

# ICU QUALITY IMPROVEMENT PROJECT 2017

## PRESSURE INJURY PREVENTION

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# PURPOSE

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- To identify the correct prevalence of pressure injuries in our ICU.
- To define pressure injury.
- To determine risk factors and causes of pressure injuries.
- To formulate an action plan to deal with this (pressure injuries) patient safety issue.
- To implement the planned interventions.
- To re-evaluate the prevalence of pressure injuries in our ICU.
- To continue surveillance and education.

# PRESSURE INJURY

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A pressure injury is localized damage to the skin and/or underlying soft tissue usually over a bony prominence or related to a medical or other device.

The injury can present as intact skin or an open ulcer and may be painful.

The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear.

The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue.

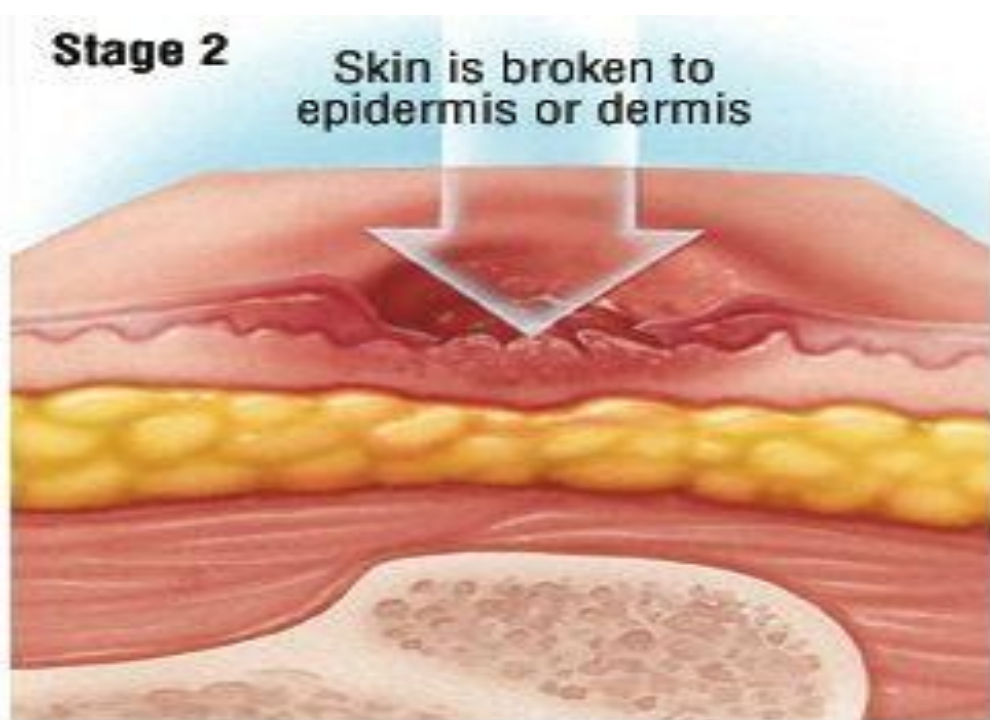
**Stage 1**

Skin is unbroken  
but inflamed



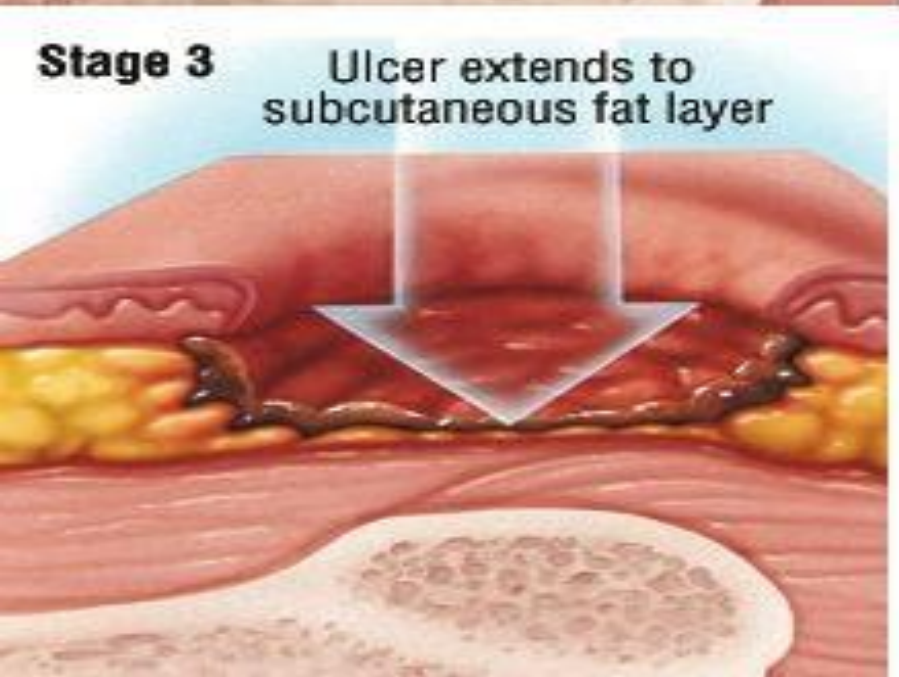
**Stage 2**

Skin is broken to  
epidermis or dermis



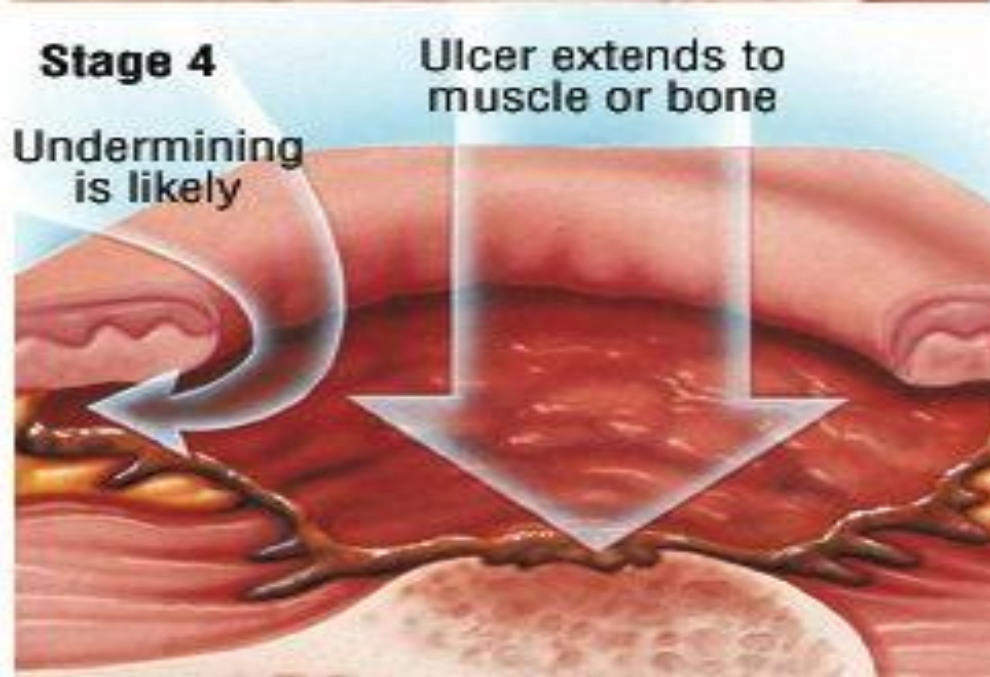
**Stage 3**

Ulcer extends to  
subcutaneous fat layer



**Stage 4**

Ulcer extends to  
muscle or bone



# RISK FACTORS

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## Intrinsic:

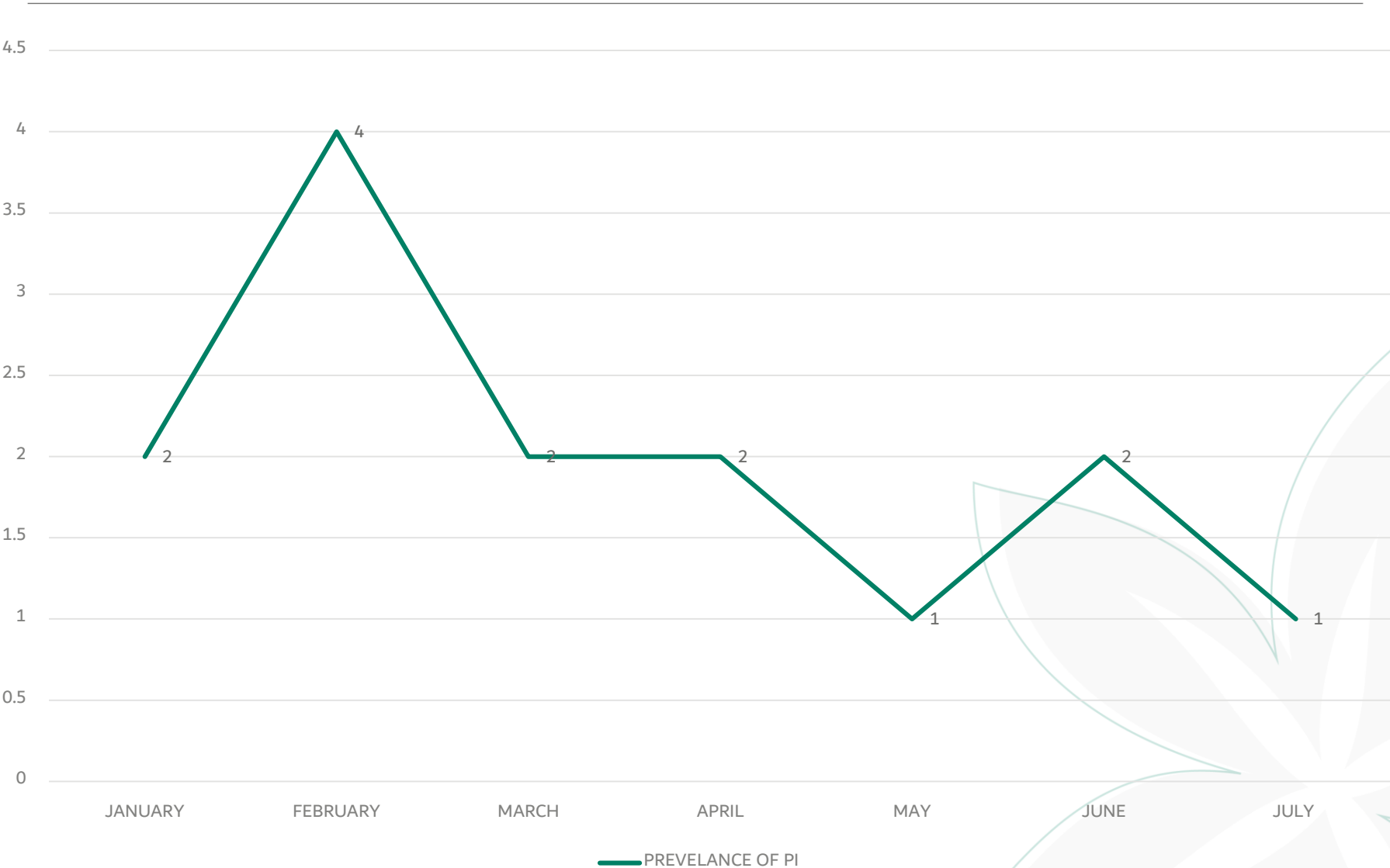
- Gender
- Age
- Nutrition
- Tissue perfusion & Oxygenation

# RISK FACTORS

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- **Extrinsic:**
  - Moisture
  - Friction
  - Shear
  - Mobility
  - Disease process
  - Medications
  - Care provider strain
  - Lack of knowledge & skills.

# PREVELANCE OF PRESSURE INJURY IN 2017



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# **AUDIT TOOL FORMATION TO ASSES RISK FACTORS ASSOCIATED WITH PRESSURE INJURIES (Audit tool in excel sheet)**



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# **HIGH RISK FACTORS AS PER THE AUDIT TOOL RESULT**

<b>S.NO</b>	<b>CRITERIA</b>	<b>RESULT</b>
<b>1.</b>	<b>GENDER:</b>	
	Female	<b>54.6%</b>
	Male	<b>45.4%</b>
<b>2.</b>	<b>AGE:</b>	
	> 50	<b>91%</b>
	< 50	<b>9%</b>
<b>3.</b>	<b>Urinary or fecal Incontinence</b>	<b>73%</b>
<b>4.</b>	<b>Albumin Level &lt;34g</b>	<b>90%</b>
	<b>CRP &gt;5mg/L</b>	<b>89%</b>
	<b>Hematocrit &lt;35%</b>	<b>91%</b>
<b>5.</b>	<b>2 hour positioning</b>	<b>30%</b>

<b>6.</b>	<b>Inotropic support</b>	<b>81%</b>
<b>7.</b>	<b>Fever spikes</b>	<b>60%</b>
<b>8.</b>	<b>Dietician involved</b>	<b>54%</b>
<b>9.</b>	<b>Device related PI</b>	<b>54%</b>
<b>10.</b>	<b>Nurse patient ratio 1:1</b>	<b>30%</b>

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# **ACTION PLAN TO DEAL WITH INCREASING PREVALENCE OF PRESSURE INJURIES**

**(Action plan available for reference)**

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**TARGET: 0-1 Pressure Injury/Month  
(0 is ideal but 1 is keeping unavoidable  
pressure injuries in mind.)**

# ALL THE INTERVENTIONS WERE BASED ON

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1. INDIVIDUAL & GROUP EDUCATION.
2. LECTURES & WORKSHOPS FROM COMPANIES.
3. DEMONSTRATIONS & RE-DEMONSTRATIONS.
4. COLLABORATION WITH WOUND CARE SPECIALISTS OF OUR HOSPITAL.

# INTERVENTIONS AS PER THE ACTION PLAN

- Assessment
- Use of assistive devices (slide sheets, hoist and transfer boards)
- Moisture prevention
- Nutrition and hydration
- Positioning & Repositioning
- Relieving pressure (pressure redistribution surfaces)

# INTERVENTIONS AS PER THE ACTION PLAN

- Safe medication administration
- Attaining normothermia.
- Keeping lab and chemistry values in therapeutic range.
- Patient and family education
- Policy & procedure (manual handling, safe handling of patients & procedures, following bundles)



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# **PREVELANCE OF PRESSURE INJURY AFTER THE INITAITION OF QIP**

## PREVELANCE OF PRESSURE INJURY



# CONCLUSION

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*Pressure injury is a serious patient safety issue which if not dealt properly can have devastating effects on the patient and the health care as a whole.*

*Although we had up and downs in our project but through our determination and hard work we were able to achieve our target of 0-1 pressure injury/month.*

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# THANKS