

# Is COVID-19 rousing a firebird for foot care in diabetes?

**Alex Berry**  
National Diabetes Audit  
Engagement Lead,  
Diabetes UK

**William Jeffcoate**  
Clinical Lead, National  
Diabetes Foot Care Audit

**Frances Game**  
Consultant Diabetologist,  
University Hospitals of  
Derby and Burton NHS  
Foundation Trust

**Bob Young**  
Clinical Lead,  
National Diabetes Audit

**Wing May Kong**  
Consultant Physician,  
London North West  
Healthcare NHS Trust

**Alex Harrington**  
Head of Podiatry,  
Great Western Hospitals  
NHS Foundation Trust,  
Swindon

**Scott Cawley**  
National Diabetic Foot  
Co-ordinator for Wales,  
Cardiff and Vale UHB

**T**he COVID-19 pandemic has produced extreme challenges for the delivery of safe and effective diabetic foot care. There has been a massive reduction of non-urgent and routine activity and, very likely, delays in early expert assessment. The capacity of many foot protection teams and multidisciplinary foot teams (MDFTs) has been significantly reduced and running these services has presented logistical problems due to the need for social distancing and infection control measures. This may result in the delay of diagnosis or early detection of more severe foot problems that can be unearthed during routine screening and routine appointment. Some services have been affected by redeployment, sickness or shielding of staff and the suspension of elective surgery.

In addition, patient fears, patient shielding and logistical issues, such as clinic moves and curtailed transport, have also created challenges. Guidance from NHS England in March 2020 included: “All secondary care MDFTs to review the service arrangement and ensure essential service is maintained as essential activity. Providers should consider access being provided as a network across an Sustainability and Transformation Partnership (STP) area, if not, all providers can maintain their individual service but collaborative working across organisational boundaries is important.” In Wales, the Welsh Government highlighted that part of essential services for diabetes care was “Emergency podiatry services and limb at risk monitoring”.

The way services have responded to these challenges has varied. The NDFA team, led by Diabetes UK, interviewed clinicians to find out about their experiences of delivering foot care during the initial impact of COVID-19 on foot care services. Semi-structured interviews were carried out with 12 podiatrists from across England and Wales.

## Primary findings

### Changes to services: removal of barriers Risk stratification

The services of those interviewed all followed their respective national guidance issued at the start of lockdown and stratified their existing patients and new referrals. Only those with active foot ulcers and those at high risk were seen by the MDFTs and/or foot protection teams. Some services set up special phone lines for community podiatrists and primary care colleagues to get advice and support on management of people in the community.

Most of those interviewed expressed their belief that, in future, MDFTs, including foot protection teams, should continue to see active ulcers and those at high risk only, whether in secondary care or the community. Routine care and management of those at medium or low risk should be maintained in the community or primary care, with easier referral pathways and rapid access to specialist assessment and advice where needed. For many of those interviewed, the pandemic was seen as a catalyst, suddenly enabling changes that they had been planning for some time. There was a sense that the usual barriers and red tape that so often hinder innovation had been removed. The firebird of the title, along with the phoenix, is a mythological character that can triumph over evil.

## Technology

Telehealth or remote consultations enable clinicians to provide support and advice to patients with foot ulcers and are potentially a cost-effective way of providing care that is acceptable to both clinicians and patients (Exposito et al, 2020). The use of technology that enables remote consultations varied across the services that participated in these interviews and there were both positive and negative

experiences. Again, the removal of red tape has enabled change to happen rapidly and at scale.

Some services have started using telephone or video consultations and sharing of photos of the foot wound to triage all referrals and decide the appropriate follow-up. Where the patient did not need continuous MDFT treatment, some services used remote consultations for every other appointment. Other services felt that trying to bring in remote consultations during the pandemic was not appropriate as anxiety was already high among both staff and patients, and trying to use new technology could have worsened this. There was concern that many of the patients would either not have access to the technology needed to share photos of their feet or participate in video consultations or they would be unable to effectively use it. Where services had managed to get people using remote technology, it was felt that this was empowering for patients.

All those interviewed felt that using video conferencing technology had been helpful in discussing patient care with other clinicians and had enabled more effective and focused MDFT discussions. The use of apps that allow for the sharing of high-resolution photos, either between community and MDFT clinicians or where the patient or family member had been encouraged to do this effectively themselves, was also seen as a positive development. Those interviewed unanimously agreed that these elements of technology should be kept and built on in the future. While most people felt that technology offered the opportunity for real change, there was concern about how this should be done both safely and effectively. Some of those interviewed suggested that the use of technology between clinicians and patients needed a robust national response, which would include training, legal implications and information governance.

### **Practical changes**

Some services had to move locations as they were based at hospital sites and either the room was needed for other services or the site was closed for outpatient clinics. This often led to decreased clinic space which, along with the need to organise appointments differently to enable social distancing in waiting rooms, led to services having to reduce

the number of face to face appointments they could offer. In some cases, these changes were highlighted as something the interviewee wanted to continue post-pandemic as the new sites were more accessible for patients.

### **Communication and relationships**

Communication between the MDFT and patients, care homes, primary care and other services was raised as an issue by those interviewed. Some felt this had gone well and that there had been no impact on the number or timeliness of referrals. Others, however, felt that due to the pace of change, it had been difficult to keep up with the need for communication, particularly with patients. There was concern that some patients had 'slipped through the net' as it was more difficult to keep track of whether people had attended remote consultations.

Discussing the foot care pathway, there was some concern about the difficulties that primary care colleagues were facing in doing their routine foot checks and that this may have had an impact on referral and time to assessment. Difficulties caused by elective surgery being cancelled, colleagues in other clinical specialities being redeployed (particularly vascular surgeons) and some services closing for periods of time, were all stated as issues which may have had an effect on patient care and outcomes.

All of those interviewed spoke of better communication between all different departments and healthcare professionals involved in diabetes foot care. Changes to clinic set up, such as all clinicians being in the same hub, which has meant, for example, better access to MDT colleagues including DSN and podiatrists that can prescribe enabled access to prompt interventions and care medications. Technological changes such as the initiation of remote MDFT meetings has made it easier to discuss patients and has led to stronger relationships within the teams.

### **Impact on patients and clinicians**

#### **Patient fears**

All of those interviewed described that many patients were fearful of attending face-to-face appointments since the onset of the pandemic due to worries about infection risk, social distancing and staff having adequate personal protective equipment (PPE). This fear was particularly evident

among patients who had been shielding and so had not attended any appointments during the initial lockdown. There were also practical or logistical considerations that hindered attendance at face-to-face appointments, for example, concerns over using public transport or difficulties travelling to a different clinic site. These issues led to increased stress for staff with time having to be spent reassuring patients or helping them with practical issues, including care homes that had locked down.

### Patient outcomes

There is apprehension about what the impact of the pandemic and the changes in foot care services on rates of minor and major amputation rates would be. Some of those interviewed expressed concern that delayed access to footwear or offloading orthotics would increase the numbers of people re-ulcerating after initial healing. There is also a 'fear of the unknown' for those stratified as being medium risk who may not have been seen for 6 months or more with a suggestion that this would lead to an increase in foot ulcers. Some services had collected data locally about incidents of amputations or re-ulcerations, but conclusions from these were varied. Initial data from NHS England, recently presented to the clinical networks, suggest that overall amputations have not increased and may even have reduced but ulcer healing outcomes are unknown.

### Staff wellbeing

People expressed concern for both their own wellbeing and that of colleagues. Many of those interviewed described experiencing exhaustion, anxiety and burnout. The pace and scale of the changes that have happened over the last 6 months have put pressure on people's resilience. Those interviewed spoke of their worry about managing risk and the impact on patient outcomes. The uncertainty of how long the second wave would last and the impact of that on staff who are already under strain is having an effect on people's wellbeing.

### Towards the future 'Opening up'

There was variation in the extent to which services had managed to get back to normal levels of service

provision over the summer. Some services were still only able to see those with active foot ulcers, but others had started to see high-risk patients albeit working through a substantial backlog.

### The second wave

It is now clear that we have entered the second wave of coronavirus infections and renewed national lockdown. Most of those interviewed felt that they had learnt lessons over the first period of the pandemic and felt more prepared to face what might happen over the winter. However, some people thought that they had not had the opportunity to reflect on the last 6 months or evaluate the changes to their service, either individually or with their team.

There was also anxiety about maintaining clinical responsibility for patients that might not have been seen for 6 months or more. While services had been able to start seeing more people face to face, there were still a number of people who had not been seen. Remote consultations and prescribing of antibiotics for longer than usual had been used to manage these patients, but there was a sense that the limits of being able to safely continue doing this were being reached.

### A new normal for diabetes foot care

While providing foot care during the COVID-19 pandemic has been challenging, many of those interviewed also described it as an opportunity to develop and deliver foot care services in ways they had always wanted to. It has also been an opportunity to consider what a new normal for diabetes foot care should consist of. Key elements for delivering better diabetes foot care were identified as:

- Harnessing technology — learn from the experiences in the use of technology, such as photo-sharing systems and remote consultations over the pandemic. Understand staff and patient concerns about technology and develop good practice guidelines for using the available technology safely and effectively. It is important that all clinicians across the foot care pathway share access to electronic clinical systems
- Changes in service structure — simplify pathways to focus on the patient journey, identify the barriers to swift access to expert assessment and where possible provide a 'one-stop shop' where

patients can see everyone in the MDFT at the same time. Recognition of the importance of the role of community podiatry teams within the diabetic foot care pathway. Better communication across all parts of the diabetes foot care pathway. Engaging patients in discussion about future service provision

- Reduce variations across services — the pandemic has exposed variations in services and differences in the structure or MDFTs. While all services should develop the system that works best in their area, national guidance on those elements of service structure and delivery that produce the best outcomes is required. This would include the continuation/extension of transformation funding to enable services to be fully staffed
- Training/upskilling of all staff — guidance, structures and processes enabling clinicians to be confident and competent, recognising when the need to escalate and discuss further with MDFT colleagues, including clarifying which episodes might be safely managed in the community without the need to refer to the MDFT
- Patient activation — better understanding of the psychological aspects of foot care. This includes standardised ways of measuring patient activation

and the development of specific interventions to improve motivation and ability to self-care.

### The National Diabetes Footcare Audit

The NDFA enables services to measure their clinical outcomes and compare them with other services (Jeffcoate et al, 2020). The clinicians interviewed acknowledged it had been difficult to collect and submit the NDFA data to the same level they had managed pre-pandemic. However, they all believed that it was crucial to keep submitting to the NDFA, in order to evaluate the changes they have made and to have an objective measure of the impact of the pandemic on patient outcomes. ■

### Acknowledgments

The authors would like to thank all those clinicians who gave their time and expertise to be interviewed.

Exposito C, Allan F, Greenwood N et al (2020) COVID-19 as a catalyst for change: virtual foot protection. *The Diabetic Foot Journal* 23(3): 36–44

Jeffcoate W, Askey A, Berry A et al (2020) Do we know how good we all are at managing diabetic foot ulcers? A question for those who do not yet participate in the National Diabetes Foot Care Audit. *The Diabetic Foot Journal* 23(3): 8–9