

# Tissue viability specialist nurses and diabetic specialist podiatrists in the acute setting: should collaborative working be encouraged?

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## Key words

- Collaborative working
- Diabetes specialist podiatrist
- Multidisciplinary teams
- Tissue viability nurse

## Article points

1. There is sparse evidence to support the collaborative role of podiatry and tissue viability nursing teams, but in the authors' experience, clinicians and patients both benefit.
2. A shared care approach allows sharing of best practice, skills and knowledge between disciplines.
3. A more formal arrangement to share information about mutual patients may enhance the service provided.

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**This article discusses collaborative working in the acute care setting between podiatrists specialising in diabetes and tissue viability nurses, presented from both the podiatrist and the nurse perspective. Professional supervision is also considered and the support the teams can offer each other. Although this is an area not explored widely in the literature, it has become more common for these two teams to work closely together. Examples are presented to demonstrate how multidisciplinary working can reduce duplication of work rather than increase it, and ultimately improve the patient experience.**

**T**issue viability is a speciality encompassing skin and a variety of wound types, including surgical wounds, pressure ulcers and leg ulcers (Pagnamenta, 2014). Podiatrists specialise in foot, ankle and leg pathology in the prevention, diagnosis and treatment of different conditions (Royal College of Podiatry, 2022a).

A podiatrist specialising in diabetes aims to prevent or manage diabetic foot ulcers (DFUs) using specialist foot assessments, complex wound care techniques and offloading equipment. There is some overlap between the role of the tissue viability nurse (TVN) and that of the podiatrist in the management of lower limb and foot wounds.

Multidisciplinary working has become the gold standard practice for the management of DFUs in outpatient clinics and community care and can enhance evidence-based practice (Ndoro 2014; National Institute of Health and Care Excellence [NICE], 2015). However, a 2008 survey of community nurses and podiatrists highlighted that 58% of respondents perceived the greatest barrier to multiprofessional working between nurses and podiatrists was communication issues (McIntosh and Ousey, 2008).

The Care Quality Commission (2022) assesses multidisciplinary working and communication as

one of its key lines of enquiry for acute facilities, and any barriers must be addressed. The Royal College of Nursing (RCN) recognises that comprehensive clinical care is increasingly delivered by multiprofessional teams (RCN, 2006).

Specialist podiatrists and tissue viability teams are working together more closely in acute settings. Although the podiatry and nursing teams were not appraised as part of a review by Epstein (2014), findings demonstrated multidisciplinary team (MDT) working maximised patient safety, increased the quality of outcomes and improved job satisfaction.

This article seeks to present the different perspectives and experiences with a view to identifying practice that is working well and areas where practices could be improved.

## The diabetes specialist podiatrist perspective

The podiatrist is traditionally based in primary care. Practitioners often work alone, alongside podiatry colleagues in multi-chair clinics, with community nurses or within general practices (Royal College of Podiatry, 2020b). The role of the podiatrist is well represented within the outpatient diabetic foot MDT; however, representation of

podiatry's role in the acute hospital setting appears to be limited (Boulton and Williams, 2020). There is a dearth of literature to support the role of the inpatient podiatrist, although the specialised skills that podiatry can utilise to support the MDT, such as specialist wound care and knowledge of offloading devices, can enhance patient care in the inpatient setting.

The inpatient diabetes specialist podiatrist role is still evolving within the acute hospital setting and launching a new service within an established Trust can be difficult. Boulton and Williams (2020) remarked that linking referral pathways with respected services such as tissue viability can be highly beneficial and has been advantageous in establishing the provision of diabetes specialist podiatry within the authors' Trust.

While there is sparse evidence to support the collaborative role of podiatry and TVN teams, anecdotal discussion with inpatient podiatrist colleagues across the Southwest Peninsula of the UK reveals that the podiatry/TVN collaboration is not only mutually beneficial for teams, but patients also benefit from this focused approach to care. The close working relationship that has been established in the authors' Trust makes certain our teams are on hand to support one another when necessary, securing mutual advantage. This approach also prevents double-handling of many patients, cutting down on the number of visits, which is vital for small teams working within a large acute Trust.

Chadwick (2009) stated that to begin integrating care, good communication must be developed. The relationship fostered between podiatry and tissue viability in the authors' Trust ensures that team interactions are equally valued and teamworking is enjoyable by both parties. This relationship was key for the inpatient podiatry team during the pandemic, particularly while negotiating the many changes that occurred across the Trust. The knowledge and support of an extended team was essential to ensure that seamless care continued to support colleagues and provide high-quality care for patients.

The shared care approach not only benefits the patient, but it also allows sharing of best practice, skills and knowledge between disciplines (Cordis Bright, 2018). Although podiatry and nursing approaches to care may differ, the team relationship

appears to complement both disciplines and thus is rewarding to team members and the patient.

Atwal and Caldwell (2006) showed that nurses perceive teamworking as an essential part of clinical practice; to accommodate the needs of the complex patient, collective understanding can be used to plan effective interventions and coordinate care.

Harrison-Blount et al (2019) noted that while podiatrists need to change their practice to support changes to healthcare needs, this can impact the clinician's professional identity, which could cause ambiguity during periods of change. However, this has not been observed by the authors and in fact, collaboration has led to increased skills and knowledge.

Stanley and Rawlinson (2021) found that an integrated care approach between nurses and podiatrists removed professional barriers which aided practice for both groups. Indeed, in the rapidly changing environment of healthcare, patients with multiple complex comorbidities, sharing care across professions is an essential component of providing improved health outcomes and efficient use of resources (Harrison-Blount et al, 2019).

Kerr (2019) stated that there is evidence that improvements can be made in the provision of care for people with diabetes to improve outcomes associated with the diabetic foot; patients admitted to hospital with DFU stayed in hospital longer than those admitted without ulceration, increasing the cost of their care. Therefore, a collaborative approach to caring for these patients may be beneficial to both the patient and the NHS by reducing length of stay.

The National Wound Care Strategy Programme (2020) advocates an MDT approach to lower limb wound care as being essential for favourable outcomes. This view is supported by international best practice guidelines, which recommend that an integrated care approach should include nurses with specialist training in its best practice guidance (Wounds International, 2013).

There is likely to be an impact on resources if effort is duplicated among teams with similar goals (Health Education England, 2021). To prevent this, coordinated care planning and joint acceptance of responsibilities can reduce or limit wasted clinical time (Cordis Bright, 2018). The regular

communication and teamworking applied in the authors' Trust has limited the number of duplicate reviews needing to be carried out, saving time and resources across the hospital and benefits both teams and patients.

### Examples in practice

#### Case 1

An 87-year-old female patient with type 2 diabetes and a history of peripheral vascular disease, known to both the diabetic foot MDT and the vascular team was admitted to hospital following an accident.

The inpatient podiatry team were not made aware of the patient's admission despite the patient having a chronic calcaneal pressure ulcer and a necrotic hallux, which was being reviewed weekly by the community podiatry team. The patient had undergone surgery to the limb affected by the pressure ulcer and the surgical wound was reviewed during the admission by the tissue viability team. Neither team had been advised of the calcaneal pressure ulcer until later in the admission.

The inpatient podiatry team were alerted to the patient's admission by the tissue viability team who requested a joint review where it was noted the severity of vascular disease had compromised the surgical wound and the slow healing of the pressure ulcer. The patient was in increasing pain during dressing changes. The joint review ensured that only one dressing change needed to take place, offloading devices were issued, aetiology of the failure to heal was assessed and a plan produced to encompass all the issues affecting this patient. On discharge, a collaborative care plan was produced to ensure that this patient's onward care would continue seamlessly.

#### Case 2

A 97-year-old female patient with type 2 diabetes and severe dementia was admitted with sepsis of an unknown cause and noted to have a necrotic pressure ulcer to the right posterior calcaneus. An incident was raised on admission for the pressure ulcer and the TVN team notified. The TVN team requested a joint review due to the patient's diabetes status. On review, the podiatry team found that the patient had vascular disease and the pressure ulcer was infected, which had been initially overlooked

as a cause of sepsis. An X-ray showed osteomyelitis affecting the calcaneus.

Recommendations on immediate and post-discharge care were recommended by TVN and podiatry team members, ensuring that all aspects of the patient's care were considered, and an adequate discharge plan was in place.

#### Case 3

A 79-year-old female patient with type 2 diabetes was admitted following a fall having sustained a fracture which required surgery. The patient was being treated in the community for chronic leg ulceration and was noted on admission to have a pressure ulcer to the leg affected by the fracture.

The TVN team were requested to assess the patient's ongoing treatment requirements and requested a joint review with podiatry due to the presence of the heel pressure ulcer and the patient's diabetes status. Underlying arterial disease was ruled out although there was an aspect of venous disease.

The podiatry team provided offloading aids for the pressure ulcer, but needed to provide no further input during the admission. However, once the patient was ready for discharge, the podiatry team advised the local diabetic foot team of the need for community follow-up because the patient was not known to the diabetic foot team prior to the admission.

### Discussion

In all three cases, the first point of referral for these patients was to the tissue viability team who then advised the inpatient diabetes specialist podiatry team of the need for review. This appears to be due in part to local process, whereby the TVN team are the first call for pressure ulceration, while in some cases, both podiatry and TVN teams will receive a referral for the same patient. However, those that only receive a TVN referral will also receive a podiatry review due to the close working relationship between the two teams which ensures that all patients receive the input required.

Ensuring that all people with diabetes and foot ulceration are provided with adequate follow-up by the diabetic foot MDT is one of the essential functions of the inpatient diabetes specialist podiatry team. Timely follow-up for patients being discharged from the acute setting into primary care,

particularly those with new ulceration, is essential to prevent delays in treatment and ultimately lower-limb amputation where care is inadequate (Paisey et al, 2018).

### **The tissue viability nurse perspective**

In most acute settings, tissue viability specialist nurses see a large variety of wound types – encompassing paediatrics through to elderly care, head wounds to foot ulcers and everything in between. This can result in a significant workload and the need for transferable knowledge.

TVNs liaise with healthcare professionals from a variety of backgrounds, including nurses, doctors, dietitians, physiotherapists and podiatrists. However, the relationship between TVNs and the diabetic specialist podiatrists at the authors' Trust has developed and strengthened over recent years. Good communication has been essential.

Historically, concerns have been identified by nurses about barriers to multidisciplinary working, including differing perceptions of teamwork and different levels of skill acquisitions (Atwal and Caldwell 2006). Although this study looked at ward-based MDT meetings, perceptions and expectations can influence the outcome of any interactions and understanding the role of other healthcare professionals is necessary to see how they complement that of the TVN.

In the authors' own acute setting, the diabetic specialist podiatrist initially shared an office with the tissue viability team, enabling the staff to see how the others work. Although that has now changed, the two teams meet to discuss shared patients or those whose care might be better led by the other team. The RCN (2006) stressed that effective teamworking requires excellent communication and should include time for discussion and handover of clinical care.

A number of patients are referred to both teams, sometimes with a DFU and wounds elsewhere or sometimes needing additional interventions for a DFU, such as compression therapy or negative pressure wound therapy. Effective communication and liaison about referrals can reduce duplication, workload and provide supervision for each of the two specialist teams. An example is conservative sharp debridement for foot wounds. The diabetic specialist podiatrist can offer education, training

and support that is more in depth for this skill when applied on wounds of this aetiology than that given on the general conservative sharp debridement courses for TVNs.

The RCN (2006) highlighted the importance of education and supervision to ensure appropriate skills and competencies and that joint training and the development of shared skills. Although this policy statement focused on nurses and doctors, it recognised that the team extends beyond these two groups and many of the principles would be applicable to multidisciplinary working between other healthcare professionals.

Concerns have been raised about duplication of work and time wasted when two specialists are involved in the care of a patient. Conversely, Epstein (2014) identified potential cost savings when healthcare professionals worked together rather than in silos.

In the authors' clinical experience, sharing care can ensure continuity of optimum safe care throughout the patient's hospital stay. Both specialist teams are relatively small, which means they can support one another when patient numbers increase or there are unexpected absences in the team. As highlighted earlier, this has been particularly useful during the pandemic.

The collaboration between the two specialisms could be additionally enhanced by formalising patient handover between the two teams, to further reduce the risk of duplication of work and improve communication to a greater extent.

### **Examples in practice**

A woman was admitted to the Emergency Department with signs of sepsis. She had leg ulcers to one of her lower legs and a wound to the heel on the other leg. She was referred to the tissue viability team as she usually wears compression wraps, but these had been removed, and there were concerns about cellulitis.

The TVN reviewed the patient and left a plan of care for the left lower leg and the right heel. The TVN was able to prompt a referral to the diabetic specialist podiatrist and update them so the patient could be seen once her acute illness was managed. The podiatrists were able to confirm the wound to the right heel was a DFU rather than a pressure ulcer and the patient was known to the

podiatry team. They continued to oversee the care of the heel ulcer while the TVNs managed the left leg ulcer. There was ongoing discussion between the two teams regarding the correct time to recommence compression therapy to the right lower leg and this was able to happen while the patient remained an inpatient.

The tissue viability team received a referral for a male patient with a necrotic left and right foot and a suspected deep tissue injury (pressure ulcer) to the heel. As the patient had diabetes, the team spoke to the diabetic podiatrists to check whether they were aware of the patient. They had in fact seen the patient and reviewed both feet the previous day.

The TVNs monitor and review hospital acquired pressure ulcers. Rather than duplicate work in this case, we were able to discuss the skin damage with the podiatrist who had seen the patient and establish that it was present on arrival to hospital, was on the right heel with the left heel being free of any damage and the ward had been given advice and a device to offload the area. This saved the patient from having another review and avoided duplication of work. We were also able to be consistent with our advice to the ward, reinforcing the input already offered by the podiatry team.

In addition to these two examples, we have many scenarios where patients are in compression bandaging and are being managed by the TVN but have DFUs. If the podiatrist needs to review these wounds, we liaise about when a dressing is due to be changed and attempt to coordinate our visit time, with either a joint visit or a visit by the podiatrist who removes the bandaging, closely followed by a visit from the TVN who can then replace it. While some podiatrists are trained to apply compression bandaging, this is not standard in the authors' Trust for a number of reasons, including case load, time availability, and the difficulty in maintaining competency in these additional skills.

### Conclusion

Multidisciplinary working is being encouraged across the NHS. Diabetic specialist podiatrists and TVNs have roles that often overlap, especially in an acute setting. There is little research to

demonstrate the effectiveness of this relationship or advise on frameworks to support the collaboration between these specialities.

This article has discussed the advantages of cross-specialism working and challenges those who suggest podiatrists and TVNs reviewing the same patients is simply a duplication of work. Good communication is essential for the success of multidisciplinary working, regardless of the specialism, and a more formal arrangement to share information about mutual patients may enhance the service provided to patients further, while supporting team members.

In the authors' Trust, the inpatient podiatry and tissue viability teams are relatively small, and they are able to offer support to one another, particularly when staff sickness or factors beyond the teams' control risk to affect their capability to manage the caseload efficiently. This was particularly valuable during the height of the COVID-19 pandemic.

A comprehensive examination of the working relationship between diabetic specialist podiatrist and TVN in the acute setting with a view to identifying factors that improve and those that hinder the process would be advantageous. A framework to guide best practice would also benefit clinicians and patients. ■

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