

Borders NHS Board



PRESSURE ULCER THEMATIC ADVERSE EVENT REPORT - MARCH 2015

Aim

The aim of this report is to provide NHS Borders Board with a thematic review of:-

- Avoidable hospital developed pressure ulcer incidents from January 2011 – December 2014;
- All pressure ulcers developed from January – December 2014.

The paper defines the different categories of pressure injuries, describes the National strategic position and identifies the improvements to patient care which have resulted in a statistically significant reduction of developed pressure injuries within NHS Borders since new systems and processes were introduced in April 2014.

The Board are asked to note the progress and ongoing improvement work that improves the quality of care provided to patients.

Background

In December 2009 national funding was released to support care and improvements in tissue viability services across NHS Scotland, including pressure ulcer prevention and wound care. Two fixed term band 6 tissue viability co-ordinators were appointed to implement the National Tissue Viability Programme across all three clinical Boards. A further release of National funding supported the re-appointment of one 0.66 WTE tissue viability co-ordinator to continue progressing this work-stream until March 2013.

In January 2012, Scotland's Executive Nurse Directors agreed to aim for zero tolerance of preventable pressure ulcers, with an improvement aim that NHS Scotland will have no grade 2 and above avoidable hospital acquired pressure ulcers by December 2015.

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| <p>Avoidable Pressure Ulcer means that the person receiving the care developed a pressure ulcer and the provider of care did not do one of the following;</p> <ul style="list-style-type: none"> • Evaluate the person clinical condition and pressure ulcer risk factors; • Plan and implement interventions that are consistent with the persons needs and goals and recognised standards of practice; • Monitor and evaluate the impact of the interventions; or revise the interventions as appropriate. | <p>Unavoidable Pressure Ulcer means that the person receiving the care developed a pressure ulcer even although the provider of the care did the following;</p> <ul style="list-style-type: none"> • Evaluated the person's clinical condition and pressure ulcer risk factors; • Planned and implemented interventions that were consistent with the person's needs and goals; • Recognised standards of practice; monitored and evaluated the impact of the interventions; and revised the approaches as appropriate; • There is documented evidence the individual person refused to adhere to prevention strategies in spite of education of the |
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| | consequences of non-adherence. |
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Reference: - Position Paper: Avoidable and Unavoidable Pressure Ulcers, Wound, Ostomy and Continence Nurses Society (WOCNS) March 2009. Accessed 24/08/2010 http://www.wocn.org/pdfs/...Us/.../wocn-avoidableunavoidable_position-3-25.pdf

Examples of unavoidable pressure ulcers within NHS Borders in-patient environments include patient non-compliance, for example, patients with cognitive impairment or palliative care patients declining to mobilise.

In January 2014, the second phase of the Scottish Patient Safety Programme (SPSP), the Scottish Patient Safety Index (SPSI), identified a change in approach for the measurement of harms. All Grade 2 or above newly developed pressure ulcers were to be reported via incident management systems. It has consequently been acknowledged that while the breakdown of avoidable and unavoidable pressure ulcers are of interest, the aim of eliminating harm means Boards should report all incidents.

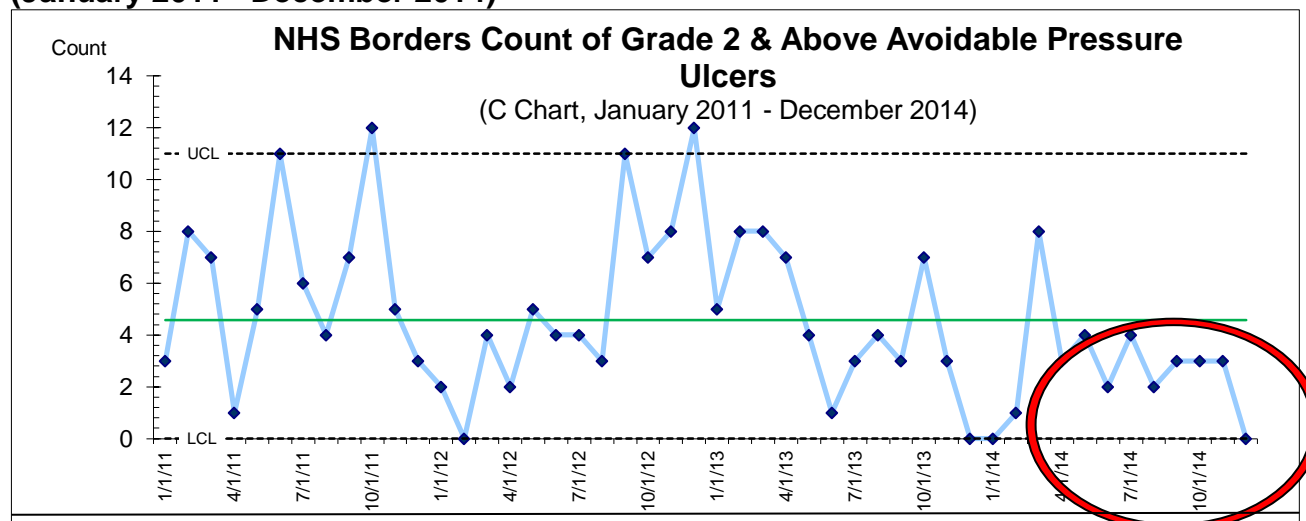
NHS Borders welcomes the evolving nature of this programme and the changes to measurement as the prevention of all pressure injuries is an improvement in the quality of care we provide to our population.

Summary

NHS Borders

Graph 1 demonstrates all avoidable grade 2 and above pressure ulcers acquired after admission or transfer to an acute NHS Borders setting where assessment and clinical history did not ascertain damage had started prior to admission.

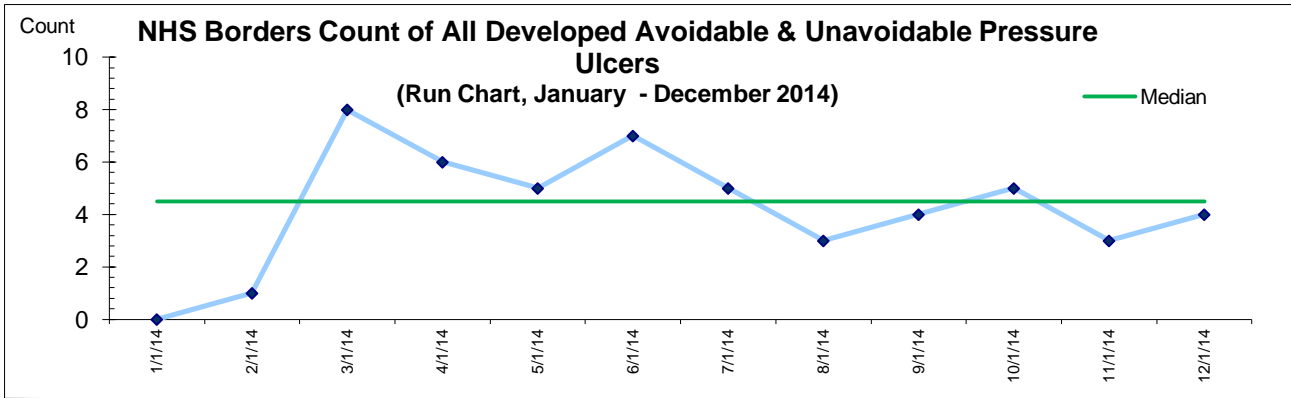
Graph 1: NHS Borders Count of Avoidable Grade 2 and above Pressure Ulcers (January 2011 –December 2014)



NHS Borders collective data demonstrates a mean of 4.6 pressure ulcer incidents per month from January 2011 to December 2014. Single points outside the control limits indicate negative special cause variation; however a positive shift of 9 data points from April 2014 would indicate a reduction in avoidable pressure ulcer patient harm.

Datix reporting was refined in January 2014 to capture all developed avoidable and unavoidable pressure ulcers. Graph 2 demonstrates the combination of developed avoidable and unavoidable pressure ulcers within the past year. The median of this baseline data set is 4.5 and depicts normal variation.

Graph 2: NHS Borders Count of All Developed Pressure Ulcers January – December 2014

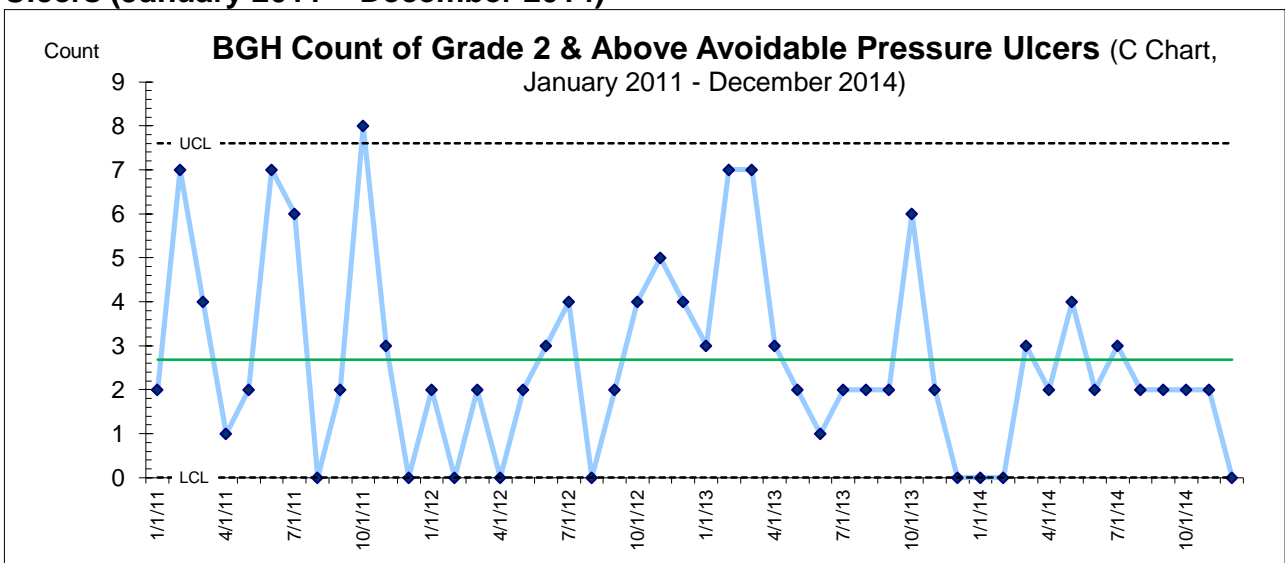


Borders General Hospital

Graph 3 displays Borders General Hospital data with a mean of 2.7 avoidable pressure ulcer incidents per month. October 2011 indicates one significant single point outside the upper control limit. Following investigation there were 10 pressure ulcers spread across 5 wards.

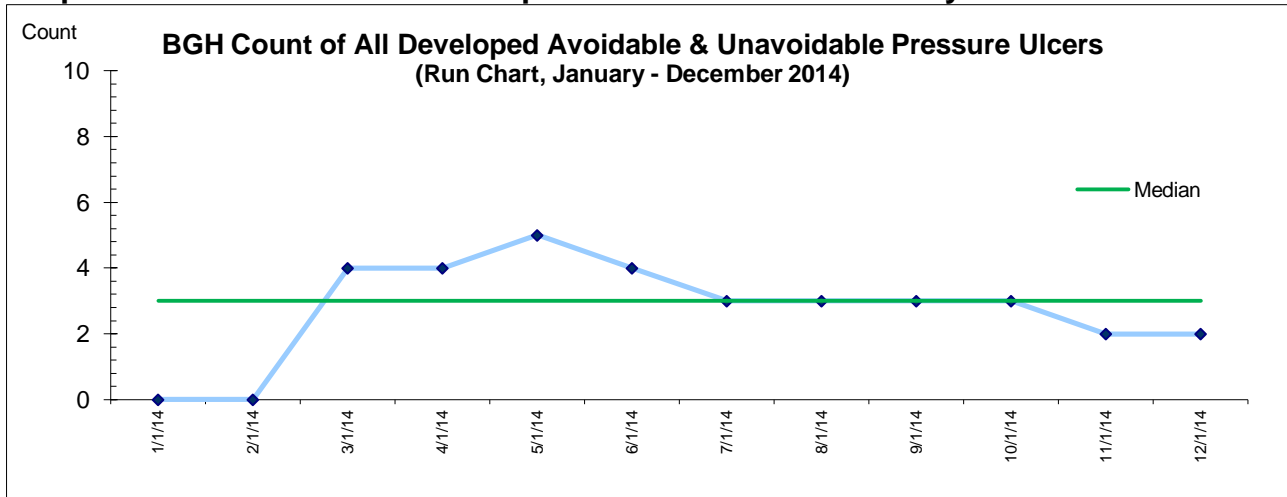
In February 2013, following the ability to incorporate CHI information, poor compliance with data collection for Medical Assessment Unit (MAU) was identified and previously missed data was entered. A training package was delivered within this environment and subsequent data collection and prevention compliance has improved.

Graph 3: Borders General Hospital Count of Avoidable Grade 2 and above Pressure Ulcers (January 2011 – December 2014)



Graph 4 demonstrates the combination of developed avoidable and unavoidable pressure ulcers within the past year within the BGH. The median of this baseline data set is 3.0 and depicts normal variation.

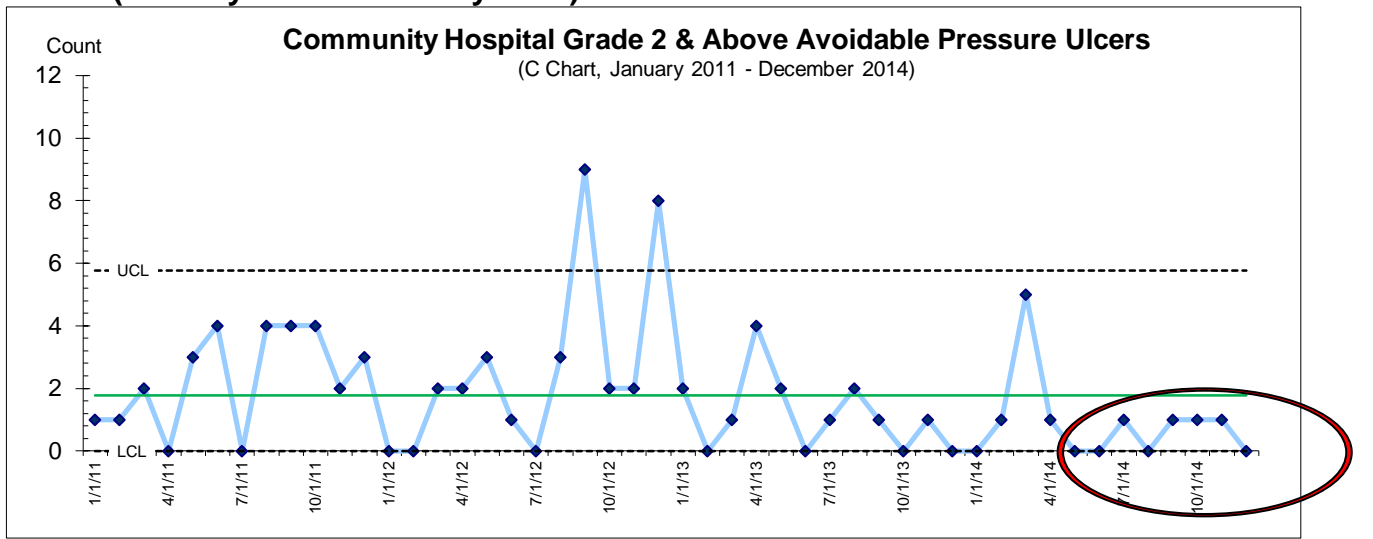
Graph 4: BGH Count of All Developed Pressure Ulcers January – December 2014



Community Hospitals

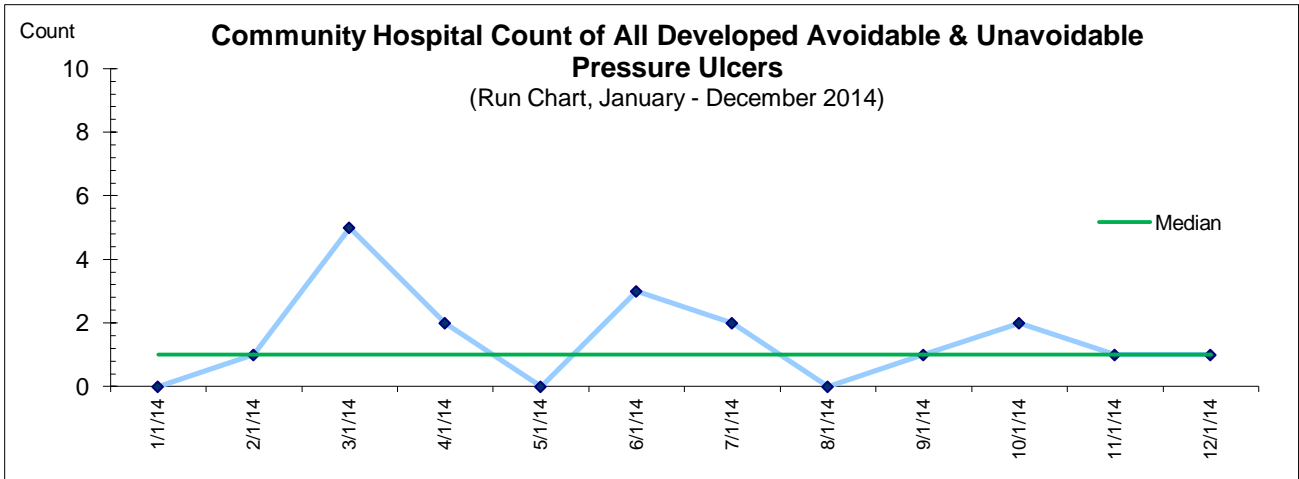
Graph 5 displays Community Hospital data with a mean of 1.8 avoidable pressure ulcer incidents per month. Investigation of the data points outside the control limits identified there were 9 pressure ulcers evenly spread across 3 Community Hospitals in September 2012 and 8 pressure ulcers spread across 2 Community Hospitals in December 2012. Continuous improvement activity supporting the positive shift from April 2014 which demonstrates a reduction in patient harm from avoidable pressure ulcers.

Graph 5: Community Hospital Count of Avoidable Grade 2 and above Pressure Ulcers (January 2011 –February 2014)



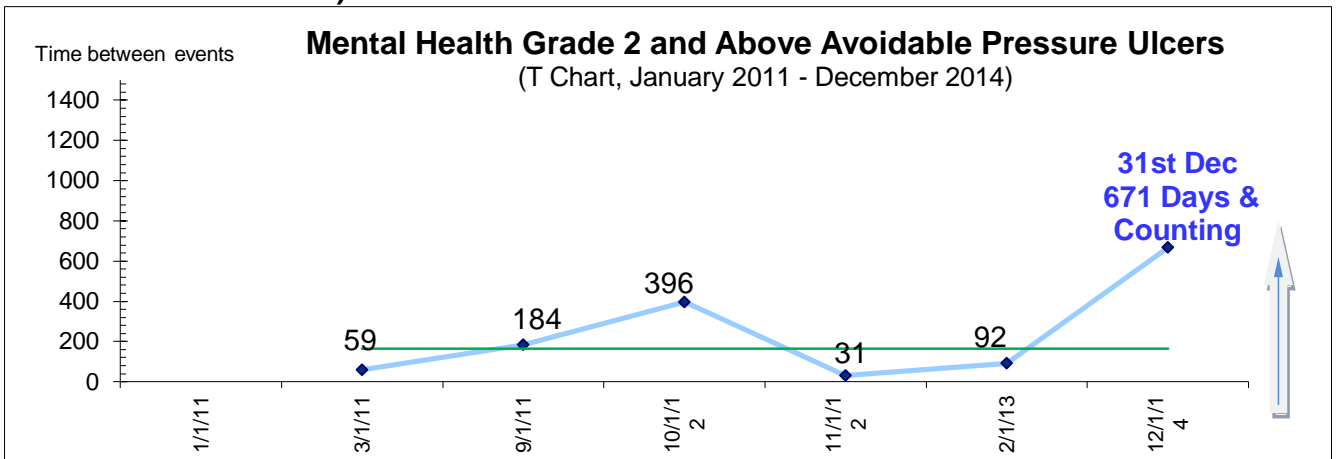
Graph 6 demonstrates the combination of developed avoidable and unavoidable pressure ulcers within the past year in Community Hospitals. The median of this baseline data set is 1.0 and depicts normal variation.

Graph 6: Community Hospital Count of All Developed Pressure Ulcers January – December 2014



Mental Health

Graph 7: Mental Health Time Between Avoidable Pressure Ulcer Incidents (January 2011 –December 2014)

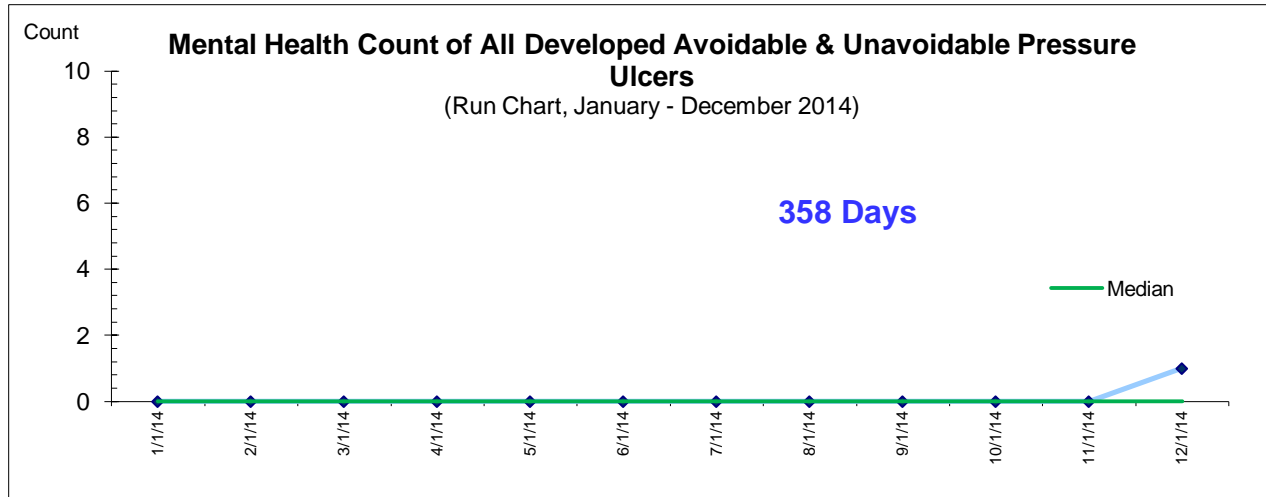


Graph 7 displays Mental Health avoidable pressure ulcer incident data represented in a time between chart. Although critical to quality of care, pressure ulcer incidents within this environment of NHS Borders occur infrequently.

The SPSP programme identifies sustained improvement as 300 days between incidents occurring. On the 31st of December 2014, it had been 671 days since the last avoidable pressure ulcer developed in a Mental Health hospital setting within NHS Borders.

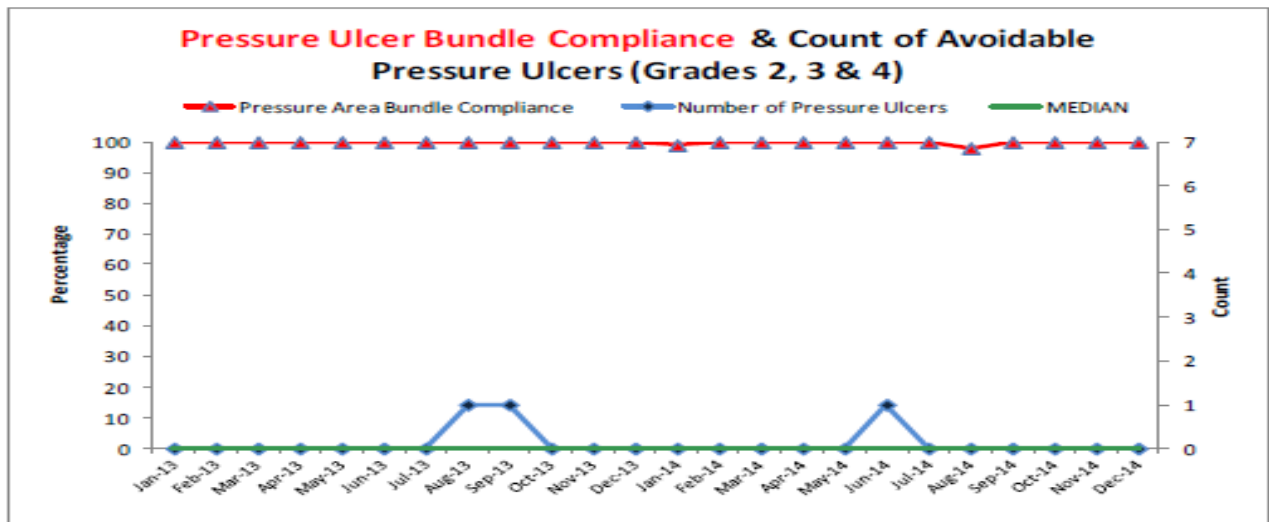
Graph 8 demonstrates the combination of avoidable and unavoidable pressure ulcers within the past year in Mental Health. This data set demonstrates avoidable and unavoidable pressure ulcers remain a rare event with an avoidable ulcer being reported after 358 days.

Graph 8: Community Hospital Count of All Developed Pressure Ulcers January – December 2014



An essential component of improvement work is tracking of reliable process delivery together with related outcome measure (pressure ulcer count/rate) at ward/unit level. Pressure ulcer process and outcome data is reported on a monthly basis through the Senior Charge Nurse (SCN) Clinical Quality Dashboard. Graph 9 demonstrates an example of how this process and outcome data is reported.

Graph 9: Example of Ward Pressure Ulcer Bundle Compliance & Count of Avoidable Pressure Ulcers



This measurement supports clinical staff to explore opportunities for improvement and understand the impact of their interventions on patient outcomes.

Data Recording

All pressure ulcer data for both inherited and developed damage is reported onto Datix to align with SPSI data collection. A root cause analysis tool has been implemented to investigate all grades of developed pressure ulcers. Tables 1 and 2 identify reported incidents and location of pressure damage from inpatient areas between January 2013 and December 2014.

Table 1: 2013 Grade 2 & Above Avoidable Pressure Ulcer Locations by Area

| | Sacrum | Buttock | Heel | Spine | Ankle | Scrotum | Elbow | Hand | Hip | Scapula | Total |
|---------------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Ward 4 | 2 | 1 | | 1 | | | | | | | 4 |
| Ward 5 | | | | | | | | | | | 0 |
| MAU | 6 | 4 | 6 | 1 | 1 | 1 | | | | | 19 |
| Ward 7 | 2 | 1 | | | | | | | | | 3 |
| Ward 9 | 1 | 2 | | | 1 | | | | | | 4 |
| Ward 10 | 1 | | 1 | | | | | | | | 2 |
| BSU/MKU | | | | | | | | | | | 0 |
| Ward 12 | | 1 | | | | | | 1 | 1 | 1 | 4 |
| Ward 16 | | | 2 | | | | | | | | 2 |
| ITU | | | | | | | | | | | 0 |
| Kelso CH | 3 | 1 | 1 | | | | | | | | 5 |
| Knoll CH | 5 | | 1 | | | | | | | | 6 |
| Hawick CH | 1 | | | | | | | | | | 1 |
| Hay Lodge CH | | | | | | | 1 | | | | 1 |
| Melburn Lodge | | | | | | | | | | | 0 |
| Cauldshiels | 1 | | 1 | | | | | | | | 2 |
| Total | 22 | 10 | 12 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 53 |

Table 2: 2014 Grade 2 & Above Avoidable Pressure Ulcer Locations by Area

| | Sacrum | Buttock | Heel | Foot | No Identification | Total |
|---------------|-----------|----------|----------|----------|-------------------|-----------|
| Ward 4 | 1 | 1 | | | | 2 |
| Ward 5 | 1 | | | | | 1 |
| MAU | 1 | 1 | | | | 2 |
| Ward 7 | | | 1 | | | 1 |
| Ward 9 | 1 | | 2 | | 1 | 4 |
| Ward 10 | | | | | 1 | 1 |
| BSU/MKU | | | 1 | | | 1 |
| Ward 12 | 5 | 1 | 1 | 1 | 1 | 9 |
| Ward 16 | | | | | | 0 |
| ITU | | | | | 1 | 1 |
| Kelso CH | 3 | 1 | | | | 4 |
| Knoll CH | 1 | | 1 | | 2 | 4 |
| Hawick CH | | | | | 1 | 1 |
| Hay Lodge CH | 1 | 1 | | | | 2 |
| Melburn Lodge | | | | | | 0 |
| Cauldshiels | | | | | | 0 |
| Total | 14 | 5 | 6 | 1 | 7 | 33 |

Within 2013/14 the most common areas of local pressure damage occurred on the sacrum, buttocks and heels. It is estimated a Grade 2 pressure ulcer costs £6,000 (Department of Health Pressure Ulcer calculator 2008/09 costs). Table 3 provides an indication of the financial costs each year since 2011.

Table 3: Annual Count of Grade 2 and Above Avoidable Pressure Ulcer Incidents:-

| Area | 2011 | 2012 | 2013 | 2014 |
|--------------------------|-----------------|-----------------|-----------------|-----------------|
| Borders General Hospital | 42 | 34 | 37 | 22 |
| Community Hospitals | 28 | 32 | 14 | 11 |
| Mental Health | 2 | 2 | 2 | 0 |
| Total | 72 | 68 | 53 | 33 |
| Costs | £432,000 | £408,000 | £318,000 | £198,000 |

Table 3 denotes that the significant reduction in pressure injuries, due to the improvement work undertaken, has avoided significant financial expenditure to the Board which is balanced by improved provision of pressure relieving equipment.

In 2013 a review of the provision of all pressure relieving equipment identified an opportunity to introduce a mid-risk foam mattress which would allow BGH staff access to a wider range of equipment appropriate for providing effective prevention and to reduce the demand for high specification dynamic air mattresses. Additional dynamic air mattresses were also purchased for the Community Hospitals. A large number of pressure relieving cushions have been distributed throughout the organisation.

However, further investment in additional bed stock to ensure profiling beds are standard in all inpatient wards and to improve the range of mattress options available has been identified. A proposal is being discussed with the Clinical Executive Operational Group to review existing mattress store contracts in order to propose a cost efficient range of pressure relieving mattresses and improve the range of stock options.

Inherited Pressure Ulcers

Patients who present with a pressure ulcer (Grade 1, 2, 3 and 4) on admission or transfer to any inpatient area have their ulcer recorded as inherited.

Table 4 identifies the reported location where the patient with the inherited ulcer was admitted or transferred from, however, this may be different from where the ulcer was developed.

The high number of unknown locations reflects the fact this is not information that has previously been requested and consequently is not routinely documented.

Table 4: 2014 All Inherited Pressure Ulcers by Area

| | Jan 14 | Feb 14 | Mar 14 | Apr 14 | May 14 | Jun 14 | Jul 14 | Aug 14 | Sep 14 | Oct 14 | Nov 14 | Dec 14 | Totals |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------|
| Unknown | 1 | | 7 | 4 | 6 | 19 | 24 | 12 | 17 | 4 | 8 | 10 | 112 |
| Home | 2 | 2 | 10 | 4 | 3 | 3 | 4 | 6 | 6 | 2 | 5 | 4 | 51 |
| 4 | | | 6 | 1 | | 1 | | | | 1 | | | 9 |
| 5 | | | | | | | 1 | 1 | 1 | 2 | | 1 | 6 |
| MAU | 1 | | 5 | 2 | 7 | 4 | 2 | 6 | 2 | 3 | 3 | 2 | 38 |
| 7 | | | | | | 1 | | 1 | 1 | | 1 | | 4 |
| 9 | | | 1 | | 2 | 1 | | | | | | | 4 |
| DME | | | | | | | 1 | 1 | 1 | | | 2 | 5 |
| MKU | | | 1 | | | | | | | | | | 1 |
| BSU | | | | | | | | | | | | | 0 |
| 12 | | | 1 | 1 | 3 | 2 | 1 | 1 | 2 | 3 | 1 | 1 | 16 |
| 16 | | | | | | 1 | | | | | | | 1 |
| ITU | | | 1 | 1 | | 2 | | 1 | 1 | | | 2 | 8 |
| Haylodge CH | | | | 1 | | | | | | | | | 1 |
| Hawick | | | 2 | | | | | | | | | | 2 |
| Kelso | | | | | | | 1 | | | | | | 1 |
| Knoll | | | | | | 1 | | 1 | | | | | 2 |

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|------------------------|---|---|----|----|----|----|----|----|----|----|----|----|-----|
| Golden Jubilee | | | | | 1 | | | | | | | | 1 |
| WGH | | | 1 | | | | | | | | | | 1 |
| Edin. Royal Infirmary | | | 1 | | | 2 | 1 | 1 | | 1 | | | 6 |
| Carham Hall | | | 1 | | | | | | | | | 1 | 2 |
| Riverside Nursing Home | | | 1 | | | | | | | | | | 1 |
| Queens House, Kelso | | | | 1 | | | | | | | | | 1 |
| Private Care Home | | | | | 1 | 1 | | | | | | | 2 |
| Grange Hall | | | | | | 1 | | | | | | | 1 |
| Nursing Home | | | | | | | | | | | | 1 | 1 |
| Thornfield Home | | | | | | 1 | | | | | | | 1 |
| Hillside Lodge Home | | | | | | | | 1 | | | | | 1 |
| Waverley Home | | | | | | | | | | 1 | | | 1 |
| Edinburgh Airport | | | | | | | | | | | 1 | | 1 |
| Totals | 4 | 2 | 38 | 15 | 23 | 38 | 36 | 32 | 32 | 16 | 20 | 24 | 280 |

Review of Improvement Activity

Improvement activity within the last 4 years has supported recognition, correct grading and actual incident data recording and reporting of pressure ulcers. It has introduced improved access to pressure relieving equipment across the Board. However, it has been identified that some areas require ongoing support and performance monitoring/management with recording, reporting and reviewing pressure damage in order to achieve the National target of no grade 2 and above avoidable hospital acquired pressure ulcers by December 2015 and reducing harm from all Grade 2 and above pressure ulcer incidents.

Wound Care Group

The reformed wound care group are reviewing and updating intranet resources and developing priority areas for action in 2015.

Case Reviews

In recognition of the need to provide additional support to frontline teams and drive improvements, the Director of Nursing and Midwifery has established proactive case reviews. Three case reviews have recently been carried out in real time attended by ward and community staff, clinical governance and quality staff, clinical improvement staff and chaired by the Director of Nursing and Midwifery.

Continued Professional Development (CPD) Revalidation Objectives

From 1 April 2015 plans are underway to implement a nursing and midwifery CPD/Revalidation framework to assure high quality patient-centred, safe and effective care for every patient, first time and every time. NHS Borders CPD/Revalidation

Objectives will provide the documentary evidence, staff knowledge and skill application reflects up-to-date evidence based practice within each element of the following 4 key organisational priority objectives:

1. **Pressure Area Care:** To eliminate patient harm from pressure ulcers;
2. **Falls:** To eliminate patient harm from falls;
3. **Food Fluid & Nutritional Care:** To ensure patients experience of eating and drinking enhances their health and wellbeing; and
4. **Deteriorating Patient:** To prevent harm from unidentified deterioration, sepsis, and cardiac arrest.

Designed as an integral part of the performance management system, SCN's will use the framework to help staff in their current job and to select the right learning and development activities to assist staff in planning their CPD/Revalidation needs. This approach aims to align individual performance for personal, professional and organisational success. It will provide a framework to assist nurses and midwives meet revalidation requirements through confirmation from a third party on their continuing fitness to practise, evidence performance across all 6 core Knowledge and Skills Framework (KSF) dimensions to inform appraisal and tailor personal development plans to meet individual and organisational priorities. All nursing staff will be supported to evidence their knowledge and skills to deliver effective pressure ulcer prevention and management strategies.

Link Nurses

To further assist drive improvement, link nurses will be developed within each inpatient area. A link nurse is a nurse who is, or is moving towards being a subject specific champion. These individuals will be developed to become a ward resource to support implementation of the CPD/revalidation objectives, specifically to eliminate patient harm from pressure ulcers.

Development will involve principles of evidence based practice appraisal, application of the SPSP Driver Diagram and Change Package, analysing ward data, constructing a Ward Project Charter to capture improvement activity and initiating improvement PDSA's to test. This is not a role for which a job description is needed as it is intrinsic within the professional and occupational responsibilities of any registered nurse/midwife.

Recommendation

The Board is asked to **note** progress within the organisation to reduce the number of hospital developed pressure ulcer incidents and data surrounding all avoidable and unavoidable pressure ulcers developed within 2014.

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| Policy/Strategy Implications | The NHS Scotland Healthcare Quality Strategy (2010) and NHS Borders Corporate Objectives guide this report. |
| Consultation | The content is reported to Clinical Boards and through the Healthcare Governance Steering Group and to the Board Clinical Governance Committee. |
| Consultation with Professional Committees | As above. |

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| Risk Assessment | In compliance as required. |
| Compliance with Board Policy requirements on Equality and Diversity | Yes. |
| Resource/Staffing Implications | Services and activities provided within agreed resource and staffing parameters. |

Approved by

| Name | Designation | Name | Designation |
|---------------|---|-------------|--------------------|
| Evelyn Rodger | Director of Nursing and Midwifery, Interim Director of Acute Services | | |

Author(s)

| Name | Designation | Name | Designation |
|-------------|---|-------------|---------------------------|
| Laura Jones | Head of Quality and Clinical Governance | Kim Smith | Practice Development Lead |