

SPECIFICATION FOR DIAGNOSTIC NON-MEDICAL SONOGRAPHY TRAINING

1.0 PREAMBLE

This specification describes the requirements for training in sonography for non-medical personnel. It leads to the qualification Diploma of Medical Ultrasound (DMU) which is awarded by the Australasian Society for Ultrasound in Medicine (ASUM).

The specification is based on information provided by ASUM Members, the ASUM Handbook "Policies and Statements" (February 1996), and the Intercollegiate Consensus Statement of Medical Colleges involved in Ultrasound practice. (Appendix I).

Terms are defined in the CTA Head Agreement and/or Service Agreement.

2.0 DESCRIPTION OF SERVICE

Sonography is a diagnostic imaging technique which may replace, or complement, other diagnostic procedures. It is performed by both sonologists (medical practitioners skilled in diagnostic ultrasound practice and interpretation) and sonographers (non-medical imaging technologists trained and qualified in diagnostic ultrasound practice) on request from a medical practitioner or midwife. Interpretation of the output from the ultrasound procedure relies upon collaboration between the sonographer and sonologist, as ultrasound is predominantly a real-time procedure. The medical requirements to interpret examinations are detailed in the Intercollegiate Statement 'Guidelines for Medical Practitioners Performing And Interpreting Diagnostic Ultrasound' (see Attachment 1). The accurate interpretation of the real-time image may, in certain controlled circumstances, be provided by an experienced and licensed sonographer, but usually requires the broader clinical expertise of the sonologist.

The purpose of sonography training is therefore to train technologists to interpret real-time images, recognise normal anatomy and abnormal pathology and produce high quality hard copy of the examinations.

Training is taken predominantly by medical radiation technologists, but may be taken by other health professionals (eg nursing or allied health).

Training is on an apprenticeship basis of two years full-time equivalent duration over a maximum of five calendar years in posts where sufficient supervision, training, and experience is available to meet the curriculum needs. Training may be taken in general ultrasound, which includes obstetric ultrasound, or obstetric ultrasound only.

The curriculum (syllabus) is set by the ASUM. There are two milestones in training, the Part I (theory) examination, and the Part II (clinical and practical) examination, for both sub-branches of the Diploma. This specification describes training in Part II only.

Note: Training in vascular and cardiac ultrasound may be available in future.

2.1 LEARNING ENVIRONMENT

The main fields of ultrasound use are in examination of solid organs, superficial structures and the vascular tree. It is technically demanding for the operator.

The main clinical fields of application are:

- Obstetrics and Gynaecology.
- General (small parts, abdominal organs and musculoskeletal system)
- Vascular tree *
- Cardiology *
- Paediatrics.

Health professionals with an interest in ultrasound practice are therefore:

- Obstetricians and Gynaecologists.
- Midwives.
- Radiologists.
- Surgeons and Physicians.
- Medical Radiation Technologists.
- Cardiologists and Cardiological and Vascular Technicians *

** These applications are not considered in this training specification.*

Learning takes place in an environment where both ultrasound and other diagnostic imaging is performed, so that the relevance of ultrasound in diagnostic practice can be appreciated.

It also must take place in a clinical environment where the relevance of the procedure to diagnosis and clinical care is understood.

The learning settings may include:

- Departments performing ultrasound diagnostic procedures
- Clinical meetings (group and individuals)
- Departmental meetings (range of imaging and diagnostic modalities)
- Results review meetings (ultrasound only).

2.1.1 Clinical Placements

General requirements

Clinical placements are in departments where ultrasound is performed.

The range of staff available to the trainee must include qualified sonographers and sonologists.

The range of cases available for the trainee should be such that by the end of training, adequate experience has been gained in all forms of ultrasound required for their chosen diploma (general or obstetric).

Trainees should be released from clinical duties to attend tutorials and other teaching sessions. This should be for 10% of their employed time (four hours per week F.T.E.).

Normal lines of clinical accountability, as applied to all staff, should apply to trainees.

Workplace safety as applied to all staff will apply to trainees. This includes safety of both patients and staff.

The principles of cultural safety shall apply to all aspects of clinical practice.

Specific requirements

Some training sites may offer specialised but limited training experience (ie, general or obstetric). This may be arranged on a stand alone or secondment basis according to criteria set out in Section 4.0 of this specification.

2.1.2 Formal Teaching

No formal teaching programme is currently available.

2.1.3 Access to Resources

Access to general resources for training include:

- Ultrasound equipment and facilities.
- Facilities for meetings, case review and group teaching.
- Library facilities including written text and diagnostic images, and relevant journals.

2.2 SUPERVISORS

All training takes place under the supervision of a qualified sonographer and a sonologist.

2.2.1 Clinical Supervision

Adequate supervision requires the presence, on the premises, of a qualified sonographer and sonologist who is available, and has sufficient time, to participate in the examination at the required level.

The degree of participation of the supervisor will depend on the competence and experience of the student.

Clinical supervision requires that the trainee is instructed and observed 100% of the time during the initial period of training, reducing to 20-30% of time by the end of training. The levels of supervision can be categorised as:

Level 1 Supervision in person of the entire examination.

Level 2 Extension of the examination or rescanning of any areas needing clarification, after the initial examination has been performed by the trainee.

Level 3 Review of the hard copy record and discussion of the case, before the patient leaves the premises, to enable level 2 to be implemented where necessary.

Currently there are no formal requirements for reporting to ASUM by the Clinical Supervisor, but it is anticipated that such reporting will develop over time.

2.2.2 Educational Supervision

As part of training, the Clinical Supervisor also acts as the educational supervisor. Additional duties expected of the Educational Supervisor are:

- To instruct on the theory and practice of sonography.
- To instruct on the safety requirements for patients and staff in sonography practice.
- To ensure a wide range of cases are available to the trainee to gain broad experience.
- To assist the trainee to integrate theory and practice.
- To assess at regular intervals (minimum three monthly) for competence and progress.
- To critically assess the standard of practice and the trainees insight regarding the need for assistance.

- To ensure trainees have exposure to film review with medical practitioners skilled in sonography.

Trainees are required to prove to the satisfaction of the DMU Board of Examiners of the ASUM that their experience is sufficient to be eligible to sit the Part II examination.

Trainees are also encouraged to select a mentor who assists in guiding them through their training programme.

2.3 PROGRAMME CO-ORDINATION

Details of these activities are under development, and are currently represented in section 2.2.

2.4 EXPECTED OUTCOMES

The final outcome of training is the Diploma in Medical Ultrasonography, awarded by the ASUM in either general (including obstetric) or obstetric ultrasound.

The Part I (theory) DMU examination can be taken prior to or in the early stages of training. At least one calendar year must elapse between Part I and Part II examinations.

The Part II examination is taken after a minimum of two full-time equivalent years of training.

All trainees must be qualified and licensed to practice sonography within five years of commencing training. This is a requirement of the Medical Radiation Technologists Board (MRTB).

3.0 ELIGIBILITY

3.1 TRAINEE ELIGIBILITY

All trainees are required to be registered by the MRTB to allow them to practice sonography prior to qualification. This gives them exemption to practice under MRTB regulation II (i)(e), which allows the Board to impose conditions of time frame, location and supervision. There is a five year limit on holding exemptions to complete Parts 1 and 2 of the Diploma in Medical Ultrasound.

Trainees should have a health professional qualification, or a basic science degree, to enter training. The usual qualification is in medical radiation technology (MRT).

Some trainees enter the programme having completed the Part 1 ASUM theory examination.

3.2 PROVIDER ELIGIBILITY

Providers must have a suitable training environment as described in Section 2.1, which includes:

- Nominated training posts.
- Qualified and licensed sonographers (as determined by MRTB).
- Sonologists.
- An adequate number and range of cases for training.

Some providers may offer limited training in specified areas and be eligible for partial training only.

4.0 LOCATION AND SETTING

Training in nominated training posts in hospitals.

Any secondment of a trainee to another location for further training experience must comply with Part 9 of the CTA Head Agreement.

5.0 ASSOCIATED LINKAGES

Links should be established externally with:

- the ASUM and Medical Colleges named in the Intercollegiate Statement
- Medical Radiation Technologists Board
- Patient Advocates for Code of Health and Disability Services Consumer Rights
- and Privacy Issues.

6.0 PURCHASE UNIT/REPORTING UNIT

6.1 PURCHASE UNIT

The purchase unit is a trainee who has passed the ASUM Part I examination, is registered with the MRTB and is in a nominated training post.

6.2 REPORTING UNIT

The reporting unit is a trainee who has passed the ASUM Part I examination, is registered with the MRTB and is in a nominated training post and specified year of training.

7.0 PROGRAMME SPECIFIC QUALITY STANDARDS

This section should be read in conjunction with Schedule 1 Part 3 of the CTA Head Agreement, which specifies the generic quality standards for all programmes provided under this contract.

7.1 LEARNING ENVIRONMENT QUALITY STANDARDS

The provider will demonstrate their commitment to training by:

- Having policies in place detailing the roles, responsibilities, of supervisors

7.2 EDUCATIONAL SUPERVISION QUALITY STANDARDS

Educational supervision will be provided to a standard that ensures:-

- All clinical supervisors are aware of the objectives of training and supervision.
- Validation of the duration of training and practical experience for trainees to be eligible to sit the DMU Part II examination.
- Mentors are available for the general guidance of trainees.
- Trainees are encouraged to attend clinical meetings.

8.0 SERVICE SPECIFIC REPORTING REQUIREMENTS

This section should be read in conjunction with Schedule 1 Part 1 of the CTA Head Agreement, which specifies generic reporting requirements for all programmes provided under the contract.

8.1 PROGRESS REPORTING

Section 2.4 of the specification details the expected outcomes of the training programme purchased.

8.2 QUALITY REPORTING

Reports as described in Schedule 1 Part 1 of the CTA Head Agreement require a summary of the programme. Schedule 1 Part 3 of the CTA Head Agreement requires that you have a quality plan in place for the ongoing monitoring of the training provided. The summary should refer to the outcomes of this internal quality management and make reference to the service specific quality standards in 7.0 above, particularly supervision.