

A sonographer is a highly skilled medical imaging professional within the allied health sector who operates an ultrasound machine to perform diagnostic medical sonographic examinations.

Sonographic practice includes but is not limited to the specialities of musculoskeletal, paediatric, breast, abdominal, vascular, cardiac, superficial organs, obstetrics and gynaecology.

The quality of the sonographic examination is intrinsically linked to the skill of the sonographer who tailors the examination and interprets the sonographic findings by selectively recording anatomical images, physical data and real time physiological information. The final diagnostic report produced by the medical specialist is inherently reliant on the technical and intellectual skills of the sonographer.

The profession of sonography involves a combination of several important factors including technical competency and decisional latitude and interpretive ability.

It is essential that the sonographer possesses core knowledge and skill in the following areas:

- Applied anatomy, physiology and pathophysiology
- Imaging and pattern recognition
- Operation of equipment
- Ability to distinguish normal from abnormal findings and identify the sonographic appearances of specific diseases and conditions
- Communication
- Clinical skills/acumen
- Patient assessment and care
- Critical thinking and problem solving

- Highly developed motor skills that are specific to the profession
- Ultrasound physics
- Occupational health and safety issues
- Infection control.

Education

As a pre-requisite for entry to an accredited post graduate sonography course, candidates have usually completed the equivalent of a Bachelor of Applied Science. On completion of an accredited sonography course and having attained the requisite minimum clinical experience, entry-level sonographers are eligible for accreditation with the registry of accredited sonographers as administered by the Australasian Sonographer Accreditation Registry (ASAR).

A qualified general sonographer is known as an Accredited Medical Sonographer (AMS). Sonographers who have successfully completed specialist studies receive an appropriate designation, such as Accredited Cardiac Sonographer (ACS). All accredited sonographers are required to undertake ongoing continuing professional development.

In 2001, the Australian Government Department of Health and Ageing introduced mandatory accreditation for all sonographers performing sonographic examinations for which a Medicare rebate is claimed.