
HEALTH PROFESSIONS COUNCIL OF SOUTH AFRICA

SCOPE OF PRACTICE FOR CATEGORY: ULTRASOUND PROFESSIONAL BOARD FOR RADIOGRAPHY AND CLINICAL TECHNOLOGY

DEFINITIONS:

Sonographer: Refers to a radiographer registered in the category of diagnostic ultrasound.

PREAMBLE:

This document serves to guide the performance levels, limits, and scope of practice for sonographers registered with the Health Professions Council of South Africa (HPCSA), as regulated by the Professional Board for Radiography and Clinical Technology (PBRCT – herein after referred to as the Board). This document aims to guide professional, safe, and effective diagnostic ultrasound practice and furthermore, to protect members of the public against unsafe and unethical professional conduct.

1. PURPOSE AND SCOPE OF THE DOCUMENT:

The purpose of this document is thus to define the scope of practice for sonographers to ensure the delivery of safe, high quality ultrasound services in both public and private health settings. The document describes the role of sonographers as members of the healthcare team and provides a framework for quality improvement programs. This document is dynamic in nature and is thus, subject to amendments with the introduction of new legislation or technologies. This document further, defines the expected performance roles and skills by sonographers with specific reference to what is unique to the ultrasound profession.

A scope of practice defines the parameters of practice and identifies the boundaries for practice, for which a professional has the knowledge, skills, and expertise to practice safely and effectively, in keeping with the terms of the governing bodies without posing any danger to the public or the practitioner.

2. QUALIFICATIONS FOR SONOGRAPHERS:

In South Africa, Sonographers practice after their competency to do so has been endorsed by a Higher Education Institutions (HEIs) and are registered by Health Professions Council of South Africa (HPCSA). South African qualifications recognized for registration by the HPCSA are the National Diploma, Bachelor of Technology (BTech) Ultrasound, Bachelor of Science (BSc) Ultrasound and bachelor's degree in Ultrasound from the different HEIs in South Africa. Foreign qualifications are considered for registration after candidates pass the HPCSA Board examinations. Sonographers may practice their profession in primary, secondary or tertiary healthcare level, in the government or private sector in accordance with prescripts outlined in the Business Practice Policy of the HPCSA.

3. PROFESSIONAL DUTIES OF SONOGRAPHERS:

Sonographers are highly skilled professionals who integrate patient's medical history, supporting clinical data and the sonographic technique and protocols to obtain appropriate diagnostic results. Thus, demonstrating a high degree of accuracy in the use

of ultrasound technology, in the production of sonograms, the evaluation, and interpretation of sonograms to aid provide a verbal and written report on the ultrasound findings. Ultrasound reports are utilized for diagnostic and medico-legal purposes and should thus, adhere to appropriate reporting guidelines and standards. All these roles constitute core duties which underpin the ultrasound profession.

Sonographers should have an insight and understanding of human anatomy, embryology, physiology, pathophysiology, physical principles of ultrasound equipment and imaging, medical terminology, patient care, communication, human rights, ethics, and health law. Critical thinking, problem solving, and ethical decision-making skills are essential to practice as independent healthcare professionals. Sonographers are expected to engage in continuing professional development (CPD) to keep abreast of rapidly evolving advances in technologies and new healthcare practices, as well as to ensure evidence-based practice of their knowledge, insight, and technical competence.

3. Sonographer's tasks shall involve:

3.1 Correctly identifying the patient and explaining the procedure to the patient.

3.2 Taking informed consent – in a language the patient understands.

3.3 Assessing the request form for justification of the examination being requested.

3.4 Ensuring that the request form has been completed and signed by a healthcare practitioner who is registered in terms of any legislation regulating healthcare practitioners in South Africa and who may request ultrasound examinations subject to the scope of their profession.

3.5 Assessing patients and their clinical history to determine appropriate ultrasound protocols and techniques.

3.6 Referral of patients to the next level of care by Sonographers working independently at private healthcare facilities.

3.7 Performing a range of ultrasound examinations on patients to produce images of appropriate technical and - diagnostic quality; These include:

- Abdominal Imaging: 2D B-mode (Gray scale) imaging and Doppler ultrasound where necessary – performed at the request of another healthcare practitioner.

- Chest/Lung Ultrasound: 2D B-mode (Gray scale) imaging – performed at the request of another healthcare practitioner.
- Obstetrics and Gynaecology Imaging: 2D B-mode (Gray scale) imaging and Doppler ultrasound where necessary – performed at the request of another healthcare practitioner.
- 3D and 4D imaging: Performed at the request of another healthcare practitioner.
- Small parts Imaging, including 2D B-mode (Gray scale) imaging and Doppler ultrasound where necessary of the Breast, Scrotum/Testes, Thyroid/Neck– performed at the request of another healthcare practitioner.
- Elastography– performed at the request of another healthcare practitioner.
- Musculo-Skeletal Imaging - 2D B-mode (Gray scale) imaging and Doppler ultrasound where necessary – performed at the request of another healthcare practitioner.
- Vascular Imaging, including Venous and Arterial- 2D B-mode (Gray scale) imaging and Doppler ultrasound – performed at the request of another healthcare practitioner.
- Cardiac/Echocardiography Imaging- 2D B-mode (Gray scale), M-mode, Color Doppler, Pulsed wave Doppler, and continuous wave Doppler imaging – performed at the request of another healthcare practitioner.
- Neurosonography Imaging: 2D B-mode (Gray scale) imaging and Doppler ultrasound where necessary– performed at the request of another healthcare practitioner.
- Paediatric Imaging: 2D B-mode (Gray scale) imaging and Doppler ultrasound where necessary – performed at the request of another healthcare practitioner.
- Eye Ultrasound Imaging: 2D B-mode (Gray scale) imaging and-Doppler ultrasound where necessary – performed at the request of another healthcare practitioner.
- High Intensity Focused Ultrasound (HIFU) performed at the request of another healthcare practitioner provided further training has been acquired.
- Contrast enhanced ultrasound (CEU)- performed at the request of another healthcare practitioner provided further post-graduate training in intravenous cannulation has been acquired.

- Providing a written or verbal report on the ultrasound findings to the requesting healthcare practitioner, in which the normal and abnormal appearances of the relevant areas are identified and described.
- Observing the wellbeing of patients and maintaining contact with them during their pre-examination, during examination and post-examination procedures.
- Providing support and reassurance to patients and addressing their physical and psychological needs.
- Recording the imaging identification and patient documentation accurately and observing protocols in compliance with the patients' rights to privacy and confidentiality.
- Supervising students, practitioners, and auxiliary staff, through delivery of appropriate and relevant education, training, and mentoring.
- Understanding and observing health and safety in the workplace as well as personal welfare issues, including infection control policies and regulations for the radiography profession to protect themselves and others.
- Manage quality assurance programmes to include the maintenance of equipment and accessories, the work environment/facilities, occupational health and safety, record keeping and archiving, supply of consumables, personnel, and patient care.
- Performing duties in a professional manner, respecting the basic human rights of patients and others, and always observing ethical responsibility, accountability, and health law.
- Participating in research studies, in accordance with National and HPCSA research guidelines.

4. SCOPE OF PRACTICE FOR SONOGRAPHERS:

The list of work activities presented in this document are to be read in conjunction with the current *Regulations defining the scope of the profession of radiography*, relating specifically to the ultrasound category. The scope must also be read in conjunction with the *Ethical Rules of Conduct* and *Annexure 10* of these Rules as well as all relevant Board policies and guidelines. *Annexure ten* provides a framework of professional and ethical

practice standards for all radiographers. The activities above are practiced, provided they fall within the scope of Board approved education, training, and competence of Sonographers. Sonographers must only practice within the category of radiography for which they are registered with the HPCSA. Their practice is subject to them having the requisite education, clinical competence, and experience to perform such procedures.