Rethinking tissue viability services:
learning from the coronavirus pandemic
The National Wound Care Strategy Programme (NWCSP) will soon be in its fourth year and it is enormously encouraging to see that wound care is becoming a topic of interest to those outside of the tissue viability world. Guest et al’s (2020) update to their original ‘burden of wounds’ study – Guest et al (2015) – estimates that the annual prevalence of wounds increased by 71% between 2012-2013 and 2017-2018. Although a lack of robust data means we cannot be sure of the exact number of people with wounds, clinical feedback supports the argument that the burden of wounds is not only very large, but also increasing. Most of this burden falls on patients and clinicians outside hospital. The work of the NWCSP is needed more than ever.

As highlighted in Nursing Times’ roundtable discussion (p3), although the coronavirus pandemic has increased pressures on the NHS, it has acted as a catalyst for thinking more innovatively about how care is delivered. Creative deployment of scarce specialists such as tissue viability nurses and podiatrists can lead to better care solutions for both clinical services and patients. This, along with the greater willingness to embrace supported self care, has also benefitted both clinical services and patients. Supported self care is the model for most chronic long-term conditions, such as diabetes and chronic obstructive pulmonary disease; the real surprise is that more self care for wound care has not happened before.

Huge opportunities for improving wound care lie in increased digitalisation, and better data capture and use. Digital, remote consultations and the increasing use of digital imaging for wound photography can transform how care is delivered for many – albeit not all – patients. The opportunity to provide online clinical and patient education that is accessible at a time and place of choosing, allows knowledge to be more easily shared.

The number-one priority must be, however, to improve wound care data. As Mark Carney, former governor of the Bank of England, noted in his 2020 Reith Lectures for the BBC: “...what get’s measured, gets managed”. The current state of wound care data is deplorable, so it is not surprising that wound care has been so low on the list of clinical priorities for so long. Quality improvement requires valid, reliable data so a baseline can be established and change can be measured. Investment in the emerging wound-management digital systems will support data improvement while minimising data-collection pressures on busy clinicians. Economic modelling by the NWCSP (2020) suggests the costs of implementing such systems as part of system improvement should easily be offset by the savings from better healing rates. Improving wound care makes clinical, economic and ethical sense.

References
National Wound Care Strategy Programme (2020) Preventing and Improving Care of Chronic Lower Limb Wounds: Implementation Case. NWCSP.
What are the effects of the coronavirus pandemic on tissue viability services?

The coronavirus pandemic has been a catalyst for change in how health services are delivered and used. Understanding what this means for wound care services, and ensuring beneficial changes are sustained, was the subject of a Nursing Times roundtable for nursing directors in December 2020. The speed at which the NHS has overcome pre-existing barriers to change and embraced new ways of working would have been unimaginable before but, as one chief nurse reported his tissue viability team as saying, “it [took] a pandemic to help us revolutionise our service”.

Roundtable participants were mostly chief nurses and directors of nursing who have an interest in wound care. Most were from integrated acute and community trusts in the north of England; one was at a community trust, one at a children’s trust and two had specialist burns units in their hospitals. Tissue viability services in most trusts provided: specialist advice and support, assessment and management of complex wounds; training and education; and equipment for chronic wound prevention and management across hospitals and the community. Two offered support and help to care homes. The community trust also provided specialist advice for primary care and integrated wound care clinics in the community, staffed by primary care and community nurses.

Although an increasing number of tissue viability teams are using nursing associates (NAs), the services represented here comprised, almost exclusively, a registered nurse (RN) workforce; only one director of nursing reported using NAs and healthcare assistants alongside RNs. There was a notable emphasis on lower-leg ulcers, a huge problem that is often overlooked as services focus on pressure ulcers: several services ran lower-leg chronic wound care clinics in hospital and community locations, and there were some good examples of integrated working with vascular teams.

Changes to services

The pandemic has seen resources diverted from non-Covid-19 areas of healthcare and, in the first wave, there were reports of many tissue viability services operating at reduced capacity, with a few trusts struggling to provide even basic wound care (Schofield, 2021). Staff shortages, sickness and the need to prevent the spread of the virus have required clinical staff to work in unfamiliar ways. Panelists spoke of the challenges this had presented to wound care services, but found much to be positive about in terms of how services had adapted and the potential long-term benefits. On one hand, they reported teams being “ravaged” by staff falling ill or having to socially isolate, staff fatigue and burnout; on the other, they described some of the shifts in practice – such as the increase in remote consultations and supported self care – as “an absolute game-changer” and “remarkable”.

Despite reports of many nurse specialists being redeployed in the first wave (Schofield, 2021) – particularly in areas with high rates of coronavirus infection, such as the South East, London and the West Midlands – only two of our panelists said their trusts had redeployed tissue viability nurses to other areas. One director of nursing, said: “We maintained the service because it was so important.” Stephanie Lawrence said that, although her community trust had redeployed some tissue viability nurses to neighbourhood teams, “I think we did the best we could in a difficult situation by still using their skills in the right place”. She said it had reduced the support offered to care homes and primary care, but the team worked remotely to triage all patients and advise on the most urgent cases, while still arranging visits for patients who really needed one.

“Panelists spoke of the challenges this [the pandemic] had presented to wound care services, but found much to be positive about”
Chris Morley said redeploying some specialist nurses into community nursing teams had “worked really positively” for his trust, as staff now saw the value of “having a tissue viability expert embedded in each locality team”. Podiatrists had taken on the diabetic foot ulcer caseload and, although this was unlikely to carry on as normal work resumed, it had led to closer working between podiatry and the community and lymphoedema teams that he hoped would continue. He added that there had been no redeployment from the ambulatory wound clinics, but nurses had switched to managing most patients remotely, with home visits for those needing face-to-face care.

Nurses having to shield had been given a new coordinator role, which included offering specialist advice remotely and teletriaging all patients. Chris Morley said this had enabled coordinated workload management and more-effective targeting of resources across the whole city – and was likely to continue at his trust once the pandemic was over.

The effects of Covid-19 had also increased tissue viability referrals, which panelists believed had increased the visibility of the role. This included protecting colleagues from skin damage related to the wearing of personal protective equipment (PPE). David Melia highlighted the “massive gear change in looking after patients in high-acute areas, and the massive increase in device-related issues and the number of patients being cared for who were prone. That really has had a massive impact, so that’s something we were prepared for, but I don’t think we managed as well as we could have done”. He added that there was also an increase in referrals in the community during the pandemic, but “some of that work really dropped off because people were either reluctant to have people in their homes, or care homes wouldn’t let people in [...]. There was a massive increase in the use of cameras and IT to provide consultation and guidance”.

Panelists saw the digital transformation of services as one of the biggest effects of the pandemic. Stephanie Lawrence said that, as a community trust, at her workplace they had been using technology for some time, but “that’s been enhanced further through Covid”. Teletriage had been widely adopted, allowing complex cases to be prioritised for face-to-face care, while other patients received advice and education, leading to a reformation in supported self care.

Digital consultations for treatment and review, as well as digital advice and support for staff, were widespread, with much staff education and training also moving online. There was also greater use of remote monitoring and management tools. “What it has done is brought on our technology in leaps and bounds, whereas we weren’t getting that buy-in before”, said Amy Mbuli. On the wards, “for a long time we’ve used digital imaging for wounds alongside the medical imaging teams, now we’ve made strides to handheld devices for imaging, which we’ve been pushing for some time”.

At the same time, there was recognition that NHS IT systems were not always advanced enough to support these new ways of working. “In Mid Yorkshire, it showed up how poor some of our equipment is, and it became a little bit ‘Blue Peterish’ at some points”, said David Melia. “But there’s a real emphasis and impetus now for us to make a more significant investment.”

What worked well
Chris Morley said telemedicine for patients with complex wounds at home had led to closer working between tissue viability nurses and other specialists, such as vascular teams. “The ability of this technology to enable better multidisciplinary team working can’t be underestimated. It’s been an absolute game-changer,” he said.

Another major benefit had been the move to shared or supported self care, described by one of his team as “a shift from it being ‘our wound’ to ‘their wound’”. He said having more patients empowered to self care and using teletriage, which sped up assessments, had reduced waiting times in his trust’s ambulatory wound care clinics and improved how services were delivered.

Panelists saw the rise in remote consultations as a way to improve the efficiency and effectiveness of health services, rather than as a cost saving. “I wouldn’t be looking at this as a way to save money and reduce staffing, for example; I would be looking at what can we do more of because we’ve created efficiency”, said Stephanie Lawrence. Victoria Hazeldine said providing remote consultations benefited patients too, as it removed the “complexity of attending appointments”.

She added that another positive was the expansion of online education and training for staff. With on-site learning, it was difficult to get staff released for a full day but having education online and breaking it down into bitesize learning so staff could even access it on their phones, was allowing her trust to reach a lot more staff. “This had been particularly useful in education for pressure ulcer prevention.”

David Melia observed that the pandemic had galvanised healthcare teams. “The biggest thing I would like us to accelerate is how our teams became a lot more agile and flexible in the way they worked [...] They were working to meet the needs of patients, rather than working in quite controlled Monday-to-Friday hours”, he said.

“My fear might be that if the world returns to something like a normal ... there will be a temptation for people to retreat to their silos, to go back to old ways of working” Chris Morley
Panelists had encountered some challenges as the ‘emergency’ nature of the response diminished. The shift to supported self care was “really remarkable”, said David Melia but, as things opened up, the feeling among some patients was, “Oh, it’s all over now, so the nurse can come back and look after my leg”. Stephanie Lawrence had also seen an expectation among some patients that they could go back to being passive recipients of care. One patient had commented: “We can go to the pub, but the nurse won’t come and see me” [...] We got some of that. Not much to be fair [...] I think, in the main, patients have adapted really well to this.”

Chris Morley said that, while communication across teams had improved, “I think my fear might be that if the world returns to something like a normal … that there will be a temptation for people to retreat to their silos, to go back to old ways of working. I hope not. I hope people have seen the benefits of it”. He added that improvements were still needed across the whole patient pathway, such as strengthening links with primary care, saying he thought primary care networks could help with this. Stephanie Lawrence said integrated clinics in her trust had improved communication with GPs, but there was “still a way to go to make sure we get that absolutely right, and we get that link really good between primary and community – and of course hospital care as well”.

**Lessons for the future**

Trusts were including the lessons from the pandemic in their recovery plans, with some looking at how this might feed into long-term plans for wound care services. As a first step Chris Morley was encouraging staff to think in four categories: “Think about your services: what you’ve stopped that you want to restart; what you’ve stopped you don’t want to restart; what you’ve started that you do want to continue; what you’ve started that you want to stop.”

Alison Lynch reported that her trust was taking the opportunity to develop its wound care strategy, and thinking how to link that into “not just the experience of patients in tissue viability services, but all other services during the pandemic”. Stephanie Lawrence suggested that Healthwatch was a good route for this, saying it was also about asking patients how things could have been improved.

Panelists acknowledged that there was a need for robust data around the patient and nurse experiences, along with the impact of service changes during the pandemic on key outcome measures, such as wound healing rates or pressure ulcer prevention. However, all agreed it would be hard to get quantifiable data on what worked, given the lack of data showing what works in wound care generally.

Digital solutions to capture that data need to be part of wound care strategies, said Alison Lynch “because, otherwise, we can’t really say what the outcomes were. You might be depending on narrative. That all feeds back to [the question] is there a sufficient evidence base in some of the wound care that we’re working with? How can we really say that… a, b or c was proven… unless we got the data right in the first place? And that should be part of the strategy”.

One nursing director said anecdotal evidence suggested there had been an increase in pressure ulcers during the pandemic. “So I think understanding that a bit more, and understanding how we’ve made the outcomes in patients worse during this time in particular, will be really important.” A number of panelists said their trust had seen an increase, but this might not all relate to the coronavirus pandemic. Again the problem was poor data. David Melia said inconsistent data on pressure ulcers, across and within trusts meant, even in ‘normal’ times, it was difficult to understand the reasons for any increase and how to get numbers down – let alone during a pandemic with so many other variables at play. All agreed a national approach to wound care data was needed.

Participants suggested one way forward was to gather information to back up what people knew worked, such as specialist advice and education from tissue viability teams, as well as changes seen as beneficial during the pandemic. Stephanie Lawrence said: “I think there’s something about the wound healing rates and understanding what difference having tissue viability input makes to that, because I think we all know that it does make a difference but I don’t think we collect that [data] probably robustly enough.” David Melia said this went back to deciding: “what do we measure, how do we measure it and how do we share it, as our rate of harms, or rate of compliance or rate of healing, or whatever it is”.

Once the emergency response to the pandemic had diminished, it would require more permanent and nuanced solutions. David Melia suggested trusts should identify “the really valuable things we need to move on with and learn from, and then try and do some more effective study of their impact”. Take the example of supported self care: “It does feel right; I think that would be a way forward, but I think it would be good if we could do that in a collaborative approach of a quality improvement methodology.”

Chris Morley said it should be remembered that supported self care did not work for everyone, and factors like patient motivation should be assessed – perhaps along with motivational tools – as part of an integrated approach with other specialisms, such as diabetes care. For example, nurses had found that some low-risk patients could be less on top of their care, and benefit from more regular follow up, than high-risk patients, who were more likely to ring for advice the instant their condition changed.

**Supporting staff**

Once the current crisis is over, panelists agreed that a crucial factor in future would be allowing staff time to take stock and consolidate any learning. David Melia said: “I think we also have to recognise that we’re potentially looking at a workforce that are going to be really fatigued, perhaps a little psychologically damaged, and we don’t know how long this is going to go on for.” He added: “The good that’s happened… we need to make that continue, rather than it deteriorating, because people are so exhausted.”

Inevitably, he said, precedence for help and support in the future will be given to certain parts of the workforce because of their roles during the pandemic. “It’s obviously incumbent on all of us to make sure that all of our colleagues, no matter what they’ve done, have that fair opportunity to be able to do that reflection, also some of that self care, and to be able to move on. Then at least they can see something positive professionally to come out of this.”

**References**

How should the pandemic inform tissue viability services in the future?

Changes in healthcare services, accelerated by the coronavirus pandemic, present new opportunities for long-term improvements in wound care. At the same time, the pandemic has also highlighted barriers to improvement, such as a lack of wound care data (pp9-5). As the immediate crisis subsides and trusts rethink their services, how should this inform trusts’ wound care strategies in the future?

The first wave of the pandemic saw many non-Covid-19 services suspended, and a widening of inequalities in wound care (Schofield, 2021). In an interview with Nursing Times, Una Adderley, director of the National Wound Care Strategy Programme (NWSCP), said there were reports that, in some trusts, wound care fell off the priority list altogether: “There were some absolute horror stories of people not only unable to get appointments with clinicians, but also not even able to access the bandages and dressings they needed.” However, she said this was accompanied by some “brilliant initiatives” elsewhere. These ranged from podiatrists in Salford training in compression therapy “because they could see the district nursing service was drowning” to the initiation of a one-stop leg-ulcer clinic at the Mid Yorkshire Hospitals NHS Trust, which had transformed patient outcomes and “released huge capacity very quickly in their service [by] simply reorganising where things are done”.

Ms Adderley noted that services adapting well had “experienced clinicians who can make themselves heard in their organisations”, adding that, because tissue viability is nurse led, there is not always enough sufficient input at board level. “In some areas”, she said, “tissue viability is seen as an add-on, with junior staff who do not receive investment or adequate support. Such staff will not have the knowledge or competence to provide the leadership needed. We are arguing that tissue viability specialist nurses responsible for leading tissue viability care ought to be educated to Masters [degree] level at least.”

“Previously, diagnosis and treatment took 12 weeks, with multiple referrals and delays. The average time was now 4.3 days”

Leanne Atkin

The NWSCP is developing a framework identifying competencies for each professional role involved in wound care, due to be published in April. It has also released a suite of free-to-access, online wound care education modules.

Leanne Atkin, vascular nurse consultant at the Mid Yorkshire Hospitals NHS Trust, said her trust’s one-stop leg-ulcer clinic would probably not have gone ahead in the midst of a pandemic had it not been for the vision of her community director of nursing. “We were already thinking about how to redesign the lower-limb wounds service to focus on new patients with ulceration because we knew we were failing these patients by allowing wounds to become chronic, complex and difficult,” she said. This had the support of acute and community directors of nursing. “Then Covid came along and, truthfully, I was the one saying ‘well, it’s not going to happen now’. My community director of nursing said, ‘no Leanne, it’s needed now more than ever’.”

Ms Atkin added that her director of nursing could see the big picture and was in tune with what patients wanted, which was to avoid hospitals, minimise contact with health professionals and to self care – and, because of the pressures on community nursing, “she really stressed we needed to get this right first time”.

Jointly managed by a vascular and a community nurse and one healthcare assistant (HCA), the clinic is open to all community referrals and saw 116 patients in the first three months; only four patients did not attend. The results were “amazing”, Ms Atkin said. Previously, diagnosis and treatment took 12 weeks, with multiple referrals and delays. The average time was now 4.3 days, with patients diagnosed, treated and, where possible, supported to self care in a single visit to their community clinic. Nine patients needed urgent escalation, having been triaged elsewhere, which was arranged for the next day. Of the remainder, 58% were able to self care and 37% experienced full healing at four weeks, contrasting with the national picture of 47% healing at 12 months.

“We’ve spun things around. Rather than all leg ulcers becoming chronic, we’re actively eliminating them”, Ms Atkin said. Patients self caring saved 49 nurse visits a week and HCAs performing routine dressing changes reduced nurse visits by a further 38 each week. Patient feedback has been “fantastic”, she said, with 100% of friends and family “definitely”, or “likely to recommend” the service.

At the Royal Wolverhampton NHS Trust care-home staff were equipped to manage simple wounds, reducing district nurse visits, ambulance call-outs and accident and emergency attendance. Tissue viability lead nurse, Lorraine Jones, said it was changing the care-home culture and improving wound healing.

Providing skin-tear boxes for 63 care homes was part of their new strategy but was accelerated due to the pandemic, and moisture-associated lesions boxes were added. “We built up packages of education and sent the PowerPoint [presentations] through, we got in all the supplies…we even put in compression liners to try and prevent skin tears [progressing to] leg ulcers,” she said. “Staff have found them really valuable and used them appropriately, and it’s become second nature for them to use them for the small wounds.”

The pandemic has also been a catalyst for increasing ward efficiency and using specialist skills better. Carole Young, lead tissue viability specialist nurse at Cambridge University Hospitals NHS Trust, said shielding had allowed her to review working practices without the usual distractions. Less red tape as a result of the pandemic also meant they “could take documents straight to executive level and get
them approved a lot quicker”. With many staff redeployed from elsewhere and working in unfamiliar conditions, measures taken included ensuring base stock levels of dressings on all wards, an inpatient leg-ulcer pathway and quick pressure ulcer prevention guides. “We focused on getting easy-to-follow, quick guides out onto the shop floor and on our intranet, rather than long-winded policies that no one had time to access or read.”

Being shortstaffed also finally gave Ms Young “the ammunition with the senior team to push forward with a formal referral process” to reduce inappropriate referrals. “We’re just now starting to look at [the first] six months of data to see how our referrals are balancing out.” This, together with remote triaging and two extra band 5 nurses for routine cases, created “huge” efficiencies and allowed nurse specialists to focus on patients with complex needs.

“When looking at tissue viability services going forward, there needs to be a focus, with data analysis, on wound healing rates”

Alison Schofield

In some trusts, the pandemic has also spurred investment in new technology (pp3-5) but Alison Schofield, tissue viability clinical nurse specialist at Northern Lincolnshire and Goole NHS Foundation Trust, said “new technology is used infrequently in wound care”. She stressed the need for “good systems, for wound measurement etc [and] for telemedicine to care homes and apps patients can use. There has been remote working via shared care in lots of areas, mine included, but we don’t have the technological infrastructure at present to measure it and make it work to its best capacity.”

She added: “When looking at tissue viability services going forward, there needs to be a focus, with data analysis, on wound healing rates, which we don’t do well.” Furthermore, data was needed on all wound types, not just pressure ulcers and trusts needed to look at “the patient journey of care” across the whole patient pathway, including impact on quality of life, “which we can measure and often don’t”. Ms Schofield said directors of nursing should ask what the pandemic made worse for patients already in their services, particularly in the first lockdown, then “analyse their team resources and skill mix to ensure workloads are acceptable” and tissue viability nurses’ specialist skills are used in the right place.

Ms Adderley also stressed that “data is absolutely essential” but “needs to tie in with the digitalisation programme, as staff have not got time to go around collecting data on paper and doing audits”. She said the NWCSVP was producing national datasets to help, and that a “much better use of trust resources” was to invest in digital wound management systems to integrate with clinical practice and collect data to inform clinical and business decisions. She said the technology already exists and the NWCSVP was developing resources to help trusts decide in which systems to invest. She outlined three strands of the NWCSVP.

Work on pressure ulcers, already under way, was about “making sense of the data already collected to feed that back to organisations in a meaningful way but, moving forward [they had] to also come up with a better way of doing this”. However, she stressed that “people are so focused on pressure ulcers, but actually improving lower-limb ulcer care will have a much bigger impact on the system. Certainly for community services that’s where the big benefits can really come”. Improving lower-limb ulcer care is, Ms Adderley said, “still about data”, but “also about looking at how you organise your service, and making sure people get seen faster because the problems with lower-limb care is that people aren’t getting the right care fast enough”.

Leg ulcers had been included in NHS England and NHS Improvement’s (2020) Commissioning for Quality and Innovation (CQUIN) framework for 2020/2021 and, although all 2020/21 CQUINs had been suspended due to the pandemic, Ms Adderley hoped to see this reinstated for 2021/22. The third area, surgical wounds, was about “looking at surgical wound breakdown across all service providers, not just surgical-site infection in hospital”.

Ms Adderley said: “Clinically, those are the things that will make a difference, but underpinning all those is sorting the data.”

References
Development of this document was funded by an unrestricted educational grant from Mölnlycke