AHP Consulting Services

# Scope of Practice

## Australasian Sonography Association

Delphi Version 4.1

## Contents

## Limitation

This document has been developed as the core **scope of practice** (SOP) that applies to an Accredited Medical Sonographer (AMS) in Australia and New Zealand based on the Professional Competency Framework for AMSs.[1] It defines the minimum level of clinical capabilities expected of a professional at "**entry level**" upon entering the workforce as an AMSAMS (General, Cardiac, Vascular, Breast, Obstetrics and Gynaecology).

This SOP document has been developed by the Australasian Sonography Association (ASA) to outline the expected capabilities and professional responsibilities of graduate AMS practising in Australia. It is primarily intended to support Australian AMSs, educators, workplaces, and policymakers. While regulatory and accreditation frameworks in New Zealand differ from those in Australia, ASA acknowledges the shared educational foundations and the close professional relationship between the two countries. Accordingly, selected references to New Zealand qualifications, regulatory bodies, and professional expectations have been included to support alignment and foster trans-Tasman collaboration. This SOP does not apply to non-registered sonography professionals.

The SOP has been written to enable individual and professional flexibility, allowing the profession to respond to the evolution of sonography, including changes in technology advancements and evolving practices.

This document does not seek to define or replace the regulatory requirements set by the New Zealand Medical Radiation Technologists Board (MRTB), nor is it a substitute for the MRTB's own SOP. Rather, it provides a framework that may be useful and influential as New Zealand continues to develop its professional standards. Any references to New Zealand are included for context only and do not imply any regulatory authority.

**The SOP document is intended to complement the Professional Competency Framework for Sonographers.**[1] These professional competencies define the minimum acceptable level of knowledge, skills, and ethical conduct required for competent and professional practice as an AMS.

# Scope of Practice

This SOP document is designed to support health and medical professionals in understanding the role and responsibilities of an AMS. It also serves as a resource for workplaces to guide workforce planning and ensure AMSs are utilised effectively in delivering high-quality care that meets community health needs.

## What is an Accredited Medical Sonographer?

An AMS is a specialist healthcare professional accredited by the Australian Sonographer Accreditation Registry (ASAR) to use ultrasound equipment to perform diagnostic ultrasound examinations. They investigate and apply clinical reasoning. They record and interpret images, video loops, Doppler information and apply clinical reasoning to answer the clinical question.

As the primary operator in delivering the diagnostic ultrasound examinations, AMSs ensure that the imaging strategy aligns with the clinical request, professional guidelines, and best practice. Depending on local protocols, the AMS may modify or extend the examination based on the referral information and findings from patient consultation. Imaging techniques may also be adjusted in real time to accommodate clinical conditions.

The AMS will generate a *Sonographer's Report* (see definition) based on diagnostic findings and interpretation, which informs the referring healthcare practitioner and may be subject to subsequent verification by a *Reporting Clinician* (see definition), depending on the workplace's guidelines.

Current educational standards for AMSs are an AQF Level 8 or NZQCF Level 8 qualification (or above) or equivalent qualification recognised by the Australian Sonographer Accreditation Registry (ASAR) and New Zealand Medical Radiation Technologists Board (NZ MRTB).

An AMS is part of a medical team whose expertise in diagnostic imaging and monitoring of medical conditions plays a significant role in enhancing patient health outcomes.

Sonography in Australia and New Zealand is a well-established profession that continues to evolve and change, based on evidence-based research, technological advancements, and responsiveness to healthcare needs.

## Qualifications of an Accredited Medical Sonographer

AMSs have:

- Completed an ASAR accredited sonography qualification or
- Completed a NZ MRTB recognised sonography qualification

## Defining Scope of Practice

***Core Scope of Practice***
Defines the minimum level of clinical competencies expected of a professional upon entering the workforce, as documented in the Professional Competency Framework for Sonographers.[1]

***Individual Scope of Practice***
Defines the roles, functions, responsibilities, activities and decision-making capacity based on the AMS's education, knowledge and skills.

***Extended Scope of Practice***
Defines the scope that exceeds the core scope but is supported through additional qualifications, credentialling, workplace training or demonstrated specialised clinical experience, regulatory or legislative changes, for example ultrasound-guided injections. Further postgraduate study or professional development may support the safe and effective delivery of extended scope activities, where relevant.

***Expanded Scope of Practice***
Represents any scope increase, either an extended or an advanced scope of practice.

***Advanced Scope of Practice***
Defines a practice within the currently recognised scope of practice for the profession, which may require additional training and credentialling at an advanced level, as well as significant professional experience and competency development.
ASAR accredited discipline-specific areas of practice currently include:

- General
- Obstetrics
- Gynaecology
- Vascular‡
- Cardiac *
- Breast
- Musculoskeletal#
- Paediatric#

‡ In Australia, vascular practitioners may be referred to asvascular sonographer, vascular technologists, or vascular scientist.

*In Australia, cardiac ultrasound is recognised as an established area of practice within two professions - sonography and cardiac physiology. Specific sub-level role descriptors in use include 'echo physiologist,' 'cardiac sonographer', and 'echocardiographer'.

# At the time of publication, paediatric and musculoskeletal sonography are incorporated within the General stream academic work, with Masters courses available in musculoskeletal for those AMSs wanting to upskill.

AMSs may, under direct supervision, perform advanced or extended roles in relation to interventional, invasive or therapeutic sonographic examinations. These roles must be undertaken in accordance with relevant policies, procedures, protocols, education and applicable legislation within their respective jurisdiction.

AMSs undertaking advanced or extended roles are responsible for performing these duties safely, competently, and within the boundaries of their SOP. The level of clinical risk associated with such roles should be appropriate to the AMS's education and training, experience, and supervision arrangements. Where AMSs perform extended duties, responsibility and accountability for those duties must be clearly defined in writing. Without clear documentation, there is a risk of ambiguity regarding where legal responsibility sits, potentially exposing both the AMS and the workplace to avoidable risk.

## Individual Scope of Practice

AMSs develop their own individual SOP. Their SOP is defined by:

1. Professional foundational competencies
    - An AMS's foundational SOP will be established by the professional competency standards at the time of their educational training and clinical settings, and must be maintained to the current SOP as a minimum.
2. Professional development
    - An AMS's knowledge and skills must be continually developed based on the continuing professional development, peer review cases, training, education and mentoring they undertake.
3. Experience
    - An AMS's experience, gained through the practical application of knowledge and skills over time, will provide insights, problem-solving abilities, critical thinking and clinical proficiency that are not easily attainable through formal education alone.
4. Association and Professional standards and guidelines
    - Current and future evidence-based standards of practice, guidelines and policies will inform and guide an AMS's practices.
5. Jurisdiction
    - An AMS will be guided by regulations and rules within their jurisdiction of work. While Australia and New Zealand have similar jurisdictional regulations and guidelines, Australian AMSs must be aware of federal, state and territory legislation, and New Zealand AMSs must be aware of associated acts, including the Pae Ora (Healthy Futures) Act 2022.[2]
6. Employment
    - An AMS's functions and responsibilities are determined by their workplace, whether they are engaged as an employee, contractor or business owner. They are required to follow the workplace policies, procedures, protocols, and risk management frameworks, and must ensure that these are aligned with the relevant Competency Standards and Codes of Conduct governing professional sonographic practice.
7. Emerging evidence-based research

- An AMS's practice, with the agreement of their workplace, may evolve to include emerging evidence-based approaches, such as AI practice supported by evidence-based and peer-reviewed research, education and training.

AMSs must take responsibility for recognising the deficiencies in their knowledge, skills and competencies and undertake appropriate action to rectify or eliminate them from their current SOP. However, it is also essential for workplaces to be legally responsible for their staff's SOP. They also need to understand that SOP is influenced by more expansive sociopolitical environments, such as their professional setting and relationships with other health and medical professionals.

Each individual is responsible for determining and justifying their SOP at any time. They may be responsible for their actions and decisions within their individual SOP. AMSs must be aware that failure to satisfy this core attribute may result in legal accountability.

It is also a legislative requirement that AMSs maintain the necessary competence in their field of practice and not provide healthcare or services outside their qualifications, training and experience.

## Settings

AMSs will apply their skills across various healthcare settings, including public and private hospitals, clinics, independent practice, and non-radiology physician clinics, in metropolitan, rural, regional, and remote areas. They may be primarily embedded in relevant departments (radiology, cardiology, obstetrics and vascular), operating independently or in mobile roles. Service delivery may be in a clinic, hospital, community, or home-based setting.

Occupational roles for an AMS can include, but are not limited to[3] :

- Practitioner
- Manager
- Researcher
- Tutor
- Academic
- Educator
- Supervisor
- Sales/marketing/ product/clinical application specialist
- Policy officer.

## Work relationships

AMSs can work within multidisciplinary teams or as sole practitioners.

Patients are typically referred to an imaging practice following a consultation with their medical or health provider.

The AMS typically works alongside a reporting clinician, either onsite or offsite. The reporting clinician will complete the final medical report for the referring practitioner, in accordance with workplace policies.

In some settings, the AMS will be responsible for interpreting and reporting the final results without the involvement of a reporting clinician.

## Practicing requirements

In order to perform clinical ultrasound examinations eligible for a Medicare rebate in Australia, AMSs must meet professional standards and hold a current accreditation with ASAR.[4] In New Zealand, sonographers must be registered with a current Annual Practising Certificate with the NZ MRTB.

In Australia, an AMS must practice in accordance with the National Code of Conduct for Health Care Workers[5]. In New Zealand, sonographers must practice in accordance with the Code of Health and Disability Services Consumers' Rights and the MRTB Code of Ethical Conduct[6]. The ASA and ASAR Code of Conduct for Sonographers also sets expectations for AMS's professional and ethical standards of behaviour[7]. An AMS is guided by written request form instructions and their workplace's policies, procedures and protocols. However, an AMS may extend the examination or adapt the examination based on clinical findings and documents from current or previous examinations, in accordance with clinical reasoning and workplace protocols.

An AMS is required to demonstrate their commitment to Continuing Professional Development (CPD). This will ensure they remain current with contemporary diagnostic trends and stay up-to-date with sonographic knowledge. ASAR or the NZ MRTB sets CPD requirements.

AMSs are strongly encouraged to maintain professional indemnity insurance, either individually, through their workplace, or both.

## Expectations of an entry-level Accredited Medical Sonographer

AMSs are healthcare professionals who apply independent, evidence-based, ethical judgment alongside clinical based thinking. An AMS:

1. Assesses the request form and, where available, the patient's relevant medical records to determine the most appropriate examination(s).
- Undertakes a patient validation check by correlating at least three points of information.
- Gathers relevant patient history verbally from the patient and/or from information available in the request form, previous imaging, and medical records to identify appropriate assessment protocols.
- Documents the rationale behind examination decisions, including any contraindications, inadequate patient preparation, and the patient's non-compliance through unwillingness or inability to tolerate the examination.
- Explains the procedures and why the procedures are being undertaken, allowing sufficient time to answer questions to enable patients to provide informed consent, considering the appropriate use and decision on the use of chaperones.
- Gathers and documents informed consent or lack of consent to undergo the examination, as per the workplace's guidelines.

- Applies knowledge of anatomy, physiology, embryology, disease and injuries to determine the most appropriate imaging protocol based on the patient's needs.
- Identifies patient's needs both before and after examination/treatment to ensure patient-centred care.

2. Assesses the patient in the region to be examined.
   - Enquires about any clinical signs or symptoms in the area (including tenderness, pain or masses) and, where appropriate, palpates or otherwise investigates, with consent, the region for clinical assessment.
   - Conducts a verbal history of the patient, confirming symptoms and region to be examined, and conducts a visual assessment of the area (as appropriate).
   - Recognises the limitations of the examination due to patient factors.
   - Recognises a deteriorating patient and enacts actions to progress or stop an examination or procedure.
   - Performs thorough real-time assessment, identifying any signs of anomalies and abnormalities and conducts and/or extends the ultrasound examination accordingly.

3. Conducts sonographic examinations that maintain safety for the patient and themselves.
   - Adheres to and respects patient needs, identities and choices, including gender identity, cultural background, and communication preferences, in accordance with relevant legislation, standards, codes, guidelines and protocols.
   - Correctly operates and maintains ultrasound equipment in accordance with guidelines and product manuals, ensuring the safety of patients and practitioners.
   - Ensures patient safety and upholds professional standards by refraining from any physical examinations involving internal contact, unless they are specifically trained, authorised, and credentialed to do so.
   - Clearly explains to the patient what the ultrasound examination will involve, using inclusive, plain language that supports health literacy and respects cultural and gender diversity.
   - Monitors the patient's physical and emotional status, as well as their capacity to receive care and ability to provide continued consent throughout the examination, with sensitivity to individual needs and expressions of discomfort.
   - Ceases examination immediately if requested by the patient, if the patient's condition deteriorates, or if the AMS does not have the capacity or confidence to continue.
   - Follows and implements infection prevention procedures to prevent cross-contamination.
   - Adheres to safe ergonomics throughout the examination.
   - Recognises and acts in circumstances where care needs onward referral and timely action

4. Recognises, evaluates and makes appropriate adjustments for social, cultural, personal and environmental factors.
   - Establishes a rapport with the patient to support safe, respectful and patient-centred care.

- Offers a support person, chaperone or interpreter for the safe performance of the examination, where appropriate.
- Encourages the patient to ask questions or express concerns about the examination procedures.
- Communicates and seeks frequent feedback from the patient regarding their comfort, emotional safety and willingness to continue the examination.
- Guides the patient on how to position themselves, what breathing manoeuvres are needed and any requirements for achieving a high-quality image, while respecting modesty and personal boundaries.

5. Modifies or extends examination based on clinical presentations, real-time imaging findings and clinical reasoning.
   - Modifies the protocol to optimise or enhance the quality of diagnostic outcomes, where possible.
   - Responds to real-time findings and clinical presentations to modify or extend the scope of the examination.
   - Adjusts scanning technique using principles of ultrasound physics, equipment and application settings to achieve optimal image quality and diagnostic information.
   - Where optimal image quality has not been achieved, the limitations are documented.
   - Seeks guidance from a peer or an experienced diagnostic clinician when encountering unfamiliar sonographic presentations or when personal expertise with the ultrasound scan is limited.

6. Analyses and interprets sonographic findings.
   - Identifies sonographic characteristics throughout the examination.
   - Correlates findings with clinical history, indications and symptoms.
   - When recognised, notifies an appropriate healthcare provider if immediate medical attention is required based on examination findings and workplace guidelines.

7. Accurately documents and stores images and the Sonographer's Report detailing the complete ultrasound examination.
   - Follows professional standards and guidelines and organisational protocols to document precise measurements, descriptions of structures, and any anomalies or findings.
   - Documents clinical indication and further clinical information gained.
   - Documents what was imaged, including any findings or incidents that deviate from normal expectations during the examination.
   - Provides a description and summary of all the findings.
   - Documents what was not scanned and any limitations to the examination, including technical issues, contraindications, inadequate patient preparation, overlying bowel gas, acoustic shadowing, large body habitus, overlying wounds, and overlying bandaging.
   - Seeks feedback and advice from peers or line manager regarding imaging and/or pathology when unsure how to describe and document (where available).

- If there is a Reporting Clinician, provide them with a written or electronic report of the examination, imaging, findings, and results.
- Prioritises urgent findings for immediate attention.

8. Provides culturally appropriate care and empathy to patients.
    - Offers professional support and empathy to patients.
    - Provides a clear explanation of why the examination has been requested and how the examination is to be carried out.
    - Responds to patients' concerns.
    - Provides relevant guidance on what patients can expect following the examination, including a clear explanation of how they can get their results.
    - Ensures patient's privacy and confidentiality are maintained, including when using artificial intelligence to generate reports or letters.

9. Collaborates with other health professionals where necessary to discuss results.
    - Engages in timely and respectful communication with healthcare team members to discuss sonographic finding and their implications
    - Promotes a positive, inclusive and collaborative team culture that values diverse perspectives and shared decision-making.
    - Communicates clearly and professionally with colleagues, adapting communication to suit different professional roles and levels of clinical understanding.
    - Provides contextually relevant information to support other healthcare professionals in interpreting sonographic results within the broader clinical picture.
    - Contributes expertise to assist in clinical decision-making and planning the next steps of patient care.
    - Demonstrates respect for the roles, responsibilities and SOP of other health professionals, fostering mutual trust and accountability.
    - Actively participates in multi-disciplinary education sessions, case reviews, and quality improvement initiatives to enhance team learning and patient outcomes.

10. Advocates for patient's rights and interests.
    - Ensures patient privacy by only sharing information with relevant health professionals and adhering to confidentiality and privacy laws.
    - Advocates for the timely review of findings by an appropriate health professional if significant, urgent findings are detected.
    - Undertakes mandatory notifications in alignment with professional standards and legal requirements when there are valid concerns about a patient's welfare or safety.

## Definitions

**AQF**: Australian Qualifications Framework

**ASAR:** Australian Sonographer Accreditation Registry

**Findings:** an observation or piece of information identified through the ultrasound examination that may have clinical significance.

**NZQCF:** New Zealand Qualifications and Credentials Framework

**NZ MRTB:** New Zealand Medical Radiation Technologist Board

**Reporting clinician:** the healthcare professional, based on workplace policies, is responsible for the final report that provides final interpretation, diagnosis, differential diagnosis and/or recommendations to the referring healthcare provider. This may be an AMS specialised medical practitioner, or a medical reporting physician.

**Request form:** a request form as per Medicare requirements or a referral from another healthcare professional authorised to refer for diagnostic imaging.

**Sonographer's Report:** the report developed by the AMS, as determined by the AMS's workplace requirements. It includes the AMS's analysis of the images, findings, or results from a diagnostic sonographic examination or procedure. In accordance with the supervising physician or workplace policies. Depending on the workplace, this could be a worksheet and images, an interim report or a final report.

## References


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7. ASA and ASAR Sonographer Code of Conduct. Melbourne. Available at: https://www.sonographers.org/publicassets/8792f4b8-7b60-f011-913f-0050568796d8/Code-of-Conduct-for-Sonographers-2025.pdf

Disclaimer: This scope is not a description of the level of education, experience, skill, or competency required to carry out sonography practice. The ASA Scope of Practice has been established using a wide, principle-based approach. Individual practitioners must make sure they have the necessary skills and competencies for any of the activities they undertake. ASA does not endorse, warrant, or make any representations in relation to, and does not accept any liability in relation to, the goods and services of those third parties who utilise this document.