



# Promoting Excellence In Ultrasound

## **Policies and Statements**

# **C2**

The Role Of The Sonographer

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#### The Role Of The Sonographer

*February 1996, Revised September 1999, November 2006, July 2007, Reaffirmed June 2008*

#### **INTRODUCTION**

Diagnostic ultrasound is used in healthcare as a diagnostic modality to confirm or exclude disease so a referring medical practitioner may institute appropriate patient management.

A sonographer is a health care professional who has undertaken an appropriate postgraduate course of practical and theoretical study specific to the practice of diagnostic ultrasound and is practising that speciality.

Ultrasound has evolved to encompass echocardiography (including transthoracic, transoesophageal, intravascular and intracardiac examinations), vascular, obstetric and gynaecological, general and musculoskeletal ultrasound, including intracavity and interventional applications.

#### **EDUCATION**

The Australasian Society for Ultrasound in Medicine (ASUM) recognises an appropriate graduate-level qualification involving a practical assessment conducted by accredited assessors, not connected with their practice or teaching institution, as the suitable qualification for a sonographer.

To maintain professional competence sonographers must maintain a high level of continuing professional development throughout their careers. ASUM recognises 50 hours of learning activity directly relevant to their practice as the minimum annual requirement.

#### **SONOGRAPHERS**

The Australasian Sonographer Accreditation Registry (ASAR), in Australia, and the New Zealand Medical Registration Technologists Board (NZMRTB), in New Zealand, accredit sonographers to practice in their respective jurisdictions. The Role of the Sonographer document applies to all of these sonographers.

Sonographers are drawn from a wide range of career related backgrounds. These include medical and pure science, applied science such as diagnostic and therapeutic radiography, nuclear medicine, nursing, cardiac technology and vascular technology.

Qualifications include the Diploma of Medical Ultrasonography (DMU) awarded by the Australasian Society for Ultrasound in Medicine (ASUM), graduate qualifications in medical sonography offered by Australian and New Zealand tertiary institutions and accredited by the ASAR for practice in Australia or the NZMRTB for practice in New Zealand, and appropriate overseas qualifications.

#### **“SONOGRAPHER” AS A TERM TO DEFINE A QUALIFIED PROFESSIONAL**

It is intended that only the fully qualified be designated “Sonographer”. Before completion of training, “trainee” sonographers should work only under the supervision of a qualified sonographer or sinologist

## **REQUIREMENTS OF THE SONOGRAPHER**

A sonographer requires a wide general knowledge in:

- Human anatomy, embryology, physiology and pathology and a detailed knowledge of the anatomical regions in which he/she specialises. In particular it is a necessity to have a three dimensional conceptual understanding of sonographic anatomical appearances, normal variations and pathological processes, in order to develop differential diagnoses.
- The physical principles of diagnostic ultrasound, including how the images are formed and recorded, and the associated artefacts which can be encountered.

The final diagnosis and writing of the report are the responsibility of the medical practitioner.

## **RESPONSIBILITIES OF THE SONOGRAPHER**

Sonographers are required to:

- understand medical practice and terminology to allow for professional communication with the supervising medical practitioner, referring medical practitioner and colleagues
- extend the examination to other areas as may be indicated by the findings during the examination
- understand nursing procedures for the patients examined, and the procedures for medical emergencies, infection control and interventional techniques
- assist in the education of student sonographers, medical practitioners and practitioners with an interest in diagnostic ultrasound
- monitor equipment to ensure it is functioning properly, and evaluate new equipment
- understand the principles of safety of ultrasound, including possible bioeffects and biohazards, and the implications regarding safe use of the equipment
- appreciate and implement the principles of research
- undertake continuing education to ensure maintenance of skills and the ability to adopt newly developed techniques in medical ultrasound
- have excellent communication skills necessary to conduct the examination in a caring and professional manner
- maintain their professional standing through membership of an appropriate professional Society or Association.

## **CONCLUSION**

By the nature of ultrasound examinations sonographers, compared with other imaging technologists, are accorded a high level of autonomy and responsibility in obtaining accurate diagnostic information from the ultrasound examination.

It is therefore particularly important that those involved in the diagnostic ultrasound process are cognisant of the requirements and responsibilities of sonographers described in this document.

Refer to [ASUM "Policy on Diagnostic Ultrasound Services" \(B1\)](#)



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