**Vanessa Goulding**

**Primary Care diabetic foot early emergency triage (D-FEET)**

**Introduction**

My name is Vanessa Goulding. I am the podiatry professional lead, leading a team of podiatrists managing the at-risk foot provision for patients living with diabetes. In Cardiff and Vale University Health Boards.

**Identifying the service need**

Diabetes can affect the feet in two main ways. You can have problems with peripheral arterial disease and you can have problems with peripheral neuropathy, both of which can predispose and patients will develop diabetic foot ulcers or diabetic Charcot neuroarthropathy deformities. These can be quite significant for patients in terms of reducing mobility, patients suffering with pain and disability. In terms of prevalence for patients living with diabetes, up to 35% will develop a diabetic foot problem. In the diabetes population, 2 to 2.5% of people at any one time will have a diabetic foot ulcer and the cost to the patient is considerable in terms of needing time off work to attend appointments and if the condition is left untreated they can suffer complications and in the extreme cases loss of a limb. The health care costs is considerable to NHS organisations.

**Description of the service**

We are running a service here in Cardiff and Vale University Health Board where we can provide access for patients who have these conditions to access services quickly so that they can see an expert health care professional who can manage these conditions. Back in 2018, I developed a walk-in clinic where patients who have what we would class as a diabetic foot emergency, so they might have an infection, they might have a diabetic foot ulcer, they might have a suspected Charcot neuroarthropathy deformity, can access our service quickly, and they don't need to have a referral, they can self-refer. Back in 2018 it was running twice a week and the patients could just turn up and we would see them. We ran this really successfully and in 2020 we were really successful and we were a finalist in the Diabetes Quality and Care Program as a commended project.

We know that there were some limitations because we knew that we needed to provide a wider access for our patients, broadening it so that they could see us more often and one of the other limitations was that we knew patients who have infections, who have diabetic foot ulcers, need to gain access to antibiotics quickly.

Historically podiatrists haven't been able to prescribe antibiotics and this has been a postgraduate course that some of our clinicians have started to undertake but we really wanted to widen the reach of that.

Last year in 2023 we started a new project, an extension of our walk-in clinic, it became D-Feat which is our diabetic foot early emergency triage clinic. What we found was previously in our walk-in clinic some of the patients who would present, didn't necessarily require same-day assessment and same-day treatment so by using phone and video consultations with our patients we can identify exactly who needs to receive same-day, same assessment and it's really crucial for diabetic foot problems that patients are able to see an expert healthcare professional quickly.

**Benefits for the person and wider system**

Research has shown that people who are seen quickly do better, they have much better outcomes. We started the clinic which we are now able to run four days a week and the patients contact our department, speak to one of our administration team and then the podiatrists will contact the same day to get information to do that virtual triage and then we know that we are seeing those patients then for a face-to-face consultation providing them with what they need. Myself and all of our team are members of the multidisciplinary team which is proven that you need to have access to those experts and with the joint working in joint clinics that we're doing with our colleagues in medicine, vascular, trauma and orthopaedics that run throughout the week here in Cardiff and Vale University Health Board we're able to fast-track those patients to the consultants as they need to see them.

Patients living with diabetes that have infection, if they have a diabetic foot ulcer, get pain, acute swelling in their foot that might be a suspected Charcot neuropathy, can contact our department directly. They don't need to have a referral from a healthcare professional, they don't need to see their GP, they can come straight and direct to the podiatry department. They phone and speak to one of our administration team and then the podiatrists will call them back and arrange a phone or a video consultation that will be done the same day and from that information that consultation and triage we're able to then decide whether we see the patient on the same day or whether or not they need to be seen at another date.

The benefits of this are as I have said, patients can get that quick access. With the clinic we're able to provide a one-stop shop so we're able to do all the investigations that they may require whether it is x-rays or they may require having some microbiological sampling. We are able to issue antibiotics under a PGD for patients with a mild infection and I'm very fortunate to have several independent prescribing podiatrists who are able to prescribe antibiotics for patients who require them and they sit outside of the PGD remit. Because we are members of the MDT we're able to escalate appointments with our consultant colleagues as we need to.

Once a week we run joint clinics with medicine, vascular and trauma orthopaedics so we're able to ensure that those patients get the right care at the right time in the right place by the right health care professional. What we found is that we participate in something called the National Diabetic Foot Care Audit. This is a national audit for England and Wales. We started participating in 2014 and we found that with the initial pilot project our walk-in clinic, the outcomes showed that patients who were self-presenting were seen quicker and we found that our healing rates started to improve. With the new D-FEET clinic we found significant improvements again with access for patients being able to see be seen quicker. We found that rates for being alive and ulcer free at 12 weeks are significantly higher than before and significantly higher than the national average. What we're also seeing is improvements in those patients who unfortunately have to have surgery and have complications such as amputations.

In terms of outcomes for our patients it's a service that we have many positive feedback and comments from our patients that they know they're able to access a service at point of need and they know they will be able to be escalated to having that expert care as they require it. From our colleagues in primary care we had positive feedback around the service being available knowing that their patients are having that prompt access. In terms of our patients who have active diabetic foot ulcers they are a small percentage of the whole population of people living with diabetes, but people living with diabetes who haven't got any current problems knowing there is a service there if they might require it is really helpful and supportive. For our colleagues knowing this service exists and they've got experts they can contact for advice and knowing the patients can be just directed is positive. For the wider organisation it’s trying to redirect patients who might turn up at A&E as they're not sure where else to go.

We can do an awful lot in the community to look after these patients trying to prevent those hospital admissions and when you look at the cost of diabetic foot disease a lot of work has been done in England around the cost and the costs are comparable to Wales and they say for every hundred pounds that is spent one pound is spent on managing active diabetic foot disease we know that it's very costly in terms of appointments and dressings. If a patient’s problems progress and they require surgical intervention obviously the costs are much higher so by having prompt access early on we are seeing improvements in outcomes and that will have improvements on the much wider picture and in terms of for our patients we want to keep them mobile, healthy and able to do what they want to do and this service supports that.

**Lessons learned**

In terms of lessons from developing the service my biggest advice to anyone who is thinking about it is, you know your service better than anybody you know you can identify areas of improvement and a small idea is worth trying is worth pursuing. We started like I said back in 2018 we'd already collected some data in terms of our NDFA data and we knew we weren’t seeing patients as quickly as we should and that sparked the idea of how can we open our doors and gain momentum with that? Equally not being overwhelmed or offering something that perhaps we couldn't manage. So we made a very conscious effort of having a step approach and started initially with one cluster group within our locality and quickly widened that. Now without any additional resource and with some internal redesign of our service within the podiatry department we've been able to offer this as four days a week for our patients. When we do pilot projects we follow a quality improvements process so our PDSA cycles and we're always planning when we're doing something, and always studying, looking at it and seeing what improvements can we make. There are more things that we want to do with this service, more that we can tweak and improve and the biggest thing is about having your stakeholders on board with anything that you're doing, so we've had patient focus groups, we've very much involved our colleagues in primary care. We've involved diabetes UK Cymru getting that patient involvement in terms of shaping the service, what would people living with diabetes want from the service which is really important to help shape it going forward.

**Future developments**

Certain of where we go next, we've been sharing the work as we go along with our colleagues from podiatry departments across Wales and we are part of a Bevan Commission exemplar program so we're very much looking towards what we can do in terms of spread and scale of either the clinic in its entirety or certainly elements of that across Wales to fit in with other local health boards. Talking to colleagues from around Wales and England there is lots of interest in providing this service. We know the prevalence of diabetes is increasing year on year and we know that we've got to change and we've got to adapt to manage those needs. We also know that it's really costly in terms of diabetic foot disease for patients in terms of pain disability suffering taking time off work if unfortunately complications occur and surgery is required. We know of the costs to the organisation and that it's really prudent to do what we can with the resources that we've got so allowing patients access a point of need they can see an expert healthcare professional who can manage their condition and they don't need to attend their GP or attend accident and emergency departments. We can ensure that they get the right care at the right time by the right person first time and that is the essence of our D-FEET clinic.