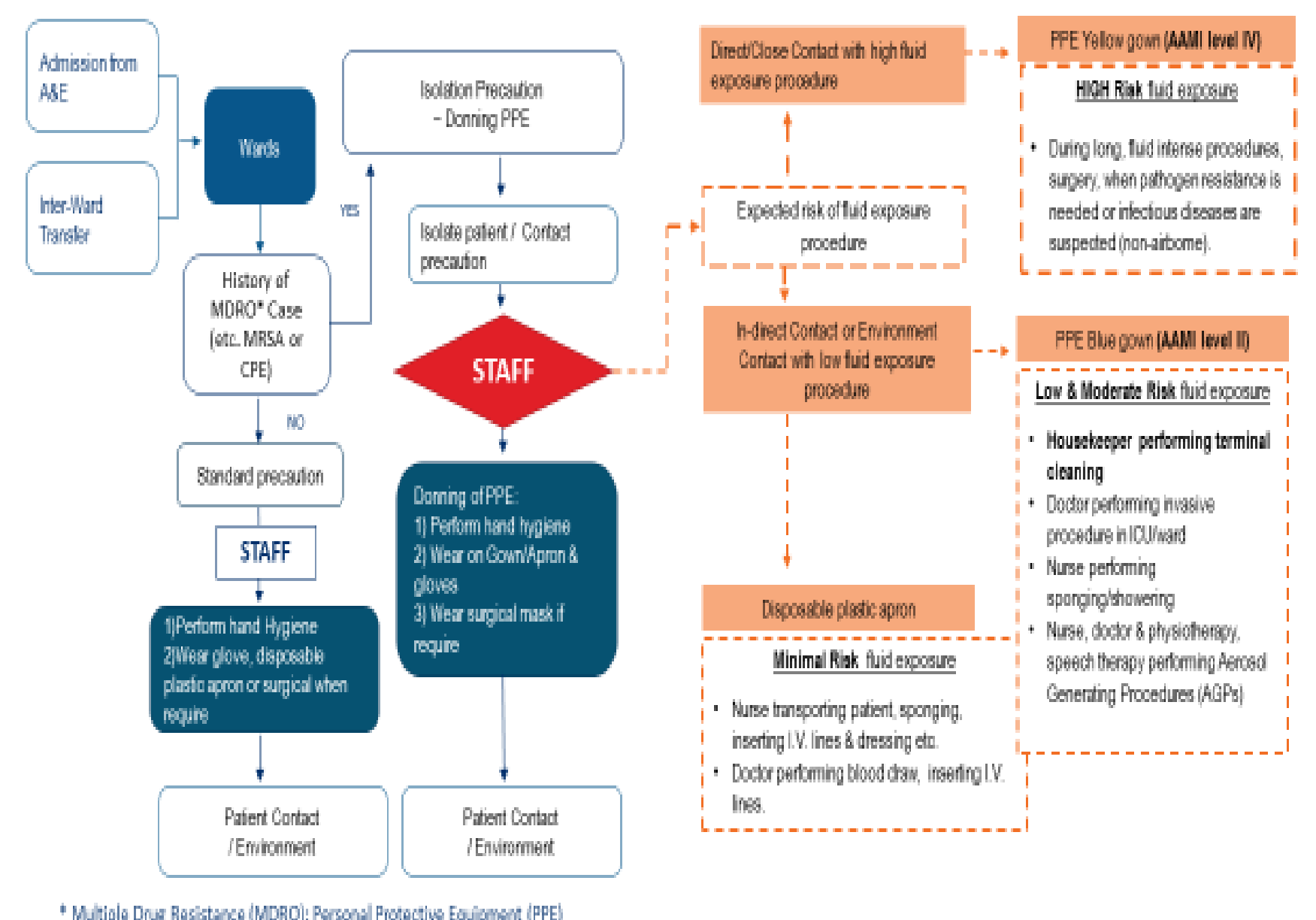
Potential solution	Interventions	Measurement
<ul style="list-style-type: none"> <li>Review the PPE selection workflow for improvement</li> <li>Provide feedback session from user experiences</li> </ul>	<ul style="list-style-type: none"> <li>Introduce a revised workflow &amp; print out a poster to paste on the nursing counter for reference</li> </ul>	<ul style="list-style-type: none"> <li>Document feedback session – roll call</li> </ul>
<ul style="list-style-type: none"> <li>Availability of alternative gowns for cleaning procedures</li> <li>Source out and review for alternative gowns with lower cost</li> <li>Provide availability of different gown supplies</li> </ul>	<ul style="list-style-type: none"> <li>Introduce the PPE blue gown (lower cost &amp; AAMI level II)</li> </ul>	<ul style="list-style-type: none"> <li>Monitor monthly numbers of the PPE gown (Blue gown &amp; Yellow gown) top-up by MMD</li> </ul>
<ul style="list-style-type: none"> <li>Provide continues education on proper gown usage in infection control practice</li> </ul>	<ul style="list-style-type: none"> <li>Small group teaching during roll calls</li> <li>Sustaining behaviour change in ward B13 – audit &amp; roll call</li> </ul>	<ul style="list-style-type: none"> <li>Number of staff attendance during teaching session – roll call</li> </ul>

## Test & Implement Changes

### Data Collection Plan

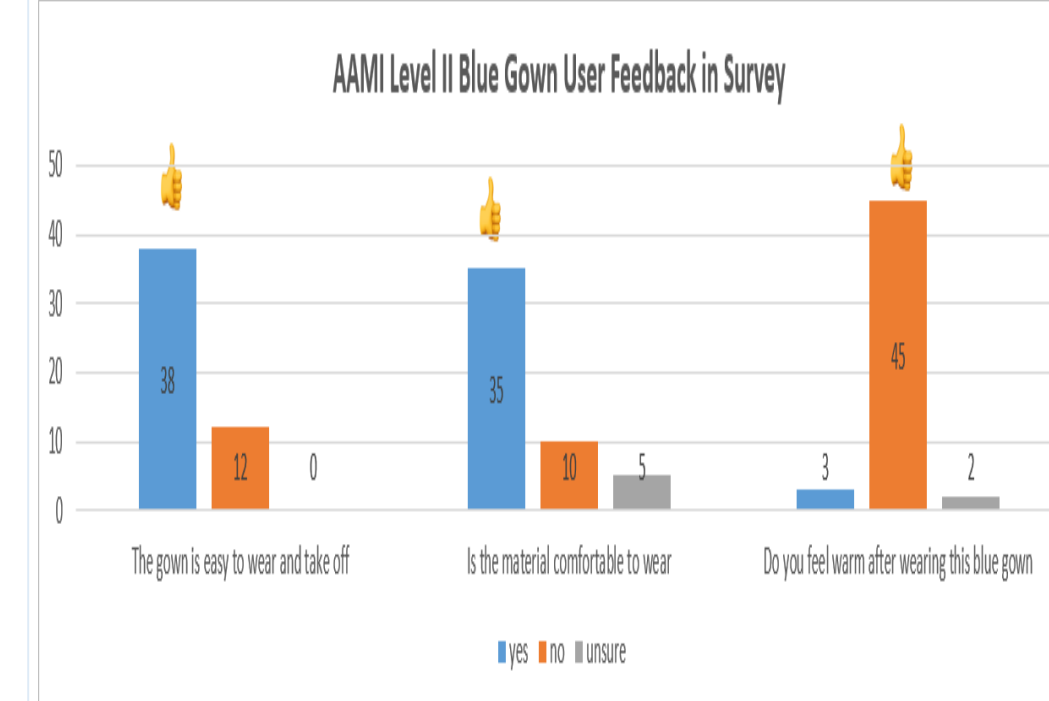
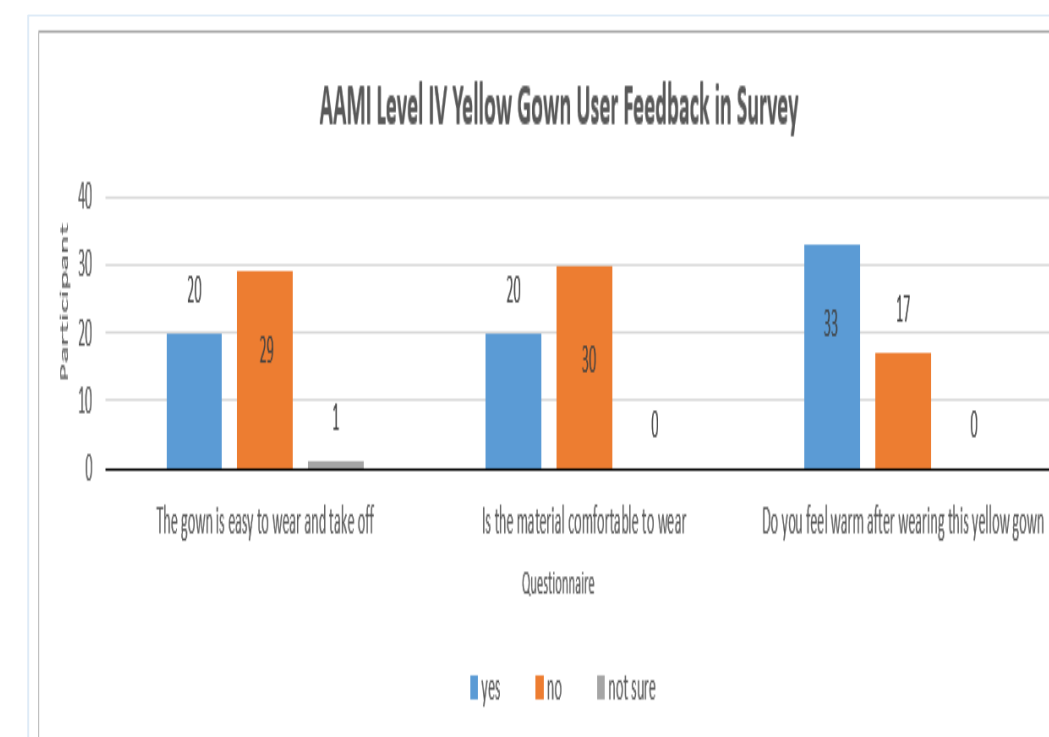
Data	Data Source	Data collection method	Data Collection Period	Frequency	Sample size	Person
Post survey on user experience of Blue gown & Yellow gown	Questionnaire	Questionnaire are distribute via online survey to staff during roll call	01 February 2021 to 15 February 2021	2 weeks	10-20 sample size	SSN Noone Si SSN Geetha
Number of Blue gown & Yellow gown supply monthly	Gown supply from MMD department	Excel calculation	15 February 2020 to 15 August 2020	6 months	All data captured	NC Zaiton

### Process Map (Flowchart) –After Improvement



\* Multiple Drug Resistance (MDRO); Personal Protective Equipment (PPE)

### Post Implementation Result- Survey



### Post Implementation Result



## Spread Changes, Learning Points

### What are the strategies to spread change after implementation?

- MMD to increase the supply for AAMI level II gowns.
- Introduce / email to nursing team regarding the availability of AAMI level II gowns for order.
- ICNs can conduct sessions to all health care staffs regarding the use and availability of AAMI level II gowns.

### What are the key learnings?

- To constantly source for alternatives that can aid in the reduction of cost for supplies.
- Ring fence the supply AAMI level IV gowns for pandemic situations, airborne and highly infectious cases.