Learning from COVID-19: developing a more efficient tissue viability service

JACQUI FLETCHER (CHAIR)
Independent Nurse Consultant

LEANNE ATKIN
Vascular Nurse Consultant, Mid Yorks NHS Trust; Lecturer Practitioner, University of Huddersfield

NINA MURPHY
NELFT NHS Foundation Trust

LESLEY NEWPORT
Tissue Viability Lead, Mersey Care NHS Foundation Trust

KAREN OUSEY
Professor and Director for the Institute of Skin Integrity and Infection Prevention, University of Huddersfield

HEIDI SANDOZ
Tissue Viability Services Lead, Hertfordshire Community NHS Trust

This meeting report was supported by Urgo Medical.

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus (World Health Organization [WHO], 2020). A pandemic has been declared by the World Health Organization, which is defined as 'an epidemic that is spread over several countries or continents and affects a large percent of the population' (WHO, 2020).

Like so many sectors at this time, the wound care community has been greatly affected by the COVID-19 pandemic. The situation has had an impact on service delivery and patient communication, and may permanently change the ways in which care is delivered. A group of specialist Tissue Viability Nurses met online via Zoom on 18th June 2020, to discuss the challenges of delivering care during a pandemic, how they have addressed these challenges, and how this may change delivery of care in the future.

HOW HAS YOUR SERVICE CHANGED DURING THE COVID-19 PANDEMIC?

The expert group reported varying experiences during the pandemic; crucially, these were not all negative. There are lessons to be learned in adapting to change, but also in terms of the improvements that can be continued and the ways in which COVID-19 has 'broken down barriers'.

Guidance around wound care and tissue viability has been vague, so clinicians have often had to use their own initiative and make changes as necessary, as and when the need has emerged. Clinicians have had to work to maintain contact with their patients and provide support, in changing circumstances and often with limited resources.

When the pandemic began, measures were taken very swiftly, in order to prepare for the anticipated 'tsunami' of COVID-19 patients.

Tissue Viability services have been physically reduced, both due to absence (in one organisation at the start of the pandemic, up to 55% of staff were off), and due to staff being redeployed to different departments (e.g critical care or within the district nursing teams). Clinics have been repurposed, for example as field hospitals; this can mean that staff are now covering two roles: supporting the new field hospital, as well as their own existing patients. As well as posing a practical challenge for clinicians, the sudden changes have had an emotional impact on staff, who may be 'mourning' their regular services and patients.

UTILISING TECHNOLOGY

While some in-person services and clinics were quickly suspended, referrals have continued and video consultation was quickly mobilised. This has provided an excellent way of still being able to maintain contact with and monitor patients, and has in general, been a positive experience. Clinicians and patients have been able to learn together when it comes to care being delivered via video. There have been some issues around platforms and connectivity that have been resolved on an ad hoc basis.

Providing a remote video service has opened up care and meant that issues can be dealt with much more quickly than they would have otherwise: patients have been able to obtain remote support, provide their own measurements and, if applicable, have compression garments delivered directly to their homes. In many cases, particularly regarding remote provision of measurements, this has been more successful than anticipated. Remote service provision has also helped in departments where staff have been shielding or self-isolating and would otherwise not have been able to work.

In patients where video appointments have been possible and appropriate, these have generally worked well – sometimes surprisingly so – and also provide patient benefits on a more practical level. For instance, the patient will no longer have to spend time travelling to, or trying to park at, a hospital, which can often be arduous and incurs costs. From a clinician and patient point of view, the convenience of video appointments means that the time to patients being seen is now reduced in some areas.

There is also potential capacity to expand how remote consultations are delivered. For instance, there may be scope to introduce three-way (or more) calls to allow multi-disciplinary team (MDT) working between departments. It may be that improved MDT communication and collaboration is facilitated by this new way of working.

There is sometimes a perception that remote service delivery 'just doesn't work' in wound care, but necessity has proved that this is not the case. Where previously red tape has hindered the implementation of this type of service, it has been possible to introduce new initiatives at pace during COVID, such as new equipment or self-care provision.

However, there have clearly been some disadvantages to the lack of in-person visits available: for instance, it was reported that cases of cellulitis have increased in the absence of routine visits, having not been recognised by the generalist practitioner.

HOME VISITS AND REMOTE CARE PROVISION

Some home visits have been able to continue. This has produced mixed results and continues to be a nuanced issue. For some patients, home visits have been very important, as this may be the only contact they have with other people.

During the pandemic, this has resulted in some patients becoming emotionally attached to their clinician, which is an element to bear in mind going forward, in terms of maintaining patient (and clinician) wellbeing. However, visiting homes continues to be a safeguarding issue that requires extra planning and vigilance for clinicians. Additionally, some patients who are concerned about COVID-19 would prefer clinicians not to come into their homes and certainly do not want to be admitted to hospital.

DIRECT EFFECTS OF COVID-19

The COVID-19 pandemic has had a direct impact on the types of wound being seen in practice. Numbers of pressure ulcers (PUs) and deep tissue injuries have increased, which is directly linked to COVID, due to factors such as patients being in the prone position or lack of availability of suitable beds.

Pressure damage due to devices has been observed, and this can be confused with damage due to side-effects of vasopressor medication, which can include tissue necrosis or oedema (VanValkinburgh et al, 2020). For clinicians as well as patients, there have been skin issues and injuries related to the use of personal protective equipment (PPE).

Reduction trajectory plans or KPIs have also been put on hold at the current time. The 'Stop the Pressure' initiative was paused due to the current reduction in available resources; however, as PU rates have been increasing, the importance and current relevance of this has been realised.

'COVID toes' is a term that has been in use and, anecdotally, has been directly observed in practice. This presents as red/purple lesions and/or swelling in the toes (like chilblains), which can be painful. COVID toes tend to be seen in 'less severe' cases of COVID-19; sometimes this is the only observable symptom, which poses a risk as the patient may have COVID-19 but be unaware of it. There is also a risk that 'COVID toes' are incorrectly diagnosed as critical limb ischaemia or missed altogether.

There are also reports of COVID-related skin issues (Galván Casa et al, 2020). Some cases of eczema-like rashes in the lower limb or ankle have been observed. It is clear that more research is needed, particularly as it is noted that COVID-19 should be considered in the long-term and with the possibility of a second wave of cases.

In terms of wound care, the possibility of skin-related COVID-19 symptoms is an area that should be considered of key importance, and increased awareness is needed around this issue. Reviews have more recently been published in this area, across geographical locations, and helped to contribute to education (Bouaziz et al, 2020; Galván Casa et al, 2020; Gottlieb and Long, 2020; Wollina et al, 2020).

WOUND CARE CHALLENGES

There is a new increased need for clinicians to decide what should be treated as 'priority', which can be difficult in practice. However, in some instances, non-urgent referrals are now receiving quicker access than usual, as systems have been streamlined, due to the ability to offer remote and virtual triage.

In particular, lower limb wounds have been efficiently managed under the current conditions and it has been noted that in some cases lower limb services are now 'better than ever'. However, management of complex cases has in some instances been more difficult, because services have been ceased or paused for anything other than urgent referrals or those already requiring and receiving weekly care/compression – e.g. in patients with misshapen legs, lymphoedema, or skin folds – which may have contributed to the increase in cellulitis cases.

Critical limb ischaemic patients have posed a challenge as these have been difficult to manage effectively in the current circumstances. There has also been a reported increase in acute embolic events at the current time; this resonates with what is known about COVID in general and the impact on the vascular system.

There was debate among the group around the importance of ankle-brachial pressure index (ABPI) testing and whether this is a barrier to patients receiving appropriate compression therapy at the current time. ABPI testing was, by necessity, suspended; in some areas, ABPI testing has since been resumed, as it was considered to be a key part of assessment, but this has not been reinstated across all areas. This has resulted in application of compression being delayed.

Although the majority of chronic wounds managed are lower limb wounds, in other wound types, it was reported that patients are currently less willing to seek care, so their wounds have become severe by the time they are seen by a clinician. For example, dehisced surgical wounds or wounds where abscesses have developed.

NON-SPECIALIST STAFF SUPPORT

There has been a need for specialist Tissue Viability nurses to provide increased support to community nurses, particularly as current redeployment needs have meant that less experienced nurses (such as school nurses or previously retired nurses) have been taking over community roles. This has involved providing support to colleagues and, in some cases, taking on additional patients. Non-specialists now managing patients with wounds have had to address a 'steep learning curve' and more experienced colleagues have had to find ways to share knowledge and provide support, often remotely.

While it has been possible to deliver services in this way and support community staff, this has illustrated that there is still a strong, clear need for specialists to be involved, particularly when there are more complex issues that need to be managed. It is evident that there is no substitute for specialist knowledge and clinical experience. This is something that may need to be fought for in the future.

SUPPORTED CARE

It was noted by the expert group that the commonly used term 'self-care' can be misleading, and 'supported care' or 'shared care' may be more appropriate. It is vital that patients' involvement in their own care is not seen as an 'excuse' to reduce caseloads or need to do less. Patients need to be prepared to participate in and be supported in their care delivery. In many cases, now more than ever, vulnerable patients have nowhere to turn and require support. We must fight for our patients when we need to, and ensure that nobody gets lost or feels abandoned by a drive to promote 'self-care'. On a practical level, it is vital that all patients are given the appropriate information they need, and know who to contact and how to do so if they need to. There must also be a logic check of the patient's willingness and ability to participate in supported care before commencing this.

This is one of the many reasons why close MDT working is required, now more than ever, wherever possible. A 'siloed' way of working increases the risk of patients being lost to follow-up. It is vital to get the balance right: ensuring the best care for patients, while maintaining safeguarding for both patients and staff. During the pandemic, there has been some blurring of roles, which has resulted in positive outcomes – e.g. podiatrists taking on compression – and a collaborative approach to care is vital.

In some cases, patients have been more engaged and keener to be involved in their own care than they have previously. Some clinicians have been pushing for more effective self-care and patient engagement methods prior to the pandemic, and have now found that these are working in practice.

In some patient groups, across geographical areas, reaching patients who are traditionally more challenging has improved. For instance,

some homeless clinics have continued and seen more engagement than usual, as patients have been housed in hostels due to COVID-19 and are therefore easier to gain regular access to.

Appropriate patient identification and assessment of mental capacity is necessary, and it is worth remembering that not all patients are willing or able to self-care. There is no 'one size fits all' approach and remote care is not always possible, so alternatives will need to be found that are appropriate to the individual. Issues with capacity, literacy and understanding need to be taken into account, as well as practical issues (e.g. not all patients have access to the Internet or a phone).

Ableism is also an issue involved in self-care: the information circulated (e.g. patient information, leaflets) do not generally take potential disability into account. Similarly, for some challenging patient groups, differing needs and capacities need to be considered. For instance, in the case of wound care for homeless people, care varies significantly based on geographic area and often also needs to encompass other issues, rather than directly focusing on wounds. For some people, a holistic service that encompasses their all-round wellbeing would be useful.

Again, achieving balance is key. Wider support may be needed and teams need to work together to reduce the number of contacts a patient may have, even if this means taking on roles previously undertaken by another clinical group/discipline.. Many patients are also reliant on family support that may not be possible at the current time and this must be addressed. There may also be patients who currently have support from furloughed family members, but will need to consider what happens when they return to work.

It should be noted that the COVID-19 pandemic has also provided wellbeing challenges for clinicians, and support may be required. This has been a challenging time for clinicians and, while online communication has helped, it can still be isolating. However, conversely, in some instances, delivering wound care services during the pandemic has necessitated working more closely with colleagues and other departments, which has seen some positive effects.

ONLINE EDUCATION

Online educational resources have had to be set up quickly for clinicians (particularly the staff redeployed into community nursing teams) who are not used to wound care. While it has been ultimately positive to share knowledge, this has been a steep learning curve for all involved. Addressing this now should help all staff to go forward with an increased knowledge base.

While there has been an increased need for education, this is often not an area that is seen as a priority, and so provision may be reduced. In order to ensure education is availalable for all, when required, there is a need to assess how this can be delivered effectively online. It is vital that essential skills are not lost, and care is not compromised through education being at risk.

There is a need to identify educational needs, and to reiterate that a solid knowledge base and experience is required: there is still a need for specialist clinicians. Assistants and unregistered staff should not be taking on additional responsibility going forward.

Although some aspects of the move to shared or supported care have been positive, it is vital to avoid the perception that this makes wound care 'easy' and that specialist clinicians are no longer needed. We need to speak up for this or services will suffer.

There is a need to support more junior colleagues and ensure that the current opportunities are taken, and wound care moves forward in a positive direction. Education should be fundamental: challenging beliefs and changing mindsets where necessary.

THE FUTURE

At the time of meeting, the expert group were already managing the challenge of trying to maintain a 'normal' service while clinics were not yet reopening. Again, it was noted that deciding what should be treated as 'priority' poses a challenge, and that waiting lists have been building up so in some cases are now 'horrendous'.

There is optimism that barriers have now been broken down and that positive changes can be made permanent; however, on the other hand, we may need to fight for basic services that are at risk of being lost.

The current situation has demonstrated that a new way of working is required; hospitals, clinics and other services will not be able to reopen and

go back to working in the same way. Considering whether and how to 'adopt, adapt, or abandon' elements of care will be a useful approach going forward.

While there are some positive aspects to this, the current situation is still focused on 'fire-fighting' and so there is not currently the focus on prevention that there used to be; it is important that this work is not forgotten.

MAKING THE CASE

For the time being, it has become clear that COVID-19 has broken down at least some of the practical barriers to care that have previously caused challenges. In particular, budgets have been 'neutralised' and some of the usual processes such as tendering and governance checks do not apply. Equipment is now more freely available without the need for the full process of 'making the case'.

However, going forward, there may be a need to 'fight' for services and the ways in which these are reinstated. There may be a reassessment of what is considered 'important' and a requirement to demonstrate the value of services such as leg ulcer clinics. Impacts such as the increase in cellulitis already demonstrate this. There may be a need to collect data in order to make the case for why services and roles are needed.

There is concern that, as clinicians have currently been able to 'manage' on reduced resources and with less experienced, non-specialist nurses being deployed, this will now be considered to be enough, rather than necessitating a return to more specialist services. Tissue viability is often not seen as a priority area – despite the fact that 'everyone has skin' and wound prevalence is high and growing – and may be at risk. However, it should be noted that very little data are available about the impact of these changes, and risk and harm to patients does need to be considered.

It was noted that there is a lot of funding available for COVID-19-related care and research, but the relevance to wound care is limited. Making 'post-COVID plans' from a wound care perspective is vital to ensure that services are optimised.

This time represents an opportunity for change, but this requires strong leadership and the clinical voice to be heard.

KEY POINTS

While care has often had to be delivered with a more ad hoc approach, and with reduced resources, this has not been a wholly negative experience. Many positive aspects and useful areas for learning and for adapting future service delivery have emerged.

It is vital that this time does not represent a missed opportunity, both in terms of how care is being delivered now, and in how this proceeds in the future. Variance between teams and geographical areas is evident, so education and communication are important to make sure that ideas are shared and standards kept up as much as possible.

Patient care should be at the heart of all service delivery. This is a genuine opportunity to truly redesign services from a patient perspective, with the 'adopt, adapt, abandon' approach. Common sense, the clinical voice and doing what's best for patients are now elements of care that are at the forefront, and should remain so. WUK

REFERENCES

Bouaziz JD, Duong TA, Jachiet M (2020) Vascular skin symptoms in COVID-19: a French observational study. *Journal of the European Academy of Dermatology and Venereology* doi.org/10.1111/jdv.16544

Galván Casa C, Català A, Hernández Carretero G (2020) Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. *British Journal of Dermatology* 183(1): 71-7

Gottlieb M, Long B (2020) Dermatologic manifestations and complications of COVID-19. *American Journal of Emergency Medicine* 38(9)

VanValkinburgh D, Kerndt CC, Hashmi MF (2020) Inotropes and vasopressors. Available online at: https://www.ncbi.nlm.nih.gov/books/NBK482411/ (accessed 5.08.2020)

Wollina U, Karadag AS, Rowland-Payne C et al (2020) Cutaneous signs in COVID-19 patients: A review. *Dermatol Ther* e13549

World Health Organization (2020) Coronavirus overview. Available online at: https://www.who.int/health-topics/coronavirus#tab=tab_1 (accessed 5.08.2020)