No return to the old normal?

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In the midst of a global pandemic it is challenging to look beyond the harrowing news of growing infections and deaths to consider the potential for looking anew at how healthcare is organised and delivered post-pandemic. However, reimagining of health services may be essential if we are to fully learn all the lessons taught by the global responses to COVID-19. Think back to March and April 2020 in the UK when sweeping changes were introduced at great pace to the NHS; the rapid construction of the Nightingale hospitals, the expanded use of personal protective equipment (PPE), the absence of hospital visitors and volunteers and the rise of implementation of digital technologies to remain in contact with colleagues and patients. All of these may have been unthinkable before the pandemic, but all were introduced almost overnight. We have seen that the NHS can change rapidly so how do we best harness this capacity for change to meet healthcare demands in a post-pandemic world?

When we consider wound management what needs to be done differently in the future and how do we achieve any changes to our services that are required? Perhaps we may have a sense that little needs to change; the development of NHS England's wound care strategy was underway before the pandemic. Perhaps all that needs to happen is for this strategy to be completed and fully implemented in England? The pandemic has highlighted fractures between the health services of the four devolved partners in the UK; perhaps there is a risk of extending these differences without a UK wide approach to wound management services?

From personal experience UK wound management is often held in high regard by health professionals from other countries. Do we really deserve such respect? Over the last years the expanding role of linked databanks has allowed detailed examination of community wound management services; the series of publications based upon The Health Improvement Network (THIN) databank (for example Guest et al, 2016; 2017; 2018) have highlighted gaps in the delivery of wound care in the UK ranging from limited assessment of the causes of leg ulcers through to lack of involvement of podiatrists in the management of 95% of diabetic foot ulcers (DFU). It appears that we have some way to travel before we can really consider we have world-leading wound care services.

So, what should we change in our wound services and what would the future look like? How do we maintain the flexibility of working practices that saw staff support the thankfully empty surge hospitals? Should we look to further increasing our use of digital platforms to communicate with patients? There are multiple ways in which change could be delivered and this debate will undoubtedly consider several areas for service improvement. One step does need to be in place before we can embark on what may be a new adventure, transforming the delivery of wound management services. Before we change, we must know where we are today; rigorous collection of data now will allow future steps to be appropriately judged as successes or failures. We need to collect data at several levels:

- What is the experience of staff and service users of the current service?
- How effective are our services?
- What is the environmental impact of changing service delivery (less travel perhaps?)
- Do changes impact service user or staff safety?
- Are our services equitable to all users?
- Are our services efficient? Are we improving outcomes with less work or at a reduced cost?

We need to know the impact of our services today before looking to seek to make improvements. In part we need to expand use of established databanks such as THIN or SAIL (Secure Anonymised Information Linkage databank which now covers over 70% of the GP practices in Wales) to obtain the wider picture of the state of wound care services across the UK while investing in independent reviews of local wound care services to highlight organisational challenges. Only through ensuring we have rigorous data at each stage will the NHS truly be able to manage change post-pandemic and so deliver world-class wound management to the UK population.
Michael Clark

1. What are the key issues we need to address to improve the delivery of wound management services?

DG: In my opinion the fundamental issue we need to address is that of reliable outcomes data. At present there are vast amounts of health professionals time and financial resource is dedicated to treating wounds but very limited insight into

what outcomes are achieved from this investment. Without reliable outcomes data the field cannot be certain that the activities we undertake actually make a positive difference to peoples lives or measure new ways of working against a baseline of outcomes. A basic national data set for each of the health systems in the UK would allow a greater understanding of outcomes and identify areas of success and failure. The idea that we would, in 2020, treat cancer patients and not monitor the outcomes and identify successful interventions nationally and internationally would seem absurd yet it is what we do in the wound healing field.

PC: I will caveat my answers in that I will as a podiatrist concentrate on 'lower limb'wound care but you will notice not just 'foot' but 'lower limb'. This brings me to my first point in this question. The pandemic has taught us that we can work outside of traditional silos. This is a key issue and conventional professional boundaries needs to reduce. Podiatrists for example have skills in assessment, diagnosis and management. They also study at undergraduate level the anatomy and physiology of the whole lower limb to understand the mechanics of gait and can train as independent prescribers. Yet before the pandemic podiatrists were treating foot wounds and nurses were treating leg wounds on the same patient. During the pandemic podiatrists used their transferable skills with some additional training to deliver whole lower limb care in some areas. This model has to be maintained to develop lower limb 'clinicians' who are appropriately trained and not bound by silos.

JS: A national agenda, Patient pathways, public awareness, accountability and audit are all essential.

All clinicians, senior leaders and managers will need to be aware of the NWCSP which will need to have auditable patient pathways. All patients will need to be on an auditable pathway for which both they (whenever possible) and the clinicians are accountable and responsible. There is a real need for patient information from a well-respected source, available in a trusted place

Accountability for care provided to all patients with a wound is essential. The provision of wound care is not a place for the well-intended but misguided or mis-informed. Outcomes and audit is essential and should be an integral part of the patient record rather than an additional task / data report.

Real accountability becomes evident when outcome measures are evidence based and rigorous.

KD: For a change as great as this we need committed leadership with vision and a plan that will garner adequate senior NHS support to make it a reality. This is emerging from the work of the NWCSP but it will take time to implement. There is acceptance at all levels in the NHS that wound care has suffered because it does not have an identifiable owner in the NHS in the way that specialised services do. The lack of information we have about the current size of clinical demand and no monitoring or metrics against which we can measure and review existing services means that we are truly starting from a low baseline. This does mean that we can design a system from the ground up with relatively little interference from legacy arrangements and can insist that any data we require to measure the acceptability and excellence of provision is collected as part of the routine of delivering care. Turning this into reliable information across the range of provision in community, primary care and secondary care, including specialised services, across the entire NHS is a major challenge but is an exciting prospect.

SJ: One of the issues is the lack of continuity for our individual patients. In the NHS, every time the dressing is changed it will be done by someone new. In my private wound clinic, I do all of the dressing changes myself. I can tell whether the wound is healing, is stalled or has a problem, as I have the luxury of being able to see how things progress. I know that that will never be possible in the NHS, but more routine use of technology such as digital photography would allow each subsequent clinician to have a really good idea of what the trajectory of the individual wound is. Often clinicians are afraid to use their own mobile phones to take photographs of wounds, as we are terrified of being accused of breaching confidentiality regulations. It remains rare for staff to be issued with devices specifically designed to photograph and assess the size of wounds.

2. What lessons can we learn from the NHS's response to the pandemic that could help better our wound services?

DG: I think it maybe too early to judge this in any real depth as at the time of writing we are still in the pandemic and have not seen any meaningful inquiries into what worked and what did not work. The use of telehealth is something that has been highlighted as having supported staff and patients but it is vital to recognise that telehealth in wound healing requires a disciplined and structured approach to ensure effective and safe delivery of care and is not simply the transfer of static images from phone to phone. It would be good to see this area of care delivery explored and expanded. Personally I am encouraged that the work of colleagues in social care and care/ nursing homes is being recognised for its value and importance.

PC: As different clinical groups were thrown together there has been significant improvement in clinicians recognising each other's skills which has led to a much more collaborative approach to wound services. The use of virtual MDTs in many areas delivering care away from the acute setting to reduce foot-fall has also been something that should be maintained so

that the new front door for wound care is a supported primary care network which has easy access to specialists. The engagement of both patients and their relatives in their own care is also something that needs to be maintained.

JS: The value and interpretation of evidence, strategy, structure and working at scale and pace and communicating a very clear message could help improve the delivery of wound care.

The interpretation of evidence and the implications for care are significant and there is a need for the process to be explicit. The different decisions about the response to the pandemic in England, Scotland, Ireland and Wales demonstrate the need for one clear strategy.

The pandemic has exemplified the real need for an integrated health and social care with a consistent approach by the government. Wound care needs to be integrated and consistent wherever the patient is being cared for.

The reluctant NHS moved into the modern era of digital technology. The crucial thing is for the NHS and wound care to really benefit from this technology in the future with well-structured support by well informed and knowledgeable clinicians. Greater access to expertise is really needed and is more achievable with digital technology.

Working as a multiprofessional team to achieve the best outcomes for the patient is important to achieve effective outcomes in wound care.

The importance of well informed and appropriately delivered self-care can be effective but requires careful monitoring.

Scale and pace are important factors in delivering a strategy, the NWCSP needs to be ambitious to achieve change so that the delivery and measurement of appropriate evidenced-based wound care ends the current myopic, inconsistent care delivery.

KD: There are many lessons to be learned from the pandemic response many of which will not emerge for months or even years. The fact the NHS were warned of the likely impact of a pandemic in a report published in 2016 that it failed to respond to it tells us a great deal. There was no preparation, just a well-intentioned but frequently confusing and contradictory response. The lesson is to listen to the experts and prepare.

Early on during the pandemic, community and wound care services were expected to cope with the accelerated discharge of huge numbers of secondary care patients with little support or additional resources. The response of the clinical staff, as elsewhere, was to adapt to the pressures and modify clinical delivery as best they could with the tools available. What we can learn from this is the need to model the demand and capacity during normal and surge activity in the NHS and to understand the consequences in all parts of the services of changes to one part.

What we also learn is that some of the barriers to innovation we had before, principally in the areas of information governance and risk assessment, were unnecessary and simply obstructive and could safely be swept aside and not allowed to return. However, the often ad hoc arrangements put into place to cope with the pressures of the pandemic may have improved matters but are not necessarily fit for the long term and should be critically assessed as to their effectiveness and use.

The current pandemic is not over and the risk of further surges should not be underestimated. This potentially does not give us sufficient time to undertake a detailed review of the lessons learnt so far and enact preparatory change. Hopefully it will give us an opportunity to record where the ad hoc introduction of innovation has helped through such processes as the #NHSChangeChallenge. It is unfortunate that the limited publicity about this process and the apparent focus on returning the NHS to normal activity levels will diminish its helpfulness regarding wound care.

SJ: During the past few months we have all learned to videoconference properly. Before COVID-19 we used to say it was too hard and we gave up too easily. Now we all know it works well (if we are sent the correct link!). We all now know that telemedicine can really work, if organised properly. I was able to conduct clinics from the comfort of my own sofa (with endless cups of my own tea and coffee, not the NHS stuff!). We also now know that when it wants to, the NHS can make rapid changes. For too long we have put up with fragmented IT departments telling us that is 'too hard' to integrate wound photographs and data. This attitude is currently holding us all back. We need to make the NHS want to make this change. Our 'National' health service must surely be able to make everybody use a common digital system to record and store the data. Data which becomes swiftly and easily availabe to all clinicians, wherever they are located.

3. How should we best install a culture of continuous service development in wound management?

DG: Having a sensible and reasonable approach to monitoring outcomes associated with wound healing services is an essential step towards allowing areas for improvement to be identified and to be able to recognise where outcomes are positive. Continuous service development should really mean continuous service improvement which is a journey and we can only undertake a journey if we know where we are starting. At this moment we do not know where we are in terms of wound healing rates for example in venous leg ulceration; do 30% 60% or 90% heal in 100 days? We can only guess and in reality, there are likely to be centres who have outcomes that are wildly different, and they don't know, we don't know and their patients don't know how the compare with their peers. A culture of improvement can only be built on understanding what the reality is

and we can learn so much from other fields such as surgery who have tackled the issue of outcomes successfully.

PC: I could talk about a bottom up and top down approach to culture change but in reality we need clinical data on interventions and patient outcomes. The National Diabetic Foot Audit (NDFA) (NHS Digital 2020 https://digital.nhs.uk/data-and-information/clinical-audits-and-registries/national-diabetes-foot-care-audit; accessed 5 September 20) is a good example of how if we start to collect data we can start to see where things are not optimal they state the NDFA 'enables all diabetes footcare services to measure their performance against NICE clinical guidelines and peer units, and to monitor adverse outcomes for people with diabetes who develop diabetic foot disease'. Units are now using the data to look at their performance and imbedding quality improvement processes across their health economy. Unfortunately, this is just in one are of wound care and similar systems need to be developed to help inform service and clinical development.

JS: Have a clear goal, communicate this goal clearly, have a framework operational model and care pathways, ensure education and training is on-going, make the culture everyone's business, be appropriate in the time it takes, move at scale and pace but don't make all the changes at once, measure outcomes as part of care delivery not as an additional element, allow people to take a pride in their work and achievements, make high quality wound care a habit and maintain the culture.

Public awareness really makes a difference. The increased awareness of general health by the population and the increased awareness of infection prevention and control, particularly hand washing and personal hygiene and social distancing demonstrates how quickly a culture can change.

KD: This requires both short- and long-term change. In the short term this will require the need to explain to clinical teams why change is necessary and to support and educate those involved in that change to understand and adopt it. To facilitate this change I believe there is a requirement for senior staff in the NHS to be exposed to aspects of informatics, which in the future I believe should require completion of some form of qualification, as my experience over three decades has taught me, their grasp of informatics is lamentable. In the long term I believe fundamental changes in the way that we prepare all clinicians for the demands of modern healthcare are necessary, with at least some emphasis on understanding the value of routine embedded monitoring and service evaluation to avoid unhelpful practices becoming embedded in clinical care. An understanding of the value of data and information could also introduce students to what technology can do now and what it might be able to do in the future. The greatest innovations and exciting changes I have witnessed have been based on interactions between clinicians who understand enough about the work of data analysts and technologists to combine their knowledge and skills into improving clinical delivery. With an area as all-encompassing as wound care the changes necessary can only happen with iterative improvements driven by an agreed set of metrics which can guide appropriate choices between service delivery options for a given population and geography.

SJ: To make improvements in any system, you need leaders who can bring together the various stakeholders, agree aims and then plan changes. Wound care does not come under any one umbrella, but instead is spread across a whole spectrum of healthcare settings and budgets. Instituting any type of culture, let alone a culture of continuous service development is therefore going to be very difficult, if not impossible, as there is currently no leadership structure in place. I am very much hoping that the NWCSP will fill this void to enable care that is organised and research-informed, in order to achieve improved healing rates, better experience of care, greater cost-effectiveness and prevent incidence and recurrence. Doctors need to be a key part of this programme or it will fail.

4. How could patients, their family and friends become better engaged with their wound care?

DG: It is clear that the best published outcomes are associated with specialist clinics undertaking and delivering care but it is also clear that not every patient needs this level of care for the duration of their healing. Guest et al, (2015) identified woeful healing rates associated with non-specialist qualified nursing staff. It is believed that these outcomes will be improved by patients and their families delivering their care? During the pandemic our service conducted a risk assessment as to which patients were appropriate for self-care, domiciliary visit or attend clinic and usual clinical outcomes have been maintained but only 5% of our case load ended up with supported self-care. There seems to be a rush to promote self-care in the absence of robust data to identify when this is and is not safe to do so. Other fields such as lymphoedema have successfully involved patients and their families in care and we would do well to learn from other fields and other cultures who do this successfully rather than rushing into this as it will be the patient and their families who pay the price if things go wrong.

PC: During the pandemic where services where shut down or significantly reduced and when people had a fear of attending, patient self-care or patient 'activation' became much more evident. NHS England (2020https://www.england.nhs.uk/personalisedcare/supported-self-management/patient-activation; accessed 5 September 2020) has described patient

activation as putting 'People at the centre of a more sustainable health system with services shaped around their needs and preferences. Patient activation' describes the knowledge, skills and confidence a person has in managing their own health and care.' During the pandemic the use of virtual consultations, the rapid development of teaching aids for patients and their relatives supported that process. It appears to be very successful and needs to be maintained. The culture of clinician control of the healthcare has been reset rapidly due to the crisis and we should not be reverting back.

JS: Greater public awareness is essential as is access to high-quality information. Patients and the public need to be much more aware of the care they can expect when they have a particular type of wound and where they are in a care pathway. There is a real need for a go-to website where they know the information is evidence based, clear and eloquent. I think the NWCSP can and must contribute to this. For the strategy to be really effective, public and patient awareness needs to be a significant force to ensure change occurs. Patients receiving appropriate wound care should no longer be indiscriminate, chaotic and variable but needs to be structured, evidence based and outcome measured.

KD: As shown during the pandemic, all sections of society can embrace change and technology quickly if there is sufficient impetus. Many patients have welcomed the change as previous care delivery arrangements have only rarely been designed with the patient's interests as the core requirement. Providing systems that are user-friendly and simple to access, usually with the use of technologies that are new to the NHS (but not elsewhere), have been promptly supported by patients. If these can be refined to provide the patient's own information along with their wound care metrics it would allow greater user involvement with their own care and provide them with a simple way of seeing that they are getting the best of care based on current best practice. It should also provide a way of flagging when they can see care is not in line with best practice and allow them to pursue it.

SJ: Patients have been forced to take and send photographs of their own wounds during the recent pandemic due to the lack of F2F clinics. We should encourage and nurture this new development. Apps are now available which facilitate interaction of the patient with the photograph of their wound — this can only help them engage and 'own' their wound problems.

Nutrition is also an area where family and friends can make a huge difference. Good nutrition is important for the healing of wounds. Too many people eat a diet predominantly made up of fast food, high in sugars. Many old people survive on a very poor diet, often consisting of nothing other than frozen ready meals. No wonder their wounds don't heal! Family and friends could be encouraged to bring the patient healthy meals, full of fresh fruits and vegetables.

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