PODIATRY LEARNER GUIDE

Assist with basic foot hygiene

April 2017
Acknowledgement

The Allied Health Professions’ Office Queensland wishes to acknowledge and extend sincere appreciation to the following Queensland Health clinicians who have contributed to the development of these learning support materials:

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- Endorsement:
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INTRODUCTION

Welcome to Podiatry Learner Guide: Assist with basic foot hygiene

Learner Guide Structure

This Learner Guide has been developed specifically for allied health assistants to provide the necessary knowledge and foster the skills required to assist a podiatrist in rehabilitation programs developed by Allied Health Professionals.

This Learner Guide contains information and activities relating to key topics to enhance learning opportunities. The guide is broken up into three topic areas with sub-topics for each. These are as follows:

Organisational Practice:
- Roles and responsibilities
- Policy and procedures
- Organisational practice

Foot Care:
- Anatomy and Physiology of the Foot
- Foot Pathology
- Treatment

Service Delivery:
- Podiatry Interventions
- Client Care
- Monitoring Requirements

The Learner Guide has six sections:
1. Introduction
2. Learning Topics
3. Workplace Observation Checklist
4. References
5. Resources and Websites
6. Appendix

Each topic includes sub-topics which cover the essential knowledge from the unit of competency. You will be asked to complete the activities in each topic to support your learning. These activities address the essential skills from the unit of competency and will be part of your assessment.

Throughout the guide, you will be given the opportunity to work through a number of activities, which will reinforce your learning and help you improve your communication and organisation skills, manual handling skills and ability to apply therapeutic exercise practices. Take time to reflect during the module on how you may be able to apply your new knowledge and skills in your role as an allied health assistant.
Learning requirements

It is important that you have an allied health workplace supervisor who has agreed to support in your study. Regular clinical supervision during the course of your study should also assist you to stay “on track”, provide opportunities for your supervisor to monitor your progress, provide encouragement, and to check that you understand the information in the learning materials. This will be particularly important if you are having any specific learning difficulties.

Activities and assessment tasks may require access to the internet. If you do not have internet access please talk with your supervisor about your options.

Self-Completion Checklist

The Self Completion Checklist outlines the underpinning knowledge and skills contained in each of the topics for the unit of competency you will be assessed against. You will be asked to review the list and place a tick in the box if you feel you have covered this information in each section and if you feel ready to undertake further assessment. If you have any questions about this checklist, ask your supervisor.

Recognition for Prior Learning

If you subsequently enrol in the Certificate IV in Allied Health Assistance you may be able to undertake recognition assessment for the study that you have done. To enable you to gain recognition for the learning you have undertaken in this Learner Guide, it will be necessary for you to complete the Assessment Guide associated with this unit of competency. The assessment activities in this Assessment Guide must be signed off by a podiatrist. Copies (Word version) of the Assessment Guide can be obtained by contacting the AHPOQ team via e-mail: AH_CETU@health.qld.gov.au

Please Note

Due to the varied environments in which allied health assistance is carried out, the terms ‘patient’ and ‘client’ are used interchangeably throughout this resource. Please use your organisation’s preferred term when performing your duties.
Symbols

The following symbols are used throughout this Learner Guide.

**Important Points** – this will include information that is most relevant to you; statistics, specific information or examples applicable to the workplace.

**Activities** – these will require you to reflect on information and workplace requirements, talk with other learners, and participate in a role play or other simulated workplace task. You may use the space provided in the Learner Guide to write down a draft response. Record your final answer in the Assessment Guide.

**Further Information** – this will include information that may help you refer to other topics, complete activities, locate websites and resources or direct you to additional information located in the appendices.

**Case Studies** – these will include situations or problems for you to work through either on your own or as a group. They may be used as a framework for exploration of a particular topic.

**Research** – this refers to information that will assist you complete activities or assessment tasks, or additional research you may choose to undertake in your own time.
LEARNING OUTCOMES

As an Allied Health Assistant assisting with basic foot hygiene you will be required to perform the following tasks.

1. Prepare for basic foot hygiene by:
   • Interpreting and responding to client Foot Care Plan and occasion of care requirements as prescribed by supervising Podiatrist
   • Determining client availability according to organisation protocols
   • Gathering necessary equipment (which may include files, clippers, scissors, forceps, gauze applicators, personal protective equipment, drill and burr/mandrel/Moore’s disc, black’s file, tissue nippers)
   • Undertaking steps to meet infection control requirements
   • Preparing for basic foot hygiene to comply with legislation, regulatory and organisation/practice requirements

2. Perform basic foot hygiene by:
   • Explaining to the client the purpose, rationale and requirements of the foot hygiene session
   • Determining the client’s understanding of the purpose, rationale and requirements of each part of the foot hygiene session
   • Identifying any condition indicating the client is at high risk (which may include, diabetes, peripheral vascular disease, peripheral neuropathy, immunologically comprised, nail pathology and disease, dermatological disease etc.) that requires a Podiatrist’s attention
   • Assisting client in and out of shoes, socks and hosiery where necessary
   • Correctly positioning the client prior to foot hygiene session
   • Implementing necessary infection control measures
   • Performing basic foot hygiene according to the directions of the Podiatrist and using appropriate infection control precautions, especially in relation to airborne particles
   • Applying appropriate dressings to any skin breaks that might result from treatment
   • Providing feedback that reinforces the Podiatrist’s advice
   • Identifying and managing client compliance issues.
   • Working with client to determine and plan any follow up requirements and dates
   • Seeking assistance when client presents with needs or signs outside limits of own authority
   • Reporting client difficulties to the supervising Podiatrist

3. Apply padding and cushioning as prescribed by the supervising Podiatrist by:
• Explaining to the client the purpose, rationale of the dressing, padding or cushioning
• Determining the client’s understanding of the purpose, rationale of the dressing, padding or cushioning
• Correctly positioning the client
• Implementing necessary infection control measures, including disposal of used padding and cushioning according to infection control protocols
• Applying, padding and cushioning according to the directions of Podiatrist
• Providing feedback that reinforces the Podiatrist’s advice
• Identifying and managing client compliance issues.
• Working with client to determine and plan any follow up requirements and dates
• Seeking assistance when client presents with needs or signs outside limits of own authority.
• Reporting client difficulties to the supervising Podiatrist

4. Clean and store equipment by:
   • Collecting, handling, managing and disposing of biological waste material according to organisation guidelines and infection control requirements
   • Preparing equipment for sterilisation according to manufacturer and organisation requirements/ensuring adequate supply of prepacked disposable instruments.
   • Storing equipment according to manufacturer’s requirements and organisation protocols.
   • Reporting equipment faults to appropriate person and maintaining equipment in working order.

5. Document client information by:
   • Documenting occasion of basic foot hygiene according to organisation requirements
   • Documenting referral to supervising Podiatrist as required
   • Using appropriate terminology to document symptomatic expression of identified problems

6. Comply with supervisory requirements by:
   • Providing podiatry assistance according to the instruction of the treating Podiatrist
   • Providing client progress feedback to the treating Podiatrist
   • Reporting client difficulties and concerns to the treating Podiatrist
   • Implementing variations to the podiatry care according to the advice of the treating Podiatrist
LEARNING TOPICS

The table below outlines the relationship between the topics presented in this Learner Guide and the Essential Knowledge required for completion of the unit of competency.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Essential Knowledge</th>
</tr>
</thead>
</table>
| 1. Organisation Practices | • Roles, responsibilities and limitations of self and other allied health team members and nursing, medical and other personnel  
|                        | • Supervisory and reporting protocols  
|                        | • Relevant organisation policies and procedures  
|                        | • OHS policy and procedures  
|                        | • Infection control protocols  
|                        | • Privacy and confidentiality requirements  
|                        | • Record keeping requirements |
| 2. Foot Care           | • Structure and functioning of the skin and integuments  
|                        | • Basic anatomy and physiology of the foot  
|                        | • Basic understanding of foot pathology  
|                        | • Pathology of nails  
|                        | • Disease processes relevant to the client group/s  
|                        | • Principles of foot hygiene  
|                        | • Standard precautions/additional precautions  
|                        | • Principles of aseptic technique  
|                        | • The function of medicaments:  
|                        | • emollients/moisturisers  
|                        | • astringents  
|                        | • antisepsics |
| 3. Service Delivery    | • Conditions treated by a Podiatrist  
|                        | • Goals and limitations of podiatry intervention  
|                        | • Client care plans  
|                        | • Medical terminology |
CONTENT

1. Organisational Practice

This topic covers information about:
- Roles and responsibilities
- Policy and procedures
- Organisational practice

Activities in this topic address the following essential skills:
- Communicate effectively with supervisors and co-workers
- Operate within OHS and infection control requirements
- Work under direct and indirect supervision
- Maintain accurate records
- Use effective observation skills

1.1 Roles and Responsibilities

As an employee of Queensland Health, you are responsible for compliance with the Code of Conduct for the Queensland Public Service in your workplace.

<table>
<thead>
<tr>
<th>Integrity and Impartiality</th>
<th>Demonstrate commitment to ethical standards; impartiality; and honest, fair and respectful interactions with all persons.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting the Public Good</td>
<td>Manage public resources effectively, efficiently and economically; seeking to achieve excellence in service delivery to serve clients better.</td>
</tr>
<tr>
<td>Commitment to the system of Government</td>
<td>Uphold the system of government and the laws of the State, Commonwealth and local governments.</td>
</tr>
<tr>
<td>Accountability and transparency</td>
<td>Demonstrate commitment to exercising proper diligence, care and attention; achieving high standards of public administration; innovating and continually improving performance.</td>
</tr>
</tbody>
</table>

(State of Queensland, 2010)
Your workplace will have a specific Role Description for your position as Allied Health Assistant – whether your position is Podiatry specific or contains aspects of a foot hygiene role. It is important that you always work within the role boundaries outlined in this document. Performing in your delegated area of responsibility allows you to effectively and safely perform your role as a member of the health care team.

Figure 1 Responsibility links between the Allied Health Professional and the Allied Health Assistant.

Many areas of health care are legislated to ensure that only those people with appropriate skills and knowledge are permitted to perform certain clinical tasks.

Further information and links:
Podiatry Board of Australia: http://www.podiatryboard.gov.au
NSW Nurses Association Guidelines on Provision of Basic Foot Care by Nurses:
Activity 1: Roles and Responsibilities of an Allied Health Assistant

1. Obtain a copy of your role description. Ensure you understand each key responsibility listed. Give a brief explanation of the responsibility links between you and your supervising Allied Health Professional. For example, Pam is a Podiatry Allied Health Assistant. In her role she takes direction from the team of Podiatrists with whom she works.

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2. Familiarise yourself with the websites listed on the previous page under ‘Further Information and Links’. Make some notes in relation to your scope of practice from at least two of the sites in the space below.

Website 1:
________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Website 2:
________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
1.2 Policies and Procedures

As a Foot Hygiene Worker, you will perform your duties according to a set of organisational policies and procedures. This set of documents must, by law, include policies on Occupational Health and Safety and Infection Control.

Occupational Health and Safety

- Ensures safety of all employees, clients and anyone else entering the workplace
- Involves risk management, an integral part of all Queensland Health activities
- As part of the management of risks, you must take reasonable action to ensure that:
  - Accidents are prevented
  - People are protected from being hurt
  - Hazards are removed or controlled
  - Health is looked after and encouraged

The Queensland Health Occupational Health and Workplace Safety website provides comprehensive information relevant to this topic at the following link:

Podiatry–Specific Example: Positioning the Client for Treatment

There are many factors that must be considered when you are positioning a client in order to perform foot skin and nail care. The physical capacity of the client will determine whether they are capable of sitting. Should sitting be a difficult or non-optional task for the client, treatment with the client lying face up is the alternative option. Below you will find information important to be aware of when considering this aspect of client care.

On the following pages are three [3] examples of positioning the client for treatment.
Position 1: Client Lying

![Image of a height adjustable practitioner stool](Height adjustable practitioner stool (Briggate Medical Company, 2010))

<table>
<thead>
<tr>
<th>Client Considerations</th>
<th>Practitioner Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should be lying face-up; ideally in a height adjustable bed</td>
<td>Ensure the bed is at a height such that no bending or prolonged uncomfortable positioning is required. This may involve raising the bed (if height adjustable) or sitting on an adjustable height stool (Figure 2) so that you are positioned at a functional height.</td>
</tr>
</tbody>
</table>

Position 2: Client Sitting (Specific Podiatry Treatment Chair)

![Image of a specific podiatry treatment chair](Specific Podiatry Treatment Chair (Briggate Medical Company, 2010))
## Position 3: Client Sitting [Stand Chair]

![Figure 4](image-url)  
*Client positioning in standard chair with footstool (Podiatry and Foot Protection Program, 2010)*

### Client Considerations

- Ideally the chair should have armrests for stability
- Use comfortable-height stool to rest the client’s feet on

### Practitioner Considerations

- Where possible, utilise adjustable height stool so that you can work at a height that reduces neck and back strain
- Avoid twisting, turning and leaning into awkward positions as this may result in injury

---

**It is your responsibility to ensure you know the safety procedures and concerns for your industry and work in a safe manner in your organisation.**
Activity 2: Occupational Health and Safety

1. Visit the Queensland Health Occupational Health and Workplace Safety site at http://qheps.health.qld.gov.au/safety/home.htm and familiarise yourself with the content of the site. Investigate the OHS Policies for your workplace. Comment below on which specific policies may be relevant to your Foot Hygiene role, for example, No Lift Policy.

2. Familiarise yourself with the equipment such as operator stools and foot stools which exist in your workplace. Make a note of what specific equipment may be required to fulfil your Foot Hygiene role (Note: Do not include instruments and the like as this will be covered in Topic 2).
Infection Control

Infection control involves maintaining a safe environment in the health care setting for staff, clients, and visitors. Infection Control in Australia is expected to comply with the current endorsed version of the Australia/New Zealand standards as well as industry specific guidelines.

These standards and guidelines may include:

- Australian Standards AS4815 and AS/NZS4187.
- National health and medical research council guidelines for infection control
- Industry codes of practice
- Local, state and federal government guidelines and standards
- Recommendations and operating manuals from manufacturers

Infection Control measures protect people in health care settings from contracting or passing on infection by:

- Removing or controlling sources and reservoirs of organisms
- Reducing the risk of transmission by promoting an environment where the risk of interaction between potentially infectious agents and susceptible people is minimised
- Maximising host defences

Care workers should have a sound knowledge of the principles of infection control and be aware of their organisational infection control protocols.

Infection Control policies and procedures may relate to:

- Cleaning procedures and schedules
- Cleaning equipment
- Handling, storage and disposal of all types of waste
- Infection control risk management
- Infection control incident and hazard reporting

All staff employed in a health care service or facility are responsible for assisting in the control of infection by observing two levels of infection control practices – standard precautions and additional precautions.
<table>
<thead>
<tr>
<th>Precaution</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Basic work practices recommended for use with all clients to give the minimum level of protection for everyone (clients, staff and others)</td>
<td>Hand washing Immunisation of health care workers Routine environmental cleaning</td>
</tr>
<tr>
<td>Additional</td>
<td>Used in addition to standard practices with those clients who pose special infection risks</td>
<td>Infectious client is isolated, preventing transmission of the infectious agent to susceptible people in the health care setting Appropriate signage to alert staff and visitors that they are entering an isolation area and personal protective equipment, e.g. a mask, is required</td>
</tr>
</tbody>
</table>

**Standard Precautions**

Standard Precautions are work practices which achieve a basic level of infection control. Based on the idea that all blood and body fluids are potentially infectious, these precautions apply to the care and treatment of all clients regardless of their perceived infectious risk.

Standard Precautions should be implemented at all times as a minimum standard for infection control. These precautions include:

- Aseptic technique to reduce client exposure to microorganisms
- Hygiene practices such as hand washing
- Use of personal protective equipment
- Appropriate clinical layout and workflow
- Appropriate clinical work practices
- Protocols for waste disposal and sharps management
- Protocols for processing reusable instruments and equipment
- Appropriate practices for cleaning and maintenance of the Podiatric Clinic and equipment
- Immunisation of health care workers

(Podiatry Board of Australia, 2016; QLD Health 2016, *Diseases and Infection Prevention*).
Additional Precautions

These precautions are used in addition to Standard Precautions when extra barriers are required to prevent or interrupt the transmission of specific diseases. The implementation of these strategies is intended to prevent the spread of infection to others from clients, known or suspected to be infected or colonised with infectious agents that would not be contained by standard precautions alone.

Where indicated, additional precautions your Podiatrist may ask you to observe may include:

- Isolation of the infectious client in a separate room or waiting area or alternatively placing them at the end of the treatment list
- Additional personal protective equipment, for example, masks, gloves and single use gowns
- Appropriate environmental cleaning regimes

(Podiatry Board of Australia, 2016; Queensland Health 2016, Diseases and Infection Prevention).

Principles of Aseptic Technique

Aseptic Technique:

- Reduces the number of infectious agents
- Prevents the transmission of infectious agents
- Renders and maintains objects and areas as free as possible from infectious agents
- May be categorised as ‘clean’ or ‘sterile’

Clean Technique

- Refers to practices that reduce the number of infectious agents
- Should be used for routine, non-invasive procedures, for example, cutting of toe nails, debridement of skin and dressing of ulcers
- Should include:
  – Personal hand washing (reduce numbers of infectious agents on the skin)
  – Personal protective equipment (e.g. gloves, to prevent transmission)
  – Cleaning procedures to prevent transmission
  – Reprocessing of instruments and equipment between uses

Sterile Technique

- Practices which maintain objects and areas as free from microorganisms as possible
- Should be used for invasive procedures including surgery for ingrown toe nails
• Should include:
  – Maintenance of sterile operative field
  – Radius of operative area prepared by removal of unnecessary items and cleaning of procedural surfaces
  – Operative field covered with sterile drapes and containing only sterile instruments, dressings and medicaments

(Podiatry Board of Australia, 2016)

Other Policies
Other policies may vary across organisations. Some examples may include, but are not limited to:

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Health Assistant – Podiatry – Assessment and Care Planning</td>
<td>All consumers who are referred to the Allied Health Assistant – Podiatry service will undergo a comprehensive assessment by the Podiatrist prior to referral</td>
</tr>
<tr>
<td>Allied Health Assistant – Podiatry – Nail Clinic Eligibility and Referral</td>
<td>Referral to the nail clinic may be made by the Podiatrist after a podiatric assessment has been completed and they are satisfied that the consumer meets the criteria for referral</td>
</tr>
</tbody>
</table>
Activity 3: Infection Control

1. Identify the Infection Control Policies specific to your organisation and list them below.

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Activity continues on the following page
Activity 3: Infection Control Continued

2. List below two specific situations where Standard and, if necessary, additional precautions may be applied in your workplace.

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________________________________________________________________________
1.3 Organisational Practice

Privacy and Confidentiality
Queensland Health has a longstanding commitment to ensuring the privacy and confidentiality of personal information collected. That commitment is supported by nine National Privacy Principles in the Information Privacy Act 2009 (Qld) (in relation to all personal information held) and strict confidentiality obligations found in Part 7 of the Health Services Act 1991 (Qld) (in relation to health information held) (Queensland Health, 2009).

Health workers are obligated not to disclose client information except when the information is required in the course of their professional duties. This information may include but is not limited to medical history, current treatment, and prognosis.

Consent
Health care workers are legally required to obtain client consent prior to commencing contact. The exception to this is in the case of an emergency. Your supervising Allied Health Professional is responsible for obtaining initial client consent for treatments with which you will be assisting. In your regular contact with clients, you should routinely gain consent before assisting the client in any way.

Requirements for consent:
- Must be freely given
- Client must have legal capacity as determined by the individual's intellectual status and age – if less than 18 years of age, consent must be provided by a parent or legal guardian.
- Client is adequately informed of the nature of the procedure

Record Keeping
Any intervention, treatment, advice, or occurrence of any kind (including indirect client contact) with or about a client must be documented within an acceptable time frame. Client record keeping must be performed in a manner consistent with your specific organisational policy and procedure. This will be in a format that is accepted and reproducible in the event of a medico-legal situation.

It is a legal requirement that all documentation is completed in black ink.
Supervision

As a Foot Hygiene Worker, you will always work under the direction and supervision of the relevant supervising Health Professional. In most cases this will be a Podiatrist or Nurse.

Supervision, by nature, is flexible and may be conducted in a number of ways including face-to-face or through electronic communication media such as telephone, videoconference, or email.

A person under supervision does not require direct and continuous personal interaction with their supervisor. The provision of supervision will be determined by a number of factors including:

- The supervisee’s familiarity with the task being supervised
- The progression of the client and the necessity to alter the treatment plan
- The need to support the development of non-clinical aspects including time management and communication skills
- Geographical factors where the supervisor and supervisee may not both be in the same place at the same time
- Organisational requirements

Your Role in Supervision

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>You are given a task to complete.</td>
</tr>
<tr>
<td></td>
<td>Your supervisor observes as you complete the task.</td>
</tr>
<tr>
<td>Indirect</td>
<td>You are given a task to complete.</td>
</tr>
<tr>
<td></td>
<td>Your supervisor interacts with you periodically to evaluate your success with completing the task.</td>
</tr>
<tr>
<td>Delegation</td>
<td>You are given a task to complete and you are responsible for completing it.</td>
</tr>
</tbody>
</table>

On any given day, your duties may comprise a combination of these methods. As your skill and experience level increases, you may perform a greater number of tasks requiring indirect supervision or delegation (Podiatry Board of Australia, 2010).
Case Study

Pam, an Allied Health Assistant (Podiatry), works with the multidisciplinary team in the High-Risk Foot Clinic. Sam, the supervising Podiatrist, asks Pam to remove a client’s existing wound dressings, irrigating the wounds whilst doing so. While Pam is performing this task, Sam checks periodically that Pam is using the correct method of dressing removal (indirect supervision). Once the dressings have been removed and the wound has been debrided and evaluated, Sam then gives Pam step-by-step direction in the application of the new wound dressing (direct supervision). Once the new wound dressing has been applied and secured in place, Sam then asks Pam to complete the process by applying the appropriate bandaging, a task that Pam has done many times before (delegation). While Pam completes this task, Sam completes the documentation for this client.
Activity 4: Supervision

1. Outline the supervision arrangements that exist for you in your current role. Discuss your Foot Hygiene role with your supervisor and the supervision requirements for this. Make notes from your conversation below.

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Activity continues on the following page
Activity 4: Supervision continued

2. Provide an example from your current role where you have undergone direct supervision, indirect supervision, and delegation.

<table>
<thead>
<tr>
<th>Supervision Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Supervision</td>
</tr>
<tr>
<td>Indirect Supervision</td>
</tr>
<tr>
<td>Delegation</td>
</tr>
</tbody>
</table>
## Key Points

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important Points</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 Roles and Responsibilities</strong></td>
<td>Queensland Health Code of Conduct</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allied Health Assistant – Podiatry Role</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responsibility links with Allied Health Professional</td>
<td></td>
</tr>
<tr>
<td><strong>1.2 Policies and Procedures</strong></td>
<td>Occupational Health and Safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infection Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organisation specific policies and procedures</td>
<td></td>
</tr>
<tr>
<td><strong>1.3 Organisational Practices</strong></td>
<td>Privacy and Confidentiality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Record Keeping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervision</td>
<td></td>
</tr>
</tbody>
</table>

My Points to Remember

____________________________________________________________________
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____________________________________________________________________
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____________________________________________________________________
2. Foot Care

This topic covers information about:

- Anatomy and Physiology of the Foot
- Foot Pathology
- Treatment

Activities in this topic cover the following essential skills:

- Undertake activity analysis — breaking activities down into component parts
- Use effective observation skills
- Identify pathological nail and skin conditions
- Identify variations in podiatry conditions
- Select and implement basic foot assessment skills
- Safely and effectively use podiatry instruments
- Cut and file nails
- Safely use electrical equipment, including electric drill
- Undertake padding processes

Apply wound dressing for iatrogenic wound

- Apply medicaments:
  - Emollients/moisturisers
  - Astringents
  - Antiseptics

2.1 Anatomy and Physiology of the Foot

The Skin

The skin, the body's largest organ, is a membrane that encloses the body. The skin is composed of two layers, the epidermis, and the dermis. These layers are joined by the dermo-epidermal junction.
Figure 5  Anatomy of the Skin (Stanford Medicine, 2010)

Epidermis:
- generally 0.06-0.15mm thick
- ‘top’ coat of the skin
- forms the ‘intact’ barrier between the body and its environment
- contains five layers of cells including keratinocytes (protein cells) and melanocytes (provide UV light protection)

Dermis:
- usually approximately 2-4mm thick
- makes up the bulk of the skin
- most of the appendages occur in this layer-
  - Arteries
  - Veins
  - Capillaries and Lymph vessels
  - Nerves
  - Hair Follicles
  - Sweat glands
  - Sebaceous glands

Function of Skin
• Prevents dehydration
• Protects against outside agents, for example, bacteria
• Regulates body temperature
• Produces Vitamin D
• Protects against damage from UV radiation
• Processes and send information via nerves
### Activity 5: Age-Related Changes to Skin

1. Compare the skin characteristics on the lower legs of three people, one from each of the age brackets listed below. Comment on your observations considering factors such as texture (thick/thin), dryness, presence of hair, presence of lesions (sores).

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12 years</td>
<td></td>
</tr>
<tr>
<td>30-45 years</td>
<td></td>
</tr>
<tr>
<td>70-85 years</td>
<td></td>
</tr>
</tbody>
</table>

2. Make some notes to discuss with your supervisor about possible aged-related changes to skin based on your observations.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
The Foot

Each foot has:

- 26 bones
- 38 joints
- 28 muscles
- Blood Vessels
- Nerves
- 150,000 skin cells
- 50,000 Sweat glands

Figure 6  Bones of the Foot (Encyclopaedia Britannica, 2010)
Muscles of the Foot

© 2007 Encyclopædia Britannica, Inc.

Figure 7    Muscles of the Foot (Encyclopædia Britannica, 2010)
Vascular

The body requires adequate blood flow to all areas to maintain good health and function. Oxygenated blood, which has passed through the lungs, leaves the heart through the aorta (the body’s largest artery) and is then pumped throughout the body, returning to the heart via the vena cava (the body’s largest vein).

Figure 8 Human body vascular supply (Wikimedia, 2010)
The feet are supplied with blood by two main arteries:

- Dorsalis pedis (top of the foot; shown below in red)
- Posterior tibial (bottom of the foot; shown below in orange)

Figure 9  Blood Supply of the Foot (joint-pain-expert.net, 2010)
Neurological

The body's nervous system can be divided into the Central Nervous System (CNS) and the Peripheral Nervous System (PNS). The CNS contains all structures lying within the central axis of the body – the brain and spinal cord. The PNS comprises the nerves that are located outside the brain and spinal cord.

Figure 10  Human body neurological supply (Improve-Education.org, 2010)
Peripheral nerve function provides information to the brain about the external environment. Afferent nerves carry nerve impulses from receptors or sense organs towards the central nervous system and provide information about changes in touch, pressure, temperature, pain, and bodily position (also known as proprioception). Efferent nerves carry nerve impulses away from the central nervous system to effectors such as muscles or glands and provide information such as sweat glands (McLeod-Roberts: 107, 1995).

As an Allied Health Assistant, it is not necessary for you to memorise the names of all the bones, muscles, and blood vessels listed above. Your supervising Podiatrist will let you know which medical terminology you will need to know to perform your role.
Activity 6: Relevant Medical Terminology

1. Discuss this topic with your Podiatry supervisor. Make a list below of the terminology that your supervisor recommends you be aware of.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Match the terms below with their correct definitions.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aorta</td>
<td>Nerves located outside the brain and spinal cord</td>
</tr>
<tr>
<td>Vena Cava</td>
<td>Main artery supplying the bottom of the foot</td>
</tr>
<tr>
<td>Peripheral Nervous System</td>
<td>Carries oxygenated blood from the heart out to the body</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>The body’s largest vein</td>
</tr>
<tr>
<td>Dorsalis pedis</td>
<td>The brain and the spinal cord</td>
</tr>
<tr>
<td>Posterior tibial artery</td>
<td>Main artery supplying the top of the foot</td>
</tr>
</tbody>
</table>
The Nails

The nail complex consists of:

<table>
<thead>
<tr>
<th>Component</th>
<th>Function/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nail plate</td>
<td>Composed of keratin</td>
</tr>
<tr>
<td>Nail bed</td>
<td>Attaches beneath the nail plate to stop harmful organisms from entering the nail</td>
</tr>
<tr>
<td>Nail matrix</td>
<td>A layer of cells under the skin at the base of the nail which produce the nail plate</td>
</tr>
<tr>
<td>Proximal nail fold</td>
<td>Covers the matrix</td>
</tr>
<tr>
<td>Eponychium/cuticle'</td>
<td>Distal section of the proximal nail fold; stops harmful organisms from entering the nail matrix</td>
</tr>
<tr>
<td>Lunula</td>
<td>The white part (moon) at the base of the nail</td>
</tr>
<tr>
<td>Hyponychium</td>
<td>Skin located beneath the distal nail plate at the junction between the free edge and the skin of the toe; forms a seal to protect the nail bed</td>
</tr>
</tbody>
</table>

Figure 11  Anatomy of the Nail (American Academy of Family Physicians, 2010)
Function and Growth:

- The function of the nail is to protect the top of the digits.
- Nails grow in response to pressure. Increased pressure leads to increased nail growth so that nails on the dominant side of the body will grow at a faster rate.
- The average toenail takes 8-12 months to grow from the cuticle to the distal edge of the nail plate.
Activity 7: Age-Related Changes to Toe Nails

1. Compare the toe nail characteristics of three people, one from each of the age brackets listed below. Comment on your observations considering factors such as colour (e.g. pink, black, brown), shape (e.g. wide, narrow, curved) and texture (e.g. smooth, brittle, crumbly). Include diagrams to illustrate if necessary.

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12 years</td>
<td></td>
</tr>
<tr>
<td>30-45 years</td>
<td></td>
</tr>
<tr>
<td>70-85 years</td>
<td></td>
</tr>
</tbody>
</table>
2.2 Foot Pathology

Disease Processes with Foot Pathologies Relevant to the Lower Limb

Certain systemic disorders or diseases may have a direct impact on the feet and lower limbs. As a result, clients with these disorders may be identified as ‘high risk’ from a Podiatric perspective.

As an Allied Health Assistant (Podiatry) or Foot Hygiene Worker, it is important that you have some awareness and understanding of these conditions and the related precautions that may need to be taken when interacting with clients who may have these conditions.

- Vascular disorders – arterial, venous, other
- Neurological disorders
- Bone and Joint disorders
- Endocrine e.g. Diabetes mellitus

Vascular Disorders – Arterial

<table>
<thead>
<tr>
<th>Condition</th>
<th>Characteristics</th>
<th>Typical Lower Limb Clinical Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occlusive Arterial Disease</td>
<td>Partial or complete blockage of one or more arteries</td>
<td>Ulceration and/or gangrene of the lower extremities may occur as a result of severe blockages</td>
</tr>
<tr>
<td></td>
<td>May occur in coronary, femoral or popliteal arteries, resulting in ischaemia (inadequate blood supply to a local area)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blockage may be due to arteriosclerosis (hardening and thickening of the walls of the arteries) or atherosclerosis (progressive thickening and hardening of the walls of medium-sized and large arteries as a result of fat deposits on their inner lining)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Early identification may be addressed by a vascular surgeon through coronary bypass ‘stenting’ or ‘ballooning’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prognosis may improve with improvements in diet and exercise</td>
<td></td>
</tr>
<tr>
<td>Raynauds Disease</td>
<td>Condition where blood vessels of fingers and toes become</td>
<td>Bluish coloured, painful, cold digits</td>
</tr>
<tr>
<td>Cerebrovascular Accident (CVA, Stroke)</td>
<td>Brain haemorrhage or aneurysm causing oxygen deficiency which damages brain tissue</td>
<td>Poor healing rates as vascular supply to affected side is impaired due to muscle weakness</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(Note: see also Neurological Disorders)</td>
<td>Results in deficiencies in bodily functions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hypersensitive to temperature variations and emotional stimuli</td>
<td>Slow healing rates</td>
</tr>
</tbody>
</table>

### Vascular Disorders – Venous

<table>
<thead>
<tr>
<th>Condition</th>
<th>Characteristics</th>
<th>Typical Lower Limb Clinical Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varicose Veins</td>
<td>Reduced venous drainage occurs due to weakness in vein walls and vein valve incompetence</td>
<td>Prominent tortuous (twisted) veins Possible cyanosis or haemosiderosis</td>
</tr>
<tr>
<td>Deep Vein Thrombosis</td>
<td>Blockage in one (or more) of the deep veins of the body, commonly the iliac or femoral veins May be potentially life threatening – treated with bed rest and blood thinning medication</td>
<td>Symptoms include pain, swelling, redness and skin discoloration</td>
</tr>
<tr>
<td>Varicose Dermatitis</td>
<td>May occur in association with chronic varicose veins Itchy skin eruption</td>
<td>Brownish skin discoloration if long standing Often leads to varicose ulceration with poor healing</td>
</tr>
</tbody>
</table>

### Other Vascular Disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Characteristics</th>
<th>Typical Lower Limb Clinical Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaemia</td>
<td>Iron deficient condition which results in reduced oxygen carrying capacity of blood</td>
<td>Generalised weakness, poor health and poor healing rates</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>Diseased/damaged heart results in weak pumping ability May be congenital (e.g. heart valve defect) or acquired (e.g.</td>
<td>Impaired healing times due to impaired lower limb circulation</td>
</tr>
<tr>
<td>through infection such as myocarditis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May involve angina</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(De Maria & POD in Health Training, 2010)
Activity 8: Foot Pathologies

Choose two separate disorders from the previous pages. Identify clients with whom you have contact who have been diagnosed with these disorders. Record your observations of the feet and legs of these clients below. Do your observations match the typical lower limb clinical picture?
## Neurological Disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Characteristics</th>
<th>Typical Lower Limb Clinical Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerebrovascular Accident (CVA, Stroke)</td>
<td>Brain haemorrhage causing oxygen deficiency which damages brain tissue</td>
<td>Loss of movement on one side of the body</td>
</tr>
<tr>
<td></td>
<td>Nerve supply to affected side is impaired</td>
<td>Muscle weakness, impaired balance and reduced sensation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speech often affected</td>
</tr>
<tr>
<td>Multiple Sclerosis</td>
<td>Autoimmune disease – immune system attacks central nervous system</td>
<td>Tremors, stiffness, muscle weakness and rigidity</td>
</tr>
<tr>
<td></td>
<td>Progressive condition of varying severity</td>
<td></td>
</tr>
<tr>
<td>Charcot-Marie-Tooth Disease</td>
<td>Hereditary disorder</td>
<td>Acquired foot deformities, weakness, balance problems and peripheral neuropathy</td>
</tr>
<tr>
<td></td>
<td>Chronic degeneration of peripheral nerve roots resulting in muscle weakness and atrophy</td>
<td></td>
</tr>
<tr>
<td>Neuropathy</td>
<td>Broad term to describe loss of sensation, balance, muscle strength</td>
<td>Foot pathology including ulceration as a result of lack of protective sensation</td>
</tr>
<tr>
<td></td>
<td>Multiple causes – Diabetes, alcoholism, substance abuse, spinal injury, CVA, Vitamin B deficiency in childhood, other conditions, e.g. Paraplegia, Quadriplegia, Cerebral Palsy, Complex Regional Pain Syndrome</td>
<td>Balance problems</td>
</tr>
<tr>
<td></td>
<td>Risk of lower limb injury is high due to reduced input from nerves</td>
<td></td>
</tr>
</tbody>
</table>
## Bone and Joint Disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Characteristics</th>
<th>Typical Lower Limb Clinical Picture</th>
</tr>
</thead>
</table>
| Osteoarthritis          | Also known as degenerative joint disease  
                          | Inflammation, breakdown and eventual loss of cartilage in joints                                  | Common in feet, especially with age and history of injury  
                          | Joints become enlarged and motion is usually restricted                                           |
| Rheumatoid Arthritis    | Auto-immune disorder  
                          | Immune system attacks the joints causing inflammation and pain                                     | Many joints may be affected although commonly seen in the hands and feet  
                          | Effects may also occur in the lungs, kidneys, eyes, skin and nervous system  
                          | Reduced blood supply to feet and legs  
                          | Peripheral neuropathy  
                          | Ulceration especially in the feet                                                               |
| Seronegative Arthritis  | Systemic arthritic conditions other than rheumatoid arthritis  
                          | Psoriatic arthritis, ankylosing spondylitis, reactive arthritis                                   | All conditions cause joint pain and inflammation                                                   |
| Gout                    | Accumulation of uric acid crystals in joints  
                          | Results from disorder in metabolism  
                          | Well managed by dietary changes and medication                                                 | Most commonly seen in 1st metatarsophalangeal joint of the foot  
                          | Joint is intensely painful and inflamed                                                          |
| Osteoporosis            | Decreased bone density resulting in structural weakness, which makes bones prone to fracture | Prominent in females and the elderly                                                              |
## Endocrine Disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Characteristics</th>
<th>Typical Lower Limb Clinical Picture</th>
</tr>
</thead>
</table>
| Diabetes Mellitus | Group of diseases characterised by high blood glucose levels (BGLs)  
Inadequate ability to produce and/or use insulin in the metabolism of glucose  
Classified as type 1 (absence of insulin production by the pancreas) or type 2 (insulin resistance)  
Common characteristics: fluctuating blood glucose levels (BGLs - hyper/hypoglycaemia), excessive thirst/urination, sugar cravings, sudden changes in weight (at diagnosis), nausea (in some cases)  
BGLs may be controlled by modified diet, exercise, oral medication or injectable insulin  
If BGLs are not maintained at the regulated level (4-8mmol/l; HbA1c less than 7%), complications may result.  
With good control of BGLs and diligent attention to foot care, lower limb and foot complications may be minimised | Eyes  
Damage to retinas and cataract development may result in impaired vision  
Impaired vision reduces ability to detect injury to feet as well as perform foot care including safe toe nail cutting  
Blood Vessels  
Poorly controlled BGLs may accelerate hardening of artery walls resulting in a reduction in circulation to the lower limbs  
Reduced circulation results in reduced healing times and hence increased risk of infection  
Reduced circulation also affects skin and tissue health making resilience to pressure and friction poor  
Nervous System  
Poorly controlled BGLs may cause nerve damage resulting in loss of sensation or neuropathy especially in the feet  
Kidneys  
Often results in kidney failure (especially in Type 1 population) which requires dialysis +/- renal transplantation |

(De Maria & POD in Health Training 2010:21-25; Edmonds & Wall 2006: 244, 246)
Activity 9: Foot Pathologies Relevant to the Lower Limb

1. Research the term HbA1c. Explain this test and its purpose including the acceptable range for test results.
2. Choose two separate disorders from the previous pages. Identify clients with whom you have contact who have been diagnosed with these disorders. Record your observations of the feet and legs of these clients below. Do your observations match the typical lower limb clinical picture?

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Range of Foot Conditions

As Podiatrists are lower limb practitioners, it is not uncommon to see a range of conditions involving structures from the hip right though to the toes.

Examples of conditions that may present:

- Plantar fasciitis
- Medial tibial stress syndrome (shin splints)
- Tibialis posterior tendon pathologies
- Hallux abductovalgus
- Patellofemoral pain syndrome
- Recurrent ankle inversion sprains
- Sinus tarsi syndrome
- Tarsal coalition
- Achilles tendinitis
- Metatarsalgia
- Bursitis
- Neuroma
- Tarsal tunnel syndrome
- Stress fractures of bones of the feet
- Pes planus
- Leg length discrepancy
Activity 10: Other Foot Pathologies

Discuss the list of conditions on the previous page with your Podiatry supervisor. Choose three conditions from the list. Research these conditions and write a brief explanation about each one. Be sure to include signs and symptoms, how they are assessed and possible treatment options.

Condition 1:

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_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

Condition 2:

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

Activity continues on following page
Activity 10: Other Foot Pathologies

Condition 3:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

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__________________________________________________________________________

__________________________________________________________________________
Pathology of the Skin

Disorders of the skin may result for a number of reasons. Consequently, numerous skin conditions may exist in the lower limbs.

Common Skin Conditions of the Lower Limbs

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fissures</td>
<td>In response to poor water retention in skin tissue, skin becomes hard and external pressure causes cracking or fissuring</td>
<td>(Podiatry and Foot Protection Program, 2010)</td>
</tr>
</tbody>
</table>
| Maceration  | Water content in skin is too high resulting in loss of tensile strength
May be associated with hyperhidrosis (overly sweaty feet which perspire excessively) and/or bromidrosis (a condition caused by the presence of bacteria which results in perspiration with unpleasant odour)
(DeMaria et al 2010: 13)                                                                                                                                                                                                 | (Wikivisual, 2010)                                                                                                                                                                                                                  |
| Hyperkeratosis | Commonly known as callus
Yellowish plaque of hard skin
Often due to increased abnormal pressure
May be painful and cause alterations in gait
May be a precursor to ulceration in the at-risk foot
(Luck, Munro, Roberts, Springett, Thomson, O'Donnell 2006:35)                                                                                                                                                          | (Podiatry and Foot Protection Program, 2010)                                                                                                                                                                                      |
<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinea pedis</td>
<td>Caused by dermatophytes&lt;br&gt;Itching blister-type skin lumps which break open&lt;br&gt;Moisture is usually a factor&lt;br&gt;(DeMaria et al 2010: 19)</td>
<td><img src="image" alt="Tinea pedis Image" /></td>
</tr>
<tr>
<td>Psoriasis</td>
<td>Chronic inflammatory skin condition&lt;br&gt;Most commonly distinct, itchy patches of thick, scaly, red skin&lt;br&gt;Prominent on elbows, knees, scalp and feet (including toe nails)&lt;br&gt;(Luck et al 2006: 37)</td>
<td><img src="image" alt="Psoriasis Image" /></td>
</tr>
<tr>
<td>Verrucae</td>
<td>Known as Plantar warts&lt;br&gt;Caused by the Human Papilloma Virus (HPV)&lt;br&gt;Often don’t cause the client any concern&lt;br&gt;Will disappear once the body’s immune system recognises the virus&lt;br&gt;(Luck et al 2006: 31)</td>
<td><img src="image" alt="Verrucae Image" /></td>
</tr>
<tr>
<td>Ulcers</td>
<td>Occur where the body’s ability to heal damaged skin is impaired&lt;br&gt;May be of varying size and depth&lt;br&gt;Infection is often a concern&lt;br&gt;(Luck et al 2006: 25)</td>
<td><img src="image" alt="Ulcers Image" /></td>
</tr>
</tbody>
</table>
Activity 11: Pathologies of the Skin

Choose two skin conditions of the previous pages. Research possible treatment options and record them below. Discuss your findings with your Podiatry supervisor and add any further relevant information.

Condition 1:

________________________________________________________________________

________________________________________________________________________

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________________________________________________________________________

Condition 2:

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________________________________________________________________________
**Pathology of the Nails**

Nails are often the first visible site of disease and changes in nail appearance can demonstrate underlying disease. In the event of serious illness or trauma, nail growth may slow or stop until improvements in health occur. There are a wide range of nail pathologies, the most common of which are listed below.

### Common Nail Disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onychocryptosis</strong></td>
<td>‘Ingrown toenail’&lt;br&gt; A spike or serrated edge of the nail pierces the adjacent skin&lt;br&gt;Causes acute inflammation and often infection&lt;br&gt;Most common in the hallux&lt;br&gt;(Johnson 2006: 77)</td>
<td>![Image](EPodiatry.com, 2010)</td>
</tr>
<tr>
<td><strong>Onychauxis</strong></td>
<td>Abnormal thickening of nail increasing from the nail base to the free edge&lt;br&gt;Occurs due to nail matrix damage, from numerous causes e.g. single trauma from heavy blow or repeated trauma from ill fitting footwear&lt;br&gt;(Johnson 2006: 80)</td>
<td>![Image](Achilles Foot Health Centre, 2010)</td>
</tr>
<tr>
<td><strong>Onychogryphosis</strong></td>
<td>‘Ram’s horn nail’&lt;br&gt;Abnormal nail thickening and gross deformity which develops a curved or ram’s horn shape&lt;br&gt;Often related to poor foot care practices (lack of nail cutting)</td>
<td>![Image](Podiatry and Foot Protection Program, 2010)</td>
</tr>
<tr>
<td><strong>Onychomycosis</strong></td>
<td>Fungal infection of the nail bed and nail plate&lt;br&gt;Causes are often difficult to isolate</td>
<td></td>
</tr>
</tbody>
</table>
however poor foot hygiene is frequently an issue

Treatment may be with antifungal agents which are applied to the nails or with GP prescribed medication

Treatment must also include precautions to reduce the possible spread of the infection via towels, socks and footwear

(Johnson 2006: 86)

(DermIS, 2010)
Activity 12: Pathology of Nails

1. Discuss with your Podiatry supervisor and then research differing approaches to the management of onychomycosis. Record your findings below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Discuss with your Podiatry supervisor and then research differing approaches to the management of ingrown toenails. Make some notes about your findings below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
2.3 Treatment

Podiatrists, Allied Health Assistants, Foot Hygiene Workers, and other health workers involved in client care may undertake basic client foot examinations in order to:

- Identify active foot problems
- Identify the ‘high risk’ foot
- Aid in the prevention of foot ulcerations, gangrene and amputation
- Assist in the maintenance of mobility, independence and a healthy, active lifestyle

Appendix B provides an example of a Basic Foot Screening Checklist.

The Basic Foot Examination

1. Ask the Client about:

<table>
<thead>
<tr>
<th>Neuropathic Symptoms</th>
<th>Intermittent Claudication</th>
<th>Previous Foot Ulcer/Amputation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbness</td>
<td>‘Sharp, cramping-like’ muscle pain with exercise or walking a certain distance</td>
<td>Greater risk of further problems – 60% chance of further ulceration</td>
</tr>
<tr>
<td>Tingling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shooting pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep bone ache</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling of ‘Creeping ants’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May be worse at night or with unstable blood glucose levels (if diabetic)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Look at both feet for:

<table>
<thead>
<tr>
<th>Infection</th>
<th>Ulceration</th>
<th>Corns and Callus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redness, warmth, discharge, swelling, pain</td>
<td>Non-healing wounds</td>
<td>May indicate presence of ulcers, especially in the neuropathic foot</td>
</tr>
<tr>
<td>Usually accompanied by elevated blood glucose levels (if diabetic)</td>
<td>Look especially at pressure areas, for example, tips of toes, ball of the foot, heels</td>
<td>Result of abnormal pressure on feet</td>
</tr>
<tr>
<td>May spread rapidly – signs</td>
<td>May be present beneath</td>
<td>Early treatment and</td>
</tr>
</tbody>
</table>
### Podiatry Learner Guide: Assist with basic foot hygiene

<table>
<thead>
<tr>
<th>Infection</th>
<th>Ulceration</th>
<th>Corns and Callus</th>
</tr>
</thead>
<tbody>
<tr>
<td>visible across the foot or</td>
<td>callus and corns</td>
<td>pressure relief prevents</td>
</tr>
<tr>
<td>up the leg</td>
<td></td>
<td>ulceration</td>
</tr>
<tr>
<td>Skin Breaks</td>
<td>Nail Disorders</td>
<td>Deformity</td>
</tr>
<tr>
<td>Possible area of entry for</td>
<td>Thickness</td>
<td>Previous amputations</td>
</tr>
<tr>
<td>bacteria and therefore</td>
<td>Discoloration</td>
<td>Bony deformities</td>
</tr>
<tr>
<td>infection</td>
<td>Infection</td>
<td>Irregular foot shape</td>
</tr>
<tr>
<td>Check between toes and</td>
<td>General condition</td>
<td></td>
</tr>
<tr>
<td>around heels especially</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note skin which is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>excessively dry or moist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Check Foot Pulses – Dorsalis Pedis and Posterior Tibial arteries.**

To obtain a quick gauge of the blood supply status in the foot, the pulses of these arteries may be felt in the following manner utilising the 2nd and 3rd finger tips (avoid using the thumb as it has its own pulse):

- **Dorsalis pedis artery**

Located on the top of the foot, usually in-line with the 2nd toe, back towards the ankle.

![Dorsalis pedis pulse](image)

**Figure 12**  Dorsalis pedis pulse (Podiatry and Foot Protection Program, 2010)
• **Posterior tibial artery**

Located on the inside ankle, approximately half way between the ankle bone and the back of the heel.

![Posterior tibial pulse](image)

**Figure 13** Posterior tibial pulse (Podiatry and Foot Protection Program, 2010)

Both pulses may be graded between 0 and 3 plus (+++):

- 0 = absent
- + = faint
- ++ = within normal limits
- +++ = bounding

Absent or bounding pulses may be considered risk factors for complications such as peripheral vascular disease and may require further investigation as determined by the Podiatrist.

4. **Test for Neuropathy - Assessment of Nerve function**

Nerve function status may be assessed in a number of ways. One method of testing evaluates the pain receptors and assesses for the presence of ‘protective sensation’ or the ability to feel painful things in contact with the feet.
Testing instrument

10 gram Semmes Weinstein monofilament

![Testing instrument](image)

Figure 14  Semmes Weinstein monofilament (Briggate Medical Company, 2010)

Testing technique

Apply the monofilament perpendicular to the skin surface with sufficient force to cause the filament to bend and then release.

The approach, skin contact and removal of the monofilament should be approximately 1.5 seconds duration.

Do not allow the monofilament to slide across the skin or make repetitive contact at the test site.

![Testing technique](image)

Figure 15  Monofilament testing (Podiatry and Foot Protection Program, 2010)
Test site
The test may be conducted at a number of sites but should always include the base of the 1st and 5th toes on the plantar surface of the foot.

![Monofilament testing sites](image)

**Figure 16** Monofilament testing sites (Podiatry and Foot Protection Program, 2010)

**Testing Procedure**

- Test first at a site with normal sensation – away from the feet (for example, the hands) so that the client is aware of what they should be able to feel
- Use the concept of ‘forced choice’ as you press the monofilament to the skin on one of the two occasions as you say ‘first time’ or ‘second time’. This prevents the client from being able to give the answer he or she may believe that you would like to hear.
- Ask the client to identify on which occasion they felt the monofilament
- Randomise the sequence of application of the monofilament during the examination

**Test Outcome**

A client who is unable to feel the 10 grams of pressure at any site is then considered at ‘high risk’ of lower limb complications due to the potential for unknown injury

---

5.07 Monofilaments have a certain usefulness in testing for the presence of protective sensation. After 100 uses, it is important to ensure a 24 hour rest period before recommencing use (Booth & Young, 2000). In addition, Yong et al (2000) found that filament force is permanently reduced after 500 uses.
5. **Assess Footwear**

<table>
<thead>
<tr>
<th>Style</th>
<th>Condition</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs to suit activity for which it is worn</td>
<td>Does the footwear protect the feet?</td>
<td>The shoe must fit the foot 3 ways – length/width/depth</td>
</tr>
<tr>
<td>Best to have a fastening mechanism such as laces, Velcro or buckles</td>
<td>Is it worn, full of holes and falling apart?</td>
<td>If the shoes do not fit well, they should not be worn</td>
</tr>
<tr>
<td>Should ideally be leather (not synthetic)</td>
<td></td>
<td>Poor fitting footwear can cause problems such as blisters, which may ulcerate, especially in the person with sensory loss</td>
</tr>
</tbody>
</table>

6. **Assess Education Need**

Does the client understand the existing and potential effects of their health conditions on their foot health?

Can the client identify appropriate foot care practices?

Are the client’s feet adequately cared for?

7. **Assess Self Care Capacity**

Does the client have impaired vision?

Can the client reach his or her own feet for safe self-care?

Are there other factors influencing the client’s ability to safely care for their own feet?
Activity 13: Conduct a Basic Foot Examination

Under the direction of your Podiatry supervisor and using the Basic Foot Examination instructions, use the Basic Foot Screening Checklist in Appendix B to conduct and record a Basic Foot Examination on a client. Attach a copy of your completed checklist to this page.
Provision of Foot Care

Your provision of foot care to clients requires that you use a range of specialist equipment. Each of these items of equipment has a particular function and it is important that your supervising Podiatrist adequately demonstrates the function of each item to you before you use it. It is essential that you always observe appropriate Workplace Health and Safety guidelines when using this equipment.

Instruments

- Nail clippers (single or double action)
- Diamond Dust nail file/Foot file (20x2.5cm)
- Electric Podiatry drill

<table>
<thead>
<tr>
<th>Figure 17</th>
<th>Double Action Nail Clippers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Briggate Medical Company, 2010)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Figure 18</th>
<th>Single Action Nail Clippers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Briggate Medical Company, 2010)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Figure 19</th>
<th>Diamond Dust Nail File/Foot Dresser</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Briggate Medical Company, 2010)</td>
</tr>
</tbody>
</table>
Toenail Care

1. Observe Standard Precautions as per organisational Infection Control guidelines (and Additional Precautions if necessary)
2. Ensure you and the client are positioned comfortably and safely (refer to Section 1.2)
3. Hold clippers in one hand with the flat edge away from you
4. Hold the toe at the distal joint between your thumb and middle finger
5. Place clippers with ¼ (smaller toes) or ½ (big toe) of width of nail in clippers
6. Place index finger over clipper blades - this will prevent any nail going astray
7. Close clippers, then repeat process until you have the entire nail cut
8. Repeat the process until you have all nails cut
9. Use the file to smooth off any rough or sharp areas especially at the corners of the nails. File in one direction, away from the client’s body. Alternatively, a Podiatry drill may be utilised to file the client’s nails.

Follow the curve of the nail  
File even with the end of the toe

Figure 23  Correct nail filing technique (Podiatry and Foot Protection Program, 2010)

Do not file into corners  
Do not file shorter than end of toe

Figure 24  Incorrect nail filing cutting technique (Podiatry and Foot Protection Program, 2010)
Important points:

Avoid trying to cut the entire nail in one cut as this will cause significant discomfort to the client.

Nails should always be cut straight across and the edges filed

Cut nails in line with the white line – this will ensure that nails are not cut too short

Avoid probing or cutting down the edges of the nails – this will cause ingrown toenails

Sometimes it is necessary to cut down the side of a nail, for example, with an ingrown nail. This should only be performed by a Podiatrist (refer to Section 2.2)

Figure 25 Correct nail cutting length (Podiatry and Foot Protection Program, 2010)
Activity 14: Nail Care

1. Familiarise yourself with the nail care equipment available for use in your work setting. Make a list of this equipment below.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
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2. Observe a nail cutting demonstration conducted by your Podiatry supervisor. Note any important points or observations below including the safety aspects of the demonstration such as during the use of the Podiatry drill.

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3. Under the direction of your Podiatry supervisor, provide nail care for a client. Once you have completed the task, reflect on this, and record your reflections below. You may find the following prompts useful: Which aspects were easy/more difficult? What did you need to be reminded to do? What would you perhaps do differently next time?

Activity continues on the following page
Padding Processes

Padding helps with resolving foot problems by correcting, deflecting, and/or cushioning. Padding may be used in a short-term capacity or as a trial with a view to more permanent arrangements such as orthoses or pressure-relieving insoles.

There are a range of types of temporary padding materials, the majority of which are adhesive-backed so they may be attached either to the foot or into the shoe. Temporary padding may come in the form of wool felt (known as semi-compressed felt) of differing thicknesses or in polyurethane foam form (O'Donnell, Lorimer, Skinner, Forster & Ahmad 2006:451).

Figure 26  Semi-compressed felt  (Briggate Medical Company, 2010)
Figure 27  Polyurethane foam  (Briggate Medical Company, 2010)

Temporary padding is cut into shape using sharp scissors. The shape and positioning of the padding depends on the site of the problem and the intended goal of the padding. Figure 28 shows temporary semi-compressed felt padding applied to a foot to reduce pressure at the 1st and 5th plantar metatarsal areas.
Figure 28 Temporary padding (Podiatry and Foot Protection Program, 2010)

Padding Application Process:

1. It is important to first ensure that the client has no allergies to adhesive tapes. This can be done by either the supervising Podiatrist or by you.
2. The supervising Podiatrist should then identify with you the approximate position and the purpose of the required padding.
3. Estimate the size of the padding required and cut the material to the appropriate shape.
4. Bevel the edges of the pad at a 45° angle on all edges.
5. Apply the padding in the prescribed location.
6. Stick hypoallergenic tape over the padding to ensure that it remains in place.
7. Advise the client about any potential reactions to the padding materials, for example, itching. Should this happen, the client should gently remove the padding immediately, wash the area with warm, soapy water and seek medical advice.

Wound Dressings for Wounds Occurring in the Course of Treatment

During the course of your treatment, you may, from time to time, cause minor disruption to the top layers of the skin. This will require a dressing plan until the site heals.
Applying Wound Dressings:

1. Ensure blood flow at the site stops by applying firm pressure to the site with a piece of sterile gauze.
2. Flush the site with sterile saline or sterile water.
3. Apply an antiseptic.
4. Cover the wound with a sterile dry dressing.
5. Instruct the client in the care of the wound.
6. Document the procedure and the instructions given.
Activity 15: Padding

1. Under the direction of your supervising Podiatrist and using the instructions supplied, practice cutting and applying padding of different materials for different purposes. Use the space below to make notes about what you have practiced.

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Activity continues on the following page
Activity 15: Padding continued

2. Discuss with your Podiatry supervisor wound dressings used for wounds occurring in the course of treatment. List below the specific products used in your workplace. Practice applying these products under the supervision of a Podiatrist.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Medicaments
Your supervising Podiatrist will advise you when and if medicaments are to be applied by you, and will instruct you in their use.

Emollients/Moisturisers
- Used for dry skin
- Provides an oily layer on the surface of the skin to retain moisture
- Most effective when applied directly after washing the skin as at this time, the skin will have a high moisture content which can be retained (O'Donnell et al 2006:453)
- Some emollients contain active ingredients such as urea. These ingredients are intended to address the dryness more effectively and efficiently
- When applying emollient to a client’s feet, ensure that the emollient is not applied between the toes as this may cause maceration (softening and whitening of skin that is kept constantly wet)
- Take care following emollient application, ensuring that the client does not slip when standing up

Astringents
- Utilised to improve skin integrity
- Assist with the prevention of problems such as fissuring and blistering which have the potential to lead to bacterial or fungal infection
- An example of astringent use would be the application of an alcohol based preparation such as methylated spirits between the toes to prevent maceration

Antiseptics
- Destroy microorganisms to prevent infection
- Podiatrists have access to a range of antiseptics which may be applied to the skin and nails for short term results. Examples include povidone, iodine and tea tree oil.
In the table below, list below the various medicaments and their uses which are available in your workplace. Outline how they are applied.

<table>
<thead>
<tr>
<th>Emollients/Moisturisers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Astringents</td>
<td></td>
</tr>
<tr>
<td>Antiseptics</td>
<td></td>
</tr>
</tbody>
</table>
# Key Points

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important Points</th>
<th>Completed</th>
</tr>
</thead>
</table>
| 2.1 Anatomy and Physiology of the Foot | • The Skin  
• Anatomy  
• Function  
• The Foot  
• Anatomy  
• Physiology – Vascular  
• Physiology – Neurological  
• The Nails  
• Structure  
• Function  
• Growth | |
| 2.2 Foot Pathology | • Disease Processes with Foot Pathologies relevant to the Lower Limb  
• Vascular disorders – Arterial  
• Vascular disorders – Venous  
• Other vascular disorders  
• Neurological disorders  
• Skeletal disorders  
• Diabetes  
• Foot Pathology  
• Pathology of Skin  
• Pathology of Nails | |
| 2.3 Treatment | • Principles of Foot Hygiene  
• The Basic Foot Examination  
• Provision of Foot Care  
• Standard Precautions  
• Additional Precautions  
• Principles of Aseptic Technique  
• Functions of Medicaments | |
3. Service Delivery

This topic covers information about:

- Podiatry Interventions
- Client Care
- Monitoring Requirements

Activities in this topic cover the following essential skills:

- Identify situations and conditions requiring referral to a Podiatrist
- Use effective observation skills
- Maintain accurate records
- Communicate effectively with clients
- Work effectively with non-compliant clients
- Apply time management, personal organisation skills and establish priorities
3.1 Podiatry Interventions

Certain bodily disorders or diseases may have a direct impact on the feet and lower limbs. As a result, clients with these disorders may be identified as ‘high risk’ from a Podiatric perspective. Foot Hygiene Workers and Allied Health Assistants are not expected to perform foot skin and nail care on these clients, although low risk interaction, such as fabrication of padding, may occur from time to time in the course of assisting the treating Podiatrist.

It is important, however, that you have some awareness and understanding of these conditions and the related precautions that may need to be taken when interacting with clients who may have these conditions. This will enable you to identify previously low-risk clients whose medical status has changed between visits.

There is no expectation that you would need to diagnose certain conditions, rather that you are aware of them and can act on your observations should this be necessary.

Should you identify a change in a client’s situation, it is imperative that you record your concerns in the client’s chart as well as reporting them to the Podiatrist or other health care professional involved in the client’s care. Prompt and effective action is imperative to prevent possible further or irreversible deterioration in a client’s condition (DeMaria & Pod in Training 2009:62).
3.2 Client Care

Effective communication with clients is the cornerstone of successful treatment outcomes. Bates, (1995, in Burrow 2006:2) suggests that this communication may take numerous forms:

- Facilitation – actions, postures or words which communicate your interest in the client
- Reflection – a word or phrase that the client used is repeated back to them
- Clarification – requesting that the client gives more meaning to what they said
- Empathy – recognise the feelings of the client through your words or actions
- Interpretation/Paraphrasing – put into your own words what you have deduced or interpreted from what the client has said. This ensures no misunderstanding.

Successful communication with clients goes hand-in-hand with effective observation skills. Your observations will assist you to build a broader picture based on the information the client has verbally given you. Whilst you will be looking for relevant signs and symptoms, it is also important to pay close attention to body language as well as other factors such as the client’s state of mind, appearance, and general awareness.

Throughout your time as an Allied Health Assistant or Foot Hygiene Worker, you will occasionally encounter a client who chooses not to engage with the treatment plan offered to them. In these situations, the following points may be useful:

- Ensure you provide education to the client that is relevant to them personally; for example, if they don’t enjoy reading, avoid giving written information to them
- Try wherever possible to see the situation through the eyes of the client. This may give you some perspective regarding their choices
- Explain the need for the client to engage in their own health care
- Document all occurrences regarding the client in the client’s health chart

In order to perform your role to the best of your ability, it is important that you are able to manage time well, are personally organised and are able to establish priorities. Be aware of the need to adhere to the time constraints of appointment lengths, ensuring that you effectively cover all required aspects of the client’s care in an efficient and organised manner.
3.3 Monitoring Requirements

Case Records
Set out, in accessible form, the progress of the management of the case
Should be completed immediately after treatment has been completed
Detail all that has occurred in each treatment
Format should be adequate for full reporting
If well maintained, provide value in the context of allegations of malpractice
Should be stored in a safe and secure place

(O'Donnell et al 2006: 452)

Documentation Points to remember:
If handwritten, must be in black ink and legible
Should include date and time
Should be brief yet factual including all aspects of the treatment episode
Should indicate that consent was obtained from the participant (or their legal guardian if less than 18 years of age or intellectually impaired)
Correct mistakes by putting one line through the error and adding your initials next to it. Avoid trying to remove the mistake completely.
Abbreviations should only be used if they are part of an accepted and published norm

Guidelines for allied health assistants documenting in health records has been developed by Queensland Health. This may be viewed at the following link:


(Queensland Health, 2016)
Activity 17: Monitoring Requirements

1. Review the Guidelines for allied health assistants Documenting in Health Records at the following link:

2. Use the following example case studies to show your documentation for the client health record.

   Case Study
   You are an Allied Health Assistant (Podiatry) in a High Risk Foot Clinic. Whilst cutting a client’s toenails, you notice a blackened big toenail. You report this to the supervising Podiatrist. The Podiatrist checks the nail and discusses possible causes with you and the client. Following this discussion, it is identified that the most likely cause is inappropriate footwear. The Podiatrists advises ongoing monitoring of the toenail and leaves you to complete the treatment and to advise on appropriate footwear.
Case Study

You are a Foot Hygiene Worker in an Aged Care Facility. You are asked to provide foot care for a new resident, Mr Brown who walks with a four-prong walking stick. You are able to conduct this treatment without incident and but notice that Mr Brown’s slippers are in a bad state of repair and he refuses to replace them. You report this to your supervisor.
# Key Points

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important Points</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Podiatry Interventions</td>
<td>Identify situations and conditions requiring referral to Podiatrist</td>
<td></td>
</tr>
<tr>
<td>3.2 Client Care</td>
<td>Communicate effectively with clients</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use effective observation skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work effectively with non-compliant clients</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apply time management, personal organisation skills and establish priorities</td>
<td></td>
</tr>
<tr>
<td>3.3 Monitoring Requirements</td>
<td>Case Records</td>
<td></td>
</tr>
</tbody>
</table>

My Points to Remember
SELF-COMPLETION CHECKLIST

Congratulations you have completed the topics for Podiatry Learner Guide: Assist with basic foot hygiene.

Please review the following list of knowledge and skills for the unit of competency you have just completed. Indicate by ticking the box if you believe that you have covered this information and that you are ready to undertake assessment.

Assist with basic foot hygiene

<table>
<thead>
<tr>
<th>Essential Knowledge</th>
<th>Covered in topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles, responsibilities and limitations of self and other allied health team members and nursing, medical and other personnel</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Relevant organisation policies and procedures</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>OHS policy and procedures</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Infection control protocols</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Standard precautions</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Privacy and confidentiality requirements</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Supervisory and reporting protocols</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Record keeping requirements</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Structure and functioning of the skin and integuments</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Basic anatomy and physiology of the foot and basic understanding of foot pathology</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Pathology of nails</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Conditions treated by a Podiatrist</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Principles of foot hygiene</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Principles of aseptic technique</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Essential Knowledge</td>
<td>Covered in topic</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>The function of medicaments:</td>
<td></td>
</tr>
<tr>
<td>- Emollients/moisturisers</td>
<td>Yes</td>
</tr>
<tr>
<td>- Astringents</td>
<td></td>
</tr>
<tr>
<td>- Antiseptics</td>
<td></td>
</tr>
<tr>
<td>Disease processes relevant to the client group/s</td>
<td>Yes</td>
</tr>
<tr>
<td>Client care plans, goals and limitations of podiatry intervention</td>
<td>Yes</td>
</tr>
<tr>
<td>Medical terminology</td>
<td>Yes</td>
</tr>
</tbody>
</table>
WORKPLACE OBSERVATION CHECKLIST

Assessor to date and sign (draft only, please record in the Assessment Guide).

<table>
<thead>
<tr>
<th>Essential Skills and Knowledge</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; observation date &amp; initial</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; observation date &amp; initial</th>
<th>Comments</th>
<th>*FER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake activity analysis — breaking activities down into component parts</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cut and file nails</td>
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<tr>
<td>Safely use electrical equipment, including electric drill</td>
<td></td>
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<tr>
<td>Select and implement basic foot assessment skills</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Identify pathological nail and skin conditions</td>
<td></td>
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<tr>
<td>Identify variations in podiatry conditions</td>
<td></td>
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<tr>
<td>Identify situations and conditions requiring referral to a Podiatrist</td>
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<tr>
<td>Undertake padding processes</td>
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<tr>
<td>Apply wound dressing for iatrogenic wound</td>
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<tr>
<td>Use effective observation skills</td>
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<tr>
<td>Work under direct and indirect supervision</td>
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<tr>
<td>Communicate effectively with clients, supervisors, and co-workers</td>
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<tr>
<td>Work effectively with non-compliant clients</td>
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<tr>
<td>Activity Description</td>
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<tr>
<td>Operate within OHS and infection control requirements</td>
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<tr>
<td>Apply time management, personal organisation skills and establishing priorities</td>
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<tr>
<td>Maintain accurate records</td>
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<tr>
<td>Understanding structure and functioning of the skin and integuments</td>
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<tr>
<td>Apply knowledge of basic anatomy and physiology of the foot and basic understanding of foot pathology</td>
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<tr>
<td>Apply the principles of foot hygiene, aseptic technique and standard precautions</td>
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<td>Apply medicaments: emollients, astringents, moisturisers, antiseptics</td>
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<tr>
<td>Follow relevant organisation policies and procedures including OHS and infection control protocols</td>
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<td>Demonstrate knowledge of disease processes relevant to the client group/s</td>
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<td>Demonstrate knowledge of client care plans, goals and limitations of podiatry intervention</td>
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<td>Use medical terminology</td>
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<tr>
<td>Demonstrate knowledge of roles, responsibilities and</td>
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<td>limitations of self and other allied health team members and nursing, medical and other personnel</td>
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<td>Follow privacy and confidentiality requirements</td>
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<td>Comply with supervisory and reporting protocols</td>
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*FER – Further Evidence Required
### Basic Foot Screening Checklist

1. **Ask the patient**
   - neuropathic symptoms: Y N
   - intermittent claudication: Y N
   - previous foot ulcer: Y N
   - amputation: Y N
   - specify SITE: _____________________ DATE __/__/____

2. **Look at both feet**
   - infection: Y N
   - ulceration: Y N
   - calluses or corns: Y N
   - skin breaks: Y N
   - nail disorders: Y N
   - foot deformity: Y N

3. **Check foot pulses**
   - Dorsalis pedis: LEFT Y N | RIGHT Y N
   - Posterior tibial: LEFT Y N | RIGHT Y N

4. **Test for neuropathy**
   - Monofilament detected at sites marked - o
     - LEFT: Y N | RIGHT: Y N

5. **Assess footwear**
   - style: Good | Poor
   - condition: Good | Poor
   - fit: Good | Poor

6. **Assess education need**
   - Does the patient understand the effects of diabetes on foot health? Y N
   - Can the patient identify appropriate foot care practices? Y N
   - Are the patient’s feet adequately cared for? Y N

7. **Assess self care capacity**
   - Does the patient have impaired vision? Y N
   - Can the patient reach own feet for safe self care? Y N
   - Are there other factors influencing ability to safely care for own feet? Y N

---

*All people with diabetes need to have their feet screened with these 7 simple steps every 12 months or more often if problems are identified*

National Diabetes Foot Screening Project
January 2004

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<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Aneurysm</td>
<td>Localised dilation of the wall of a blood vessel; usually caused by atherosclerosis and hypertension, common in the lower limbs especially the popliteal arteries of the older population.</td>
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<tr>
<td>Arteriosclerosis</td>
<td>Narrowing of the arterial diameter due to thickening of arterial wall coupled with loss of elasticity</td>
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<tr>
<td>Atherosclerosis</td>
<td>Accumulation of fats on internal arterial wall</td>
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<tr>
<td>Atrophy</td>
<td>A wasting of reduction in size or physiological activity of a part of the body due to disease or other influences</td>
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<tr>
<td>Bromhidrosis</td>
<td>Odour caused by bacterial decomposition of perspiration on the skin</td>
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<td>Congenital</td>
<td>Present at birth</td>
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<tr>
<td>Cyanosis</td>
<td>Bluish discoloration of the skin and mucous membranes caused by an excess of deoxygenated blood</td>
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<tr>
<td>Dermatophyte</td>
<td>Fungus that causes parasitic skin disease in humans</td>
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<tr>
<td>Embolus</td>
<td>A foreign object, a quantity of air/gas, a section of tissue/tumour or a portion of a thrombus that circulates in the bloodstream until it becomes lodged in a vessel.</td>
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<tr>
<td>Endocrine</td>
<td>A system of glands which secrete particular hormones into the bloodstream to regulate bodily functions</td>
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<tr>
<td>Fasciculation</td>
<td>Involuntary twitching</td>
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<tr>
<td>Gaiter area</td>
<td>Area immediately proximal to the ankles</td>
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<tr>
<td>Haemosiderosis</td>
<td>Increased deposition of iron in tissues. Usually presents as brown discoloration of the skin of the anterior lower legs</td>
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<tr>
<td>Hyperglycaemia</td>
<td>A greater than normal amount of glucose in the blood</td>
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<tr>
<td>Hyperhidrosis</td>
<td>Excessive perspiration</td>
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<tr>
<td>Hypertrophy</td>
<td>Increase in size of an organ due to increase in size of the cells</td>
</tr>
<tr>
<td>Hypoglycaemia</td>
<td>A state of low blood glucose levels</td>
</tr>
<tr>
<td>Iatrogenic</td>
<td>Inadvertent adverse effects or complications caused by or resulting from medical treatment or advice</td>
</tr>
<tr>
<td>Intermittent claudications</td>
<td>Cramp-like pains in the calf muscles caused by poor circulation of blood to the leg muscles, often occurs after a certain period of walking especially uphill or up steps</td>
</tr>
<tr>
<td>Medial</td>
<td>Situated or oriented toward the midline of the body</td>
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<tr>
<td>Necrosis</td>
<td>Localised tissue death that occurs in groups of cells in response to disease or injury</td>
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<tr>
<td>Sebaceous</td>
<td>Oily, refers to the oil-secreting glands of the skin.</td>
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</tbody>
</table>

(Anderson 1994; Edmonds & Wall 2006)
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