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**New Horizons: Advancing Wound, Ostomy &  
Continence Practice**

Australian Association of Stomal Therapy Nurses & Asia Pacific Enterostomal Therapy Nurses Association

## Poster Presentation

**Topic : The effectiveness of reposition schedule related of support surface and internal factors associated incidence density pressure injury.**

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## Background

Pressure injuries are important indicators of the quality of nursing care. During 2018-2020, Siriraj Hospital data indicates that hospitalised pressure injuries at a high Incidence Density (ID) from 1.35 up to 1.53 per 1,000 patient day. Most pressure injuries are preventable if appropriate evidence-based implemented, including important internal factors<sup>1,2</sup> assessment : Mean ARTERIAL Pressure < 60 mmHg, On dopamine or norepinephrine , use of high specific foam mattress<sup>3</sup> : high resilience foam, density >35kg/m<sup>3</sup>, thickness 5.9 inches, reposition on an individualized schedule<sup>4</sup>. Enterostomal Nurse (ETN) analyse ID and adjust new intervention for Pressure Injury Prevention guideline. The four high risk pilot units were implemented.

## Objectives

Reduced incidence density pressure injury in the patient using support surface and/or individualized schedule reposition.

## Methods

The implementation will pilot during June to October 2021 as follows:

Seeking evidence base about important internal factors, specific support surface and individualized schedule reposition

Create reposition schedule related support surface and important internal factors (Table 1)

Provide support surface appropriate the rate of patient at risk.

Create sighthboard and Implementation (Figure 1)

Collect and analyze data to learn about pressure injury incidence density, causes of pressure injuries and prevention practices..



Figure 1 Sighthboard implementation

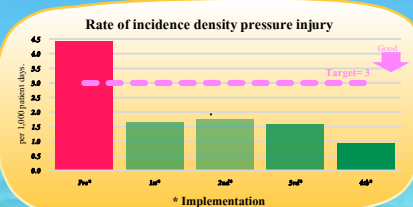
Communicate team leader for promote, support, and resource the prevent pressure injuries guideline.

Table 1 reposition schedule related support surface and important internal factors

Mattress	Standard mattress/Air mattress/Polyurethane foam : density ≤ 35kg/m <sup>3</sup> /thickness <5.9 inches	Polyurethane foam: density ≤ 35kg/m <sup>3</sup> /thickness ≥ 5.9 inches	Low air loss/ Viscoelastic foam/ High resilience : density >35kg/m <sup>3</sup> / thickness ≥ 5.9 inches
Cobfined to bed/ limited impmbility/ completely-vere slightly limited dependency/ unresponsiveness/ alteration of concious	2 hrs	3 hrs	4 hrs
MAP< 60 mmHg *	2 hrs	2 hrs	2 hrs
On dopamine or norepinephrine*	2 hrs	2 hrs	2 hrs

## Results

ID decrease from 4.44 to 0.93 per 1,000 patient days.



## Conclusion

The new intervention prevention strategie including using high specific foam mattress and/or individualized schedule reposition able to reduce ID. Moreover, the view of nureses who implemented are the guideline able prevent pressure injury, decrease nursing time of reposition and increse satisfaction.

## Reference

1. Alderden J, Shibily F, Cowan L. Best Practice in Pressure Injury Prevention Among Critical Care Patients .Crit Care Nurs Clin N Am 32 (2020) 489–500.
2. Sala JJ, Mayampurath A, Solmos S, Vonderheid SC, Banas M, D’Souza A, LaFond C. Predictors of pressure injury development in critically ill adults: A retrospective cohort study. Intensive & Critical Care Nursing 62 (2021) 102924
3. European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA; 2019.
4. Alderden J, RondinelliJ, Pepper G, Cummins M, Whitney J. Risk factors for pressure injuries among critical care patients: A systematic review. International Journal of Nursing Studies 71 (2017) 97–114.