2018 NSW PRESSURE INJURY POINT PREVALENCE SURVEY REPORT
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## 2018 Inpatient Pressure Injury Point Prevalence Survey

## 2018 Residential Aged Care (RAC) Pressure Injury Point Prevalence Survey

## 2018 Community and Outpatient Pressure Injury Point Prevalence Survey

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EXECUTIVE SUMMARY

This is the fourth NSW Pressure Injury Point Prevalence Survey Report. The 2018 annual survey was conducted by Local Health Districts (LHDs) and Speciality Health Networks (SHNs) with the support of the Clinical Excellence Commission (CEC). The CEC worked with LHD/SHN representatives to develop standardised questions on the Quality Audit Reporting System (QARS) and supports reporting of the results at a ward level to assist identification of local issues which require improvement.

The 2018 NSW survey was conducted across three settings: inpatient, NSW Health residential aged care (RAC) and community/outpatient as recommended in the 2015 report.

The survey data provides valuable information on pressure injuries in the NSW public health system. It provides key findings and recommendations to continue to improve the care provided and reduce the harm from hospital/health service-acquired pressure injuries.

With the introduction of the National Safety and Quality Health Service Standards (NSQHSS) version two, Standard 5 Comprehensive Care now includes pressure injury prevention and management. The standard requires a shift in thinking about the way care is provided for patients with a focus on the patient’s expressed goals of care and healthcare needs while ensuring that risks of harm are prevented and managed.

Incontinence is recognised as a risk for pressure injury development on the sacral and buttock locations. The CEC has continued to raise awareness of Incontinence Associated Dermatitis (IAD) to improve recognition, prevention and management. The CEC is working with the NSW Hospital Acquired Pressure Injury (HAPI) Implementation Research Collaborative group to progress this work.

Key Findings

The 2018 point prevalence survey results show:

- Nearly 12,000 people consented to a skin inspection from 17 LHD/SHNs across 152 inpatient facilities, 67 NSW Health Residential Aged Care (RAC) facilities and 63 community and outpatient services.
- The overall pressure injury prevalence rates for all three settings are slightly higher than 2017 results
  - Inpatient 768 people of 9,669 surveyed (7.9%)
  - RAC 78 people of 981 surveyed (8%)
  - Community/outpatient 117 people of 1244 surveyed (9.4%).
- The HAPI prevalence rates are similar with 2017
  - Inpatient 382 people of 9,669 surveyed (4%)
  - RAC 55 people of 981 surveyed (5.6%)
  - Community/outpatient 15 people of 1244 surveyed (1.2%).
- In the inpatient group, 65% of people identified at risk on initial assessment had ongoing comprehensive risk assessments documented (up from 59% in 2017).
- The percentage of people with a documented risk assessment was 61% down from 68% in 2017.
- The percentage of people identified at risk of developing a pressure injury who had a documented care plan remained stable at 71%.
- Where a person was recorded as having one or more pressure injuries, only 19% had a wound management record or chart documenting every current injury (overall 2017 – 36%).
- The most common locations for HAPI were the sacrum or buttocks (36.7%) and heels (25%).
- A 3.3% reduction was noted in sacral and buttock injuries as compared to 2017 (40%). This may reflect improvement in correct identification of IAD.
- There were 196 IAD injuries identified with 48% being hospital or health service-acquired. 80% were category 1 (persistent redness) and 20% were category 2 (skin loss).
Recommendations

The CEC recommends that NSW Health organisations:

- Ensure individual patient risks are identified and a plan of care is documented, communicated and implemented
- Engage in reviewing clinical outcomes at a ward/unit level, identifying gaps and opportunities for improvement
- Use improvement science methodology to improve processes around risk identification and implementation of prevention plans to reduce the frequency and harm from pressure injuries
- Use the CEC Quality Improvement Data System (QIDS) as a data source for Health Information Exchange (HIE) data, and as a platform to document improvement projects and share learnings
- Consider the patient’s goal of care and preferences with input from the patient, family and carers
- Ensure when a person has one or more pressure injuries that a wound management record is documented
- Ensure patients, family and carers receive appropriate information on pressure injury prevention for those identified at risk of developing a pressure injury, and is documented
- Continue to develop strategies to improve the prevention, recognition, management and reporting of IAD
- Continue to develop processes and strategies to ensure comprehensive care is provided.

Future support for Pressure Injury Point Prevalence surveys

The CEC will support LHD/SHNs with the reporting of the 2019 pressure injury point prevalence survey. A standardised suite of questions will remain available on QARS together with a guide on the CEC website for those LHD/SHN wishing to continue Pressure Injury Point Prevalence surveys in the future.

CEC Support

To support the LHD/SHNs as part of the Pressure Injury Prevention Project the CEC has developed the following resources and training programs:

- The NSW Health Pressure Injury Prevention and Management Policy (PD2014_007) and accompanying implementation guide were released in 2014 to improve patient safety and the quality of clinical care
- The Quality Audit Reporting System (QARS) provides an electronic data collection tool to support standardised point prevalence surveys and provides a platform for localised audits. [https://qars.cec.health.nsw.gov.au/](https://qars.cec.health.nsw.gov.au/)
- The Quality Improvement Data System (QIDS) provides an automated Pressure Injury dashboard to track outcome data and to support improvement work. [https://qids.cec.health.nsw.gov.au](https://qids.cec.health.nsw.gov.au)
INTRODUCTION

This is the fourth Pressure Injury Point Prevalence Survey state-wide report and provides information to inform the provision of health care that is safe, person-centred, sustainable, and of the highest standard.

The CEC recommends LHDs/SHNs use the information from this and past point prevalence survey results (and other data sources e.g. HIE data and IMS data) at a ward level, to identify areas for improvement, and use improvement science methodology to facilitate improvement activities.

Although most pressure injuries are avoidable some are unavoidable. Some individuals are more susceptible to pressure injury development, examples include: older adults, those who have experienced trauma, those with spinal-cord injuries, those who have sustained a fractured hip, those in long-term homes, the acutely ill, those with diabetes and those in critical care settings.

The Pressure Injury Prevention Project addresses the National Safety and Quality Health Service Standards (NSQHSS), the Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline 2014 and the NSW Health Pressure Injury Prevention and Management policy PD 2014_007 provide a framework for improvement.

International

Internationally there has been an ongoing decline in pressure injury prevalence in the general acute care setting over the past fifteen years. In other clinical care settings, trends are less clear because of significant variations in the study design, specific setting descriptions and population differences confound analyses.

The 2014 international guideline Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline is being reviewed with the revised guideline due for release on the 15 November 2019. This will provide the most current best practice recommendations.

The sacrum and heels are reported as the most common anatomical location and the location of the most severe injuries respectively. Correct identification of pressure injuries is essential to ensure appropriate care is given and the injury accurately reported. It is often difficult for clinicians to correctly identify Incontinence Associated Dermatitis (IAD) and to distinguish it from pressure injuries (Stage 1 and Stage 2) on the sacral and buttck locations. This is an area which has been identified as a priority with resources developed to support improved recognition, prevention and management of sacral and buttock IAD injuries.

In the paediatric populations the occiput and other head (including facial) injuries were commonly observed and medical devices estimated to account for 43% of pressure injuries. Medical devices have also been associated with up to 34.5% of pressure injuries in the acute care setting. Over the past fifteen years there has been minimal variation in rates of medical device-related pressure injury; this continues to be a significant area to focus on prevention.

The Australian Context

In Australian public hospitals in 2015–16 there were 4,313 pressure injuries recorded. The rate of HAPI in Australian hospitals was 9.7 injuries per 10,000 hospitalisations in 2015-16.

Pressure injury point prevalence data collected during Queensland Health annual Bedside Audit reports a reduction in hospital-acquired pressure injury prevalence from 14.0% (2003) to 3.0% (2018).
NSW Practice

The CEC established the Pressure Injury Prevention Project in October 2012. The project aims to help reduce the occurrence of pressure injuries, and if they do occur, to help reduce the recovery time for the patient. It promotes evidence-based practice for the prevention and management of pressure injuries and increases awareness of pressure injury prevention among health care professionals.

The project is supported by the CEC LHD/SHN pressure injury prevention group and has made considerable gains in reducing HAPI over the past five years as evidenced by the supporting data. The CEC is working with other NSW Health agencies to continue to reduce the incidence of HAPI including:

- The NSW Health HAPI Implementation Research Collaborative supported by the Nursing and Midwifery Office
- Leading Better Value Care, Chronic Wound Management Program supported by the Agency for Clinical Innovation. Chronic pressure injuries are one of the main wound categories identified
- Review of risk screening and assessment and development of a care plan in eMR to support comprehensive care, led by eHealth.

"A pressure injury is a localised injury to the skin and/or underlying tissue, usually over a bony prominence, resulting from sustained pressure (including pressure associated with shear).”

A point prevalence survey aims to:

- Identify pressure injury prevalence within an organisation
- Identify core pressure injury prevention practices, including documentation, adherence to best-practice and evidence-based guidelines, to evaluate and inform strategic planning on service quality improvement, and demonstrate trends in care processes and patient outcomes
- Determine the severity and anatomical location of identified pressure injuries, distinguishing between pre-existing injuries and those acquired during this admission/episode of care
- Provide data for benchmarking between organisations."
KEY FINDINGS

The data provides NSW Health and executives in public hospitals information to inform safety and quality improvement activities and effective management strategies. LHDs/SHNs conducted the survey during the calendar year of 2018 at a time to suit their local audit schedule.

Survey
In 2018, 17 NSW Health LHD/SHNs undertook a comprehensive pressure injury prevalence survey. 152 inpatient facilities, 67 RAC facilities and 63 community and outpatient services participated in the survey.

Of the 13,838 people eligible for the survey, 86% consented to a skin inspection (11,894 people) and are included in the results.

Pressure Injuries
The prevalence includes people with one or more pressure injury present on admission as well as new injuries that developed while in the facility or service. The 2018 rates for all three settings are slightly higher than 2017 results:

- Inpatient: 768 people of 9669 surveyed – 7.9% prevalence compared with 2017 – 7.7%
- RAC: 78 people of 981 surveyed – 8% prevalence compared with 2017 – 7.8%
- Community/outpatient: 117 people of 1244 surveyed – 9.4% prevalence compared with 2017 – 9.3%

HAPI Prevalence
The HAPI prevalence shows new injuries that developed while in the facility or service. The inpatient results are consistent with 2017 with slight improvement in the RAC and community/outpatient groups:

- Inpatient: 382 people of 9669 surveyed – 4% prevalence (2017 – 4%)
- RAC: 55 people of 981 surveyed – 5.6% prevalence (2017 – 5.9%)
- Community/outpatient: 15 people of 1244 surveyed – 1.2% prevalence (2017 – 1.9%).

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Figure 1. People with one or more hospital-acquired PI – Inpatient

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Figure 2. People with one or more health service-acquired PI – RAC

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Figure 3. People with 1 or more health service-acquired PI – Community and outpatient

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<td>1.9%</td>
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Location and Classification of HAPI

In the 2018 NSW survey 36.7% of HAPI were located on the sacrum or buttocks. This is a 3.3% reduction from 40% in 2017. This may reflect improvement in correct identification of IAD. 25% of injuries were located on the heels.

The classification of the injuries were 60% Stage 1 and 29.4% Stage 2.

In the paediatric setting, 27% (4 of 15) HAPI in patients from the Sydney Children’s Health Network were device-related Injuries. In 2017 two thirds (67%, 6 of 9 injuries) were device-related.

Initial Risk Assessment

In 2018, overall 61% of the 13,672 people surveyed had a comprehensive risk assessment documented, including a skin assessment and use of a validated tool, within eight hours of presentation (inpatient and RAC) or first presentation (community and outpatient), down from 68% in 2017.

- Inpatient 59%
- RAC 77%
- Community and outpatient 67%.

The CEC is working with eHealth to review risk screening and assessment processes in eMR to support the NSQHSS Comprehensive Care Standard and improve the identification and documentation of patient risks.

Ongoing Risk Assessment

In 2018 for the inpatient group 65% of people who were identified at risk or higher on the initial risk assessment had ongoing comprehensive pressure injury risk assessments attended as recommended (59% in 2017).

The CEC is working with eHealth to review the risk screening and assessment requirements in eMR with an emphasis on regular review of the care plan and implementation and communication of agreed interventions.

Care plan

Overall in 2018, of the people who were identified at risk of developing a pressure injury on the initial assessment, 71% had documentation of an appropriate pressure injury prevention care plan (72% in 2017). The CEC is working closely with eHealth to develop a care plan in eMR considering the patient’s goal of care and input from the patient, family and carer to identify their preferences.

- Inpatient 69% (2017 – 73%)
- RAC 69% (2017 – 84%)
- Community and outpatient 69% (2017 – 51%).

Figure 4. Comprehensive risk assessment documented

Figure 5. Documentation of an appropriate pressure injury prevention care plan
Information for patients

In 2018 documentation of pressure injury prevention information being provided to the person or carer, three settings combined was 50% compared to 59% in 2017. Future improvements to the documentation of a care plan in eMR will support compliance with the documentation of the provision of information.

- Inpatient 44% (2017 – 41%)
- RAC 57% (2017 – 70%)
- Community and outpatient 74% (2017 – 57%).

Wound Management Documentation

In 2018 where a person was recorded as having one or more pressure injuries, 19% had a wound management record or chart documenting every current injury (Overall 2017 – 36%). Calculation of this rate has improved over the last 2 surveys. Differences across years is in part attributable to changes in the calculation method.

Work is currently progressing to inform improvements to the eMR wound documentation section and the inclusion of wound photography.

- Inpatient 13% (2017 – 29%)
- RAC 27% (2017 – 48%)
- Community and outpatient 51% (2017 – 68).

Incontinence Associated Dermatitis

There were 196 IAD injuries identified with 48% being hospital or health service-acquired. 80% were category 1 (persistent redness) and 20% were category 2 (skin loss). At a state level as part of the NSW Health HAPI Implementation Research Collaborative support will continue to improve the identification, prevention and management of sacral and buttock IAD injuries.

A 3.3% reduction was noted in sacral and buttock pressure injuries in 2018 (36.7%) compared to 40% in 2017. This may reflect improvement in correct identification of IAD.

HIE NSW HAPI Data

HIE coded data is available on the CEC QIDS. There has been a decrease in hospital and health service pressure injury incidents since 2016 as demonstrated on the chart below. In 2016 there were 4,664 pressure injuries (rate per 1,000 separations 2.392) compared to 2017 with 4750 injuries (rate per 1,000 separations 2.405) and 2018 with 4001 injuries (rate per 1,000 separations 2.069). This represents 749 fewer injuries in 2018 compared with 2017. There is a winter phenomenon particularly evident in 2017, but each of the three winters have a spike in incidence of pressure injuries.

![HIE HAPI trend report by 1,000 separations January 2016 to March 2019. (Source HIE data – QIDS report 64 – 14 June 2019)](image)

The chart below shows HAPI rates per 1,000 separations (by classification) from January 2012 to December 2018. The Pressure Injury Prevention and Management policy (PD2014-007) was released in 2014 raising awareness of pressure injury prevention and the importance of documentation.

There has been ongoing work with LHD/SHNs to improve the quality of reporting of pressure injury and correct documentation of the classification of the injury. This is demonstrated by the decrease in the unspecified injury rate.

![NSW HAPI (by classification) per 1,000 separations Jan 2012 to Dec 2018 (Source HIE data – QIDS report 64 – 29 March 2019)](image)
99% of inpatient facilities undertook a survey in 2018 (152 facilities across 16 LHD/SHNs).

86% of patients consented to a skin inspection (11,894 people total).

59% of patients received a comprehensive risk assessment (including a skin assessment and use of a validated tool) within 8 hours of admission to the facility.

PRESSURE INJURY PREVALENCE

7.9% or 1 in 13 people with one or more pressure injuries present on admission as well as new injuries that developed while in the facility.

4.0% or 1 in 24 people developed a new injury while in the facility.

HOSPITAL-ACQUIRED PRESSURE INJURIES

Location
37% were located on the sacrum or buttocks and 25% on the heels.

Classification
59% were Stage 1 and 31% were Stage 2.

Of the patients receiving a comprehensive risk assessment, 54% were identified at risk of developing a pressure injury on the initial assessment.

Where a patient was identified as being at risk or higher on the initial risk assessment 71% had a documented pressure injury prevention care plan.

Where a patient was recorded as having one or more pressure injuries, 19% had a wound management record or chart documenting every current pressure injury.
97% of RAC facilities undertook a survey in 2018 (67 facilities across 10 LHD/SHNs).

92% of residents consented to a skin inspection (981 people total).

77% of residents received a comprehensive risk assessment (including a skin assessment and use of a validated tool) within 8 hours of admission to the facility.

**Pressure Injury Prevalence**

8% or 1 in 13 people with one or more pressure injuries present on admission as well as new injuries that developed while in the facility.

5.6% or 1 in 17 people developed a new injury while in the facility.

**Health Service-Acquired Pressure Injuries**

- **Location**
  - 39% were located on the sacrum or buttocks and
  - 15% on the heels.

- **Classification**
  - 64% were Stage 1
  - 21% were Stage 2.

Of the resident receiving a comprehensive risk assessment, 77% were identified at risk of developing a pressure injury on the initial assessment.

Where a resident was identified as being at risk of developing a pressure injury on the initial risk assessment 89% had a documented pressure injury prevention care plan.

Where a resident was recorded as having one or more pressure injuries 27% had a wound management record or chart documenting every current pressure injury.
63 community/outpatient facilities undertook a survey across 16 LHD/SHNs in 2018.

79% of clients consented to a skin inspection (1,244 people total).

**PRESSURE INJURY PREVALENCE**

9.4% or 1 in 11 people with one or more pressure injuries present on admission as well as new injuries that developed while in the care of the service.

1.2% or 1 in 83 people developed a new injury while in the care of the service.

**HOSPITAL/HEALTH SERVICE-ACQUIRED PRESSURE INJURIES**

Location

- 42% were located on the sacrum or buttocks and
- 11% on the heels.

Classification

- 53% were Stage 1
- 21% were Stage 2.

Of the clients receiving a comprehensive risk assessment, 67% were identified at risk of developing a pressure injury on the initial assessment.

Where a client was identified as being at risk of developing a pressure injury on the initial risk assessment

- 69% had a documented pressure injury prevention care plan.

Where a client was recorded as having one or more pressure injuries

- 51% had a wound management record or chart documenting every current pressure injury.
GLOSSARY

Pressure injury point prevalence

Point Prevalence
Is the number of individuals with a pressure injury at a specific point in time, and indicates the scale of the issue. The injury may have developed recently, or over an extended period of time, and for inpatients, they may have been present on presentation to the facility.¹

Point Prevalence (%)
Number of patients with pressure injury at a specific point in time X 100
Total number of patients in the survey population at a specific point in time.¹
REFERENCES


7. Independent Hospital Pricing Authority (AU). Activity Based Funding Admitted Patient Care 2015–16, acute admitted episodes, excluding same day.

