

## **Project Title**

Reduce Pressure injury rate in Jurong Community Hospital wards

## **Project Lead and Members**

Project lead: Muruganandam Devi

Project members: Glenn Dacudao Mendoza, Mariano Elzy Rodriguez, Umamageswary Paramasivam, Zhang Qianqian, Yin Yin Htwe, Nant Aye Aye Aung

## **Organisation(s) Involved**

Jurong Community Hospital

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

Nursing

## **Aims**

The aim is to Reduce inpatient pressure injury cases in JCH ward C5 from 1.57 per 1,000 patient days to 0.04 per 1,000 patient days by June 2021 to improve the quality of care.

Stretch Goal (After spread change in July 2021): The aim is to Reduce inpatient pressure injury rate in JCH ward from 0.09 per 1,000 patient days to 0.04 per 1,000 patient days by December 2021 to improve the quality of care

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Lessons Learnt**

Thorough and proper skin assessment has a role in the prevention of Pressure injury. The capture of pressure point photos has provided the baseline and helped in early identification of skin changes that prompted early treatment.

Nurse have an important role to play in timely assessment and timely initiation of standards of care in prevention of pressure injury.

## **Conclusion**

See poster appended/ below

## **Project Category**

Care & Process Redesign

Quality Improvement, Clinical Practice Improvement

## **Keywords**

Pressure Injury, Safety

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# REDUCE PRESSURE INJURY RATE IN JCH WARDS

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- ✓ SAFETY
- ✓ QUALITY
- PRODUCTIVITY
- COST
- PATIENT EXPERIENCE

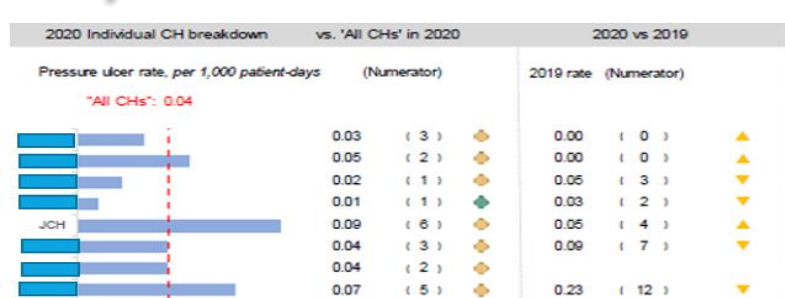
## Define Problem, Set Aim

### Problem/Opportunity for Improvement

➤ Studies showed Pressure injuries are a concerned health issue resulting in reducing quality of life (1,2). Between January 2020 to December 2020, there was an increase number of Hospital acquired pressure injury reported in Jurong Community Hospital (JCH)

➤ JCH pressure injury rate per 1,000 patient days has increased from 0.04 in year 2019 to 0.09 in year 2020.

❖ The result 0.09 is above the target of JCH key performance indicator (KPI). This affects the reputation of organizational performance when benchmarked with nation average. It also impact on patients' well being and potential extension of hospital stay that ultimately increase the hospital cost and patients' dissatisfaction



❖ JCH Ward C5 reported three pressure injuries in year 2020 compared to other JCH wards. Hence, the project will be done at ward C5.

### Aim

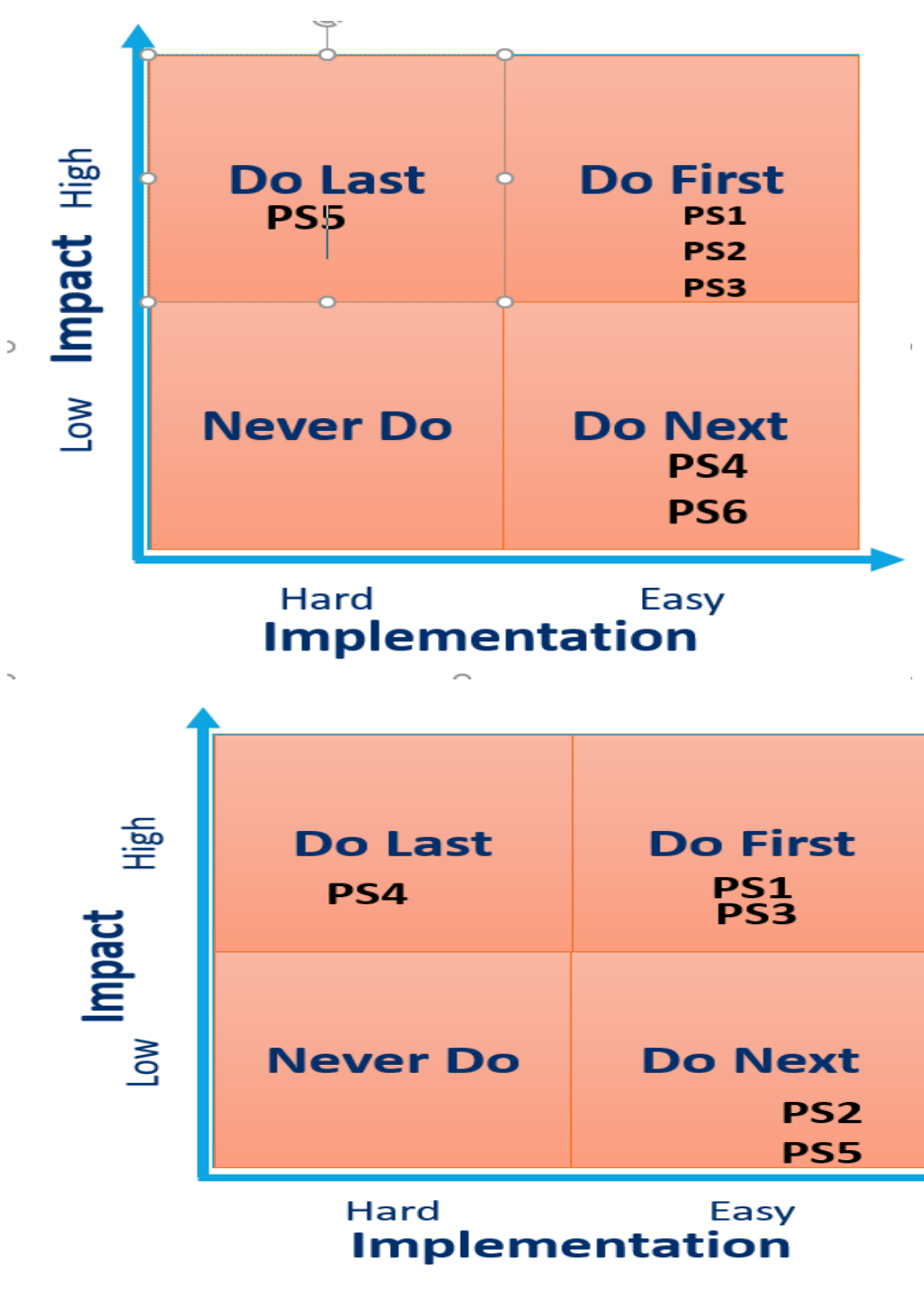
The aim is to Reduce inpatient pressure injury cases in JCH ward C5 from 1.57 per 1,000 patient days to 0.04 per 1,000 patient days by June 2021 to improve the quality of care.

Stretch Goal (After spread change in July 2021): The aim is to Reduce inpatient pressure injury rate in JCH ward from 0.09 per 1,000 patient days to 0.04 per 1,000 patient days by December 2021 to improve the quality of care

## Select Changes

### Possible solutions

Root Cause	Potential Solutions
Root Cause A Lack of importance of performing thorough skin assessment	PS1: Change set of clothing for patient on admission regardless of internal or external transfers to facilitate thorough skin assessment
	PS2: Conduct sessions to nursing staffs and HCAs to increase awareness on importance of skin assessment
	PS3: Capture pressure points photos on admission and weekly
	PS4: Document skin assessment using smart phrase
	PS5: Put up relevant poster to increase awareness
	PS6: Use mirror to check skin especially malleolus and heel for those patient with precautions such as do not lift up the leg, do not rotate
Root Cause B Lack of knowledge on preventive measures according to risk score	PS1: Conduct sessions to increase staff knowledge on preventive measures according to risk score
	PS2: Use Allewyn heel if patient non compliance to heel protectors
	PS3: Standardize guide to do 2 hourly turning and positioning of patient
	PS4: Put up relevant poster to provide visual guide on DO'S
	PS5: Document preventive measures and patient compliance using smart phrase



## Test & Implement Changes

### Solution Implementation

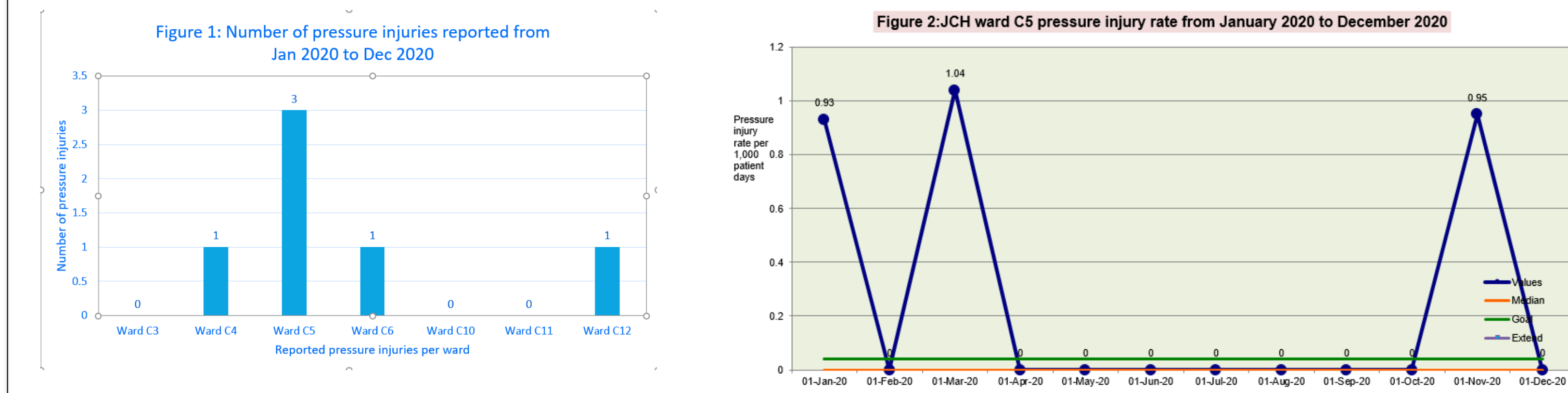
Cycle	Plan	Do	Study	Act
1	<b>Aim:</b> To increase staff awareness on importance of thorough skin assessment <b>What:</b> Awareness sessions <b>Who:</b> will be conducted by team members <b>Where:</b> to all JCH C5 staffs (Nurses, HCAs) <b>When:</b> in January 2021	Awareness session conducted in January 2020. Capture pressure points photo on admission and weekly (Use acronym A BEST SHOT)	Nursing care audit on skin assessment and prevention of pressure ulcers ranged from 70 to 80% Only staff nurses were doing the skin assessment and verbalized about time consuming. Sharing sessions conducted to Enrolled nurses to enable them to do the thorough skin assessment EH do not have to wound iPad (canto), informed sponsor for assistance.	Adopt Empower Enrolled nurses to be in charge of skin assessment and report to staff nurse. Continue nursing care audit on skin assessment and prevention of pressure ulcers
2	<b>Aim:</b> To increase knowledge on Braden scale assessment and initiate preventive measures <b>What:</b> Conduct sharing sessions <b>Who:</b> will be conducted by team members <b>Where:</b> to all JCH C5 staffs (Nurses, HCAs) <b>When:</b> in February 2021	Sharing sessions done in February 2020. Monitor usage of Allewyn heel cups (Non compliance to heel protectors)	Nursing care audit on skin assessment and prevention of pressure ulcers ranged from 95% to 100% that determined staff knowledge been increased Zero pressure injuries reported in January 2021.	Adopt Use of Allewyn heel cups Continue nursing care audit on skin assessment and prevention of pressure ulcers
3	<b>Aim:</b> To provide visual reminder (poster) on standards of preventive care guide and 2 hourly turning schedule <b>What:</b> Posters <b>Who:</b> distributed by team members <b>Where:</b> to JCH C5 ward <b>When:</b> in March 2021	Poster distributed to all wards in March 2021. Monitor 2 hourly turning done as per scheduled and patient bed number was written on the poster	Nursing care audit on skin assessment and prevention of pressure ulcers ranged from 95% to 100% that determined staff knowledge been increased Zero pressure injuries reported in January 2021.	Adopt Poster provided visual reminder on DO'S (Preventive measures) Continue nursing care audit on skin assessment and prevention of pressure ulcers
3a	<b>Aim:</b> To improve quality of skin assessment documentation using standardize smart phrase template <b>What:</b> Sharing on template to all nurses <b>Who:</b> Shared by team leader <b>Where:</b> to all JCH ward nurses	Smart phrase template shared to all nurses. Monitor smart phrase template was used by all nurses.	Zero pressure injuries reported in January 2021.	Smart phrase template to be done on admission, every shift, Discharge and weekly

## Establish Measures

### Current performance (Outcome measure)

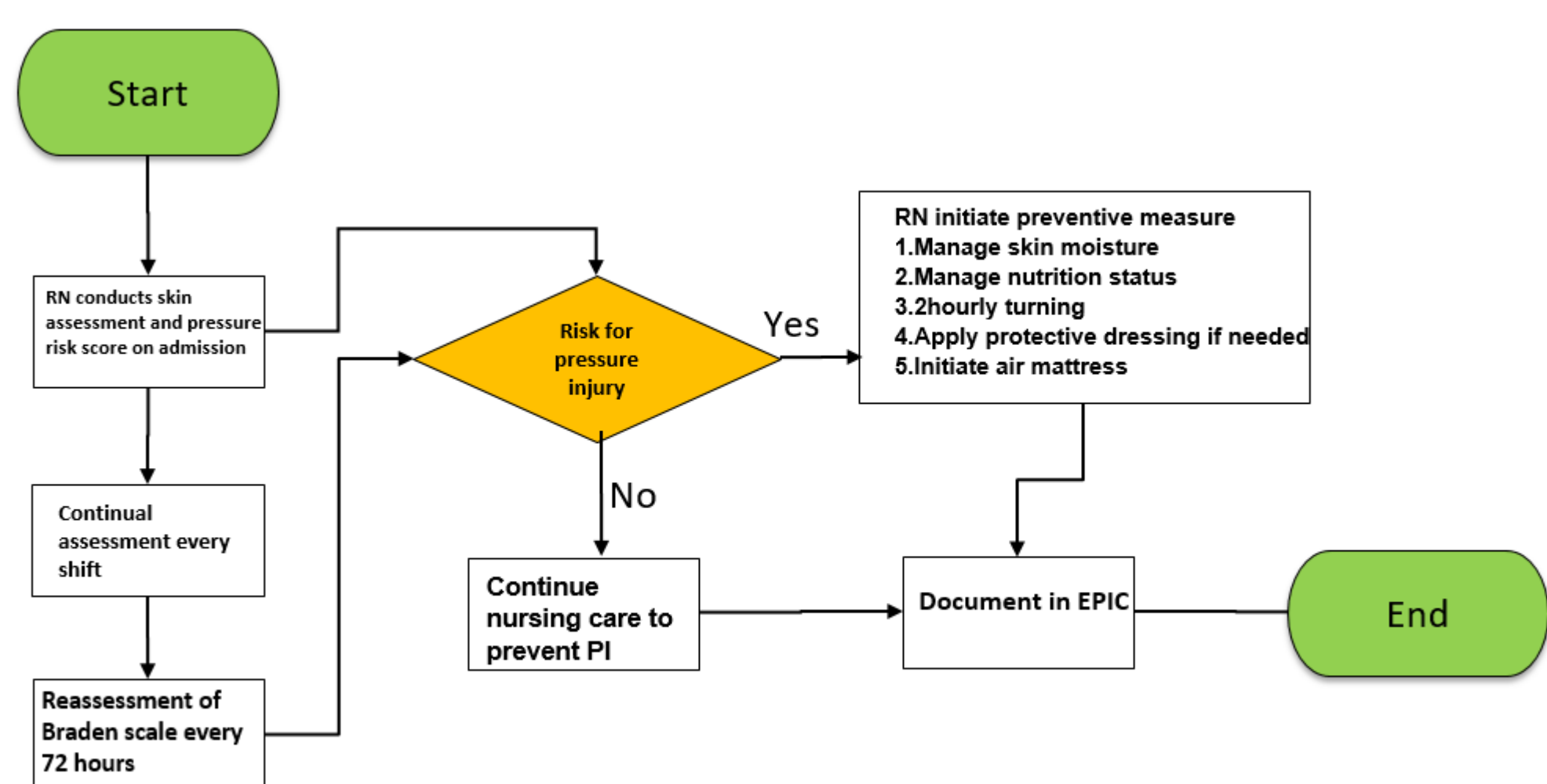
Figure 1 shows number of pressure injuries reported from Jan 2020 to Dec 2020 in JCH WARDS

Figure 2 shows JCH ward C5 pressure injury rate from Jan 2020 to Dec 2020



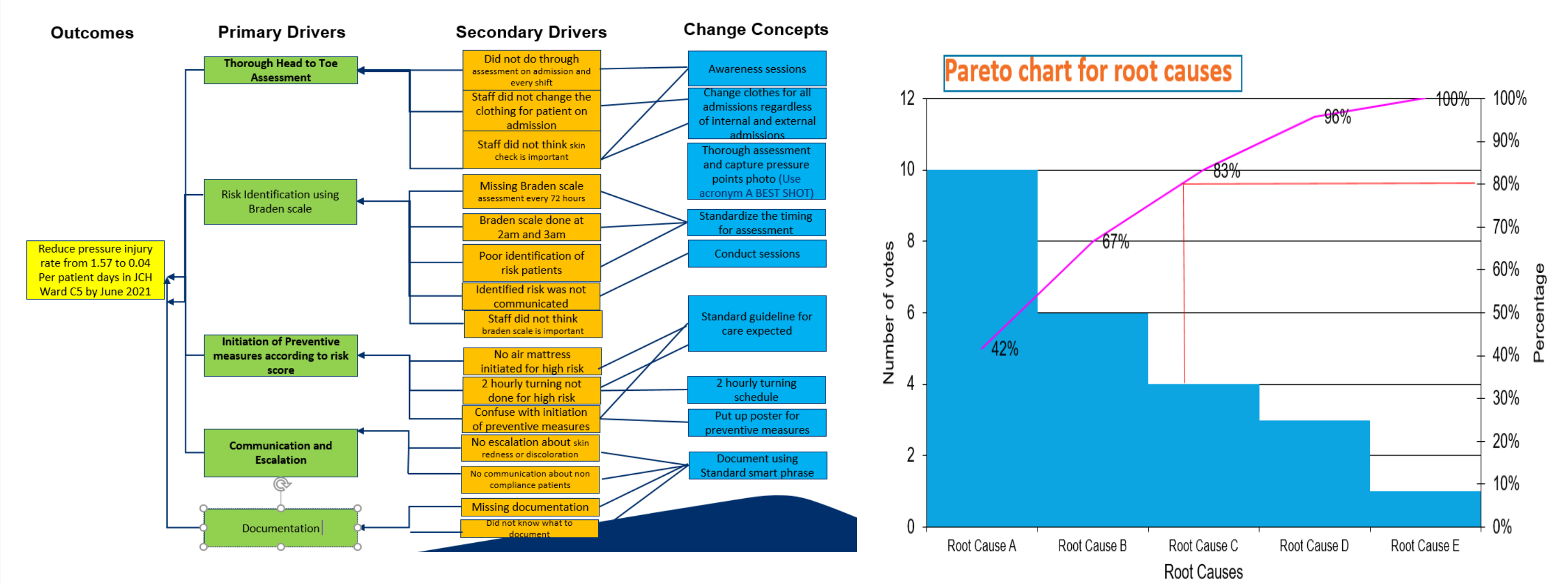
## Analyse Problem

### Current Process Mapping



### Root cause Analysis

### Pareto chart for root causes



## Spread Changes, Learning Points

### 1. Spread change to Other JCH wards

Solution	Spread Details	Spread Timeline	Who
1. Thorough skin assessment and capture pressure point photos 2. Standards of preventive care 3. Poster and documentation using smart phrase template	Leader will share this solutions in JCH leaders meeting and wound committee meeting. Project team members prepared the wound file with all resources for staff reference. Posters and 2 hourly turning chart were distributed by team members. Team members were assigned to individual ward to support wound champions and monitor the practices.	Started 1 <sup>st</sup> week of July 2021 end by September 2021	Individual wound champions will be in charge to spread the changes. Team members will continue monitor the compliance practices and Pressure injury incidences

➤ Project will be presented during quality month presentation to extend the improvement initiative beyond JCH is to reduce pressure injury and improve quality of care.

### 2. Key Learnings:

- Thorough and proper skin assessment has a role in the prevention of Pressure injury. The capture of pressure point photos has provided the baseline and helped in early identification of skin changes that prompted early treatment.
- Nurse have an important role to play in timely assessment and timely initiation of standards of care in prevention of pressure injury.

### 3. References

1. Mohammad, S., Papanikolaou, P., Nassar, O., Shaheen, A. and Dennis, A. (2019). Nurses' knowledge and practice of pressure ulcer prevention and treatment: An observational study. *Journal of Tissue Viability*, Vol.28, No.4, pp. 210-217

2. Alfred, O.A. Implementation of Pressure Injury Prevention Intervention in a Long-Term Care Facility (2020). *Doctor of Nursing Practice (DNP) Projects*, pp. 224