Implementing an adapted SSKIN bundle and visual aid in the community setting

KEY WORDS
- Carers
- PU prevention
- Community
- Visual prompt tool
- Blanching/non-blanching erythema
- SSKIN bundle

The Hownslow Richmond Community Health NHS Trust (HRCH) has adapted a SSKIN bundle for use in the community. It incorporates visual prompts aimed at non-English speakers and instructions for wheelchair user instructions. It was launched in April 2015 alongside a dedicated HRCH webpage for carers and their patients. A multidisciplinary group led by the pressure ulcer (PU) clinical lead was set up in January 2015 and it is hoped that this collaboration will help make the community SSKIN bundle successful in reducing rates of PUs among patients being cared for at home.

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While there is a lot of research evidence looking at management of pressure ulcers (PUs) in the acute setting, there is very little evidence available on community care models (Franks et al, 2002).

In the UK, there is an increasing ageing population with complex comorbidities (Department of Health [DH], 2013). Patients who are housebound and have personal care needs may be cared for by formal or informal carers. Whereas early-stage pressure damage identification and risk assessment can be carried out by community nursing staff, it is the long-term care provider with the most contact with the patient who will be in the best position to observe changes in risk level and any early signs of skin damage. A high amount of referrals to community nursing teams for PU care is for patients who have grade 2 ulceration or above that has developed within the home setting.

According to Guy (2012) 'Preventing pressure ulcers are an essential aspect of patient safety. The process of prevention begins with a risk assessment incorporating evaluation of identified risk factors and skin inspection.' Tools must be used alongside clinical judgment, skin assessment and consideration of support surfaces' (Guy, 2012).

The NICE guidelines for the prevention and management of PUs were produced not just for nurses but for the patient's families, carers and the public, however, it has not been interpreted into a simple tool for carers to use (NICE, 2014).

There is robust evidence that suggests early stage pressure damage (grade 1) may be reversed if rapid interventions, which can be as simple as repositioning the patient, are made. Without this basic intervention an unidentified early stage PU may deteriorate rapidly to a serious deep-tissue injury that extends down to the bone (Collier, 1999).

Carers need to be equipped to identify risk and put in place immediate actions to prevent rapid deterioration. Identifying patients who are at risk of developing PUs is the most important factor in prevention, and assessment is the first stage towards this goal (Bethell, 2003). Where one patient at home may have various health and social care professionals entering their home, this assessment needs to have a multidisciplinary approach. This is also highlighted in the NHS Five Year Forward View (2014) which describes the need for a radical upgrade in community prevention strategies. It says that the 'one size fits all' care model is ineffective.

The key message of the author's Hounslow and Richmond Community Healthcare (HRCH) Stop the Pressure campaign is to work closer with carers. Carers UK and the University of Leeds estimate that there are nearly 6.5 million carers in the UK, a rise of just over 9% from 5.8 million in 2001 Carers UK (2015). They advise that this represents 10.5% of the total population, or 12.6% of the adult population (one in eight adults). Carers in the community setting are greatly varied and can be difficult to reach. They tend to be divided between two main providers:

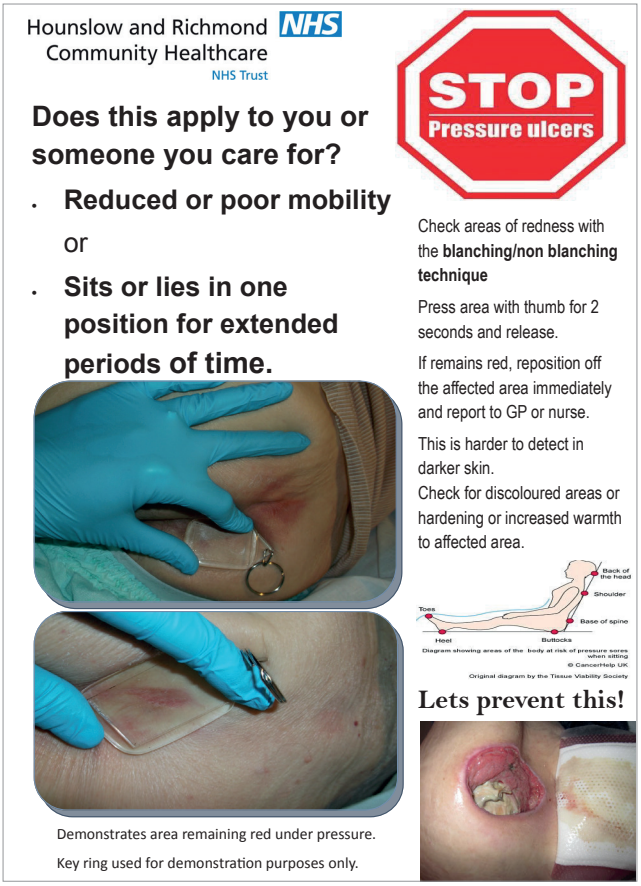

Figure 1. Visual prompt poster

- Informal carers who may be a family member, neighbour or friend
- Formal carers from care agencies or day centres predominately managed by local authorities.

VISUAL PROMPT POSTER

There is a wealth of resources and literature that can be shared with carers, such as NHS England's Stop the Pressure website, the PU info app for smart phones and adapted leaflets. Much of what we now understand in early detection involves where the ulcers may occur and how removing the pressure on these areas will allow tissue reperfusion to take place without causing a break in the outer skin layers (Russell, 2002).

Often the first a health professional may know of a patient's risk status is when a carer has reported a wound to the GP and a referral is sent to the community nurses to visit. This may be the first visit for the nursing team and the ulcer may already be of grade 2 status.

Many carers in the Trust's area do not speak or understand English, so the author designed a visual aid for them (*Figure 1*). This came after research conducted in 2012 as part of a specialist degree dissertation looking at the relevance of identifying early stage grade 1 PUs in the community setting.

The poster design is similar to meningitis posters that prompt parents and professionals to use a blanching technique to identify a meningitis rash.

The poster features the blanching/non-blanching technique and highlighted the urgency of testing the area and offloading immediately if initial damage was detected.

This technique is more difficult to demonstrate on darker skin and descriptors such as heat, swelling and pain still have to be used to detect any damage.

JOINT HEALTH AND SOCIAL CARE PU PREVENTION MODELS

Research has highlighted that there is a poor inter/intra rater reliability in grading PUs (Beeckman et al, 2009). Carers need to be well informed on how to identify early stage non-blanching erythema and what immediate actions they can take to prevent rapid deterioration but this requires training and support.

Working towards shared care protocols and accessing care provider forums to raise awareness and improve training on PU prevention will be key if the 'Stop the Pressure' campaign is to be successful. The updated NICE quality standard 89 (2015) recently published on quality indicators for PUs needs to be explicit on how health provider services can measure the information given to carers on PU prevention strategies as part of standard practice.

One strategy may be a joint prevention care model that ensures carers have access to skin integrity training funded by the clinical commissioning groups (CCGs), and local authority. This leaves scope to develop aligned policies between health and social care when purchasing care contracts, with local authority quality teams working with health partners.

Charities such as Your Turn have supported community NHS trusts by commissioning training in residential care homes using their React to Red campaign. There is a deficit in PU prevention training for domiciliary care providers who provide care for our high-risk patients at home, and innovative ways of teaching these carers are needed.

Introduction of the Care Bill 2016, which follows on from the Care Act 2014, will result in the

Table 1. SSKIN bundle and additional HRCH actions.

SSKIN	HRCH SSKIN additional actions
S Skin inspection: staff to check skin	Nurse to demonstrate blanching/ non-blanching technique to the carer that provides daily skin care.
S Surface: pressure relieving equipment is required, and is working effectively.	Ensure carer can check equipment to see it is working effectively
K Keep moving: staff to ensure the patient is mobilised or they have a repositioning schedule in place	Care provider to be advised to initiate repositioning where possible
I Incontinence: staff to ensure skin protected from moisture damage	Nurse to ensure carer is using barrier cream/spray where required and not zinc-based cream
N Nutrition/hydration: staff to ensure a nutritional assessment is completed and actioned if required	Nurse to ensure nutritional assessment completed and instructions for food/fluid needs given to and discussed with the carer

introduction of personal health budgets for those patients wishing to manage there own budget to purchase care packages. This may prompt more people to use local homecare providers. Hounslow and Richmond have 32 care agencies. The managers of these groups have been contacted via local authority care provider forums but reaching the actual carers has proved more of a challenge.

Hounslow and Richmond is an ethnically diverse area and for many of the carers, English is not their first language. A visual aid may benefit these carers more than a written booklet or leaflet.

A business proposal has been submitted for the joint commissioning of a charity such as Your Turn to provide internal accredited training to the domicillary care providers. There has been much debate about PUs being a quality indicator of care; therefore, if successful in its bid, this will be implemented and the incidences of PUs will be monitored.

HRCH'S SSKIN BUNDLE IMPLEMENTATION

HRCH has adapted the skin, surface, keep moving, infection and nutrition (SSKIN) bundle, involving the carer where possible and the multidisciplinary team. The SSKIN bundle concept was initially developed in the US. Here representatives from the Institute for Healthcare Improvement and Ascension Health worked together developed a blueprint for change in PU prevention. They advised that by checking the skin more regularly, early signs of pressure damage will be identified sooner by staff (Gibbons et al, 2006). Downie et al (2013) advise that although the bundle may come in many different forms, it should include the basic five standards—skin, surface, keep moving, infection and nutrition—known to be key protectors of the skin for patients who are at risk of PU prevention. These elements are based on best practice.

The SSKIN bundle has since been adopted by various trusts across the UK, however, there have been issues identified when trying to use a SSKIN bundle in the community such as daily skin inspection, which is largely carried out by non-clinical staff, and two-hourly turning, not always being possible for people who do not have a 24-hour carer. To address these issues HRCH adapted the SSKIN bundle for community use (*Table 1*). We looked at community bundles from Coventry, Birmingham and Nottingham Community Trusts. This HRCH SSKIN bundle incorporates a multidisciplinary approach to prevention with health and social care participation. The HRCH SSKIN bundle was put into place in April 2015 for every service user identified as being at risk of PU within the home setting. The HRCH SSKIN bundle incorporates the following:

- Specialist instructions for multidisciplinary teams, such as wheelchair services, physiotherapy
- Additional comments incorporating patient and carer agreement, such as concordance with the plan
- A visual tool demonstrating the blanching/non-blanching technique
- When recommendations are declined by the patient with full capacity, the risk/benefits and other options are both explained and documented
- A carer instruction sheet and booklet shared by Birmingham Community Healthcare NHS Trust (a card with the HRCH webpage can also be provided).

THE IMPLEMENTATION PROCESS

We began with a three-month scoping exercise that examined historic root cause analysis investigations of PUs that had occurred at HRCH. Areas that needed to be changed were identified and the work plan project was designed using

Table 2. Results to date: Number and grade of PUs identified among community patients at HRCH

Benchmark: Year 2014-2015 pre- SSKIN bundle implementation. All data is from HRCH community acquired collected from DATIX. (note: Grade 1s not routinely reported at beginning of project)

PU grade	Quarter-1 2014–2015			
Benchmark	Quarter-2	Quarter-3	Quarter-4	
Grade 1	Data not collected	Data not collected	Data not collected	7
Grade 2	34	38	46	54
Grade 3	21	13	17	10
Grade 4	1	1	3	6
Ungradable/suspect deep tissue injury incorporated October 2014	0	0	0	0
HRCH SSKIN Bundle launched April 2015 alongside training.				
PU grade	Quarter-1 12015-2016	Quarter-2	Quarter-3	Quarter-4
Grade 1	8	4	6	Data not complete
Grade 2	46	50	40	Data not complete
Grade 3	13	6	11	Data not complete
Grade 4	3	2	0	Data not complete
Ungradable/Suspect deep tissue injury line with EPUAP update	0	1	2	Data not complete

multiple streams to reduce PU incidences. Community-adapted SSKIN bundle with training sessions began in April 2015. Key contacts from the quality teams at the local authorities were contacted to discuss access to care provider forums to train on the SSKIN bundle.

All the root cause investigations for PUs were sent to learning panels which were made up of all the services involved with care. They looked at the findings and agreed areas that needed action. This allowed them to take ownership of the changes and allows them to share their learning. This may be more meaningful in the long run and steers away from a blame culture.

Then a multidisciplinary community group was set up including nurses, occupational therapists, a dietitian, matrons, rapid response nurses, carers, wheelchair services which held monthly meetings to look at emerging patterns of PU development and discuss potential joint solutions, incorporating this into practice using a plan, do, study, act (PDSA) model.

Training was given at local authority care provider forums and an external resource web page for the public and carers was launched: http://www.hrch.nhs.uk/patients/pressure-ulcers/

For complex housebound patients, carers were accompanied on home visits with the PU lead and the multidisciplinary team involved to devise a individualized prevention plan using SSKIN tools.

The poster was developed by the author to act as a visual prompt for carers and was also displayed at the local GP surgeries.

SSKIN care training was delivered throughout Hounslow and Richmond to health and social care staff and allied health professionals. SSKIN training has now been made part of HRCH's induction programme.

A business case was constructed for joint CCG and local authority funding for an external trainer to provide PU prevention training to all care agencies and providers across Hounslow and Richmond.

RESULTS

Data is taken from the online reporting incidence form Datix and the deep tissue injuries are cross-referenced with the patient's records to ensure

Acknowledgment

The author would like to thank Fiona Downie for her support when writing this article.

accuracy. Every reported grade 2 ulcer is checked, if the clinical wound descriptor is that of a moisture lesion staff are asked to upload a photograph so that it can be double-checked by the PU lead.

It is difficult to hypothesise results from data at this stage, however, by end of March 2016, themes may start to become more clear. The figures show there has been a decrease in the number of grade 4 ulcers and an increase in grade 3s (*Table 2*). This may indicate that earlier identification and preventive treatment has been successful in preventing PU progression. It may be that digital cameras provided for the community staff may have made it easier to grade the PUs and the increase may indicate that deep tissue injuries were previously under-reported.

If ungradable ulcers or suspected deep tissue injuries were previously reported as grade 3 and 4 ulcers, there may have been a decrease in reporting grade 3 and 4 ulcers and the increase in numbers will be due to the new more accurate gradings.

Trends in reporting grade 2 ulcers had been neglected in the community, with no process set up like the root cause analysis (RCA) for grades 3 and 4 PUs for investigation to identifying areas with emerging themes prompting actions. Grade 2 pressure ulcers remain the most prevalent. By monitoring patterns of grade 2 pressure ulcer formation common themes may be studied and key interventions implemented, for example, evaluating the use of heel protectors.

It has been noted that the ungradable/DTIs that have been identified have all been among patients who are receiving palliative care.

DISCUSSION

There are still issues that need attention and will be addressed in 2016–17. These include:

- Patient concordance
- Lack of public awareness about early intervention
- Misdiagnosing moisture lesions and Incontinence-associated dermatitis (IAD)
- Inappropriate use of pressure relieving equipment
- Mental health and self-neglect of the skin
- The link between skin change at life's end (SCALE) ulcers and ungradeable or suspected deep-tissue injury (SDTIs)
- The patient pathway between hospital and home for the high-risk patient
- Poor referral times from awareness of discoloration to home visit by community nurse or GP.

A lack of primary care engagement also continues to be a challenge. Further involvement from primary care in detecting an increase in risk and creating prevention plans is a key priority in the updated NICE pressure ulcer prevention and management guidelines (2014). GPs and practice nurses need to carry out risk assessments and identify those with comorbidities, such as diabetes, who will have a higher risk of pressure damage.

Even with the SSKIN plan in place and efforts from nurses and carers to instil the SSKIN principles at home, there are high numbers of patients who do not comply. This may be due to lack of understanding of the risk of developing a pressure ulcer or could be related to underlying physical issues, such as arthritis.

SSKIN compliance by staff has been difficult to establish and we have been checking five random records a week as part of a compliance audit for different clinical areas and we have a goal of 85% compliance for 2016. Without accurate compliance data it is difficult to establish that the incidence figures directly correlate to the use of the bundle. It is also not possible to measure the effectiveness of the visual aid, webpage and increased training.

FURTHER STEPS

It is hoped that over the next 12–24 months the SSKIN bundle will becomes embedded in community practice and there will be signs of a decline in the reported avoidable pressure ulcers and a reduction to the number of grade 2 PUs. Although a change in culture is needed across primary and community care in how we understand PU prevention in the community setting, we need to support and educate those that are most like to identify an early stage PU and be able to identify the 'root cause'. Care planning can then be updated accordingly to incorporate individualised prevention strategies that incorporate the five main SSKIN principles.

An increase in public awareness through campaigns will also be key so that people have a greater understanding of the risks. Self-care models of SSKIN need to be encouraged and risks explained.

Benchmarking in the community setting is a fairly new territory, with data mainly reliant on the safety thermometer. The safety thermometer is a prevalence tool and has been criticised by the Tissue Viability Society (TVS) (2013) as tools of this nature have been shown to be more accurate for long-term diseases such as diabetes and asthma.

Joint prevention participation may steer towards supporting and training carers in skin integrity and PU prevention and reducing the risks for housebound patients. A cost saving analysis may be presented to joint commissioning as a business case, demonstrating the cost of hiring an external trainer to provide internal accredited training to domiciliary cares balanced against the cost of treating PUs.

An audit of healing rates will commence in the first quarter of 2016 looking at grade 3, 4, ungradeable and STDI PUs. We will be looking at the wound status after three months of being reported. Trends will be monitored and shared in quarterly reports and may signify further work to be done in prevention, e.g. for clients with neuropathy secondary to diabetes.

CLINICAL RELEVANCE

Protecting patients from harm is paramount and PU prevention remains very high on the agenda. The focus has been on acute settings using the safety thermometer and this has been slow to transfer to the community and incidence rates have not been properly monitored.

A localised deeper look into occurrences and the emerging patterns around reported PUs may shed more light into how we can heighten our preventive strategies and focus our future actions. This will be very difficult for one service or organisation to do in isolation. The multidisciplinary SSKIN bundle aims to incorporate all services that care for the patient.

NICE guidelines 2014 and Care ACT 2014 (clause 3) ask for this partnership and highlight the importance in joint prevention strategies. The importance of community health providers working with the local authorities that maintain contracts for care agencies should be of a joint enterprise when looking at how to provide support and training of skin integrity and prevention. The upcoming personal health budgets from the updated care bill (2016) will mean that patients will have more ability to purchase care from a carer provider of their choice. In areas as diverse as Hounslow and Richmond many of these carers may have limited English and the patient may prefer a carer that understands their own language. We need to find ways to reach and educate carers. A shared local authority and health prevention model may act as a starter to begin with.

There is guidance about how social and health providers can create joint prevention care models to support NHS commissioners with new forms of contracts and commissioning services Ham and Murray (2015). The prevention models in the community will need to be a Joint approach in recognizing carers as our key preventers and offer support and training in early identification and risk factors.

Since it was introduced, the project and visual tool has been given the Quality Improvement Project award on the Prevention of Skin Breakdown by the European PU advisory panel (EPUAP) in 2015.

CONCLUSION

Although understanding of how long a PU takes to develop is not definite due to the various factors that make up a person's risk, we do know that it can be a matter of hours if the risk is not identified and acted upon. When nurses may only be visiting a patient with minimal nursing needs weekly or monthly, it stands to reason that the key person in prevention becomes the patient's daily carer.

With the increase in the numbers of older people in our society we must find different prevention strategies and we can no longer rely on community nurses alone. The SSKIN bundle can be used in the community and offers a good benchmark for holistic prevention care planning, but needs to be adapted for everyday carers who must be actively involved in the plan.

The importance of ensuring that carers have access to training on prevention strategies should be the responsibility of all community services and unless this involves primary, community and local authority services, the prevalence and incidence of PUs may remain static. Joint working and internal accreditation for prevention training for all carers will be a positive step forwards. WUK

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