# Singing a new song: my role in reducing the incidence of pressure ulcers in children

# **KEY WORDS**

- ▶ Infants
- Nursing Quality Practice

  Educator
- >> Pressure ulcers

This article reflects on my past two years working alongside the Tissue Viability Team, facilitating teams to achieve their own goals to reduce the incidence of pressure ulcers in neonates, infants, children and young people at Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH).

y role of Nursing Quality Practice Educator was introduced in 2012 and was designed to help the nursing team implement and sustain improvements in the quality of nursing care at Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH).

The role provides opportunities to work alongside clinical and non-clinical staff across multiple specialties to improve patient care and experience using education, transformation and quality improvement methodologies. GOSH is an acute specialist Trust in London, providing a full range of specialist paediatric health services.

I work alongside the tissue viability nurses (TVNs) and a wide range of clinical and non-clinical teams across the Trust to implement and sustain improvements in paediatric pressure ulcer (PU) prevention and management. I also work clinically with children and families to help think through and implement PU prevention strategies.

Together with the TVNs and an active Trust-wide working group, an improvement project plan was developed to reduce the incidence of PUs in neonates, infants, children and young people. GOSH continually strives to reduce the incidence of PUs. PU prevention and management is a high priority, actively sponsored by the Assistant Chief Nurse, and embedded in the Trust's 'Quality Strategy.' The Chief Nurse, who is ultimately accountable for the project, reports regularly at board level.

# WHAT I HAVE BROUGHT TO THE TEAM

The team I joined was already a strong clinical tissue viability team (TVT) with three nurse

specialists covering both plastic surgery and the tissue viability service. The addition of an educator was valuable to the team. I have worked as a clinical practice educator for 10 years now in different NHS Trusts and my aim is to help marry an innovative and progressive attitude with the continual improvement of the quality of patient care. I brought with me my experience of teaching, launching big Trust-wide projects, issue analysis, project planning and problem solving.

Just before my appointment, I completed a Transformation Improvement Methodologies Programme (TIMP) course (Ball and Hopewell, 2012) where I learned to implement successful projects in a systematic way. The course also gave me an increased knowledge and confidence in using improvement science in my everyday work. This helped to build the PU project plan. My colleagues in the TVT found this addition to their team useful. They are extremely busy with the day-to-day treatment of wounds, severe nappy rash and PUs, and found they had less time to spend on activities such as teaching Trust-wide, website development, and policy and guideline development.

The first task we set our team was to understand the problems in our organisation in depth, our PU incidence and where in the Trust these were occurring, as well as the causes and which patients were getting PUs. The next task was to review our current PU prevention strategies and assess if there was anything else in the evidence available to prevent PUs in children. As an educator, I was able to spend time searching the literature and feeding this back into the organisation.

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## **CELEBRATING SUCCESSES**

We continually evaluate our successes at the end of each year and stage of the project. Celebration of success is key in encouraging the teams to continue their great work. For example, one ward has just reached two years being free of PUs, for which their staff have been congratulated by the Chief Nurse.

We re-branded our team as the Pressure Ulcer Prevention and Management Team and sent out posters of how to contact us. We created an active working group with representation from across the hospital, created a network of link nurses and began facilitating teams to achieve their own goals. We also provided support in the process of raising standards of care for infants, children and young people.

An experience-based design approach (NHS Institute for Innovation and Improvement, 2013a) was used to bring patients and staff together to share the role of improving care. The stories of parents, children and young people about their experience of developing PUs and their clinical care were collected and used to improve the patient and parent experience. Staff were asked about their experiences of using previous PU prevention tools and the resources available to them. This enabled the working group to identify priorities and agree a starting point (Wounds UK, 2013).

# **DAY-TO-DAY ROUTINE**

A typical day for me would be to join the TVT on their round, and organise and run a Pressure Ulcer Prevention Working Group. The team review all PUs identified to them via a bleep system. I might visit a patient and ward team on the ward to liaise and offer advice and support on the most appropriate pressure relieving surfaces, beds and repositioning. I may also develop a policy and finish preparing a teaching session. I have lots of things on the go at one time and my work is varied. I receive a daily report of any skin-related issues around the Trust, and alongside the Risk team and TVT we can provide support to the ward team and patients as soon as possible.

# **INTERVENTIONS**

The project was designed to fit into the Trust's transformation strategic goals of 'Working together towards Zero Harm, No Waits and No Waste' (GOSH, 2013a). An increase in the number of PUs was identified in early 2012.



Nursing Quality Practice Educator Sarah Kipps (left) works alongside the Tissue Viability Nurses (TVNs) and a wide range of clinical and non-clinical teams across her Trust.

Our interventions included:

- >> A creative publicity campaign for staff
- The launch of the Glamorgan Paediatric Risk Assessment Tool and introduction of a paediatric SSKIN care bundle
- ▶ Investment in new prevention technologies, such as new dermal pads (Aderma\*, Smith & Nephew) and specialist beds
- A new interactive teaching programme for staff
- ▶ A new root cause analysis (RCA) tool adopted by the Risk Management team
- Working with nursing teams, children and families advising on PU prevention strategies such as repositioning and pressure relieving surfaces at ward level.

# **RESULTS**

The project commenced in April 2012. Our results so far have demonstrated sustained and statistically significant change in our incidence of PUs. Improvements were implemented and rolled out to the majority of wards by December 2012. The rate of PUs per 1,000 bed days dropped to 0.46 from January 2013 to March 2013. Therefore, a reduction of 35% was achieved against a target of 20%. Variability since June 2012 has reduced due to the implementation of sustainable processes (GOSH, 2013b). During 2013-2014, we reduced the number of hospital-acquired category III PUs from seven to three (GOSH, 2014) (*Figure 1*).

The Tissue Viability Team review all of the PUs in the hospital and these figures represent those

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Figure 1. Reduction in category III PUs during 2013-14.

PUs graded by TVN specialists. We rolled out a Glamorgan Risk Assessment (*Figure 2*), which is used 97% daily in each inpatient.

#### **PUBLICITY CAMPAIGN FOR STAFF**

I enjoy being creative and took pictures for teaching presentations, as well as a range of posters. These posters are displayed on the wards to raise awareness of anti-embolism stocking injuries in children and prevent heel PUs.

#### INTRODUCTION OF NEW TOOLS

We reviewed the evidence for the SSKIN care bundle and decided to use this format across our hospital. I designed the form and tested it in one ward area first. In 2012, we trialled various formats and using the 'Plan, Do, Study and Act' (PDSA) approach, we gradually introduced the new documentation across the hospital.

We decided to use the PDSA cycles to test the SSKIN care bundle idea because you can 'temporarily trial the change and assessing its impact' (NHS Institute for Innovation and Improvement, 2013b).

The four stages of the PDSA cycle (NHS, 2013b):

- ▶ Plan the change to be tested or implemented
- ▶ Do carry out the test or change
- ▶ Study data before and after the change and reflect on what was learned
- → Act plan the next change cycle or full implementation.

Evaluation has been important at all stages of the process. The final document was a complete individualised paediatric SSKIN care plan. As an educator, I was responsible for the teaching and supporting this process. The nursing team at the grassroots were asked for their input at all stages of the project and a new version of the form is about to be launched in the autumn.

# **COURAGE THROUGH CHANGE**

Initially, it was not a popular change. The paperwork nurses need to fill in was already considerable and this could perhaps be seen as a 'box-ticking exercise'. However, 'compassion' as outlined in the Department of Health's 'Compassion in Practice's' '6 Cs' includes 'courage'; courage to innovate and to embrace new

ways of working (NHS England, 2012). This move was an important step in preventing PUs and documenting skin integrity of children and young people. The paediatric SSKIN care bundle is now embraced in everyday practice for all children. It took a long time to get used to the change, but the latest qualitative feedback confirms that nurses see the importance of the tool and the qualitative nursing key performance indicators demonstrate 97% compliance with PU risk assessment scoring. Combining the SSKIN care bundle risk assessment with the manual handling, repositioning and nutrition charts in one 'bundle' helped.

#### PAEDIATRIC NEW RISK ASSESSMENT

We changed from the Braden Q PU risk assessment to the Glamorgan PU risk assessment (Healthcare Scotland, 2011). NICE (2014) state the importance of using a validated tool. However, this meant we had to reteach the PU risk assessment tool Trust-wide to all clinical staff. Making this big change, it was important it was evidence based.

It was challenging deciding on a new tool once we had done a literature search as the evidence base was not strong for paediatric PU risk assessment scales. Anthony et al (2010) described that in paediatrics several competing scales are used and identified at least 10 published paediatric PU risk assessment scales. There are few studies showing the validity of such scales and none identified that compare the paediatric PU risk assessment scales. Therefore, NICE (2014) recommended further research into risk assessment scales for children.

It was decided the Glamorgan tool had sufficient evidence to demonstrate it was good at predicting risk in our GOSH population of interest. It was also easy to use. NICE (2014) also identify many of the tools have been developed from adult PU risk assessment tools. General caution should be taken when adapting any adult tools or figures to ensure they are age appropriate. It is important to remember children are not just small adults.

# NEW INTERACTIVE TEACHING PROGRAMME FOR STAFF

Working with the Trust-wide education team is a key part of my role to ensure all new permanent and temporary MDT members on induction receive training on Pressure Ulcer Prevention and Management. The clinical educator role focuses on

#### **REFERENCES**

Anthony D, Willock J, Baharestani M (2010) A comparison of Braden Q, Garvin and Glamorgan risk assessment scales in paediatrics. *J Tissue Viability* 19(3): 98–105

Ball E, Hopewell A (2012) Transformation Improvement Methodology Improvement Programme. Changing from the Bottom Up. Available at: http://bit.ly/Xh8F4g (accessed 13.08.2014)

Great Ormond Street Hospital NHS
Foundation Trust (2013a) Our
Transformation Journey. Quality
Improvement at Great Ormond
Street Hospital for Children NHS
Foundation Trust. Available at:
http://bit.ly/1kB6brz (accessed
13.08.2014)

Great Ormond Street Hospital NHS Foundation Trust (2013b) *Quality Report 2012/13*. Available at: http://bit.ly/10J5t74 (accessed 13.08.2014)

Great Ormond Street Hospital NHS Foundation Trust (2014) *Quality Report 2013/14*. Available at: http://bit.ly/1oJ5t74 (accessed 13.08.2014) building the capacity and capability of the nursing and multidisciplinary workforce through the delivery of high-quality, safe and effective clinical teaching and learning programs (NHS Employers, 2010).

Developing bespoke teaching sessions at ward level and training packages, i.e. for the SSKIN care bundle, how to reposition a child, carrying out risk and skin assessment and give further information on pressure-relieving devices, grading PUs, documentation or running through scenarios, is one of my key roles. These sessions enhance clinical skills and underpin them with knowledge and theory. I have interactive PU teaching models and think this is an important part of my teaching toolkit.

We cover subjects that are recommended in the NICE Pressure Ulcer Guidelines (2014) on Trust induction, such as:

- Which children are most likely to be at risk of developing a PU
- >> How to identify pressure damage in children
- ➤ What steps should be taken to prevent new or further pressure damage
- → How to contact the Pressure Ulcer Prevention and Management Team.

Recently, I have been able to use video animation software to design and develop teaching videos and shorts. I have also begun working with the digital media team at the hospital to embed these into e-learning packages for use within the Trust.

# WORKING WITH CHILDREN, YOUNG PEOPLE AND THEIR FAMILIES

Part of my role is to visit children, young people and their families that ward staff have identified as needing advice on preventing PUs and maintaining skin integrity. The main philosophy of children's nursing is family-centred care, recognising that, in most cases, children and young people are best cared for by their parents (Nursing and Midwifery Council, 2010).

At GOSH and as a PU Prevention and Management Team, we work in partnership with children, young people and their families and nursing team, to plan their skin care, negotiate who will provide that care, and also where it should be provided. An age-appropriate approach to care is also essential, for example, encouraging young people to self-report skin integrity, as well as discussing with them the merits of early mobilisation, the rationale underpinning decisions



Figure 2. Assessing an infant using the Glamorgan Paediatric Pressure Ulcer Risk Assessment and SSKIN Care Bundle.

and the use of products, such as Aderma, as well as the implications of staying in bed.

The SSKIN care bundle document reflects this. The record sheet has a unique code where parents or carers can report on their child's skin integrity. Parents are encouraged to be involved in the repositioning and identifying if there are any areas of skin with non-blanching erythema. NICE guidelines (2014) advocate that parents and children are offered 'timely, tailored information to people who have been assessed as being at high risk of developing a PU, and their family or carers'.

The information should be delivered by a trained or experienced healthcare professional and include:

- >> The causes of a PU
- >> The early signs of a PU
- >> Ways to prevent a PU
- The implications of having a PU (for example, for general health, treatment options and the risk of developing PUs in the future).

# **CONCLUSION**

I would never have dreamt as a paediatric nurse I would be coming up with songs, such as 'Head, shoulders, hips and heels' (note the clever twist on one of the all-time favourite nursery rhymes!), singing them quietly to myself through the corridors of the hospital and in my training sessions to amazed trainees to help them help children to understand which parts of their body to move and reposition. Paediatric Nursing is a special profession and working in a role such as Nursing Quality Practice Educator is a privilege.

HealthCare Improvement Scotland (2011) Paediatric Risk Assessment Tool v6. Available at: http://bit. ly/lyvnnjl(accessed13.08.2014)

NHS Institute for Innovation and Improvement (2013a) Experience Based Design. Available at: http://bit.ly/lyvnD1L (accessed 13.08.2014)

NHS Institute for Innovation and Improvement (2013b) *Plan, Do, Study, Act.* Available at: http://bit. ly/S6u6lD(accessed 13.08.2014)

NHS Employers (2010) Career Planner for Nurses. Available at: http://bit.ly/1l2G8ua (accessed 13.08.2014)

NHS England (2012) Compassion in Practice. Available at: http:// bit.ly/1g6ZNmT (accessed 13.08.2014)

National Institute for Clinical Excellence (NICE) (2014) Pressure Ulcers: Prevention and Management of Pressure Ulcers. Available at: http://www.nice.org.uk/guidance/cg179 (accessed 13.08.2014)

Nursing and Midwifery Council (2010) What do Nurses do?
Children's Nurses. Available at:
http://bit.ly/10J6D20 (accessed 13.08.2014)

Wounds UK (2013) Pressure Ulcer Prevention in the Acute Setting Using Aderma™ in Practice 9(4): Available at: http://www.woundsuk.com/pdf/content\_10969.pdf (accessed 21.08.2014)

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