Pressure Ulcer to Zero for the Spinal Cord Injury Population

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Ireland
Introduction

Pressure ulcer to Zero is a large scale improvement healthcare collaborative, which began in 2014

Primary aim:

• To reduce the incidence of avoidable pressure ulcers
• To increase the capacity and capability of frontline clinical teams to improve the care they deliver

‘The Spinal Cord System of Care Programme’ was chosen for the pilot project in our hospital
Why Pressure Ulcers?

The collaborative placed an intentional focus on pressure ulcer prevention as pressure ulcers are an increasing problem affecting 1000’s people annually. Patients with SCI and its chronic comorbidities and lack of sensory perception are a particularly vulnerable population.

In the Spinal Cord Injury population pressure ulcers may be:

- Debilitating
- Costly
- Painful
- Life threatening / Sepsis
- Lead to Osteomyelitis
- Affect quality of life
Prepare to be shocked...

- The estimated cost to successfully treat one patient with a grade 4 pressure ulcer is ..... €119,000

- Based on this figure, it is estimated that it could cost €250 million per annum to manage pressure ulcers across all care settings in Ireland (Gethin et al.2005)
“A pressure ulcer is a localised injury to the skin and / or underlying tissue usually over a bony prominence, as a result of pressure or pressure in combination with shear....”

This guideline provides a specific section of particular relevance for individuals with a spinal cord injury
What causes pressure ulcers?
Remember......
A goal was set to reduce the incidence of avoidable pressure ulcers in the participating settings by 50% over six months with an ultimate goal of reaching 0%
The pilot study involved working together to achieve improvements and to reach our goal

- **Steering group:** Key role to support the project

- **Participating team:** Clinical facilitator, Nurses, Ward Manager, Physiotherapist, Occupational therapist, Dietitian,

*Overall the teams that participated are part of an active community, learning from each other and from recognised experts*
How we did it?

• A pre-workshop pack was distributed to all teams
• Attended 4 one day learning sessions: December 2015 to June 2016
• Each team presented their monthly data on line
• For completion of project specific timelines were identified
Real time instant data was collected...

- Safety cross
- Snapshot risk assessment
- Measured patients engagement
- Reflection of practice
- Story board
- Education poster
Snapshot risk assessment.....
Safety Cross

Is a tool used to collect data for improvement

- No new Pressure Ulcer identified
- New pressure ulcer ward acquired
- Admitted with Pressure ulcer from other organisation
- Transferred with pressure ulcer from same organisation
Measured patient engagement:

Patients at risk of acquiring a pressure sore were asked 5 questions...

<table>
<thead>
<tr>
<th>Measure of Patient Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are you aware you have been identified as 'being at risk of getting a pressure ulcer'? ANSWER YES/NO</th>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did the patient mention any of the phrases below? TICK THE BOXES BELOW THAT THEY MENTIONED</th>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Mattress Cushions Sheets Skin Red areas Soreness</td>
<td>Cushion</td>
<td>Red Area</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Keep moving Getting out of bed Walking Moving side to side</th>
<th>Wheelchair</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Incontinence Keeping dry Avoiding lying on wet sheets</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Nutrition Eating well Drinking fluids regularly | NO         |          |          |          |          |

SSKIN
Surface
Skin
Keep moving
Incontinence
Nutrition
Reflective practice

Involves the observation of the process of care delivered within our care setting.

Story board

Completed the ‘Pressure Ulcer to Zero’ poster for the ward and therapy departments. Educational session for SCSC (Spinal Cord System of Care) interdisciplinary team on progress to date and discussion with team on...
The **SSKIN Care Bundle** is a powerful tool as it defines and ties best practices together. The **bundle** also makes the actual process of preventing pressure ulcers visible to all.

### Frequency of SSKIN bundle

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Record using 24 hr clock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pressure ulcer present (please record on pressure ulcer wound assessment chart)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
</tr>
<tr>
<td>Mattress Type (please record)</td>
</tr>
<tr>
<td>Cushion Type (please record)</td>
</tr>
<tr>
<td>Equipment checked daily</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency of SSKIN bundle</th>
<th>hourly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bed rest (including regimen as prescribed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelchair pressure relief (as per regimen and dependency):</td>
</tr>
<tr>
<td>Dependent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SITTING TOLERANCE</th>
<th>Up to Hours</th>
<th>Up to Date</th>
<th>Up to Hours</th>
<th>Up to Date</th>
</tr>
</thead>
</table>

### Recommendations

- **Dry and Clean**
- **Nutrition**
- Nutritional Screening: Risk Low | Medium | High | Repeat Nutritional Screening Date: |
- Receiving the appropriate diet |
- Drinking adequate fluids |
- Oral nutritional supplement(s) |
- Taken as prescribed | Not applicable |
- Initials | RGN/HC/A/GT/FT |

<table>
<thead>
<tr>
<th>Patient Education</th>
<th>SSKIN Care Bundle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin inspection</td>
<td>Do you check your skin at least twice a day? How do you do this? Do you know the term scaling? What would you do if there were a red mark especially over a bony area?</td>
</tr>
<tr>
<td>Support surface</td>
<td>What type of cushion do you use? How do you maintain your cushion? Does it have a cover?</td>
</tr>
<tr>
<td>Wheeling</td>
<td>How do you pressure relieve in your chair? How often should this be done?</td>
</tr>
<tr>
<td>Incontinence</td>
<td>How are you bowel and bladder managed? Do you have problems with incontinence?</td>
</tr>
<tr>
<td>Nutrition</td>
<td>How many calories do you take each day? Do you have a good appetite? Are you eating food that you like?</td>
</tr>
<tr>
<td>Other (e.g., smoking, alcohol)</td>
<td>If you have been advised to take a nutritional supplement do you take them?</td>
</tr>
</tbody>
</table>
Pressure Ulcer Prevention

Use the SSKIN Care Bundle

SSKIN
Skin Inspection
Support Surface
Keep Moving
Incontinence
Nutrition

Pressure Areas

The key to success is the collaboration of the patient, family and the interdisciplinary team in order to achieve ‘Pressure Ulcers To Zero’
Overall project results:
49% reduction in pressure ulcers
Our Achievements........

The participating teams achieved a 49% reduction in avoidable pressure ulcers.

• Increased awareness of pressure ulcers – not just the nurse’s job but the team’s job
• Increased capability in using quality improvement tools and methodologies
• Forging of stronger team working
• Supporting integration – greater networking across the region
• Creativity and innovation within the teams in supporting their colleagues to implement the changes for improvement.
Focus for the future........

To empower the patient through education, promoted by the entire inter-disciplinary team

Provide a toolkit of knowledge for lifelong learning for both staff and patients combining visual, auditory and kinaesthetic methods

*The key to success is the collaboration of the patient, family and the interdisciplinary team in order to achieve*

“Pressure Ulcers to Zero”. 


**Web sites**

Prevention and Treatment of Pressure Ulcers: Quick Reference Guide  

Pressure Ulcers - Ireland's Health Service - Health Service Executive  
[www.hse.ie/eng/about/Who/qualityandpatientsafety/safepatientcare/Pressure_Ulcers](http://www.hse.ie/eng/about/Who/qualityandpatientsafety/safepatientcare/Pressure_Ulcers)

[https://www.youtube.com/watch?v=zn-77RQFhg&feature=youtu.be](https://www.youtube.com/watch?v=zn-77RQFhg&feature=youtu.be) Pressure Ulcers to Zero - Peachy SSKIN