**Module mapping to National Occupational Standard for ‘Perform Image-Guided Procedures and/or Interventions’ CI.I.2019**

All focused course and programme accreditations need to include mapping of individual modules to the National Occupational Standards CI.C.2019, as these are the minimum standards of anyone performing ultrasound at all levels. If the programme or course includes interventional procedures, then this mapping for CI.I is also required.

A word template is available for the CI.I mapping. The module headings should be replaced with the programme module titles or the focused course title. If any aspects are not applicable to your programme/ focused course, justification should be provided.

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| **CI.I.2019 –**  **Perform image guided procedures and/or interventions** | **Module 1** | **Module 2** | **Module 3** | **Module 4** | **Module 5** | **Module 6** |
| **Knowledge and Understanding** | | | | | | |
| 1. legal, organisational and policy requirements relevant to your role, the role of others in your organisation and the activities being carried out |  |  |  |  |  |  |
| 1. the relevant national and local standards, guidelines, policies and procedures that are available and how and when they should be accessed |  |  |  |  |  |  |
| 1. the national and local guidelines for acceptance of requests for image guided interventional procedures in your area of practice |  |  |  |  |  |  |
| 1. the importance of obtaining valid consent in line with national and local guidelines |  |  |  |  |  |  |
| 1. the principles and role of image guidance in your area of practice |  |  |  |  |  |  |
| 1. the use of pre-intervention checklists and how they should be used according to local and national policies and procedures |  |  |  |  |  |  |
| 1. how to keep full, accurate and clear records in line with organisational procedures |  |  |  |  |  |  |
| 1. the limitations of your own knowledge and experience and the importance of operating within your scope of practice |  |  |  |  |  |  |
| 1. the benefits and limitations of image guided interventional procedures in your area of practice |  |  |  |  |  |  |
| 1. the role and importance of alternative, additional and complementary imaging techniques and investigations |  |  |  |  |  |  |
| 1. clinical appropriateness of the examination request and the action to take when the request is not appropriate |  |  |  |  |  |  |
| 1. how to undertake risk assessments for individuals prior to the procedure |  |  |  |  |  |  |
| 1. the contraindications associated with each investigation and the implications of proceeding with due consideration of related risks |  |  |  |  |  |  |
| 1. the preparation of the individual, environment and equipment for image guided interventional procedures in your area of practice |  |  |  |  |  |  |
| 1. the importance of respecting individuals’ culture, privacy, dignity, wishes and beliefs and decisions and how to do so |  |  |  |  |  |  |
| 1. the roles and responsibilities of other team members |  |  |  |  |  |  |
| 1. how to adapt communication styles, ask questions, and listen carefully in ways which are appropriate for the needs of the individual |  |  |  |  |  |  |
| 1. methods of communicating difficult and complex information to individuals and key people |  |  |  |  |  |  |
| 1. the importance of providing individuals and key people with opportunities to ask questions and increase their understanding |  |  |  |  |  |  |
| 1. the information that should be given to individuals before, during and on completion of the examination |  |  |  |  |  |  |
| 1. debrief procedures and how these should be used to ensure that any problems encountered during the procedure are recorded to inform future interventions |  |  |  |  |  |  |
| 1. the anatomy, physiology and pathology of the anatomical structures under investigation |  |  |  |  |  |  |
| 1. the pathophysiology of relevant disease processes |  |  |  |  |  |  |
| 1. the clinical findings and imaging appearances associated with normal and abnormal anatomical structures |  |  |  |  |  |  |
| 1. the safe use of local anaesthesia and other medicines used during the procedure or intervention |  |  |  |  |  |  |
| 1. aseptic techniques and the potential consequences of poor practice |  |  |  |  |  |  |
| 1. the importance of minimising any unnecessary discomfort of individuals undergoing interventional procedures, and how to do so |  |  |  |  |  |  |
| 1. the management of emergency/acute complications that occur during the procedure |  |  |  |  |  |  |
| 1. the safe use and manipulation of non-imaging equipment used during the procedure |  |  |  |  |  |  |
| 1. the management, storage and transport of tissue samples where relevant |  |  |  |  |  |  |
| 1. local procedures for image acquisition, storage and retrieval |  |  |  |  |  |  |
| 1. the annotation and interpretation of relevant images and information to confirm the location of the region/structure(s) under investigation |  |  |  |  |  |  |
| 1. procedures relating to recording, collating and preparing appropriate documentation and images for transfer or storage according to local protocols |  |  |  |  |  |  |
| 1. how changes to image findings as a result of intervention may affect interpretation of future imaging procedures and decisions by others |  |  |  |  |  |  |
| 1. safe operation of imaging equipment in your area of practice |  |  |  |  |  |  |
| 1. the risks of work-related disorders and how to minimise the risks |  |  |  |  |  |  |
| 1. machine settings and methods available to optimise the image in your area of practice |  |  |  |  |  |  |
| Performance criteria | | | | | | |
| 1. apply standard precautions for infection prevention and control, and other appropriate health and safety measures |  |  |  |  |  |  |
| 1. check and prepare the equipment required for the examination |  |  |  |  |  |  |
| 1. ensure all necessary preparations have been made by the individual and staff before starting the procedure |  |  |  |  |  |  |
| 1. ensure the environment is conducive to maintaining the privacy and dignity of the individual |  |  |  |  |  |  |
| 1. introduce yourself and other members of staff present during the examination |  |  |  |  |  |  |
| 1. check the identification details before commencing the interventional procedure in accordance with local policies and procedures |  |  |  |  |  |  |
| 1. obtain valid consent for the procedure in accordance with national and local guidelines |  |  |  |  |  |  |
| 1. communicate with the individual / key people to facilitate their understanding of and co-operation with the examination |  |  |  |  |  |  |
| 1. establish the individual’s capacity to understand the procedure with the help of key people if necessary |  |  |  |  |  |  |
| 1. clearly explain the procedure and possible outcomes, including risk, benefits, limitations and alternatives |  |  |  |  |  |  |
| 1. respect the individual’s privacy, dignity, beliefs and decisions |  |  |  |  |  |  |
| 1. review the clinical history for factors which might contraindicate the procedure |  |  |  |  |  |  |
| 1. assess the individual for contra-indications to any medicines to be used in the examination and for any relevant allergies, and take appropriate action |  |  |  |  |  |  |
| 1. ensure appropriate and recent imaging is available and assess relevant images and information prior to performing the procedure to confirm the location of the region/structure(s) of interest |  |  |  |  |  |  |
| 1. make an assessment of the individual’s emotional needs and respond appropriately |  |  |  |  |  |  |
| 1. ensure that relevant checklists are completed prior to the procedure in line with local and national policies to highlight any potential problems before the procedure begins |  |  |  |  |  |  |
| 1. select the correct equipment for the procedure according to national and local guidelines and protocols |  |  |  |  |  |  |
| 1. take appropriate precautions to ensure a clean or aseptic technique as required |  |  |  |  |  |  |
| 1. ensure the individual is in an appropriate position and is as comfortable as possible for the procedure |  |  |  |  |  |  |
| 1. administer local anaesthetic if required according to local and national guidelines |  |  |  |  |  |  |
| 1. take appropriate steps to minimise the risk of work-related disorders |  |  |  |  |  |  |
| 1. ensure the procedure is carried out correctly and in accordance with local policies and procedures |  |  |  |  |  |  |
| 1. where required by the procedure, obtain any samples and label containers according to local guidelines and protocols |  |  |  |  |  |  |
| 1. ensure all images are acquired, stored and transferred in line with local guidelines and protocols |  |  |  |  |  |  |
| 1. ensure dressings are applied where appropriate after the procedure |  |  |  |  |  |  |
| 1. ensure immediate post-procedure observations are carried out according to national and local guidelines and protocols |  |  |  |  |  |  |
| 1. recognise and respond to a deterioration in the individual’s clinical condition in line with relevant national and local guidelines and protocols |  |  |  |  |  |  |
| 1. provide the individual with information relating to the procedure and aftercare where necessary |  |  |  |  |  |  |
| 1. explain the process for obtaining results |  |  |  |  |  |  |
| 1. document the procedure according to national and local guidelines and protocols |  |  |  |  |  |  |

**References:**

Skills for Health (2019) CI.C.2019 - Perform, interpret and report on ultrasound examinations. [Online]. Available: <https://tools.skillsforhealth.org.uk/competence/show/html/id/4302/>

Skills for Health (2019) CI.I Perform image guided procedures and/or interventions [Online]. Available: <https://tools.skillsforhealth.org.uk/competence/show/html/id/4307/>