

# Diabetic Foot Screening Policy

This policy describes the process of assessing a patient with diabetes for foot complications, assigning appropriate risk classification and implementing.

Key Words:	Diabetic Foot Assessment Screening Ulcer Foot Emergency		
Version:	7		
Approved by:	Pressure Ulcer Group/Patient Safety Improvement Group		
Ratified by:	Quality Forum		
Date this version was Ratified:	June 2024		
Please state if there is a reason for not publishing on website			
Review date:	January 2024		
Expiry date:	July 2027		
Type of Policy	Clinical X	Non Clinical	



# **Contents**

1.0	Quick Look Summary3
1.1	Version Control and Summary of Changes4
1.2	Key individuals involved in developing and consulting on the document4
1.3	Equality Statement4
1.4	Due Regard4
1.5	Definitions that apply to this Policy6
2.0.	Purpose and Introduction6
3.0	Policy requirements
4.0	Duties within the Organisation9
5.0	Compliance Error! Bookmark not defined.
6.0	Monitoring Compliance and Effectiveness10
Арре	endix 1 Flowchart(s) Error! Bookmark not defined.
Арре	endix 2 Training Needs Analysis Error! Bookmark not defined.
Арре	endix 3 The NHS Constitution Error! Bookmark not defined.
Арре	endix 4 Due Regard Screening Template Error! Bookmark not defined.
Арре	endix 5 Data Privacy Impact Assessment Screening Error! Bookmark not defined.



#### 1.0 Quick Look Summary

- Diabetic foot complications are the largest single reason for hospital admissions among the diabetic population in the UK. It has the potential for devastating complications which are potentially avoidable.
- It is therefore essential that standards of care and referral procedures for patients with diabetes are standardised across the trust in accordance with best practice.
- The training which underpins the policy will ensure all patients with diabetes under the care of LPT will be screened for foot complications in a timely manner by a trained practitioner and their risk status identified with appropriate interventions or referrals actioned.

PLEASE NOTE THAT THIS LIST IS DESIGNED TO ACT AS A QUICK REFERENCE GUIDE ONLY AND IS NOT INTENDED TO REPLACE THE NEED TO READ THE FULL POLICY



#### 1.1 Version Control and Summary of Changes

Version number	Date	Comments
1	17/02/2014	
2	26/05/2016	Decrease in number of assessments required to be carried out per year to maintain competence. Statement added re Mental capacity and best interest decisions
3	April 2018	Policy reviewed –no major changes
4	June 2019	Policy reviewed. Changes made in line with local pathways.
5	Sept 2019	References updated Touch toes test included to prevent the need for equipment required to establish neuropathy. Appendix 15 removed – already covered with pathways
6	October 2020	Appendix 16 and 17 removed. Designed for Rio, no longer in use.
7	November 2023	Updated references and procedures. Added SystmOne template. Removed fast access clinic details

#### 1.2 Key individuals involved in developing and consulting on the document

Name	Designation
Accountable Director	
Author(s)	Helen Parberry / Lesley Weaving
Implementation Lead	
Core policy reviewer group	
Wider consultation	

#### 1.3 Governance

Level 2 or 3 approving delivery group	Level 1 Committee to ratify policy
Pressure Ulcer/QF	Q&S

#### 1.4 Equality Statement

Leicestershire Partnership NHS Trust (LPT) aims to design and implement policy documents that meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others. It takes into account the provisions of the Equality Act 2010 and promotes equal opportunities for all. This document has been assessed to ensure that no one receives less favourable treatment on the protected characteristics of their age, disability, sex (gender), gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity.

#### 1.5 Due Regard

LPT will ensure that Due regard for equality is taken and as such will undertake an analysis of equality (assessment of impact) on existing and new policies in line with the Equality Act 2010. This process will help to ensure that:

- Strategies, policies and procedures and services are free from discrimination.
- LPT complies with current equality legislation.
- Due regard is given to equality in decision making and subsequent processes.
- · Opportunities for promoting equality are identified.

Please refer to due regard assessment (Appendix 4) of this policy





#### 1.5 Definitions that apply to this Policy

Diabetic Foot	A foot screen to determine the risk status of developing a diabetic foot
Assessment	complication. This does not involve a full medical examination and routine bloods.
Foot ulceration	A patient with diabetes who has an open wound on their foot
Charcot foot	A foot that presents as hot, swollen and red either with or without an open wound. Commonly the arch is flattened with a 'rocker' shape to the foot due to pathological fractures / bony changes associated with neuropathy
Neuropathy	Interruption of nerve function
Peripheral arterial disease	Synonymous with peripheral vascular disease
Peripheral vascular disease	Any abnormal condition that affects the blood vessels outside the heart and lymphaticvessels
Ipswich Touch Toes Test	Simple, quick and reliable test that requires no special equipment to establish if a patient at risk of diabetic foot ulceration

#### 2.0. Purpose and Introduction

Diabetic foot complications are the largest single reason for hospital admissions among the diabetic population in the UK. It has the potential for devastating complications (amputation) which are potentially avoidable.

The National Diabetes Foot Audit, 2019 has demonstrated that delayed referral has been associated with an increased risk of amputation and in June 2017 NHS England published the "Right care pathway" for Diabetes with seven key areas identified to improve care of people with diabetes. One of the key areas identified was a reduction of major amputations (above or below the knee) recommending that there is a triage to specialist services (NHS England)

Early referral to specialist services is associated with better patient and wound outcomes at 12 weeks, and ulcer severity is higher among those who wait the longest for referral (National Diabetes Foot Audit, 2019).

It is therefore essential that standards of care and referral procedures for patients with diabetes are standardised across the trust in accordance with best practice. The training which underpins the policy will ensure all patients with diabetes under the care of LPT will be screened for foot complications in a timely manner by a trained practitioner and their risk status identified with appropriate interventions or referrals actioned.

The aim of this policy is to ensure that standards of care and referral strategies for patients with diabetes are known and standardised across the trust in accordance with best practice. To ensure all patients with Diabetes in the care of LPT are screened for complications in a timely manner, by a suitably competent practitioner, their risk status identified, and appropriate



intervention / action taken or referrals made as recommended By NICE guidance NG19.

#### 3.0 Policy requirements

# **Diabetic Foot Screening**

#### 3.1 Classifcation

Successful assessment and classification will inform the management strategy and is aimed at reducing the incidence of foot ulcers. Foot screening has been shown to lower amputation rates (Ang 2017).

Diabetic patients should be checked for a diabetic foot emergency as soon as possible on admission but within 24 hours. If one is found, then follow the diabetic active foot pathway urgently (Appendix 11) As soon as practically possible carry out a diabetic foot screen.

If the patient does not have a diabetic foot emergency continue with the following within 72 hours of admission

Classification of risk status of diabetes patients will be in accordance with NICE guidance NG19 Diabetic Foot Problems: Prevention and Management (2015; updated 2016; reviewed January 2023, no changes made)

#### **NICE Classification – Prevention and Management of Foot Problems**

Diabetic patients are classified to help predict diabetic foot complications and provide appropriate, tailored education.

Provision of care and thus appropriate referral should be as follows, according to NICE:

NICE Classification	Referral to	Surveillance Interval	Education Leaflets
Low Risk	No referral required	Annually (min) Or change in status	Low risk leaflet Appendix 9
Moderate Risk  - No foot Pathology	No referral required .	3-6 Monthly	Moderate and High risk
Moderate Risk- with Foot Pathology	Podiatry – Referral Refer using electronic form via www.leicpart.nhs.uk	Or change in status	leaflets Appendix 8/



High Risk	Podiatry – Referral as above providing as much information as possible for podiatry to triage accordingly	1-3 Monthly Or change in status	Appendix 7
Foot Emergency	Follow Diabetic active foot pathway		

#### **Emergency Referral**

In addition to the services offered by UHL (MDFT UHL Diabetic Foot Clinic/Vascular Services ) The LPT Podiatry Service have a staff hotline number if you would like to discuss any individual patients of concern.

# Staff Emergency HOTLINE 0116 2255105

The Hotline (Staff only), operating Mon – Fri 8am – 4.30pm, will be given priority over other calls within the Podiatry Appointments Booking Centre

#### 3.2 Training and competency

- There is no national guidance regarding screening for foot complications only that it
  is carried out by an appropriately trained and deemed competent practitioner. As
  this is a technical based task, the training is suitable for Health Care Assistants
  through to Medics. Competency is determined as someone who regular undertakes
  the foot check and staff member feels competent.
- Training for staff in LPT required is desirable and can be completed on ulearn
- To maintain competency a practitioner should be carrying out frequent foot assessments. It is also recommended competency status be monitored and recorded within staff members appraisal.
- Diabetic Foot screening should be carried out on all patients with diabetes annually, on admission or more frequently dependent on risks; and this should be recorded in the patient's electronic record.

#### 3.3 Screening Equipment

Where possible, all LPT wards should screen diabetic patients for foot complications within 72 hours of admission if a foot emergency has not already been identified. If they are unable to perform an assessment within the expected time frame it is recommended a note detailing the reason why should be entered in the patient's electronic record.



It is recommended that a simple assessment must comprise of at least:

- Tests for Neuropathy, as a minimum
  - 10g Monofilament (large fibre) OR
  - o Touch the toes test. No equipment required.
- Tests for impaired circulation, as a minimum
  - Testing for pulses (palpation or doppler use)
  - Observing for colour changes, vulnerability of skin / tissue, hair loss and changes to nails
  - Checking for temperature gradient
- Observing for foot deformity and / or pathology
- If any abnormalities are found it is recommended these findings are communicated to the GP on discharge. The above regime will be sufficient in most cases, allowing appropriate classification and follow on action and / or indicating need for further in depth and targeted testing, e.g. if tests failed or are inconclusive.

For patients exhibiting an inability to appropriately respond to neurological tests e.g. due to ill health or disability, it is to be considered that the foot is high risk

#### 3.4 The Diabetic Foot Assessment / Screening Tool

The recommended Diabetic Foot Assessment Tool (<u>Appendix 4</u>) provides a standard approach to the assessment process and must be used by all LPT staff involved in diabetic foot screening. This tool is available electronically, on request.

The Tool is structured to be user friendly and enables the practitioner to assess the patients' 'risk' status in relation to their feet.

#### 4.0 Duties within the Organisation

Policy, Guideline or Procedure / Protocol Author

**Lead Director** 

**Directors, Heads of Service** 

**Senior Managers, Matrons and Team Leads** 

Staff

**Corporate Affairs Team** 

**Responsibility of Clinical Staff** 

#### Consent

• Clinical staff must ensure that consent has been sought and obtained before any care, intervention or treatment described in this policy is delivered. Consent can be given orally and/ or in writing. Someone could also give non-verbal consent as long as they understand the treatment or care about to take place. Consent must be



voluntary and informed and the person consenting must have the capacity to make the decision.

- In the event that the patient's capacity to consent is in doubt, clinical staff must ensure that a mental capacity assessment is completed and recorded. Someone with an impairment of or a disturbance in the functioning of the mind or brain is thought to lack the mental capacity to give informed consent if they cannot do one of the following:
  - Understand information about the decision
  - Remember that information
  - Use the information to make the decision
  - Communicate the decision

# 5.0 Monitoring Compliance and Effectiveness

Page/Section	Minimum Requirements to monitor	Process for Monitoring	Responsible Individual /Group	Frequency of monitoring
3.2	Maintain competency in assessment of diabetic foot by carrying out assessments	To be recorded as supervision	Staff and line manager	Annual as part of appraisal
3.1	Every Diabetic patient should be checked for a diabetic foot emergency as soon as possible or within 24 hours on admission_and correct pathway followed	Audit via AMAT	ward staff	yearly
3.3	Every diabetic patient admitted should have a screen conducted within 72 hours of being admitted	Audit via AMAT	Ward staff	yearly

#### 6.0 References and Bibliography

Ang GY et al (2017). Effectiveness of Diabetes Foot Screening in Primary Care in Preventing Lower Extremity Amputations. Annals of the Academy of Medicine,



Singapore [01 Nov 2017, 46(11):417-423]

Cavanagh et al (2005) in McIntosh C (2007) Diabetic foot ulcers; what is best practice in the UK. Wound Essentials (2): 162-170

Diabetes UK (2009) Putting feet first; commissioning specialist services for the management and prevention of diabetic foot disease in hospitals

Diabetes UK

DoH (2001) The National Service Framework for Diabetes. DoH, London

Edmonds M (2008) A natural history and framework for managing diabetic foot ulcers. British Journal of Nursing Tissue Viability supplement 17 (11): 20-30

Fletcher J (2006) Full nursing assessment of patients at risk of diabetic foot ulcers. British Journal of Nursing Tissue Viability supplement 15 (15): 18-22

Frykberg et al (2006) in McIntosh C (2007) Diabetic foot ulcers; what is best practice in the UK. Wound Essentials (2): 162-170

Kerr M (2017) Improving footcare for peoplewith diabetes and saving money – an economic study in England. Diabetes UK. www.diabetes.org.uk/Professionals/Resources/shared-practice/Footcare.

Llorente D, Urrutia V (2006) Diabetes, psychiatric disorders and the metabolic effects of antipsychotic medications. *American Diabetes Association Clinical Diabetes* 24(1) 18-24

Mackie S (2006) Developing an education package on diabetic foot disease. Wound Care (Dec 06): S6-14

Mackin P, Bishop D, Watkinson H, Gallagher P, Ferrier N (2007) Metabolic disease and cardiovascular risk in people treated with antipsychotics in the community.

British Journal of Psychiatry 191: 23-29

McIntosh C (2007) Skin and nail conditions and the diabetic foot. Wound Essentials (2):173-176

McIntosh C (2007) Diabetic foot ulcers; what is best practice in the UK. Wound Essentials (2): 162-170 National Diabetes Support Team (2006) Diabetic Foot Guide. National Diabetes Support Team, Leicester

Nash M (2009) Mental health nurses' diabetes care skills – a training needs analysis. British Journal of Nursing 18 (10): 626-634

National Institute for Health and Clinical Excellence (2015, updated 2016, reviewed January 2023, no changes made) Diabetic Foot Problems; Prevention and Management <a href="https://www.nice.org.uk/guidance/ng19">https://www.nice.org.uk/guidance/ng19</a>

NHS England report available at https://www.england.nhs.uk/rightcare/intel/cfv/pathways/diabetes-pathway/



# **Appendix 1 Training Requirements**

# **Training Needs Analysis**

Training topic:	
Type of training: (see study leave policy)	<ul><li>☐ Mandatory (must be on mandatory training register)</li><li>☐ Role specific</li><li>X Personal development</li></ul>
Directorate to which the training is applicable:	x Mental Health x Community Health Services □ Enabling Services □ Families Young People Children / Learning Disability Services □ Hosted Services
Staff groups who require the training:	All health care professionals in an in-patient setting
Regularity of Update requirement:	One off or if staff member no longer feels competent
Who is responsible for delivery of this training?	E-learning for health via ulearn
Have resources been identified?	
Has a training plan been agreed?	
Where will completion of this training be recorded?	X ULearn  ☐ Other (please specify)
How is this training going to be monitored?	

# **Appendix 2 The NHS Constitution**

- The NHS will provide a universal service for all based on clinical need, not ability to pay.
- The NHS will provide a comprehensive range of services.

Shape its services around the needs and preferences of individual patients, their families and their carers	х
Respond to different needs of different sectors of the population	Х
Work continuously to improve quality services and to minimise errors	х
Support and value its staff	Х
Work together with others to ensure a seamless service for patients	Х
Help keep people healthy and work to reduce health inequalities	Х
Respect the confidentiality of individual patients and provide open access to information about services, treatment and performance	х

12



# Appendix 3 Due Regard Screening Template

Section 1				
Name of activity/proposal				
Date Screening commenced				
Directorate / Service carrying out the				
assessment				
Name and role of person underta	aking			
this Due Regard (Equality Analys	-			
Give an overview of the aims, ob		rpose of the proposal:		
AIMS:				
OBJECTIVES:				
OBJECTIVES.				
Section 2				
Protected Characteristic	If the proposal	s have a positive or negative	e impact please give	
	brief details			
Age				
Disability				
Gender reassignment				
Marriage & Civil Partnership				
Pregnancy & Maternity				
Race				
Religion and Belief				
Sex				
Sexual Orientation				
Other equality groups?				
Section 3				
Does this activity propose major	changes in term	ns of scale or significance for	r LPT? For example, is	
there a clear indication that, although	_			
from an equality group/s? Please	e tick appropriate	e box below.		
Yes		N	0	
High risk: Complete a full EIA sta	arting click	Low risk: Go to Section 4.		
here to proceed to Part B				
2				
Section 4	adina and dana a a	a in titie at a a fact become		
If this proposal is low risk please give evidence or justification for how you reached this decision:				
Signed by reviewer/assessor Date				
Sign off that this proposal is low risk and does not require a full Equality Analysis				
Head of Service Signed Date				



#### **Appendix 4 Data Privacy Impact Assessment Screening**

Data Privacy impact assessment (DPIAs) are a tool which can help organisations identify the most effective way to comply with their data protection obligations and meet Individual's expectations of privacy.

The following screening questions will help the Trust determine if there are any privacy issues associated with the implementation of the Policy. Answering 'yes' to any of these questions is an indication that a DPIA may be a useful exercise. An explanation for the answers will assist with the determination as to whether a full DPIA is required which will require senior management support, at this stage the Head of Data Privacy must be involved.

Name of Document:	Diabetic Foot Screen	ing Polic	ey .
Completed by:			
Job title			Date
Screening Questions	L	Yes / No	Explanatory Note
1. Will the process described the collection of new informa This is information in excess carry out the process describ	tion about individuals? of what is required to	Yes	Yes – carrying out a DFA(diabetic foot assessment) may result in new information being divulged for the first time. In particular risk factor information/social information
2. Will the process described individuals to provide information in excess of what the process described within	ation about them? This is t is required to carry out	yes	Yes – the DFA asks individuals their social situation, eg living alone, marital status, smoker
3. Will information about indirorganisations or people who routine access to the information process described in this doc	viduals be disclosed to have not previously had tion as part of the	yes	Results of the Diabetic foot assessments will be shared with other health professionals/GPs within LPT and possibly UHL all via our current secure methods in line with NICE guidance for care of patients with Diabetic foot problems.
<b>4.</b> Are you using information purpose it is not currently used?		No	
5. Does the process outlined the use of new technology w as being privacy intrusive? F biometrics.	hich might be perceived or example, the use of	no	
<b>6.</b> Will the process outlined in decisions being made or acti individuals in ways which can on them?	on taken against	yes	If a foot ulcer or podiatric need is discovered this may require the individual to attend more appointments, potentially community and hospital for dressing changes, debridement, x-rays, orthotist care.



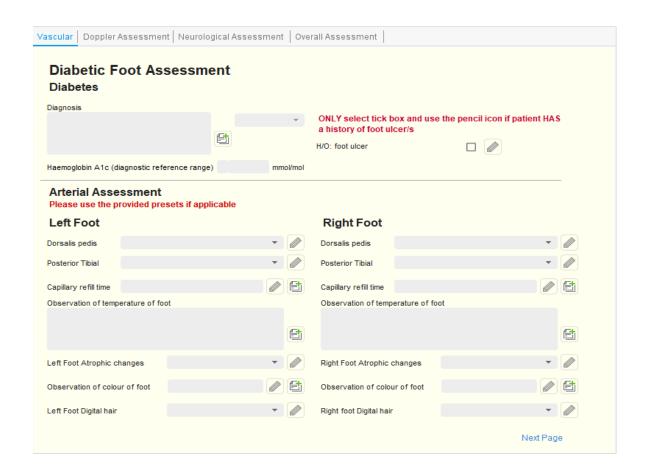
7. As part of the process outlined in this document, is the information about individuals of a kind particularly likely to raise privacy concerns or expectations? For examples, health records, criminal records or other information that people would consider to be particularly private.		yes	records are shared with consent and this is recorded as part of their podiatric/heath records across the trust
<b>8.</b> Will the process require you to contact individuals in ways which they may find intrusive?		no	
If the answer to any of these questions is 'Yes' please contact the Data Privacy Team via Lpt-dataprivacy@leicspart.secure.nhs.uk In this case, ratification of a procedural document will not take place until review by the Head of Data Privacy.			
Data Privacy approval name: Sarah Ratcliffe			
Date of approval May 2024			

Acknowledgement: This is based on the work of Princess Alexandra Hospital NHS Trust

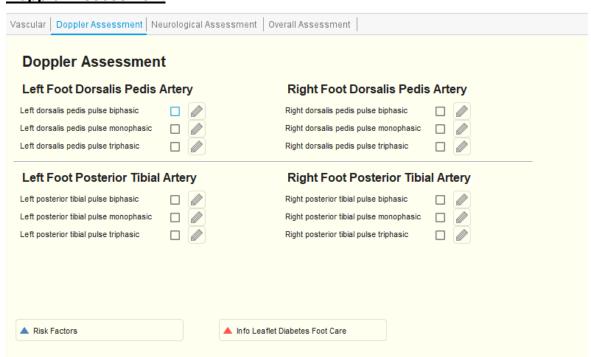


## **Appendix 4 Diabetic Foot Assessment Tool**

# **Vascular**

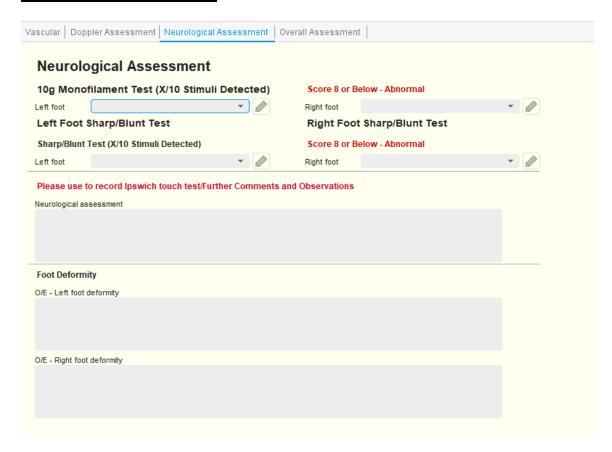


#### **Doppler Assessment**

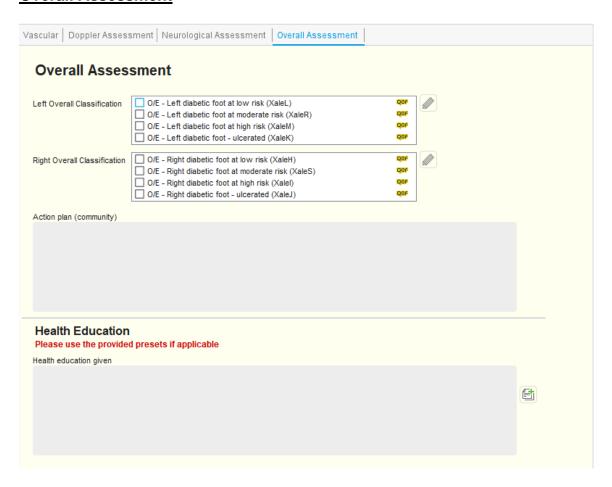




#### **Neurological Assessment**



#### **Overall Assessment**





## **Appendix 5 Diabetic Foot Assessment Guidance Notes**

The Diabetic Foot Assessment Tool is divided into eight main sections:

#### 1. Personal details

This section must be completed in full or using a patient identification sticker if available

#### 2. Diabetes

Vascular Assessment		
Arterial Assesment	Right Foot	Left Foot
Dorsalis Pedis (Pulse	e) - V	

It is recommended that this section also be completed in full on each assessment as:

- It is good practice to remind oneself of the type of diabetes the patient has and the associated risks. Also this may not be known to other practitioners involved in the patients' care e.g. Podiatrists.
- Date of diagnosis will enable the practitioner to gauge risks associated with duration of disease and this information may also not be available to other practitioners involved in the patients' care
- Method of control may have changed since last visit
- The HbA1C test result gives a good indication of patients overall diabetic control and enables the practitioner to gauge the risk of secondary pathology. Hyperglycaemia lowers immunity to infection and aids towards joint motion limitation.

#### 3. Risk Factors

It is recommended that this section be completed on each assessment as it provides completeness and enables the practitioner to confirm 'risk' status from a medical / social grounding. It also allows for comments and communication between disciplines (though it is important to note that any serious concerns must be addressed appropriately and followed up, practitioners must not rely on action from comments on this form).

- The form can be referenced against previous assessments and should clearly show any increase in risk levels e.g. patient may have a recorded history of ulceration (shown on previous assessment), now lives alone due to divorce and has also started smoking.
- Previous ulceration maybe an indicator of existing diabetic foot disease. A
  person who has already had an episode of foot disease has a 40% risk of a
  second episode in 12 months. Previous ulcerated sites will also have reduced
  tensile strength increasing their susceptibility to breakdown from external
  factors such as ill-fitting footwear.
- Poor glycaemic control will increase the risk of arterial disease, neuropathy and infection.



- Age/sex Trials have shown that diabetic foot ulcer rates are more common in males than females and the prevalence of both PN and PVD increases with age.
- Smoking causes an increased risk of arterial disease; hardening and calcification of the arteries impair blood flow to the foot.
- Living alone and self-neglect may mean that they have been unable to meet their nutritional and personal needs and are at risk of poor glycaemic control and foot care deficits
- Poor eyesight also reduces the ability to self-care and renders the patient unable to conduct daily visual checking of their feet.
- Retinopathy is associated with an increased risk of neuropathic foot ulceration.

#### 4. Vascular assessment

It is recognised that in a busy clinical/in patient environment, time is of utmost importance. For the majority of patients being assessed, it is possibly sufficient to check for palpable pulses, temperature gradient, skin colour, and capillary refill time.

If there is active foot disease then referral to vascular surgery should be considered.

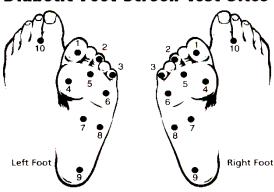
## 5. Neurological assessment

This is designed to test large fibres responsible for more crude sensory detection. In aclinical situation this together with observation, signs and symptoms may provide sufficient information to determine neuropathic status.

A 10 gram monofilament should be used on 10 sites for each foot. Less than 8 out of 10 would suggest a degree of neuropathy.

- First apply the monofilament on the patients inner wrist so the patient knows what to expect.
- With the patients eyes closed apply the filament to the 10 sites on both feet as shown below
- Apply the monofilament perpendicular to the skin surface
- Apply sufficient force for the monofilament to bend or buckle
- The total duration of the approach, skin contact and the removal of the filament should be approximately 2 seconds.
- Do not apply the filament over callus, ulcer site, scar or necrotic tissue
- Ask the patient if they feel any pressure and where

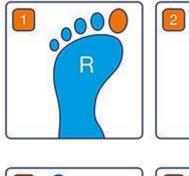
# **Diabetic Foot Screen Test Sites**





The use of the Ipswich Touch Toes Test is a simple, quick and does not require any equipment. The touch should be gentle, light as a feather and brief.

- Take off socks
- Touch each leg and say "This is your right" and "This is your left"
- Patient need to close their eyes until the end of the test
- All they must say is "right" or "left" as soon as they feel a touch on their toes.
- With your index finger lightly touch the patient's toes in the following order.













 If the patient did not feel two or more of the six toes that were touched they are likely to have reduced sensation and at increased risk of foot ulcer/blister

Please see the following link for more detailed information

https://www.youtube.com/watch?v=kauYqodCx6w&feature=youtu.be

#### 6. Foot Pathology

It is recommended that this section be completed on each assessment as it provides completeness and enables the practitioner to confirm the 'risk' status from a physical / pathological perspective.

It also allows for communication between disciplines (though it is important to note that any serious concerns must be addressed appropriately and followed up, practitioners must not rely on action from comments on this form).

The form can be referenced against previous assessments and should show, any increase in risk levels e.g. the patient may have had recorded the presence of a bony condition (shown on previous assessment), and is now exhibiting corn and callous formation associated with the previous condition.



This section can be further divided into:

- A thickened nail for example will increase pressure on the nail bed and thus there is potential for subungual ulceration.
- Involuted and ingrowing nails or neglected nails may penetrate the skin allowing entry to bacteria and increasing the risk of infection.
- Thickened nails, deformed nails or the absence of nails may indicate inadequate nutrition.
- a. Skin should be examined for callous, corns, dryness, fissuring, extravasation, broken skin, existing ulceration and gangrene etc. Here the site of the lesions should be noted.

Calluses result from increased pressures and may increase these pressures further. Calluses could also result from changes in foot structure due to motor neuropathy.

Callous, dryness, fissuring and poor elasticity may result from autonomic neuropathy and devitalisation through inadequate blood flow.

Bleeding under the skin is a sign of pressure.

Vital clues can be found on conducting skin examination towards the existence of underlying vascular and neuropathic problems. Skin examinations enable an assessment of the risk from high foot pressures and the potential for skin damage / breakage and hence infection risk.

b. **Structural and Biomechanical / Gait abnormalities.** The obvious structural abnormality is the Cavoid foot type which may be an indication of the presence of PN but also results in increased pressures through a high medial longitudinal arch, exposed metatarsal heads and clawing of the digits.

Limited joint motion may occur through prolonged hyperglycaemia.

Pre-existing biomechanical abnormalities may affect gait and result in other structural problems such as Hallux Valgus which may pose similar problems.

A footwear assessment may identify gait patterns and identify potential risk factors by examining the wear on, and the shape of a worn shoe.

Footwear should be assessed for suitability as the style and make-up of the shoe may be a risk factor in itself.

#### 7. Conclusion

This is the summary of the patients' overall 'risk' status and is dependent on the outcomes of the above tests and assessment.

The National Institute for Clinical Excellence (NICE) paper on Diabetic Foot Problems;



Prevention and Management (NG19 2015, updated 2016)\* gives succinct guidelines on the classification of these patients and the form is designed to reflect these (Type 1 Diabetics will also follow the same classification): -

- Low Risk normal sensation, palpable pulses
- Moderate Risk neuropathy or absent pulses or other risk factors
- High Risk neuropathy or absent pulses plus deformity or skin changes or previous ulcer
- Foot Ulceration/Active foot care of people with foot care emergencies (e.g. Charcot neuropathic osteoarthropathy) and foot ulcers

There is a fair degree of practitioner autonomy / interpretation afforded in this decision (as the Tool does not rely on score sheets etc.), thus practitioners are encouraged to comment.

\* Update of guideline entitled - Clinical Guidelines and Evidence Review for Type 2 Diabetes; Prevention and Management of Foot Problems

#### 8. Health Education

Foot health education in relation to the effects of Diabetes alone has been proven to reduce amputation rates by in excess of 50%.

This section is designed to provide a record of the topics discussed with the patient on the day of assessment as well as an indicator of topics still to be discussed for the practitioner (when referenced against previous assessments)

#### Appendix 6 Online Podiatry application form link

Podiatry - Leicestershire Partnership NHS Trust (leicspart.nhs.uk)



Appendix 7 Diabetes High Risk Information Leaflet



Diabetic Foot Group

East Midlands Clinical Networks

# High Risk

# Diabetes Foot Care information and advice leaflet



Diabetes is a lifelong condition which can cause foot problems. Some of these problems can occur because the nerves and blood vessels supplying your feet are damaged.

#### This can affect:

- the feeling in your feet (peripheral neuropathy); and
- the circulation in your feet (ischaemia).

These changes can be very gradual and you may not notice them. This is why it is essential that every year you have your feet screened and assessed by a podiatrist. You can then agree a treatment plan to suit your needs.

Your screening and assessment have shown that there is a **high risk** that you will develop foot ulcers. Your podiatrist will tick which of the following risk factors you have.

- You have lost some feeling in your feet.
- The circulation in your feet is reduced.
- Hard skin/skin changes on your feet.
- The shape of your foot has changed.
- Your vision is impaired.
- You cannot look after your feet yourself.
- Have had an ulcer or amputation before.
- Renal dialysis

Other
Ou ioi

Keeping good control of your diabetes, cholesterol and blood pressure will help to control these problems.

If you smoke, you are strongly advised to stop. Smoking affects your circulation and can lead to amputation.

As your feet are at **high risk**, you will need to take extra care of them. You will need regular treatment by a podiatrist. If you follow the advice and information in this leaflet, it will help you to take care of your feet between visits to your podiatrist. Hopefully it will help to reduce the problems in the future.



# Advice on keeping your feet healthy

# **Check your feet every day**

You should check your feet every day for any blisters, breaks in the skin, pain or any signs of infection such as swelling, heat or redness. If you cannot do this yourself, ask your partner or carer to help you.

## Wash your feet every day

You should wash your feet every day in warm water and with a mild soap. Rinse them thoroughly and dry them carefully, especially between the toes. Do not soak your feet as this can damage your skin. Because of your diabetes, you may not be able to feel hot and cold very well. You should test the temperature of the water with your elbow, or ask someone else to test the temperature for you.

# Moisturise your feet every day

If your skin is dry, apply a moisturising cream every day, avoiding the areas between your toes.

#### **Toenails**

Do not cut your toenails unless your podiatrist advises you to. File your nails regularly following the curve of the end of your toe. Use a nail file to make sure that there are no sharp edges which could press into the next toe.

## Socks, stockings and tights

You should change your socks, stockings or tights every day. They should not have bulky seams and the tops should not be elasticated.

# **Avoid walking barefoot**

If you walk barefoot you risk injuring your feet by stubbing your toes and standing on sharp objects which can damage the skin.

#### Check your shoes

Check the bottom of your shoes before putting them on to make sure that nothing sharp such as a pin, nail or glass has pierced the outer sole. Also, run your hand inside each shoe to check that no small objects such as small stones have fallen in.

#### **Badly-fitting shoes**

Badly-fitting shoes are a common cause of irritation or damage to feet. The podiatrist who assessed your feet may give you advice about the shoes you are wearing and about buying new shoes. They may suggest that you are measured for special shoes you can get on prescription.

#### **Prescription shoes**

If you have been supplied with shoes, they will have been made to a prescription. You should follow the instructions your podiatrist or orthotist (the person who makes the shoes) gives you. These should be the only shoes you wear. Shoes will normally be prescribed with insoles. These are an important part of your shoes and you should only remove them if your orthotist or podiatrist advises you to. Whoever provided your shoes will carry out all repairs or alterations to make sure that they will match your prescription.

#### Minor cuts and blisters

If you check your feet and discover any breaks in the skin, minor cuts or blisters, cover the area with a sterile dressing. Do **not** burst blisters. If after one day there is no sign of healing contact your podiatry department or GP immediately (their contact numbers are



over the page). If unavailable go to your local accident and emergency department.

#### Hard skin and corns

Do not attempt to remove hard skin or corns yourself. Your podiatrist will provide treatment and advice where necessary.

#### Over-the-counter corn remedies

Do not use over-the-counter corn remedies. They are not recommended for anyone with diabetes as they can damage the skin and create foot ulcers.

## Avoid high or low temperatures

If your feet are cold, wear socks. Never sit with your feet in front of the fire to warm them up. Always remove hot water bottles or electric blanket from your bed before getting in.

#### A history of ulcers

If you have had an ulcer before, or an amputation, you are at **high risk** of developing more ulcers. If you look after your feet carefully, with the help of a podiatrist, you will reduce the risk of more problems.

#### USEFUL WEBSITE ADDRESSES

www.diabetes.org.uk www.nhs.uk www.feetforlife.org

Individual advice		
Local contact number		
Podiatry Department:	GP Surgery:	

#### **SPOTTING A FOOT ATTACK**

- Is your foot red, warm or swollen?
- Is there a break in the skin or any discharge (or oozing) on to your socks or stockings?
- Do you feel unwell?

You may not have pain even with a visible wound.

Contact your GP, Podiatrist or Nurse immediately (or a member of the Foot Protection Service).

If unavailable go to your nearest out of hours healthcare service or your A&E department.



**Appendix 8 Diabetes Moderate Risk Information Leaflet** 





East Midlands Clinical Networks

# Moderate Risk (Increased Risk)



# **Diabetes Foot Care information and advice leaflet**

Diabetes is a lifelong condition which can cause foot problems. Some of these problems can occur because the nerves and blood vessels supplying your feet are damaged.

#### This can affect:

- the feeling in your feet (peripheral neuropathy); and
- the circulation in your feet (ischaemia).

These changes can be very gradual and you may not notice them. This is why it is essential you receive a foot screening and assessment from a **podiatrist** every year. You can then agree a treatment plan to suit your needs.

Your screening and assessment have shown that there is a **moderate (increased) risk** that you will develop foot ulcers. Your podiatrist will tick which of the following risk factors you have.

- You have lost some feeling in your feet.
- The circulation in your feet is reduced.
- Hard skin / skin changes on your feet.
- The shape of your foot has changed.
- Your vision is impaired.

<ul> <li>You cannot look after your feet yourself.</li> </ul>
---

- 1	Other	

If you smoke, you are strongly advised to stop. Smoking affects your circulation and can lead to amputation.

Controlling your diabetes, cholesterol and blood pressure, and having your feet assessed every year by a podiatrist will help to reduce the risk of developing problems with your feet.

As your feet are at **moderate risk** of developing ulcers, you will need to take extra care of them. You may need treatment by a podiatrist or podiatry assistant.



If you follow the advice and information in this leaflet, it will help you to take care of your feet between visits to your podiatrist. Hopefully it will help to reduce the problems in the future.

# Advice on keeping your feet healthy

#### Check your feet every day

You should check your feet every day for any blisters, breaks in the skin, pain or any signs of infection such as swelling, heat or redness. If you cannot do this yourself, ask your partner or carer to help you.

#### Wash your feet every day

You should wash your feet every day in warm water and with a mild soap. Rinse them thoroughly and dry them carefully, especially between the toes. Do not soak your feet as this can damage your skin. Because of your diabetes, you may not be able to feel hot and cold very well. You should test the temperature of the water with your elbow, or ask someone else to test the temperature for you.

#### Moisturise your feet every day

If your skin is dry, apply a moisturising cream every day, avoiding the areas between your toes.

#### **Toenails**

Cut or file your toenails regularly, following the curve of the end of your toe. Use a nail file to make sure that there are no sharp edges which could press into the next toe. Do not cut down the sides of your nails as you may create a 'spike' of nail which could result in an ingrowing toenail.

#### Socks, stockings and tights

You should change your socks, stockings or tights every day. They should not have bulky seams and the tops should not be elasticated.

#### Check your shoes

Check the bottom of your shoes before putting them on to make sure that nothing sharp such as a pin, nail or glass has pierced the outer sole. Also, run your hand inside each shoe to check that no small objects such as small stones have fallen in.

#### **Badly-fitting shoes**

Badly-fitting shoes are a common cause of irritation or damage to feet. The podiatrist who assessed your feet may give you advice about the shoes you are wearing and about buying new shoes. They may suggest that you are measured for special shoes you can get on prescription.

#### Avoid walking barefoot

If you walk barefoot you risk injuring your feet by stubbing your toes and standing on sharp objects which can damage the skin.

#### Minor cuts and blisters

If you check your feet and discover any breaks in the skin, minor cuts or blisters; cover them with a sterile dressing. Do **not** burst blisters. If after one day there is no sign of



healing contact your podiatry department or GP immediately (their contact numbers are over the page). If unavailable go to your local accident and emergency department.

#### Hard skin and corns

Do not attempt to remove hard skin or corns yourself. Your podiatrist will provide treatment and advice where necessary.

#### Over-the-counter corn remedies

Never use over-the-counter corn remedies. They are not recommended for anyone with diabetes as they can damage the skin and create foot ulcers.

#### Avoid high or low temperatures

If your feet are cold, wear socks. Never sit with your feet in front of the fire to warm them up. Always remove hot water bottles and turn off electric blanket before getting into bed.

#### USEFUL WEBSITE ADDRESSES

www.diabetes.org.uk www.nhs.uk www.feetforlife.org

Individual advice		
Local contact numbe		
Podiatry Department:	GP Surgery:	

#### **SPOTTING A FOOT ATTACK**

- Is your foot red, warm or swollen?
- Is there a break in the skin or any discharge (or oozing) on to your socks or stockings?
- Do you feel unwell?

You may not have pain even with a visible wound.

Contact your GP, Podiatrist or Nurse immediately (or a member of the Foot Protection Service).

If unavailable go to your nearest out of hours healthcare service or your A&E department.

Based on the original leaflet produced by the Scottish Diabetes Group—Foot Action Group



#### **Appendix 9 Diabetes Low Risk Information Leaflet**





East Midlands Clinical Networks





# Diabetes Foot Care information and advice leaflet

Diabetes is a lifelong condition which can cause foot problems. Some of these problems can occur because the nerves and blood vessels supplying your feet are damaged.

#### This can affect:

- the feeling in your feet (peripheral neuropathy); and
- the circulation in your feet (ischaemia).

These changes can be very gradual and you may not notice them. This is why it is essential you have your feet screened every year.

Your foot screening has shown that you do not have nerve or blood vessel damage at present and so you are currently at **low risk** of developing foot complications because of your diabetes.

Controlling your diabetes, cholesterol and blood pressure, and having your feet screened every year by a suitably trained professional, will help to reduce the risk of developing problems with your feet.

If you smoke, you are strongly advised to stop. Smoking affects your circulation and can lead to amputation.

As your feet are in good condition, you will not need regular podiatry treatment.

If you follow the simple advice in this leaflet, you should be able to carry out your own foot care unless you develop a specific problem.

# Advice on keeping your feet healthy

## Check your feet every day

You should check your feet every day for any blisters, breaks in the skin, pain or any signs of infection such as swelling, heat or redness.



#### Wash your feet every day

You should wash your feet every day in warm water and with a mild soap. Rinse them thoroughly and dry them carefully, especially between the toes. Do not soak your feet as this can damage your skin.

#### Moisturise your feet every day

If your skin is dry, apply a moisturising cream every day, avoiding the areas between your toes.

#### **Toenails**

Cut or file your toenails regularly, following the curve of the end of your toe. Use a nail file to make sure that there are no sharp edges which could press into the next toe. Do not cut down the sides of your nails as you may create a 'spike' of nail which could result in an ingrowing toenail.

#### Socks, stockings and tights

You should change your socks, stockings or tights every day. They should not have bulky seams and the tops should not be elasticated.

#### Avoid walking barefoot

If you walk barefoot you risk injuring your feet by stubbing your toes and standing on sharp objects which can damage the skin

#### Check your shoes

Check the bottom of your shoes before putting them on to make sure that nothing sharp such as a pin, nail or glass has pierced the outer sole. Also, run your hand inside each shoe to check that no small objects such as small stones have fallen in.

#### **Badly-fitting shoes**

Badly-fitting shoes are a common cause of irritation or damage to feet. The professional who screened your feet may give you advice about the shoes you are wearing and about buying new shoes.

#### Minor cuts and blisters

If you check your feet and discover any breaks in the skin, minor cuts or blisters, you should cover them with a sterile dressing and check them every day. Do **not** burst blisters. If the problems do not heal within a few days, or if you notice any signs of infection (swelling, heat, redness or pain), contact your podiatry department or GP (their contact numbers are over the page).

#### Over-the-counter corn remedies

Do not use over-the-counter corn remedies. They are not recommended for anyone with diabetes as they can cause damage to the skin that can create problems.

USEFUL WEBSITE ADDRESSES

www.diabetes.org.uk www.nhs.uk www.feetforlife.org

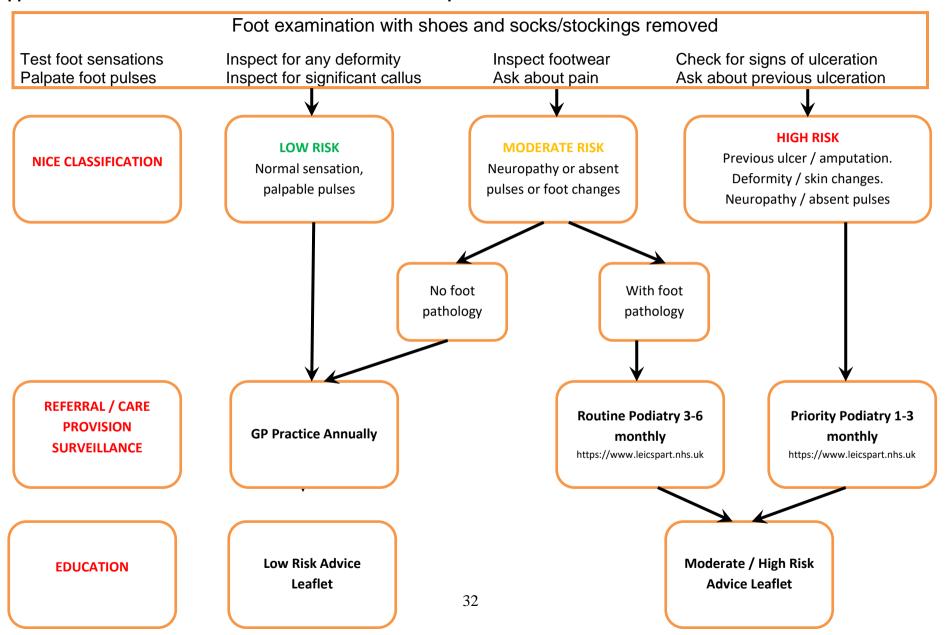


Individual advice
Local contact numbers
Podiatry Department:
GP Surgery:
SPOTTING A FOOT ATTACK
Is your foot red, warm or swollen?
<ul><li>Is there a break in the skin or any discharge (or oozing) on to your socks or stockings?</li><li>Do you feel unwell?</li></ul>
You may not have pain even with a visible wound.
Contact your GP, Podiatrist or Nurse immediately (or a member of the Foot Protection Service).
If unavailable go to your nearest out of hours healthcare service or your A&E department.

Based on the original leaflet produced by the Scottish Diabetes Group—Foot Action Group

# **Appendix 10**

# Flowchart for referral procedure





# Appendix 11 Diabetes active foot ulcer pathway **Active Foot Problem** Ulceration of the foot: chronic /acute with / without/ inflammation /infection Gangrene (wet / dry) necrosis Critical Limb Ischaemia (Vascular emergency) Charcot Arthropathy \*(see below) \*Charcot Arthropathy - a hot red swollen painful neuropathic foot Is patient well? If the patient has a foot ulcer with no palpable pulses please refer to VALS Contact VaLS clinic coordinator 0116-2588508 or If patient systemically unwell, (fever or other 2588506 signs and symptoms of systemic sepsis – deep and seated infection) e.g. critical limb ischaemic, palpable gas - Admit to secondary care Refer immediately for triage within 1 working day by a member of the Multi-disciplinary Foot Care Team immediately! (MDFT) Please consider antibiotics as per Diabetic Foot Infection antimicrobial guidelines Protect the foot (off load/Repose boots/Slippers/Repositioning) MDFT UHL REFERRAL DETAILS Email address: diabetesfootclinic@uhl-tr.nhs.uk Via electronic referral Contact Details: Clinic co-ordinator 0116 250 2876/Diabetes Centre 0116 258 8249 OR Diabetes Helpline 0116 2584919 If patient not willing or unable/not appropriate to attend refer urgently to Podiatry. Email address: LLR.podiatry@nhs.net **PODIATRY REFERRAL DETAILS** Via electronic referral

33

5105Podiatry also run Diabetic Foot emergency drop in clinics for Patients Mon-Fri which they can attend

Contact phone numbers: Patients 0116 225 5118 for staff only and if urgent enquiry 0116 225

if have any concerns that they require urgent attention

