









D-Foot International

D-Foot International is an organisation registered as an international non-profit association under Belgian law. We promote the global profile of diabetic foot prevention and care through awareness, guidance implementation, education, research and professional development. Our aim is to prevent and reduce the number of lower limb amputations from diabetes worldwide. Within our global network of dedicated, specialised footcare representatives we have put the focus on implementing international evidence-based practice guidance documents. This is in order to give healthcare professionals strategies to implement, sustain and develop foot services; to guide health professionals in training and supporting colleagues and to promote recognition of diabetic foot specialists. Programmes have already been delivered to health professionals across 66 countries. While doing this work it has become clear that the role of the podiatrists is central to the delivery of such programmes as they are involved in the care of the patient in prevention of ulceration, management of the acute episode and in the remission state following ulceration. This is a challenge because the profession of podiatry does not exist in many countries. In low and middle-income regions, the burden of disease is the greatest, and the presence of podiatry is the least.

The common POINT Project is an ambitious but realistic project that can make a real change at a global level. Currently, every 20 seconds a leg is lost by amputation due to diabetes. The time for discussion has passed and the time for change is now.

Kristien Van Acker, President, D-Foot International

FIP-IFP

The International Federation of Podiatrists is an international organisation of podiatrists representing 28 countries. It has, for 70 years, promoted the practice of podiatry worldwide, showcasing what podiatrists can offer in all areas of lower-limb and foot health. It is a global association of associations, and so, it encourages the expansion of podiatric skills, at all levels, around the world. We have developed a definition of Podiatry that encompasses the diversity of the profession worldwide yet allows for the expansion and growth of skill and behaviours that define it:

'Podiatry is that profession of health sciences concerned with the research, prevention, diagnosis and treatment of deformities, pathologies and injuries of the foot and associated structures – in relation with the body as well as the manifestations of systemic disease – by all appropriate systems and technologies using scientific and professional specialised knowledge.'

The POINT document is a multidisciplinary consensus that identifies the skills needed to provide diabetic foot care across four levels, irrespective of the presence of podiatrists. It is a starting point for those countries that do not yet have recognised podiatrists, and a building block for those countries that do have podiatrists that are recognised providers. It is to be used as an educational tool to help in the identification and treatment of the diabetic foot. It is also to be used as an example of how other areas of podiatry can be defined by skills and behaviours.

We have a vision for the inclusion of podiatry across the globe in the management of this condition, which places a large burden on both patients and societies. Dissemination and implementation of this document is now a priority for health care globally and (out-) patients. We hope that it will be useful to all.

Matthew Garoufalis, Past president, FIP-IFP

The POINT Project team

Kristien Van Acker, Diabetologist, Belgium; Matthew Garoufalis, Podiatrist, US; Pauline Wilson, Podiatrist, Ireland; Neil Baker, Podiatrist, Kuwait; Stuart Baird, Academic, UK; Esther García, Podiatrist and Academic, Spain; Mieke Fransen, Podiatrist and Academic, Belgium; Luc Hendrickx, Administrator, Belgium; Caroline Teugels, Administrator, Belgium; Norina Alinta Gavan, Industry Specialist, Romania.

The publication of this document has been supported by BSN medical, Mölnlycke Health Care and Urgo Medical. None of these sponsors had any influnece on the content or preparation of the material.

Suggested citation for this document Van Acker K, Garoufalis M, Wilson P et al. POINT: podiatry for international diabetic foot teams. J Wound Care 2018; 27(Sup 11):1–32.

Editor: Rachel Webb Designer: Sam Meaden

Managing Director: Anthony Kerr (anthony.kerr@markallengroup.com)

Published by: MA Healthcare Ltd, St Jude's Church, Dulwich Road, London, SE24 0PB, UK

Tel: +44 (0)20 7738 5454 Web: www.markallengroup.com

©MA Healthcare Ltd 2018

All rights reserved. No reproduction, transmission or copying of this publication is allowed without written permission. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without the prior written permission of MA Healthcare Ltd or in accordance with the relevant copyright legislation.

Although the editor and MA Healthcare Ltd have taken great care to ensure accuracy, neither the editor nor MA Healthcare Ltd will not be liable for any errors of omission or inaccuracies in this publication.

Published by MA Healthcare Ltd.

FOREWORD

he Point Project is an initiative between the two organisations:
D-Foot International and the International Federation of
Podiatrists (FIP-IFP). Both organisations promote the role of
evidence-based foot care for patients with and at risk of
diabetes. This collaborative work highlights the podiatric skills needed
in order to deliver comprehensive evidence-based care to patients with
diabetic foot disease. The statements along with the relevant skills and
behaviours are based upon the guidance documents produced by the
International Working Group on the Diabetic Foot (IWGDF), thus
meaning while this is a consensus document it is also evidence-based.

Representatives from both organisations with a multidisciplinary membership met early in 2017 to discuss the different areas of practice and to define which skills and behaviours were required at different levels of practice. Using the TRIEpodD-document (UK) and IWGDF guidance as the basis for discussion, the team identified which knowledge, skills and behaviours could be considered podiatric in nature. Once identified as podiatric, we discussed at which level of podiatric practice they could apply. The members of the team came from a variety of locations which represented practice at the different levels. Following the initial meeting, further discussions took place via email in order to consolidate initial discussions and complete the document.

Cognisant of the large volume of guidance in relation to all areas of practice, this document is aimed to assist clinicians by pointing them in the direction in which they need to develop services rather than being a set of rules which must be followed. The POINT team feels that this document supports clinicians globally on three levels:

- As a benchmarking tool for existing teams to critically reflect upon their practice and identify where quality improvements can be made
- As a tool for clinicians who wish to establish a diabetic foot team to highlight the skills needed in order to provide care across the breadth of diabetic foot practice highlighting the specific roles in which podiatrists can help
- For national and local decision makers, to identify which skills can be provided by podiatrists to promote the development of the profession.

While this is a consensus relating to podiatric skills, the team is aware that, in the absence of podiatrists, skills will be provided by other health professionals. We support this practice and while such professionals can not be considered podiatrists, they are providing podiatric skills to the diabetic foot team. The delivery of the relevant skill to the patient is the important factor, not the health professional is delivering it.

The development of this document is merely the first step to identifying areas where skills need to be developed. Both D-Foot and FIP-IFP are committed to developing podiatric skills further across the globe. The aims and objectives of the two organisations are mutually beneficial to those suffering from diabetic foot disease. People with diabetes deserve the best care that they can receive, irrespective of the resources available. By working together we have been able to identify the podiatric knowledge, skills and behaviours required to provide evidence-based care. The next step is to work together to ensure consistent delivery of these globally for the benefit of those suffering the debilitating consequences of diabetic foot disease.

Pauline Wilson

CONTENTS
Generic4
Assessment / diagnosis
Dermatology
Diagnostic imaging10
Pharmacology12
Wound care14
Wound care level 416
Peripheral vascular disease 18
Charcot neuroarthropathy 20
Health improvement22
Ulcer prevention and non ulcerative offloading24
Painful diabetic peripheral neuropathy (PDPN)26
Surgery28
Research, audit and leadership30





GENERIC

This section includes knowledge, skills and behaviours common to all practitioners in the arena of the management of diabetes as a chronic condition.



KNOWLEDGE

 A rudimentary knowledge of the nature of diabetes as a chronic life limiting disease, including its signs and symptoms and complications

SKILLS AND BEHAVIOURS

- Applies information to clinical context within agreed boundaries and protocols
- Refers to, and seeks guidance from, appropriately skilled colleagues when necessary
- Able to reflect on and improve their own practice with support from senior colleagues
- Updates medical histories appropriately
- Uses relevant patient record systems and decision support tools
- Uses up-to-date information and terminology to communicate with patients and colleagues
- Undertakes protocol-led clinical examinations within the scope of their practice
- Communicates to patient, using up-to-date information and appropriate terminology the benefits of good glycaemic control, self-care and monitoring to prevent diabetic complications
- Uses available professional networks for support, reflection and learning.



KNOWLEDGE

Generic knowledge, skills and behaviours as for Level 1.

SKILLS AND BEHAVIOURS

Constructively challenges inappropriate practices.



KNOWLEDGE

- A general knowledge of the aetiology of diabetes and the impact of disease progression
- Aware of the WHO criteria for diabetes diagnosis
- A basic understanding of pharmacological and non-pharmacological approaches to the management of diabetes
- Can recognise normal and abnormal blood glucose ranges and how to monitor them
- In-depth knowledge of complications secondary to diabetes
- Familiar with diabetes-related national guidance.

- Undertakes an examination and assessment to form a diagnosis
- Takes and/or reviews medical and medication histories
- Assesses the patient's understanding, and reinforce the benefits, of good glycaemic control, self-care and monitoring to prevent complications; including the provision of lifestyle advice (i.e. smoking cessation, taking exercise, healthy diet)
- Able to accurately discuss diabetes management with the patient based on available information



- Able to request and interpret relevant tests in the management of diabetes
- Communicates clearly with the patient about diabetes care, while recognising that the patient may find the diagnosis, or ongoing management, of diabetes stressful
- Able to apply the principles of evidence-based medicine to their practice, taking a critical approach to accessing and applying new information
- Seeks out and develops professional networks for support, reflection and learning
- Evaluates and interprets clinical information from diverse sources and makes informed judgements about its quality and the appropriateness of disseminating it to colleagues.



- In-depth knowledge of the aetiology of diabetes and the impact of disease progression
- In-depth knowledge of the signs and symptoms of diabetes, including the WHO diagnostic criteria
- In-depth understanding of pharmacological and non-pharmacological approaches to the management of diabetes
- In-depth knowledge of primary, secondary and tertiary prevention strategies
- In-depth knowledge of normal and abnormal blood glucose ranges and how to monitor them.

SKILLS AND BEHAVIOURS

- Employs their in-depth diabetes knowledge to engage with patients about their care
- Provides patients and/or carers with information that supports them in providing informed consent for clinical interventions
- Proactively identifies the need for clinical and service innovations to meet the needs of people with diabetes, and takes a leading role designing and implementing these innovations
- Communicate clearly to the individual what is involved in the assessment and management of the presenting condition
- Contributes to the development of evidence-based, clinical and cost-effective diabetes care, and takes a leading role in disseminating this information to colleagues
- Seeks out and develops professional networks for their own, and colleagues', support, reflection and learning
- Establishes and/or monitors the multidisciplinary approaches to integrated patient care
- Establishes multidisciplinary links with clinicians in their specialism
- Acts as a professional mentor for junior colleagues
- Engages in the critical review of their own and others' practice, and learns from them
- Able to critically reflect on, and improve, their own practice
- Reflects on the performance of their service/clinic relative to other local and national services/clinics
- Takes a leading role in the design of patient record systems and decision support tools
- Influences and contributes to the design of patient record systems and decision support tools
- High-level clinical decision making skills that are effectively translated into clinical practice
- Creates formal links with relevant local agencies (e.g. social services, patient support networks) and influences national policy on diabetes care.**

** desirable skills meaning that these are not essential for practice at this skill level



ASSESSMENT / DIAGNOSIS

This section includes knowledge, skills and behaviours common to all practitioners in the arena of completing baseline assessment and screening in order to arrive at a diagnosis and define a management plan.



KNOWLEDGE

- Is aware of and understands local policies in the diagnosis and assessment of diabetic foot disease
- Is aware of and understands methods and strategies to prevent diabetic foot ulceration
- To understand the local protocol of risk stratification
- Understands regional referral (fast) pathways.

SKILLS AND BEHAVIOURS

- Performs an assessment of the foot of a person with diabetes, including neurological and vascular evaluation
- Performs a visual assessment of foot, hosiery and footwear
- Implements an appropriate treatment rationale
- Identifies when referral is required/needed.



KNOWLEDGE

- Understands the need for assessment, and accurate diagnosis to inform management plans
- Is aware of national guidelines pertaining to the treatment of diabetic limb disease.

SKILLS AND BEHAVIOURS

- Clearly communicates to the patients and/or carer what is involved in the assessment process
- Stratifies the foot according to risk levels of local protocols and communicates the results accordingly.



KNOWLEDGE

- A knowledge of which advanced assessment tools are used for assessment of the foot in diabetes and the indication for their use
- Understands the frequency of regular assessment based upon the risk stratification of the patient in accordance with local pathways
- Understands which pre-ulcerative signs on the foot require intervention.

- Performs an advanced assessment of the diabetic foot and limb
- Educates the patient and/or carer in the results of the assessment and provides treatment for pre-ulcerative signs
- Facilitates training and education of both staff and patients
- Participates in the development of evidence based practice in the area of assessment and diagnosis.





- In-depth knowledge of advanced techniques of assessment of the foot
- Has knowledge of innovative diagnostic and assessment techniques and their potential role in clinical practice.

- Based upon the latest evidence available develops and delivers training and education of both staff and patients
- Identifies the need for service innovation based upon current research evidence
- Provides expert opinion on the local assessment process
- Leads integration of innovative diagnostic techniques
- Works with all stakeholders to develop the most appropriate pathways of care based upon the most up-to-date evidence and ensure that pathways are adhered to.



DERMATOLOGY

This section includes knowledge, skills and behaviours common to all practitioners in identifying which dermopathologies are of significance in the patient with diabetes.



KNOWLEDGE

■ To understand the difference between normal and abnormal skins.

SKILLS AND BEHAVIOURS

Able to recognise and refer the patient to a colleague when skin abnormality is suspected using the appropriate referral pathway under supervision.



KNOWLEDGE

- To have a greater understanding of what constitutes dermopathology
- To have a knowledge of which patients are at an increased risk of dermopathology.

SKILLS AND BEHAVIOURS

 Uses the appropriate referral pathway for the investigation of suspected dermopathologies (including microscopy and culture, biopsies and allergy testing).



KNOWLEDGE

Knows and is able to describe dermopathologies common to diabetes.

- Makes urgent, appropriate referrals to exclude malignancy
- Where appropriate, undertakes clinical management of dermopathologies based on an agreed care plan.





In-depth understanding of investigations for dermopathologies, (including microscopy and culture, biopsies and allergy testing).

- Able to diagnose, and develop care plans for, and treat dermatological infections with effective antibiotic and antimycotic regimens, with reference to local and/or national microbial stewardship policies*
- Be able to perform investigations for dermopathologies
- Establishes clear referral pathways for dermatological intervention and treatment of the diabetic lower limb.

^{*} important for practice at this level but may not be able to be employed due to individual legislation in countries



DIAGNOSTIC IMAGING

This section includes knowledge, skills and behaviours common to all practitioners in the use and request of diagnostic imaging to facilitate diagnosis.



KNOWLEDGE

An understanding of the available routine diagnostic imaging investigations and the rationale for their use.

SKILLS AND BEHAVIOURS

Is able to alert their supervisor when they feel diagnostic imaging is needed using local referral pathways.



KNOWLEDGE

- An understanding of the advanced diagnostic imaging investigations and the rationale for their use
- An understanding of the side-effects of diagnostic imaging investigations and why, in some circumstances, a non diagnostic imaging method of investigation may be more appropriate.

SKILLS AND BEHAVIOURS

Is able to refer appropriately for diagnostic imaging using local referral pathways.



KNOWLEDGE

Keeps up-to-date with changes in clinical practice related to requesting or interpreting diagnostic images.

SKILLS AND BEHAVIOURS

Works within, and contributes to the development of, local protocols for diagnostic imaging requests (e.g. patient group directions).





- An awareness of innovative diagnostic imaging techniques
- Up-to-date knowledge of the actions, indications, contraindications, interactions, cautions, dose and side effects of the diagnostic imaging investigations ordered.

- Requests diagnostic imaging investigations frequently enough to maintain competency
- Able to interpret diagnostic imaging reports
- Able to clearly communicate to the patient and/or carer the rationale behind undertaking a diagnostic imaging investigation, and the potential risks and benefits of doing so
- Communicates the results of diagnostic imaging investigations to the patient and/or carer in terms they understand
- Has completed a training programme in Ionising Radiation (Medical Exposure) Regulations
- Provides support and advice to other diagnostic imaging requesters and colleagues where appropriate
- Systematically negotiates the appropriate level of clinical support for requestors of diagnostic imaging investigations to undertake this aspect of their role safely and effectively**
- Proactively identifies the need for clinical or service innovations to diagnostic imaging investigations of the lower limb for people with diabetes, and takes a leading role designing and implementing these innovations.**

 $^{^{\}star\star}$ desirable skills, not essential for practice at this skill level



PHARMACOLOGY

This section includes knowledge, skills and behaviours common to all practitioners in the area of management of medications.



KNOWLEDGE

- Aware of the potential for unwanted effects of relevant medication
- Knows how to refer patients exhibiting any problems related to medications promptly using the appropriate referral pathway.

SKILLS AND BEHAVIOURS

Refers patients promptly using the appropriate local referral pathways via their supervisor when unwanted effects are observed.



KNOWLEDGE

- Aware of the potential misuse of relevant medications
- Demonstrates an awareness of no treatment, non-drug and drug treatment options
- Aware that patient specific factors (e.g. renal impairment) impact the effectiveness of relevant medicines and that regimens may need to be adjusted based on these factors
- Understands local drug policy and budgetary constraints.

SKILLS AND BEHAVIOURS

Works within local protocols for prescribing requests and uses as appropriate.



KNOWLEDGE

- Maintains an up-to-date knowledge of relevant products including formulations, dosages and costs related to the area in which they practice
- Understands the need for the aggressive management of cardiovascular risk factors
- Understands current legislation on prescribing practice at local and national levels
- Aware of the modes of action and effects of relevant medicines including pharmacokinetics and pharmacodynamics
- Understands local budgetary constraints and can discuss then with colleagues and patients.

- Recognises classes of medications and alerts the prescriber accordingly to minimise risk
- Discusses with patient and/or carer the importance of complying with pharmacotherapy and consequences of not doing so
- Identify patients who are at need of medication review and refer accordingly
- Stores prescription pads safely and knows what to do if they get lost.





- Aware of common medication errors and medication error prevention strategies
- Recognises classes of medications and adapts treatment strategies accordingly to minimise risk
- Understands national drug budgetary constraints and can discuss them with colleagues and patients
- Aware of and accepts legal and ethical responsibility for prescribing within the context of the care plan.**

- Gives clear information to the outpatient and/or carer about their medication/s including how/ when to take/administer the medications, where to obtain them and possible side effects
- Able to request and interpret renal and live function tests
- Establishes, monitors and make changes to medication regimes within the scope of the care plan and in light of the therapeutic objectives in line with the regulatory framework in the country of practice
- Negotiates treatment plans (including where appropriate non pharmacological therapies) that both patient and prescriber are satisfied with
- Implements management plans for cardiovascular risk factor management within the whole care package**
- Plays a role in developing local protocols for prescribing requests.
- Provides support and advice to other prescribers when appropriate**
- Uses tools to improve prescribing practice (e.g. review of prescribing data, feedback from patients)**
- Takes a leading role in supporting and advising other prescribers and colleagues**
- Reports prescribing errors and near misses, and reviews practice to prevent recurrence
- Leads collaborative working and networking with higher educational institutions and other agencies to meet the needs of the population with diabetes.**

^{**} desirable skills, not essential for practice at this skill level



WOUND CARE

This section includes knowledge, skills and behaviours common to all practitioners in the management of wounds and application of dressings.



KNOWLEDGE

- Be aware of and understands standard of care for diabetic foot ulceration
- Be able to to understand when a wound deteriorates
- Be able to know how to minimise cross infection.

SKILLS AND BEHAVIOURS

- Carries out dressing changes as instructed and within the scope of their practice
- Encourages the patient and/or carer to comply with recommended dressing regimens
- Encourages the patient and/or carer to comply with instructions on the use of pressurerelieving devices for the treatment of active ulceration
- Applies a basic infection control techniques for minimising cross infection (e.g. hand hygiene).



KNOWLEDGE

- A basic understanding of the wound healing process and the potential complications of, or delays to, that process
- Knows the different causes of lesions and the management strategies and classification of them
- An up-to-date knowledge of biomechanical pressure relieving strategies for wound healing
- A broad knowledge of available dressing products, their modes of action, and appropriate use
- Understands the principles of debridement and wound bed management.

- Able to take a comprehensive assessment of a wound
- Able to carry out wound management techniques within the individual scope of practice (e.g. basic sharp debridement, wound irrigation)
- Able to confirm that the patient and/or carer understand the purpose and nature of a proposed care plan
- Able to recognise the clinical signs and symptoms of wound infection and refers quickly and appropriately for infection control
- Carries out appropriate basic microbiological sampling and ensures results are interpreted by an appropriately skilled colleague
- Refers appropriately for advanced wound management using local referral pathways
- Refers the patient for assessment for, and supply of, specialist pressure-relieving devices for wound healing appropriately
- Works collaboratively with colleagues, including orthotists, to optimise patient compliance with pressure relieving devices for wound healing.





- A working knowledge of diabetic wound management-related local and national guidance
- A broad understanding of the wound healing process and its potential complications
- A broad understanding of the psychological impact of active diabetic foot disease on the patient
- Appropriately recognises the need, for advanced debridement
- A broad knowledge of debridement techniques other than sharp debridement.

- Critically analyses wound care interventions to develop evidence-based, individualised care plans
- Carries out advanced wound management techniques with appropriate support and supervision
- Recognises the signs and symptoms of local wound infection and manages them effectively
- Recognises when to refer the patient for infection control by appropriately skilled colleagues
- Undertakes comprehensive microbiological sampling (e.g. deep tissue sample)
- Ensures the results of microbiological investigations are seen and interpreted by an appropriately skilled colleague
- A broad knowledge (add in skill and behaviour) of biomechanical pressure relieving strategies for foot ulcer healing
- Able to carry out basic sharp debridement of simple and complex wounds, within the scope of their practice
- Aware of their local wound management formulary group and related groups
- Appropriately recognises the need, and refers the patient, for advanced debridement
- Good knowledge of available dressing products, their modes of action, and appropriate use.

^{**} desirable skills, not essential for practice at this skill level



WOUND CARE LEVEL 4

At level 4 the practitioner is expected to provide management across the whole spectrum of wound management. As this is a large area of practice we have further separated skills into the individual components of practise.



KNOWLEDGE

- Advanced understanding of the wound healing process and its potential complications
- An advanced understanding of the psychological impact of active diabetic foot disease on the patient
- A working knowledge of national guidance related to diabetic wound management.

SKILLS AND BEHAVIOURS

- Contributes expert opinion on the development of care plans for complex diabetic foot ulceration**
- Contributes to the development of local referral pathways
- Contributes to the development of local guidance related to diabetic wound management.



KNOWLEDGE

Recognises the need for surgical debridement.

SKILLS AND BEHAVIOURS

- Able to carry out advanced debridement (with a range of debridement tools) of complex wounds, within the scope of their practice
- Able to carry out advanced wound management techniques (e.g. topical negative pressure systems)
- Refers the patient, for surgical debridement appropriately
- Supports less-experienced colleagues in developing advanced debridement skills**
- Leads in the evaluation of novel wound care products**
- Provides clinical leadership in advanced wound debridement techniques**
- Leads in the establishment of working relationships with surgical staff responsible for surgical debridement**
- Provides expert opinion on debridement products, techniques and indications in local and national expert groups.**



KNOWLEDGE

- Understands the need for aggressive management of bioburden in wounds
- Understands why the signs and symptoms of local infection may not be seen in the patient with diabetes.

- Recognises deep infection (e.g. foot abscess) and refers for appropriately
- Recognises the need for inpatient treatment of diabetic foot ulceration, and facilitates the process of the patient's admission to hospital using local pathways
- Interprets results from microbiological sampling



- Leads colleagues in comprehensive microbiological sampling (e.g bone sampling, tissue biopsy) and reporting
- Leads in liaising with local infection control, microbiology and multidisciplinary teams to minimise patient risk associated with infection**
- Leads in establishing relationships with surgical staff for infection control and vascular reconstruction**
- Contributes in the development of local antibiotic use guidance
- Leads, in conjunction with appropriate stakeholders, the development and implementation of local antibiotic use guidance**
- Collaborates with higher educational institutions and other educational providers on meeting the diabetic foot-related educational needs of podiatrists and associated colleagues.**



An up-to-date knowledge of and the appropriate use of advanced and customised pressure relieving strategies used in the management of diabetic foot ulceration.

SKILLS AND BEHAVIOURS

- Monitors the effectiveness of the offloading strategy and modifies it accordingly
- Demonstrates the ability to apply bespoke pressure relieving devices to optimise wound healing such as total contact and slipper casts**
- Demonstrates the ability to plan and implement complex pressure relieving strategies**
- Employs a broad knowledge of the range of pressure-relieving devices to select the most appropriate interventions for the patient**
- Creates an environment that supports collaborative work with orthotists and other colleagues to optimise the patient's compliance with pressure-relieving devices.**



KNOWLEDGE

Advanced knowledge of available dressing products, and their modes of action.

SKILLS AND BEHAVIOURS

- Demonstrates extensive experience in the appropriate use of available dressing products
- Makes dressing product choices based on consideration of clinical indications, wound type, patient needs, and formulary and budgetary directives
- Supports other colleagues in choosing appropriate dressings for patients with diabetic foot ulceration
- Provides expert opinion to their local wound management formulary group and other related wound dressing groups
- Provides expert opinion on dressings and medical devices in local and national wound formulary and associated groups.

** desirable skills, not essential for practice at this skill level



PERIPHERAL VASCULAR DISEASE

This section includes knowledge, skills and behaviours common to all practitioners to provide effective care for people with diabetes and peripheral vascular disease (PVD).



KNOWLEDGE

- Aware of and can explain, signs and symptoms that would warrant an urgent reassessment and/or referral
- Aware of and appropriately uses, local referral protocols where foot pulses are not palpable
- Be aware of specific risk factors related to PVD and how they can be modified.

SKILLS AND BEHAVIOURS

- Provides advice and support to stop smoking where appropriate with onward referral if needed
- Completes basic vascular assessment and alerts their supervisor in time when onward referral is needed
- Clearly communicates to careers and patients who foot pulse palpation is necessary
- Able to palpate for presence or absence of foot pulses
- Assigns a foot ulcer risk score based on the result of pulse palpation and other screening tests in line with local protocols or national guidelines
- Records the foot pulse results on the relevant patient records system
- Explains the results of the foot pulse assessment and/or risk score to the patient and the carer in an appropriate manner
- Helps the patient and /or carer understand the implications of their PVD, in relation to potential morbidity, disease management and risks to life and limb.



KNOWLEDGE

- Able to identify and recognise symptoms and clinical signs likely to be due to PVD
- Aware of local policies and services available to further assess or treat these conditions.

SKILLS AND BEHAVIOURS:

- Able to carry out a basic peripheral arterial assessment, including clinical history, palpation of foot pulses, and hand held doppler insinuation of pedal arteries
- Able to make appropriate, specific referrals for specialist assessment and intervention.



KNOWLEDGE

- Is able to identify and recognise symptoms and clinical signs likely to be due to intermittent claudication, embolic disease, ischaemic rest pain, venoms, lymphatic or vasospastic disease
- Able to understand and interpret ABPI readings in the context of clinical findings
- Able to identify acute/critical limb ischaemia.

SKILLS AND BEHAVIOURS

 Able to carry out an assessment of peripheral arterial status including handheld doppler intonation of foot perineal and popliteal arteries and ABPI



- Communicates the clinical diagnosis to the patient and explains interventions available and implications of not treating the PVD
- Able to make appropriate referrals in relation to lifestyle, medicine or surgical interventions depending on the severity of PVD and patient choice
- Able to identify acute/critical limb ischaemia and facilitate urgent referral to a vascular multidisciplinary team
- Provides and facilitates the training of colleagues in lower limb peripheral vascular assessment and clinical management.



- An in-depth understanding of the need for non invasive diagnostic assessment and interpretation of results for lower limb PVD in line with national clinical guidance and local vascular team preference
- An in-depth understanding of nonsurgical interventions for the management of PVD
- An in-depth understanding of the role of advanced interventions, their effectiveness and rehabilitation.

- Able to carry out a range of non invasive diagnostic assessment and interpretation of results for lower limb PVD in line with national clinical guidance and local vascular team preference (e.g. TBPI, TcPO₂)
- Initiates and reviews nonsurgical vascular interventions (e.g. medicines, structured exercise)
- Provides education and training to colleagues in all aspects of lower limb clinical vascular assessment and decision making
- Develops local evidence PVD care/referral pathways in partnership with local vascular teams and all other clinical stakeholders who assess and manage lower limb problems in patients with diabetes
- Works within the vascular MDT, ordering and interpreting appropriate diagnostic imaging and consulting with patients on lower limb surgical interventions and attending team meetings
- Arranges follow-up for patients following intervention ensuring that appropriate management plans are implemented with onward referral as needed
- Works with stakeholders to develop and implement clinical pathways for all aspects of PVD, including both urgent and non-urgent management**
- Proactively monitors, audits and implements changes in the delivery of peripheral vascular assessment and management by clinicians working with foot health**
- Leads collaborative working and networking with GP's, diabetes and vascular teams and other stakeholders in relation to the care of people with diabetes and PVD**
- Works strategically with professional bodies, higher educational institutions and other agents to improve in the early detection and best management of the diabetes population with PVD.**

^{**} desirable skills, not essential for practice at this skill level



CHARCOT NEUROARTHROPATHY

This section includes knowledge, skills and behaviours common to all practitioners in the management of Neuropathic arthropathy, neuropathic osteoarthropathy, also known as Charcot neuroarthropathy or Charcot Foot (CN), refers to progressive degeneration of a weight bearing joint, It is a process marked by bony destruction, bone resorption, and eventual deformity.



KNOWLEDGE

Know the syndrome charcot neuroarthropathy (CN) and a have rudimentary knowledge of its clinical presentation and diagnosis.

SKILLS AND BEHAVIOURS

- Recognise a suspicion of CN
- Follows instruction from colleagues to ensure CN care plans are carried out, within the scope of their practice.



KNOWLEDGE

- Understands which patients are at increased risk of CN
- Have an understanding of the differential diagnosis of CN.

SKILLS AND BEHAVIOURS

- Recognises the clinical signs and symptoms of acute onset CN and initiates an immediate referral to a specialist team using agreed pathways
- Is able to give immediate simple off-loading advice/information
- Assists in the implementation of care plans for the management of CN.



KNOWLEDGE

- A working knowledge of local and national/international guidance on the diagnosis and management of CN
- A knowledge and understanding of the interventions for a suspected CN.

- Ensures that any initiated referral for an acute CN is received and dealt with by the recipient team
- Recognises when further investigations are required for the diagnosis of CN
- An understanding of the rationale for biomechanical pressure-relieving strategies in the management of CN
- Assists in the implementation of care plans for acute CN
- Confirms that the patient and/or carer understands the purpose and nature of the proposed CN care plan
- Able to undertake long-term care plans following the resolution of CN.





- A working knowledge of pressure-relieving strategies for the management of acute CN
- Has an in-depth knowledge of surgical management of CN and when its use is indicated
- Understands the need for diagnostic imaging and biochemical assessments of CN and has the knowledge of which test is appropriate when.**

SKILLS AND BEHAVIOURS

- Undertakes differential diagnosis of CN
- Assists in the design and implementation of the care plan for acute CN
- Where an uncertain diagnosis of acute CN or osteomyelitis is present ensures that appropriate management is undertaken and reviewed regularly
- Is able to apply safe, effective and immediate immobilisation techniques including removable and non-casted devices (e.g. walkers)
- Monitors the effectiveness of pressure-relieving strategies for the management of acute CN (e.g. total-contact casting) and makes changes, or refers for further assessment, appropriately
- Monitors the effectiveness in long-term force relief in the management of quiescent CN and the prevention of contra-lateral or recurrence of acute CN
- Uses clinical reasoning, and reflection on their practice, to ensure the safe management of acute CN, especially in the use of casts
- Plans and implements complex pressure-relieving strategies for short- and long-term management of all phases of CN
- Leads the design and implementation of care pathways and plans for the management of acute CN in collaboration with colleagues (e.g. consultant physicians, plaster technicians, orthotists)**
- Considers and where appropriate engages in the surgical management of CN**
- Applies bespoke pressure-relieving devices (including total-contact casts) for the management of acute CN**
- Monitors the effectiveness of CN care plans and makes changes where appropriate through the progressive stages of CN
- Refers for diagnostic imaging and bio-chemical assessments of CN**
- Communicates to the patient and/or carer the long and short-term implications of a diagnosis of CN
- Recognises the challenges faced by the patient with acute and resolved CN and provides them and/or carer with appropriate support
- Leads the design of long-term care plans for the patient following the resolution of acute CN
- Contributes to the development of local and national guidance on the management of diabetesrelated CN**
- Works with stakeholders in the development of local referral pathways for the management of CN and enables their implementation**
- Proactively identifies the need for clinical or service innovations to effectively manage CN, and takes a leading role designing and implementing these innovations.**

 ** desirable skills, not essential for practice at this skill level



HEALTH IMPROVEMENT

This section includes knowledge, skills and behaviours common to all practitioners in order to facilitate patients to limit the effects of the disease and improve their quality of life (QoL).



KNOWLEDGE

- Understands the importance of patient education for, and self-management of, longterm conditions
- Aware of services designed to assist the patient and/or carer in the self-management of their diabetes.

SKILLS AND BEHAVIOURS

Undertakes, and encourages, honest, clear communication with patients and/or their carer.



KNOWLEDGE

- An understanding of the psychological impact on the patient and/or carer of having a longterm condition
- Aware of the kinds of misinformation the patient may have about diabetes and is able to provide them with appropriate information about the condition
- Aware of services designed to assist the patient and/or carer in the self-management of their diabetes
- An understanding of the need for detailed personal action plans to achieve and maintain health-related goals for patients at increased risk of diabetic foot complications.

SKILLS AND BEHAVIOURS

Provides access to relevant information, in a suitable format, to the patient and/or carer to support their understanding and self-care.



KNOWLEDGE

- A critical understanding of the importance and effects of patient education and self management
- Awareness of the impact of culture and social context on how the patient feels about healthrelated behaviours and about changing them
- Recognises misinformation the patient may hold about their condition, and the effects of this misinformation has on self-care behaviours and their consequences
- An awareness of counselling techniques, interview methods and motivational interviewing
- Understands a range of tools and techniques in the assessment and evaluation of the patient's health status, concerns, personal context and priorities
- Understands a range of tools and techniques in the assessment and evaluation of the patient's health status, concerns, personal context and priorities
- A working knowledge of how to develop detailed personal action plans to achieve and maintain health-related goals for patients at increased risk of diabetic foot complications.



SKILLS AND BEHAVIOURS

- Uses a range of tools and techniques in the assessment and evaluation of the patient's health status and addresses their concerns
- Corrects misinformation the patient may hold about their condition
- Develops detailed personal action plans to achieve and maintain health-related goals for patients at increased risk of diabetic foot complications.



KNOWLEDGE

- Understands the psychological impact of diabetic foot disease in the patient and has knowledge of strategies to address the impact
- An in-depth understanding of the tools and techniques for assessment and evaluation of the patient's health status, concerns, personal context and priorities.

- Leads collaborative working and networking with higher educational institutions and other agents to meet the needs of people with diabetic foot disease
- Manages the psychological impact of diabetic foot disease in the patient
- Influences the design and dissemination of relevant, suitably presented, patient information on the prevention and management of diabetic foot disease
- High-level skills in undertaking, and encouraging, honest, clear communication with the patient and/or carer about active diabetic foot disease.



ULCER PREVENTION AND NON ULCERATIVE OFFLOADING

This section includes knowledge, skills and behaviours common to all practitioners in preventing ulceration in the person with diabetes at risk for foot disease.



KNOWLEDGE

- Understands the mechanisms leading to ulcers and understanding how to prevent by proper education
- Understands the principles of the correct choice of appropriate footwear and the prescription of specialist shoe wear to prevent ulceration and re-ulceration
- Understands that abnormal levels of mechanical pressure can contribute to the development of foot ulcers in diabetic patients
- Understands that high pressure is itself significantly associated with foot deformity and structural changes in soft tissue
- Understands that if an ulcer is not effectively offloaded healing may be chronically delayed with increased risk for infection and amoutation.

SKILLS AND BEHAVIOURS

- Assess the patients understanding of their level of risk according to assessment findings and educates them accordingly
- Identifies the individual risks of bringing the foot in danger and educates the patient and/or carer accordingly
- Encourages patients and/or carers to comply with instructions on the use of pressurerelieving devices.



KNOWLEDGE

- Understands the design application, function and prescription of in shoe orthotics in the prevention of ulceration and re-ulceration
- Understands the function and prescription of offloading devices in the prevention and management of ulceration and re-ulceration
- An up-to-date knowledge of pressure relieving strategies.

- Provides appropriate advice to prevent re-ulceration in the patient with diabetic foot disease
- Encourages patients and/or carers to use in shoe orthotics and offloading devices as appropriate to the management plan
- Uses basic pressure-relieving devices within the scope of their practice
- Refers patients for assessment/supply of specialist pressure-relieving devices using local pathways.





- Has an understanding of which patients are at an increased risk of ulceration due to their foot mechanics
- Has an understanding of stock footwear, its fit and prescription
- Understands the need for compliance among patients in relation to footwear and activity in relation to ulcer prevention
- Has a clear understanding of the different forces and their components that cause tissue damage and influences healing.

SKILLS AND BEHAVIOURS

- Appropriately measures and prescribes specialist footwear to prevent ulceration/re-ulceration
- Undertakes specific patient education to prevent ulceration
- Provides education to the patient and their carer in order to assist them in making appropriate management choices in preventing recurrence of ulceration
- Is able to prescribe therapeutic foot insoles/orthosis with a good knowledge of material science.



KNOWLEDGE

- Has an in depth understanding of diabetes, its complications and how to assess for its severity in relation to preventing foot ulcer recurrence
- Has an in-depth understanding of stock footwear and its alternatives
- An up-to-date knowledge of advanced and customised pressure relieving strategies used in the management of diabetic foot disease
- A knowledge of, and experience in using, technologies for gait analysis and foot pressure measurements
- An extensive knowledge of the materials used in the manufacture of foot orthoses and the technologies used in assessment of foot pressure and gait analysis.

SKILLS AND BEHAVIOURS

- Skilled in fabricating, modifying and supplying insoles as part of the management of diabetic foot disease
- Monitors the effectiveness of pressure-relieving devices, and appropriately refers patients for further foot pressure assessment
- Designs specific foot health education strategies to prevent ulceration/re-ulceration
- Undertakes audit, and service reviews regarding off-loading provision and outcome
- Plays an active role in education, training and mentorship programmes
- Is active in the introduction and development of local, national and international guidelines, standards and protocols regarding off-loading strategies
- Engages with local and National Stakeholders regarding strategies for preventing diabetic foot ulceration.**

** desirable skills, not essential for practice at this skill level



PAINFUL DIABETIC PERIPHERAL NEUROPATHY (PDPN)



KNOWLEDGE

To understand the causes, signs, symptoms and typical progression of painful diabetic peripheral neuropathy (PDPN).

SKILLS AND BEHAVIOURS

Able to recognise the common signs and symptoms of PDPN when reported by a patient and alert the supervisor for the need for onward investigation.



KNOWLEDGE

A basic knowledge of the management strategies available for the relief of the symptoms of PDPN.

SKILLS AND BEHAVIOURS

Provides the patient and/or carer with information on PDPN in a suitable format.



KNOWLEDGE

Understands the difference between PDPN and other causes of painful symptoms.

- Able to refer appropriately for further investigations and treatment
- Able to differentiate between PDPN and other painful symptoms, such as ischaemic rest pain.





- An in-depth knowledge of the causes of PDPN
- An in-depth knowledge of the signs and symptoms of PDPN
- An in-depth knowledge of the typical progression of PDPN
- An in-depth knowledge of the evidence-based treatments available for the relief of the symptoms of PDPN.

- Helps the patient and/or carer to understand the actions they can take to manage the symptoms of PDPN. Provides the patient and/or carer with information on PDPN in a suitable format and encourages them to engage in active self-management and treatment compliance
- Supports or contributes to specialist PDPN/pain clinics
- Works with stakeholders to develop and implement PDPN care pathways
- Proactively identifies the need for clinical or service innovations to effectively manage PDPN, and takes a leading role designing and implementing these innovations
- Leads collaborative working and networking with higher educational institutions and other agents to meet the needs of the population with diabetes.**

^{**} desirable skills, not essential for practice at this skill level





■ Has an awareness of the urgent need for surgical debridement/interventions due to infection.

SKILLS AND BEHAVIOURS

Alerts their supervisor when they identify patients in need of surgical intervention in accordance with local pathways and within their scope of practice.



KNOWLEDGE

Has an awareness of the selection criteria and pathways for surgical foot procedures and their indications for use.

SKILLS AND BEHAVIOURS

Refers patients for the appropriate surgery to the appropriate surgical service using the appropriate pathways.



KNOWLEDGE

- Understands the principles of local debridement
- Understands the principles of compartments of the foot
- To understand the need for local anaesthesia and its contraindications.

- Is able to undertake and clearly document a patient assessment determining and rationalising the indications and contraindications for debridement
- To administer local anaesthesia when required within their scope of practice*
- To understand and adopt correct hand washing and gowning techniques
- To understand the relevance of pharmacological agents, their actions and use, initiating action where required*
- To know and to treat the complications and side effects derived from debridement*
- To be able to manage postsurgical open wounds and refer the need for urgent surgical review or further surgery.





- Has an understanding of the different types of surgery, their criteria and requirements regarding pre-surgical assessments.
- Understands the importance of haemostasis and the factors which can affect it.
- Is fully conversant with theatre procedures and protocols
- Understands the duties of all theatre staff and how the team works together.

- Able to carry out surgical debridement techniques
- Able to carry out appropriate haemostasis techniques where required
- Able to carry out different tissue handling and suturing/closure techniques
- Performs elective surgery techniques (procedure performed to alleviate pain to limitation of motion in a person without loss of protective sensation) always performed in the absence of critical limb ischaemia
- Carries out prophylactic surgery (procedure performed to reduce risk of ulceration or reulceration in person with loss of protective sensation but without open wound) always performed in the absence of critical limb ischaemia
- Undertakes comprehensive detailed records of all surgical procedures undertaken including any complications, postsurgical instructions and follow-up plan
- Performs curative surgery (procedure performed to assist in healing open wound)
- Performs emergency surgery (procedure performed to limit progression of acute infection)
- Performs reconstruction surgery in diabetic charcot foot
- Able to undertake and present regular audits and reviews of all surgical interventions and implement change where required
- Able to introduce new surgical approaches, techniques and pathways where appropriate
- Able to undertake the training and mentorship of junior colleagues
- Able to ensure that an multidisciplinary approach to the surgical management of diabetic foot patients is maintained and developed
- Influences local, national, international policies and guidelines where applicable.

 $^{^{\}star}$ important for practice at this level but may not be able to be employed due to individual legislation in countries





- Understands the importance of evidence-based practice
- Analyses methods of clinical evaluation.

SKILLS AND BEHAVIOURS

- Undertakes general and basic literature searches to answer clinical questions
- Demonstrates a knowledge of current research relevant to their level of practise
- Show clinical leadership within their workplace at their level of competence.
- Participates in peer review of colleagues' clinical practice at their level of competence.



KNOWLEDGE

Demonstrate knowledge of current research in the field of diabetic foot disease.

SKILLS AND BEHAVIOURS

- Facilitate the use of evidence-based practice within the clinical setting
- Shows clinical leadership within their workplace
- Aware of local diabetes service protocols and works within them
- Participates in peer review of their own clinical practice.



KNOWLEDGE

- Understands and has an knowledge of the audit cycle
- Critically appraises the current research evidence in the field of diabetic foot disease.

SKILLS AND BEHAVIOURS

- Participate in the design of clinical audit to improve practice outcomes
- Implement the results of audit to improve clinical practice and change clinical outcomes
- Participates in the development of guidance, protocols and recommendations related to diabetic foot care.



KNOWLEDGE

- Understands and has an in-depth knowledge of quantitative and qualitative research methods
- Understands and has an in-depth knowledge of the audit cycle.

SKILLS AND BEHAVIOURS

Leads and designs clinical research in the field of diabetic foot disease



- Disseminates current research findings where appropriate to improve the clinical service for patients with diabetic foot disease
- Implements research findings to enhance patient care
- Collaborates with multiple stake holders to design develop and implement innovative research projects in the field of diabetic foot management
- Presents research findings to a local, regional and national audience to influence and drive policy and improve patient outcomes in the field of diabetic foot disease
- Provides mentorship to junior colleagues in all aspects of research and audit
- Contributes to the development of relevant national guidance
- Proactively identifies the need for clinical or service innovations to effectively manage active
 diabetic foot ulceration, and takes a leading role designing and implementing these innovations
- Leads in the integration of theoretical wound management into clinical practice, and collaborates with higher educational institutions and other educational providers to achieve this
- Ensures there is local capacity to facilitate, support and mentor colleagues seeking to develop their clinical practice (e.g. advanced debridement, total-contact cast fabrication)
- Contributes to the coordination of services for the care of the diabetic foot across organisational and professional boundaries
- Provide support for colleagues to interpret current research in diabetic foot disease
- Develop skilled methods to present audit findings
- Shows clinical leadership within their local diabetic foot services
- Offers appropriate education and advice to podiatry and other colleagues in relation to clinical and service practices in diabetic foot care
- Plans and initiates collaborative training programmes for service improvement and delivery
- Leads the review of their own and their colleagues' clinical practice
- Creates opportunities for colleagues to undertake self-directed and supported learning
- Challenges local services to improve care of, and outcomes for, people with diabetic foot disease
- Provides expert knowledge in relation to diabetic foot services
- Leads projects designed to improve diabetic foot-related patient and service outcomes
- Participates in the development of professional networks related to diabetic foot care
- Designs, delivers and evaluates educational packages for appropriate colleagues, and students, on diabetic foot care and service development and delivery
- Provides clinical leadership on diabetic foot care at local, national, and international levels
- Leads diabetic foot care services across organisational and professional boundaries
- Leads the development of professional networks related to diabetic foot care, and facilitates the participation of colleagues in these networks
- Develops, and implements, clinical guidance and protocols related to diabetic foot care at local and national levels
- Communicates the sometimes complex and challenging needs of providing diabetic foot care
 to key opinion leaders, policy makers and politicians nationally, and influences related policy
- Supports colleagues in bringing about service improvement in the care of the diabetic foot
- Proactively identifies the need for clinical or service innovations in diabetic foot care, and takes
 a leading role in designing and implementing these innovations
- Develops and implements strategies to ensure the best use of local resources and technologies in diabetic foot care.

