

# ACT NOW in diabetes and foot assessments: an essential service

Due to concerns around foot assessments during the COVID-19 pandemic, the **iDEAL group** have recommended an acronym – ACT NOW – to help health professionals and people with diabetes to recognise the warning signs that might lead to amputation

**T**he iDEAL (Insights for Diabetes Excellence, Access and Learning) group have put forward a series of recommendations to improve foot care and education, promote more effective and timely referral when needed, and to reduce the unacceptable numbers of major amputations in people with diabetes.

This is especially timely with the increase in numbers of avoidable late referrals into multi-disciplinary diabetes foot care teams being reported and foot examinations not being routinely undertaken (Rogers et al, 2020) due to the remote nature of diabetes consultations in general practice since March 2020 and the first and second lockdown.

The iDEAL group have recommended an acronym of ACT NOW to help both health professionals and people with diabetes to recognise the warning signs that might lead to amputation, which if identified earlier can be referred urgently to specialist multi-disciplinary diabetes foot care teams for assessment and treatment. iDEAL believe if this ACT NOW assessment can become routine in clinical practice that a 50%

reduction in major amputations among people with diabetes can be achieved within 5 years (Edmonds et al, 2019; Edmonds et al, 2020).

## What is the problem?

There were 7545 major amputations in people living with diabetes in England across three years from 2015–2018 (Public Health England, 2019). There is also a postcode lottery for amputation rates with a seven-fold difference, even after correcting for age and ethnicity (Jeffcoate et al, 2017). As 84% of lower extremity amputations result from complications of foot ulceration (Pecoraro et al, 1990), it is felt that these amputations are avoidable if ulcers are effectively detected, assessed, referred and treated quickly to promote healing (Boulton, 2015; Phillips and Mehl, 2015).

A problem since lockdown and remote consultations becoming routine in diabetes reviews is that people's foot problems can be missed, especially if the individual cannot check their own feet, or does not know how to undertake a foot check or what they should be looking for or reporting for further assessment. Practitioners cannot assume people know what to look for independently or how to check their own feet, especially if their eyesight is sub-optimal or they cannot reach their feet. With the festive break coming up, this is especially pertinent as general practice will be closed for several days at a time; however, community nurses will continue to work through all the festive bank holidays albeit on a reduced service.

## Developing services during the COVID-19 pandemic

As Stafford (2020) recognised, podiatry and multi-disciplinary diabetes foot services

have remained accessible and available during lockdown/s. Each has adapted their approach to the delivery of care to support these vulnerable individuals affected by diabetes and foot ulceration during this difficult time. As Stafford (2020) reported, virtual multi-disciplinary foot care services have been taking place through video conferencing in satellite and community clinic facilities.

## Why is this serious?

One in three people diagnosed with diabetes will experience a foot ulcer during their lifetime (Edmonds et al, 2020). There are two main types of foot ulcers in diabetes: those that occur in neuropathic feet (neuropathic ulcers) and those that occur in ischaemic feet (ischaemic ulcers). Both types of foot ulcers are highly susceptible to infection which spreads rapidly, causing major trauma and tissue destruction. The progression from an initial 'scratch' to gangrene can take as little as 48 hours (Edmonds et al, 2019) and the images in *Figure 1* illustrate the speed at which an infection can evolve in the neuropathic foot and the ischaemic foot. Recognition of this is essential to make an urgent referral to aim to save limbs and avoid amputation.

The faster the infection spreads the greater the tissue destruction and loss. Vas et al (2018) coined the phrase 'Time is Tissue'. Additionally, a severe reduction in blood supply due to peripheral vascular disease can lead to critical ischaemia resulting in dry gangrene (Phillips and Mehl, 2015). Therefore, severe infection or severe ischaemia can lead to limb-threatening or life-threatening conditions.

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**What can be done?**

The iDEAL diabetes group is a multi-disciplinary team of specialists with a key interest in improving diabetes care outcomes across the UK. All the authors of this paper are iDEAL group members, along with people living with diabetes who shared their very valuable insight and experiences with us. A position statement was published pre-lockdown by iDEAL entitled ‘Diabetes and Footcare Assessment and referral: ACT NOW’ (Edmonds et al, 2019). A series of recommendations were put forward, which are particularly relevant now in times of remote digital consultations, social distancing and reduced numbers of diabetes foot care checks being undertaken.

Additionally, the importance of early referral is highlighted by the NHS England Diabetes Programme (2020) who have identified significant funds available until 2024 to develop multi-disciplinary diabetes foot care services in every NHS Trust (Kar, 2020). This is vitally important for people to be referred to the right service at the right time.

iDEAL recommends that an assessment tool should be used for everyone with diabetes presenting with any type of foot problem by all practitioners in all locations.

The ACT NOW tool has been designed to be easy to use, effective and reliable, as shown in *Box 1*. *Figure 2* shows the ACT NOW checklist that can be used in practice.

**How can we achieve a 50% reduction in amputations?**

There are four primary action points:

**1. To heal ulcers quickly**

The primary aim is to avoid unnecessary amputations and to heal ulcers as quickly as possible, and prevent infection or ischaemia leading to gangrene occurring. This is an urgent referral and any unnecessary delays, even with COVID-19, are limb-threatening. NHS England and NHS Improvement stipulated in its clinical guide for the management of acute people with diabetes during COVID-19 that ‘multidisciplinary diabetes foot services may need to continue at full capacity’ (Edmonds et al, 2020), such is the recognition of the urgency to save limbs and prevent delay in referral. Delay can occur due to three primary reasons:



Figure 1. The speed at which an infection can evolve in the neuropathic foot and the ischaemic foot. Edmonds and Foster, 2014

**Delay by the person with diabetes in seeking and reaching care**

This can be caused by general practice services seeing priority patients only and telephone consultations being routinely used in diabetes reviews rather than face-to-face, and thus foot assessments are being missed. Many people with diabetes have been genuinely frightened and are often home alone with reduced or little access to carers or family who can help them check their feet. Additionally, a lack of knowledge leads to a lack of urgency, especially if neuropathy is present, as the individual cannot feel there is a problem present (Tesfaye, 2014; Masson, 2017).

**Delay by health care professionals in referring to specialist care**

The ACT NOW assessment tool has been devised to help both practitioners and people with diabetes to recognise

warning signs that should trigger referral to specialist care (Edmonds et al, 2020). Similarly to STOP and FAST, which were successfully associated with national campaigns to inform the public about heart attacks and strokes, so ACT NOW is our approach to save limbs and promote earlier and more effective and efficient referral for people with diabetes with foot problems to the right specialist services to save limbs – the multi-disciplinary diabetes foot care team – or Accident and Emergency if out of hours.

**Delay in actually accessing care from the multi-disciplinary diabetes foot team**

A recommendation by iDEAL is that the initial assessment should be in primary or community care or through community podiatry, and advice can be obtained by telephone from the multidisciplinary


**Box 1. The ACT NOW Acronym**

- A – Accident? Recent or history of an accident, injury or trauma?
- C – Change: is there any new swelling, redness or change of shape of the foot?
- T – Temperature: is there a change in temperature present? Either hot or cold. Could this be an infection or possible Charcot?
- N – New pain? Is there pain present? Is it localised or generalised throughout the foot?
- O – Oozing? Would colour is any exudate? Is there an odour?
- W – Wound: can you document the size, shape and position of the wound in the foot affected?

## ACT NOW!

Tool for all NHS Primary and Secondary Care services to promote prompt and rapid referral to the MDFT (Multidisciplinary Foot Care Team) (Edmonds et al, 2020).

Refer the PLwD (Person/People Living with Diabetes) if they present with any of the following to their foot/feet:



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ACT NOW! Checklist				
ASSESSMENT OF FOOT	Tick if present	Digital photo taken to include with referral	Date referred	Document referral to Specialist MDFT
<div style="background-color: #4a7ebb; color: white; padding: 2px 5px; margin-bottom: 5px;"><b>A - ACCIDENT?</b></div> Recent or history of an accident or trauma?				
<div style="background-color: #4a7ebb; color: white; padding: 2px 5px; margin-bottom: 5px;"><b>C - CHANGE?</b></div> Is there any new swelling, redness or change of shape of the foot?				
<div style="background-color: #4a7ebb; color: white; padding: 2px 5px; margin-bottom: 5px;"><b>T - TEMPERATURE?</b></div> If there is a change in temperature present? Could this be an infection or possible Charcot?				
<div style="background-color: #4a7ebb; color: white; padding: 2px 5px; margin-bottom: 5px;"><b>N - NEW PAIN?</b></div> Is there pain present? Is it localised or generalised throughout the foot?				
<div style="background-color: #4a7ebb; color: white; padding: 2px 5px; margin-bottom: 5px;"><b>O - OOZING?</b></div> What colour is any exudate? Is there an odour?				
<div style="background-color: #4a7ebb; color: white; padding: 2px 5px; margin-bottom: 5px;"><b>W - WOUND?</b></div> Can you document the size, shape and position of the wound in the foot affected?				

Figure 2. The ACT NOW checklist that can be used in general practice.

diabetes foot team (Stafford, 2020; Edmonds et al, 2020). If ACT NOW assessment tools can be used this offers consistency in what is required for each individual’s assessment, whichever health professional undertakes this.

**2. To prevent the development of ulcers in the first place**

Preventing the development of foot ulcers can be achieved through education, assessment, and teaching individuals, their carers’ and all health practitioners about diabetes-related foot assessment. The need for swift referral is a necessity to save limbs and should be emphasised. Ideally, neuropathy and vascular disease should be prevented by excellent glucose control, which can prevent or slow the onset of neuropathy and thus can be protective to people susceptible to minor trauma (Boulton, 2015; Phillips and Mehl, 2015; Masson, 2017; Edmonds et al, 2020).

Regular diabetes-related foot assessment, at least annually, needs to be a core part of the diabetes annual review (Masson, 2017). This cannot be neglected as the individual concerned may not be able to alert someone there is a problem if they do not know how to check or what the problem may be (Phillips and Mehl, 2015). Telephone diabetes reviews, despite becoming routine practice, cannot replace a trained practitioner undertaking a foot review with individuals with diabetes. This is not something the individual themselves can carry out independently. Stafford, (2020) recommended some ‘how to’ video clips on Diabetes UK Webpages which can and do service as a teaching resource for individuals and their families/carers in caring for and assessing an individual with diabetes and their feet (see *Resources*).

**3. To educate people living with diabetes, all health professionals and multi-disciplinary diabetes foot care teams**

Improved foot care knowledge, assessment and referral, and urgent referral with practical practice-facing useful information is essential. Therefore, ACT NOW is a tool that can be routinely adopted and used by every practitioner when assessing an individual with diabetes to promote effective and urgent referral as required, and ultimately to save limbs and avoid



unnecessary amputations (Edmonds et al, 2019; Edmonds et al, 2020).

#### 4. To maintain a sufficient, sustainable and supported workforce

Improvement of foot care and foot assessment in people living with diabetes is dependent on well-informed and educated health professionals who recognise its importance from diagnosis and at every diabetes review. There needs to be greater access for every health professional to have annual training in diabetes-related foot assessment to maintain competency and skills. Adoption and regular use of the ACT NOW tool can keep a focus on the vital nature of this assessment and the need for education, knowledge and awareness to expedite timely referral to save limbs and lives.

#### Conclusion

The impact of adopting and using the ACT NOW assessment tool has the potential to have a profound impact on helping people living with diabetes to have timely assessment and referral as required. This in turn can accelerate the healing of foot ulceration and reduce infections, hospital admissions and, of course, reduce the unacceptably high volume of major amputations. All practice and community nurses have a role to play in this by adopting ACT NOW and using this tool consistently in their practice. This also offers an opportunity to reverse the current situation and aims to achieve the 50% reduction of major amputations in people

#### Resources

- Diabetes UK provides steps to prevent foot problems and offers tips for everyday foot care: <https://www.diabetes.org.uk/guide-to-diabetes/complications/feet/taking-care-of-your-feet>
- Diabetes UK shows how people with diabetes can check their feet and recognise a serious foot problem: <https://www.diabetes.org.uk/guide-to-diabetes/complications/feet/serious-foot-problem>

with diabetes in the next 5 years. Please ACT NOW and save feet. **PN**

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