

Transformative education to improve wound care and sustain workforce

KEY WORDS

- » Competency
- » Industry
- » Nurse training
- » Partnership
- » Tissue viability
- » Workforce

While there are policy and government forces for positive change within the NHS, there are concerns regarding the national NHS workforce crisis (The Health Foundation, Kings Fund and The Nuffield Trust, 2018). The number of community nurses has fallen by 14% since 2009, with District Nurses falling even further at 45%. Staff recruitment and retention is a national and local priority (Health Education England, 2017), especially for community nursing. By partnering with wound care companies, two pilots to upskill staff in wound care were conducted to support improved wound management for community patients. Project 1, to up-skill Band 4 Healthcare Assistants (HCAs), and Project 2, to establish tissue viability (TV)-specific Band 6 roles at Hertfordshire Community NHS Trust. This article focuses on Project 1, a subsequent article will detail the method and outcomes of Project 2.

Guest et al's (2015) now seminal paper highlighted the burden of wound care on the NHS. The authors found that 10.9 million community nursing visits came at a cost of £682,382,518, a little over 33% of wounds being treated were leg ulcers and that only 16% of those with a foot or leg ulcer had their ankle-brachial pressure measured.

NHS England (2017) responded by including wound assessment in the 2017–19 Commissioning for Quality and Innovation (CQUIN) scheme to encourage improved wound assessment in the community and a national minimum data set for wound assessment was created (Coleman et al, 2017). Above all, NHS England have launched the National Wound Care Strategy Programme with a long-term commitment to patient care (NWCSP, 2018).

Despite these positive developments, sustaining a workforce with the relevant skills and competence is a challenge, not helped by recent cuts in educational funding for health care workers (The Health Foundation, Kings Fund and The Nuffield Trust, 2018) and an ever-growing district nurse caseload of frail and complex patients.

A particular challenge to areas that border with London is that London job roles offer higher salaries, making it difficult to recruit locally. At Hertfordshire Community NHS Trust, the community adult service serves two Clinical Commissioning Groups

(CCGs) with a population of 1.2 million. In wound care in particular, there is unwarranted variation in leg ulcer service provision, with some areas having no access to services. At the time of writing, there is no commissioned tissue viability service (TVS); there is fewer than three full-time tissue viability nurses (TVNs) to support all the community adult services, nursing homes, hospices and GP practices.

Patients who are referred to the TV team have often not received a full wound or holistic assessment. In an initial baseline CQUIN audit in 2018, less than 10% of patients had had a full wound assessment, despite nearly half of the community nurses caseload being wound care related. Many patients, particularly those with long-standing wounds, were receiving ongoing wound care by healthcare assistants (HCAs) who were not enabled to assess, and where they had been made by registered nurses, they did not inform the treatment plans. In the community, HCAs are often expected to deliver wound care autonomously without support, and skills can go unchecked. HCAs often acquire wound care knowledge through the observation of qualified clinicians in practice, rather than undertaking formal wound care training. Therefore, ritualistic practice can be easily established, driving suboptimal care, rather than current evidence-based practice.

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The Five Year Forward View (NHS England, 2014) and Long Term Plan (NHS, 2019) are committed to reducing unwarranted variation, delivering services nearer to home, preventing ill health rather than focusing on treatment, facilitating earlier discharge and transforming services to sustain health care, whilst delivering efficiencies in cost.

A business case that supports the expansion of TV services is the preferred option, however, without good data demonstrating the scale of the problem and how improved service delivery would enhance outcomes and reduce spend, it may be difficult to persuade CCGs to invest in TV services. Hence, an approach was taken to investigate what could be done within the community nursing teams to improve practice and patient outcomes.

PILOT PROJECTS TO IMPROVE OUTCOMES

Delivering health care is increasingly being enabled by improved partnership with not-for-profit organisations and the voluntary sector. In tissue viability, there are well-established for profit commercial companies that supply wound care products. Many of these companies re-invest into the NHS by offering value-added services to support service delivery, which may include education, placing staff on honorary contracts or providing business skills support. In Hertfordshire, both projects were supported by commercial companies.

PROJECT 1: ENHANCING WOUND ASSESSMENT SKILLS FOR BAND 4 HCAS — THE TISSUE VIABILITY EDUCATION PROGRAMME

Traditionally wound assessment is the responsibility of the registered nurse, and while the Nursing and Midwifery Council (NMC, 2019) gives clear direction on delegation and accountability, it may be sensible to enhance the skill set of the un-registered workforce to support this aspect of care. This can release nurse capacity to conduct full wound assessments, with Band 4 HCAs able to conduct wound assessments between registered nurse visits.

A Coloplast UK TV Nurse advisor was given an honorary contract with the Trust for 2 days per month to support the project. The TVN developed a competency-based education programme using the unbranded, European Wound Management Association (EWMA)-endorsed series of TV modules (HEAL), written by global experts.

- Competency One:** Generic
- Competency Two:** Health improvement
- Competency Three:** Pressure ulcer prevention and management: CHS Care
- Competency Four:** Wound care
- Competency Five:** Lower limb ulceration
- Competency Six:** Dermatology
- Competency Seven:** Skin products and dressings management
- Competency Eight:** Safeguarding and incident reporting

Figure 1. Competency domains

- Level One:** You have observed the skill/procedure in a practice setting
- Level Two:** You have participated in the skill/procedure under direct supervision
- Level Three:** You have performed the skill/procedure on a number of occasions and required minimal supervision
- Level Four:** You can perform the skill/procedure safely and competently, giving the rationale for your actions
- Level Five:** You are able to critically appraise/teach the skill/procedure to others

Figure 2. Competency levels

PROJECT 2: DEVELOPING BAND 6 COMMUNITY NURSE ROLES WITH A SPECIFIC INTEREST IN TV

The community team was restructured to create a TV-focused role with an enhanced skill set in wound management. Urgo Medical funded the project, enabling the appointment via an honorary contract of an independent TVN to lead the project. They delivered a focused, competency-based education and skills development programme, primarily on leg ulceration management.

Two Band 6 nurses were employed, and the nurses received 2 days a month of educational theory and clinical practice support by the independent nurse consultant. The methodology and results will be described in the next edition in *Wounds UK*.

METHODOLOGY

A community nursing team that included Band 4 HCAs and a Band 6 TV-specific interest post was approached to pilot the 1-year project. The Tissue Viability Leading Change (TVLC) National Competency Framework (University of Huddersfield and Urgo Partnership 2015; Ousey et al, 2016) was

Box 1. Modules completed

HEAL modules delivered by Coloplast

- Wound healing and skin integrity
- Pressure ulcer and safeguarding
- Dermatology and dressing selection
- Wound assessment and health promotion
- Wound Infections
- Moist wound healing
- Leg ulcer

Module delivered by Medi UK Ltd

- Practical sessions on hosiery

Table 1. HOTSHOT educator regulated alignment (adapted from Beckwith, 2019)

Domain 1 (Teaching activities)	Domain 2 (Learning activities)	Domain 3 (Assessment activities)
Reflective thinking Critical thoughts	Problem solving Elucidation	Production Justifications

used for HCAs to self assess their level of competence pre- and post-programme, as well as half way through at 6 months (*Figure 1*). Each competency domain can be assessed based on experience, role and registration status, and each student can then self assess against five levels of competence (*Figure 2*).

The Band 4 Tissue Viability Education programme was tailored to the group, following informal pre-interviews to assess the HCAs’ educational and clinical experience and future aspirations. All eight Band 4 HCAs were preparing to undertake the Nurse Associate Programme at the University of Hertfordshire, so it was important to align the design of the Tissue Viability Education programme with that of the academic setting and current educational ideology. HOTSHOT Educator Regulated Alignment domains (Beckwith, 2018) (*Table 1*) underpinned the course. Coaching, reflection and problem-solving activities were utilised to address issues of embedding theory into practice.

A theory–practice gap is often a result of the clinician’s lack of awareness of how theory guides practice (Gardner, 2019). In addition, insufficient clinical leadership and role models can lead to nurses lacking confidence in decision making (Bradley et al, 2004; O’Brien et al, 2011). The role of the mentor is invaluable in supporting less experienced staff to develop the knowledge and skills to deliver wound care competently and effectively (Frankel, 2008). However, without protected time to reflect, the theory–practice gap can worsen and lead to poor practice.

DOMAIN 1: TEACHING ACTIVITIES

A flipped classroom method was adopted (Bergmann et al, 2012), whereby HCAs completed relevant online modules (*Box 1*) prior to the classroom sessions. They were then assigned an experienced TVN mentor for half a day for a month to:

- ▶▶ Shadow the HCAs individually to set goals and provide feedback
- ▶▶ Provide education in practice on pressure-relieving equipment and assess their knowledge against the framework

- ▶▶ Assess their knowledge on local safeguarding policies and procedures against the framework
- ▶▶ Educate HCAs on incident reporting procedures and completion of incident forms
- ▶▶ Ensure HCAs were familiar and confident using SystemOne™ templates
- ▶▶ Provide feedback on progress to programme lead.

After each module was completed, the key learnings were expanded with the HCAs observing the expert in practice and critically discussing the patient outcomes.

DOMAIN 2: LEARNING ACTIVITIES

Following each module, case study workshops enabled the HCAs to draw on the knowledge gained in the theory sessions, exploring and reflecting on the application of the Triangle of Wound Assessment (TOWA) in practice. The TOWA used in Hertfordshire Community Trust was used as an aide-mémoire in practice and then translated within the Trust’s electronic care records to promote continuity of care (World Union of Wound Healing Societies, 2017).

DOMAIN 3: ASSESSMENT ACTIVITIES

Information from initial interviews shaped the design and content of the assessment process throughout the course. Several different assessment methods were adopted including workshops, a mid-point test, patient case studies and role play. Midpoint testing and case study discussions demonstrate the student’s theoretical understanding, while role play enables the assessor to observe the student’s knowledge in practice, as well as their critical thinking and justification (*Table 1*).

CASE STUDY WORKSHOPS

Informal monthly assessment in the style of case study reviews enabled the HCAs to explore their knowledge to date, demonstrating their wound assessment skills. This also supported their clinical opinion and rationale behind a wound treatment plan. This assessment style enabled the educator to observe and provide critical feedback in a less formal manner, establishing an open dialogue within the group.

MID-POINT CASE REPORT CHALLENGE AND TEST

At 6 months the students had completed their generic education and pressure ulcer modules. At this stage it was important to understand what the gaps in basic knowledge were, before moving onto the next 6 more aetiology specific wound modules. The students were advised to revise the recently completed modules prior to an unseen case study quiz. Following this exercise, individual and group feedback was given, providing an opportunity to get course feedback, and adapt the curriculum for the next 6 months.

In addition, each HCA was requested to identify one patient with a wound and write a case study using the Coloplast Case Report Challenge template. With consent, the patient's wound was photographed throughout the wound journey and the HCA was able to assess, plan and implement a care plan with the support of their mentor.

FINAL ASSESSMENT

Each pair of HCAs were given a different role-play scenario to stimulate reflection and critical discussion. An OSCE template was adapted with permission of the author (Smith, Isle of Wight). The Coloplast's TOWA board game was used to make an holistic patient assessment (Figures 3 and 4). A pictorial quiz and pressure ulcer 3D model were also used to assess pressure ulcer categorisation and describe the theory of wound healing and skin integrity.

RESULTS

Two HCAs left the Tissue Viability Education programme after 1 month as they began the Nurse Associate Programme. Five of the remaining six HCAs completed the course and HEAL modules.

Initially the aim was to demonstrate improvements in wound assessment documentation and patient satisfaction. However, it was quickly acknowledged that in order to reliably demonstrate improvements in these two areas, the HCAs needed to see the same patients throughout the course of their treatment, which was not possible. Therefore, results are presented based on the improvements in the competencies and assessment results of the HCAs.

Figure 5 demonstrates the level of self-assessed competence pre- and post-Tissue Viability Education programme. Pre-programme, the HCAs scored themselves on average as 2.8 out of 5, indicating that



Figure 3. TVN role play and case study discussion



Figure 4. TVN role playing as a patient

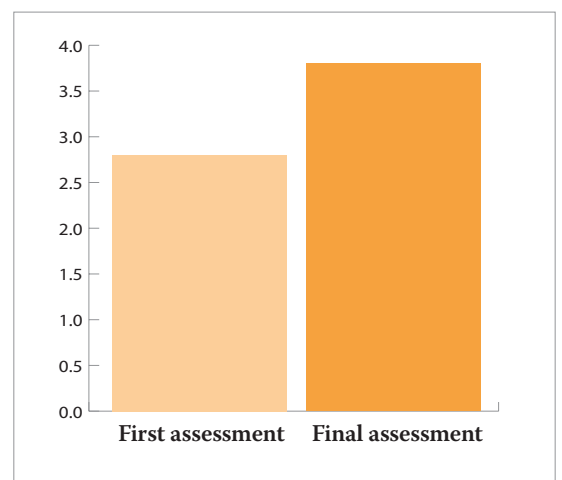
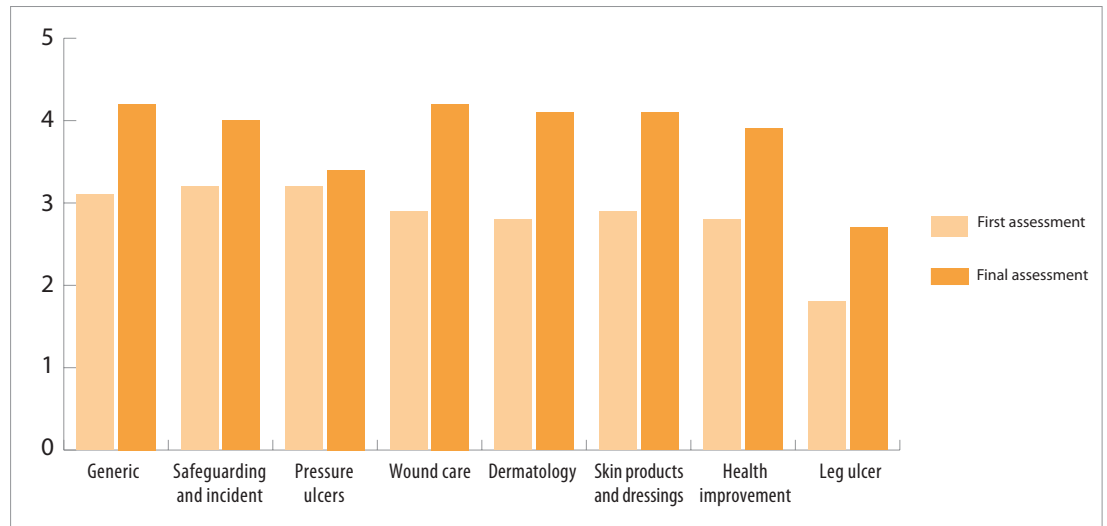


Figure 5. Average self-assessed competence of HCAs pre- and post-Tissue Viability Education programme

Figure 6. Average changes in competency pre- and post Tissue Viability Education programme for each skill



within their scope of responsibility they felt able to participate in a particular wound care task with minimal supervision. Post-programme, there was an overall increase in self-assessed competence of 35% and all HCAs felt able to conduct wound care assessments with minimal input.

The greatest increase in competence was seen in wound care (45%), dermatology (45%) and leg ulcer management (44%) (Figure 6). The smallest increase in competence was seen for pressure ulcer management, which highlights the importance of the ongoing national focus on pressure ulcer prevention. All of the HCAs reported that they now understood the importance of skin integrity, wound management principles and treatment options. As the HCAs progressed through the programme, they became more confident in higher levels of critical thinking.

DOMAIN 1 AND 2

On completing the programme, HCAs were asked for feedback on the HEAL theory sessions (1 = poor and 5 = excellent). All HCAs recorded a 4 or a 5 across the range of sessions. Additionally, all the HCAs who completed the course found the coaching days held the most value with regards to consolidation. The ability to critically reflect, perform a holistic assessment and provide rationale for their actions had improved and helped to bridge the gap between theory and practice. However, all of the HCAs reported difficulties securing protected time to complete the course, which often meant they weren't able to give the clinical coaching days their full concentration.

DOMAIN 3: ASSESSMENT ACTIVITIES

Mid-point case report challenge and test

Four of the six HCAs passed the mid-point case study challenge and test (Figure 7). Of the four HCAs students that had passed the test, one student was on sick leave and one failed to achieve the 60% pass mark. A personal development plan was put into place to support learning but the student made the decision not to complete the final assessment.

Two of the five students submitted case studies, which clearly demonstrated critical thought and justification. The other three HCAs were unable to secure a patient due to caseload continuity or patient complexity.

ROLE PLAY

The final role play assessment was a consolidation of seven of the eight TVLC competency domains investigated (leg ulcers excluded). Three of the five HCAs performed better in the role play than at the mid-point test, demonstrating the need to adopt a variety of different assessment methods. One student was unable to complete the role play due to long-term sickness, however, feedback from the mid-point test and coaching sessions suggest that they will pass the course on their return to work.

COURSE FEEDBACK

Overall feedback from the HCAs and clinical managers was excellent (Box 2), and all agreed that the programme "... should be offered to everyone involved with wounds." It was clear that, despite the issues raised about protected time, the HCAs felt they were making a real difference to patient lives. All of the HCAs felt

Box 2. Healthcare assistant testimonials

"I am truly grateful to have been given this opportunity to learn from a TVN and its really helped my confidence with wounds and seeing patients wounds improving"

"Jacquie has been very supportive. I have gained knowledge in wound care and feel more confident in my practice"

"It has really helped my confidence with wounds, I feel it's all down to our learning with you"

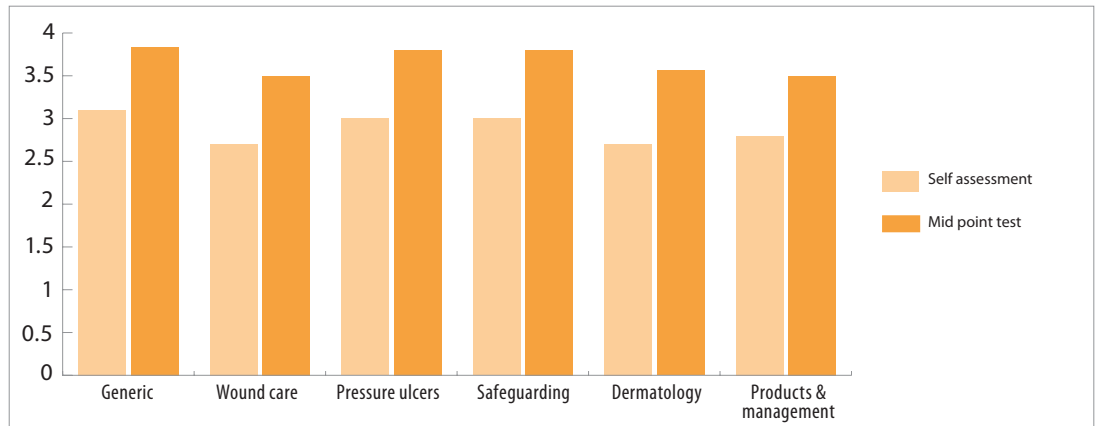


Figure 7. Test results of the self assessment and mid-point tests

increased levels of confidence and job satisfaction when assessing a patient and wound, and in their ability to disseminate and articulate both verbally and in written documentation to senior staff. One student felt that the pedagogical approach adopted supported her transition into the Nurse Associate Programme.

CONCLUSION

The project was embraced by the local nursing teams, three of the Band 4s have taken ownership of their new-found knowledge and competency skill set, and this is visible in their documentation of wound assessment and care. A programme to improve wound assessment and wound outcomes needs to consider different confidence levels, and be aware that some personnel may require more time and development than others.

This project has not been without challenges. Personal circumstances and illnesses amongst HCAs and trainers thwarted delivery at times, delaying the completion dates. Two days per month, whilst seemingly achievable, did create long gaps

in the HCAs receiving training, which can delay confidence building in their newfound skill set. Measuring outcomes has proven challenging — the ultimate outcome is to demonstrate improved wound outcomes post-project. Whilst small audits before the project commenced did demonstrate a lack of lower limb assessment, time constraints have delayed repeating this audit. The case study examples have identified improvements in patient-related outcomes. Student and team perceptions and evaluations have been positive, and it will be interesting to see if enhancing the skill set will increase job satisfaction, support retention and provide an awareness and succession for TVNs.

Moving forward, the plan is to expand on this project and roll it out across the locality community nursing teams. This will require a focused practice development programme and resources to deliver. The TV service is, at time of writing, receiving support from the transformation team to develop the service provision and hopes to gain additional funding.

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