

### **Project Title**

Isolation nurses creating infection control awareness and adherence among visitors in Isolation Ward

### **Project Lead and Members**

Project lead: Hema Malini

Project members: Norazrina Baharudin, Emelia Ong,

### **Organisation(s) Involved**

Ng Teng Fong General Hospital

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

Nursing

### **Applicable Specialty or Discipline**

Infection Diseases

### **Aims**

The Isolation Ward strives to minimise challenges for nurses to educate patients' visitors on infection control practices from 77.3% to <20%, in order to increase awareness and improve adherence from 18.5% to 70% by 31st October 2019.

### **Background**

See poster appended/ below

### **Methods**

See poster appended/ below

### **Results**

See poster appended/ below

### **Lessons Learnt**

- There is a lack of measures pertaining to infection control among patient's visitors as potential vectors of disease carriers.
- More educational resources can be directed towards improving visitors' understanding on isolation and infection precaution measures.

### **Conclusion**

See poster appended/ below

### **Project Category**

Care & Process Redesign, Value Based Care, Operational Management, Resource Allocation, Safe Care, Adherence Rate, Risk Management

### **Keywords**

Isolation Ward, Infection Precaution Measures, Visitor Education

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# ISOLATION NURSES CREATING INFECTION CONTROL AWARENESS AND ADHERENCE AMONG VISITORS IN ISOLATION WARD

MEMBERS: NC HEMA MALINI, SSN NORAZRINA, SN EMELIA ONG

- SAFETY
- PRODUCTIVITY
- QUALITY
- COST
- PATIENT EXPERIENCE
- TEAMWORK
- COMMUNICATION

## Define Problem, Set Aim

### Opportunity for Improvement

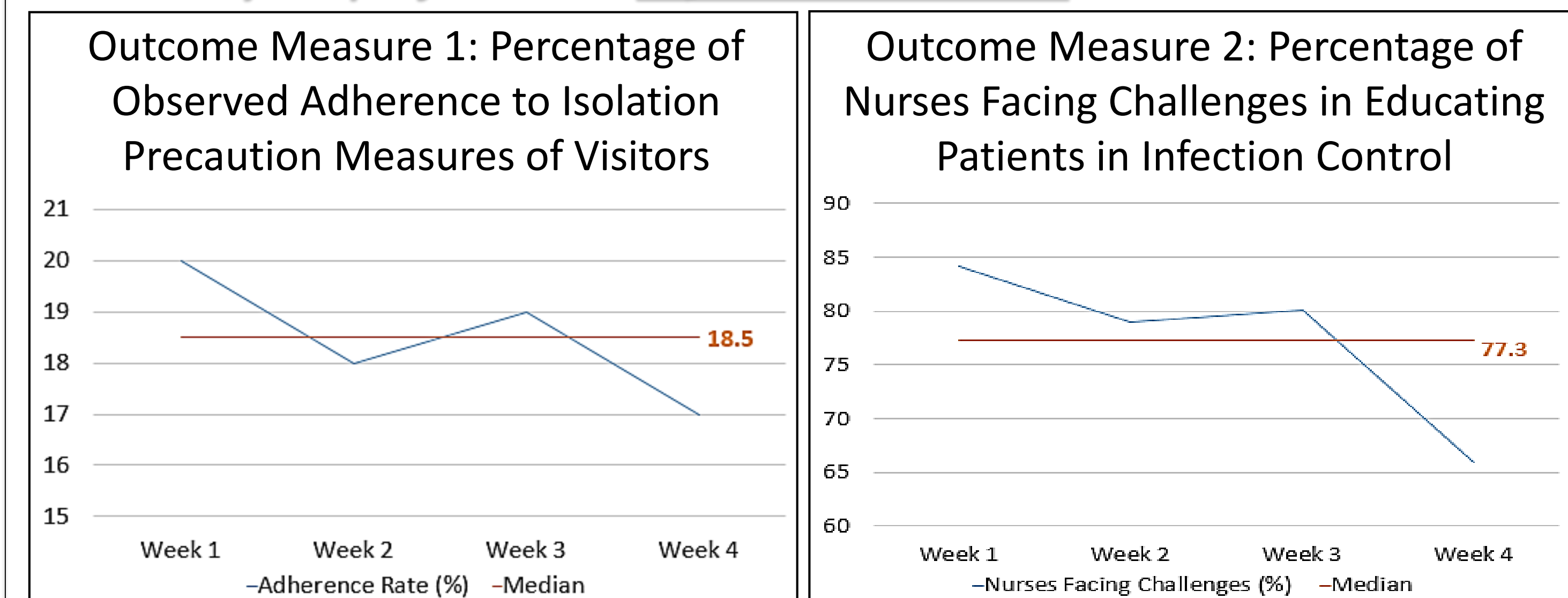
Patients in the Isolation Ward are generally on isolation precautions (airborne, droplet and/or contact). On observation, only **18.5%** of visitors were aware of and adhered with infection control measures. In addition, **77.3%** of nurses found it challenging to educate visitors on infection control measures. These factors results in the breach of infection control by the patients' visitors that could cause disease to them and the community through the spread of contagious harmful organisms.

### Aim

The Isolation Ward strives to minimise challenges for nurses to educate patients' visitors on infection control practices **from 77.3% to <20%**, in order to increase awareness and improve adherence from **18.5% to 70%** by 31<sup>st</sup> October 2019.

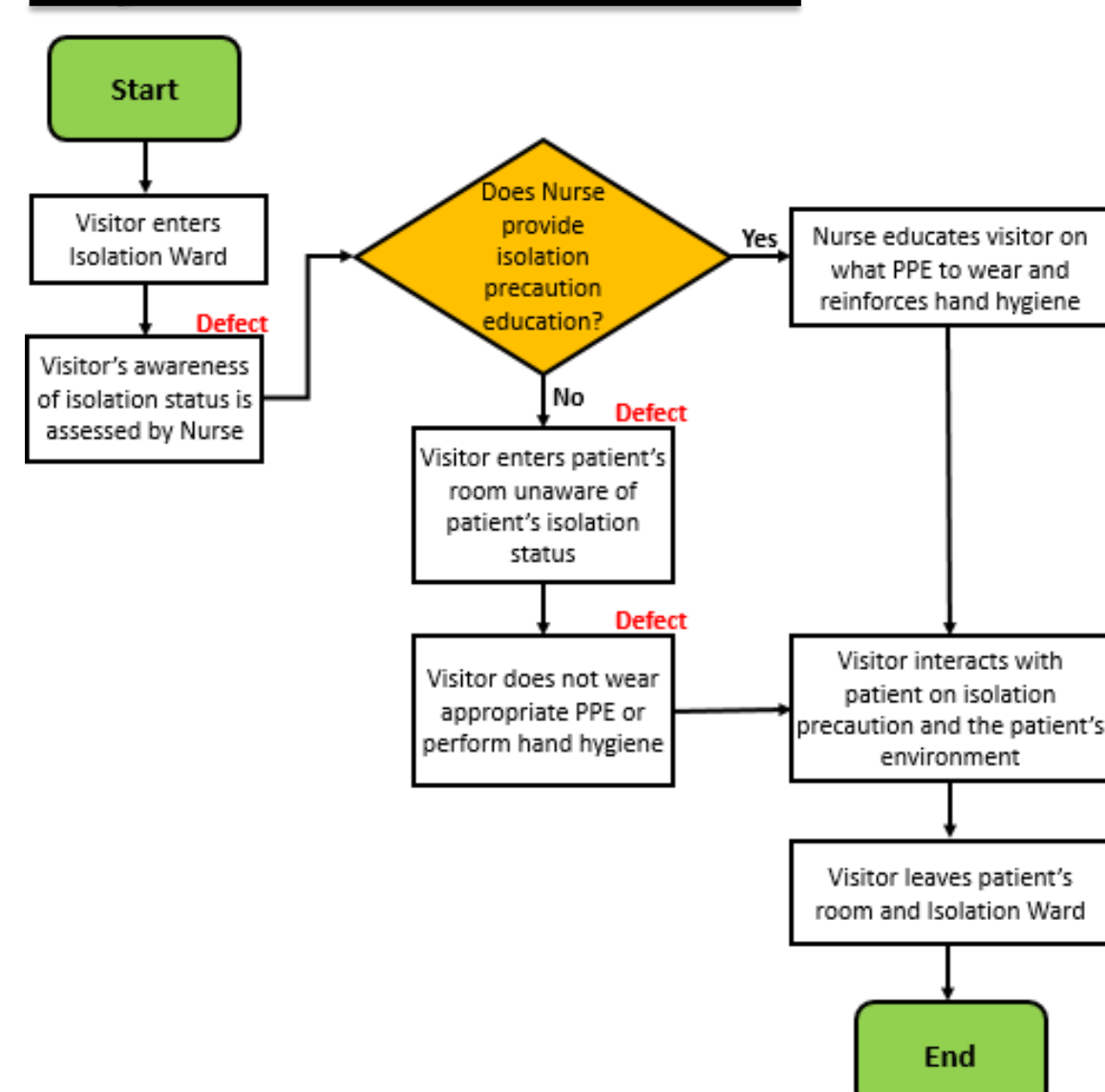
## Establish Measures

### What was your performance before interventions?

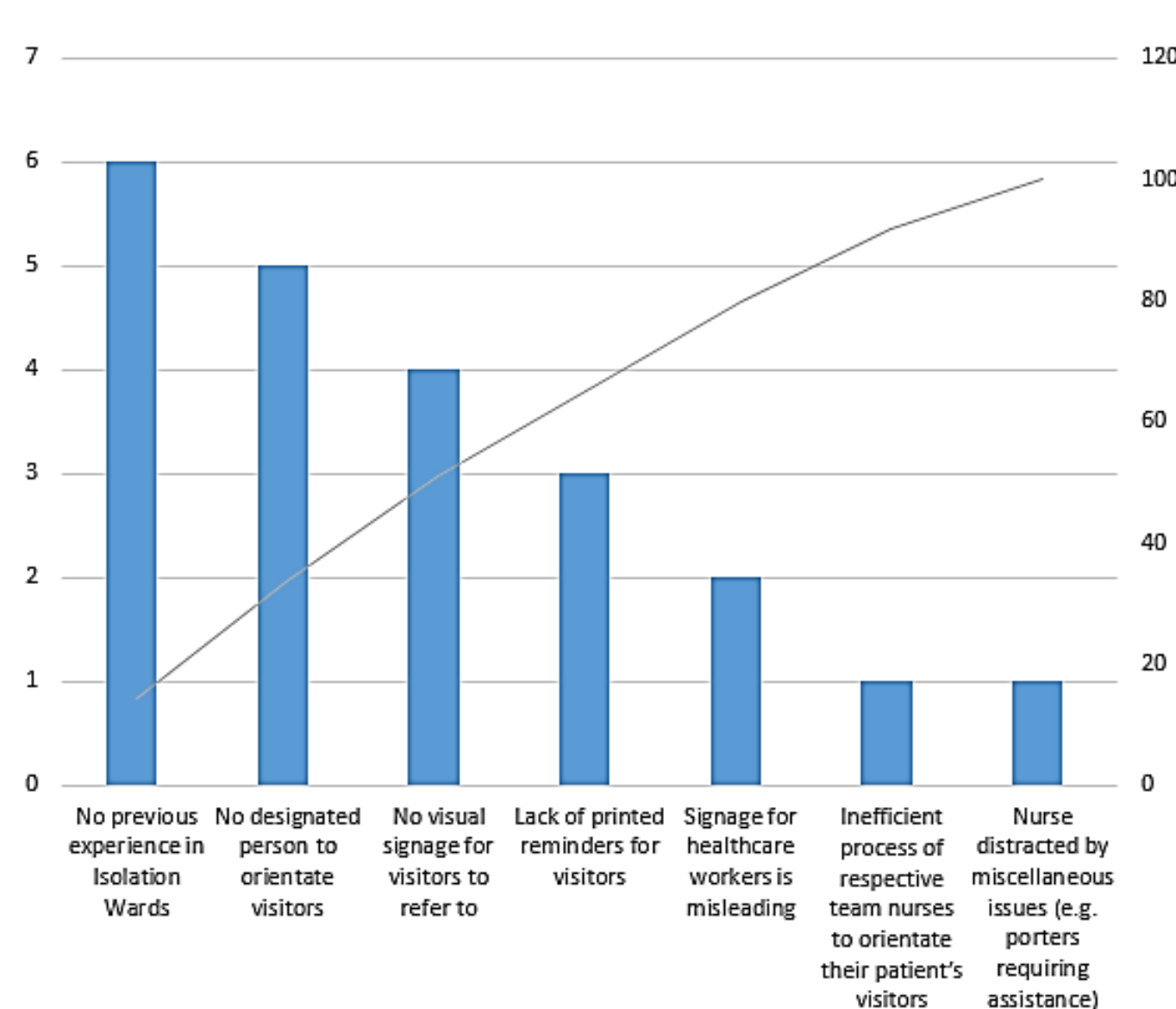
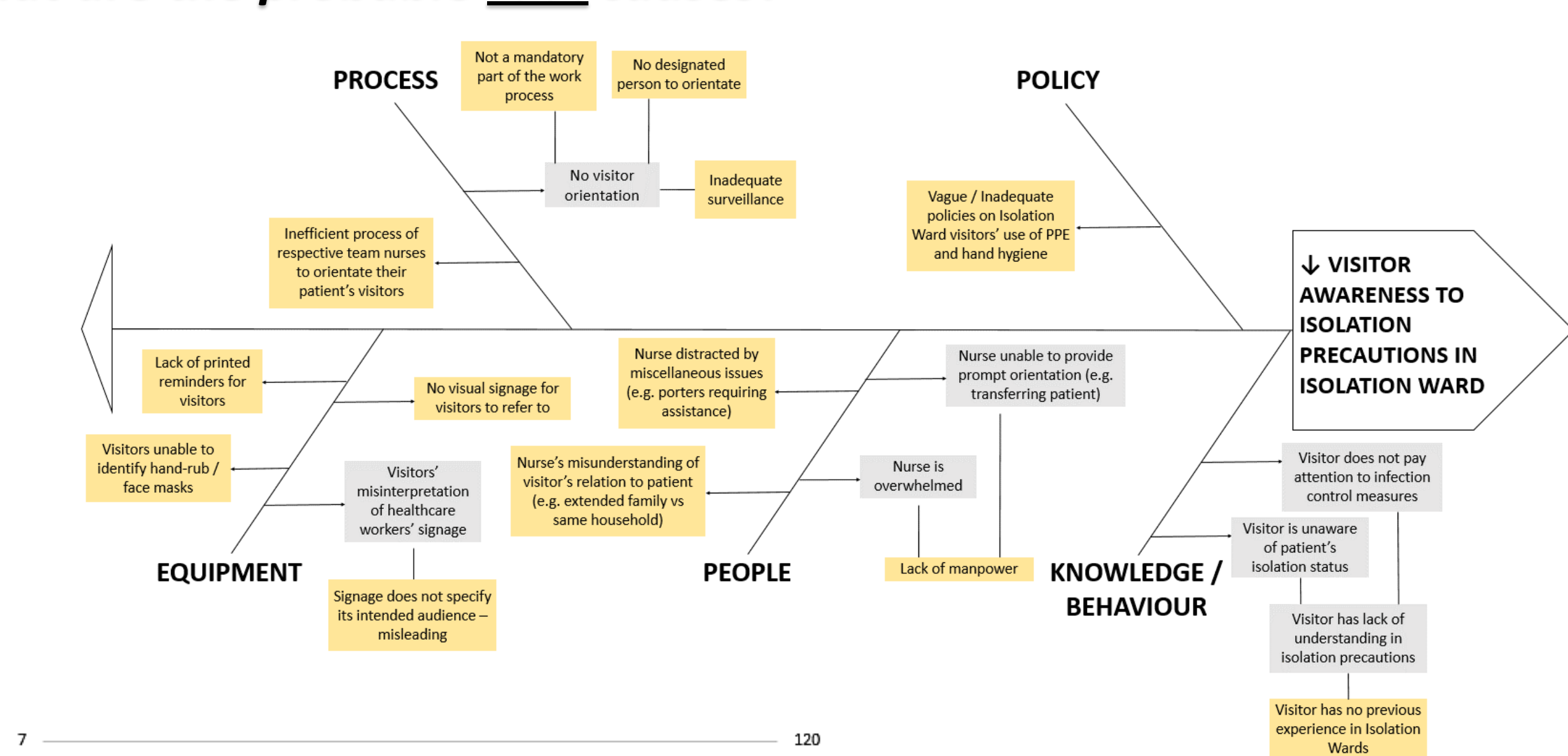


## Analyse Problem

### What is your process before interventions?



### What are the probable root causes?



Out of the 13 causes identified in the fishbone diagram, 7 were voted to construct the Pareto chart. Through the 80-20 rule, 5 root causes were pinpointed as the project's priority.

## Select Changes

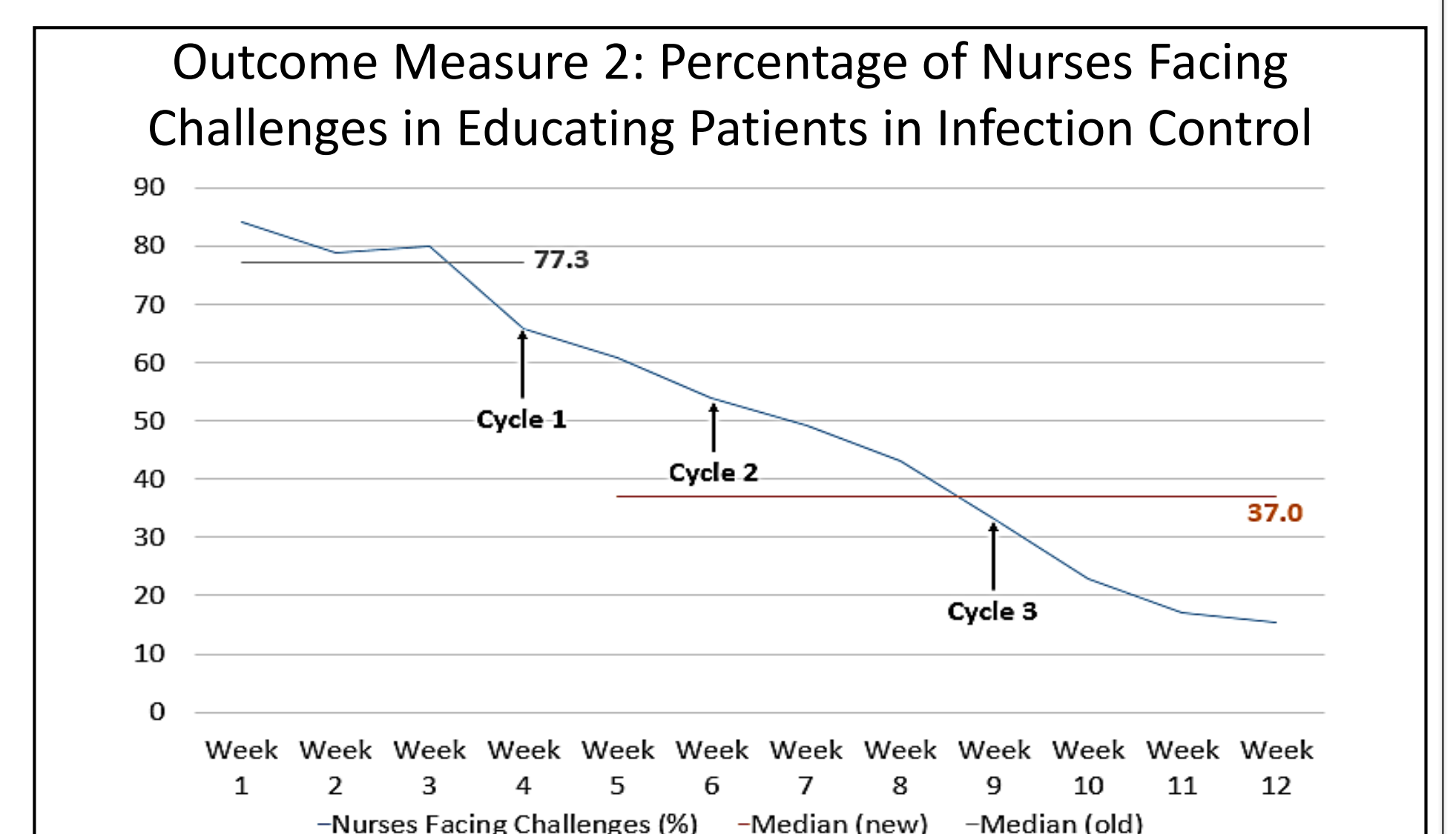
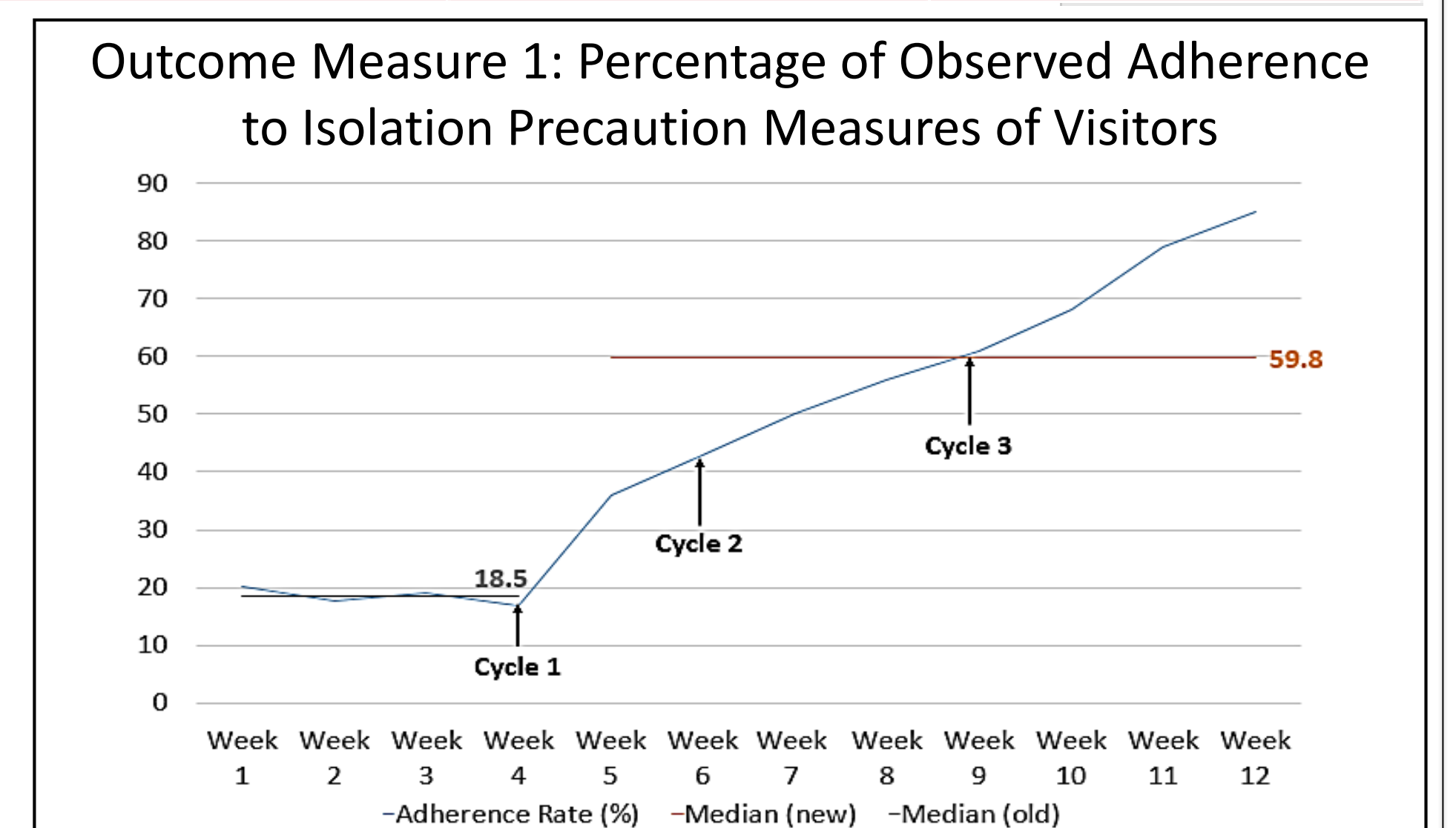
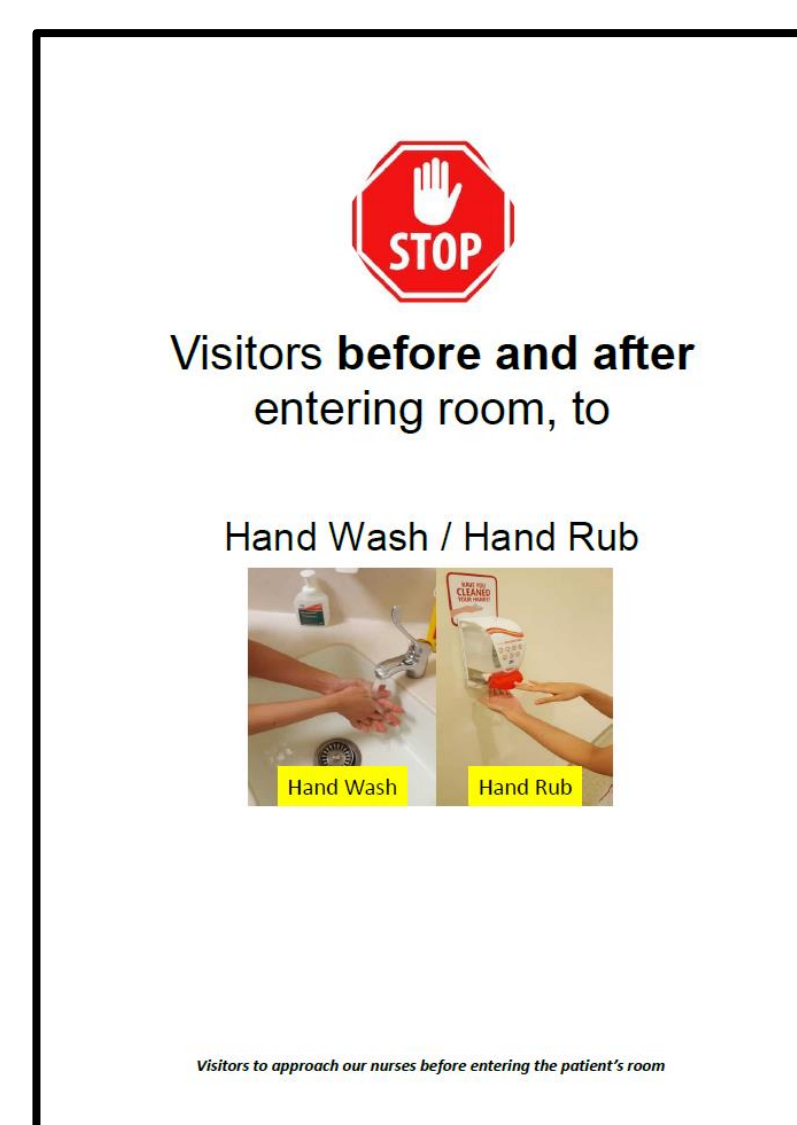
### What are all the probable solutions? Which ones are selected for testing?

Root Causes	Potential Solutions
Visitor has no previous experience in Isolation Wards	1. Have a designated person to orientate visitors of Isolation Ward. ✓ 2. Involve Communications Department to create advertisements on isolation precautions. 3. Hand out leaflets to visitors at Registration.
No designated person to orientate visitors	1. Delegate 1 nurse to provide orientation. ✓ 2. Have Patient Greeter specifically for Isolation Ward to assist in providing orientation. 3. Have permanent PSA posted to Isolation Ward to assist in providing orientation. 4. Receptionist to provide orientation during registration at visitor lobby.
No visual signage for visitors to refer to	1. Create posters with visual cues placed at prominent areas. ✓ 2. Create and hand out leaflets for visitors. 3. Involve Communications Department to create advertisements on isolation precautions.
Lack of printed reminders for visitors	1. Place infection control posters at prominent areas. ✓ 2. Verbal reminders from nurses. 3. Involve Communications Department to create advertisements on isolation precautions.
Signage for healthcare workers is misleading	1. Verbal explanation that signage is for HCWs. 2. Create signage specifically for visitors. ✓ 3. Involve Infection Control Department to provide new signage that include isolation precautions for visitors.

## Test & Implement Changes

### How do we pilot the changes? What are the initial results?

CYCLE	PLAN	DO	STUDY	ACT
1	<ul style="list-style-type: none"> <li>Get designated personnel every shift to orientate visitors.</li> <li>Create posters specifically for visitors.</li> </ul>	<ul style="list-style-type: none"> <li>Delegated 1 nurse to be visitor orienteer.</li> <li>Designed posters for visitors showing how to wear mask and perform hand hygiene.</li> </ul>	<ul style="list-style-type: none"> <li>Unable to delegate as most nurses are generally busy attending to patients.</li> <li>Posters were too generic.</li> </ul>	<ul style="list-style-type: none"> <li>Identify specific nurses who will provide orientation.</li> <li>Create more specific and conspicuous posters for visitors.</li> </ul>
2	<ul style="list-style-type: none"> <li>Have specific nurse who will provide orientation.</li> <li>Specify what visitors should do and wear based on different isolation precautions.</li> </ul>	<ul style="list-style-type: none"> <li>Delegate NIC of shift as visitor orienteer.</li> <li>Create different posters for different isolation precautions.</li> <li>Place posters at visitor's lounge.</li> </ul>	<ul style="list-style-type: none"> <li>Delegation and job scope of visitor orienteer was clear.</li> <li>Posters were not noticed by visitors as not placed in prominent locations.</li> </ul>	<ul style="list-style-type: none"> <li>Nurses found the new role to have added value in the ward.</li> <li>Identify prominent locations to place posters.</li> </ul>
3	<ul style="list-style-type: none"> <li>Identify prominent locations to place posters.</li> <li>Monitor visitors' adherence after implementation.</li> </ul>	<ul style="list-style-type: none"> <li>Place posters in visitor's lounge &amp; entrance to anteroom.</li> <li>Observe visitors' adherence and awareness level.</li> </ul>	<ul style="list-style-type: none"> <li>More visitors approached nurses after noticing posters.</li> <li>More visitors adhered to infection control measures.</li> </ul>	<ul style="list-style-type: none"> <li>Visitors were showing more awareness and adherence to isolation precautions, and nurses found it less challenging to educate visitors.</li> </ul>



Overall, significantly more visitors on average were noted to be enquiring on and adhering to isolation precaution measures after the implementation of changes. Nurses also found less difficulty in providing education to visitors on infection control.

## Spread Changes, Learning Points

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

- Involve Communications Department to develop official posters for hospital-wide use.
- Involve Infection Control to implement and pilot standardized measures for visitors of patients with isolation statuses in all wards.

### What are the key learnings from this project?

- There is a lack of measures pertaining to infection control among patient's visitors as potential vectors of disease carriers.
- More educational resources can be directed towards improving visitors' understanding on isolation and infection precaution measures.