

12 September 2022

GUIDELINE FOR CT EXAMINATIONS PRE-LICENCING REQUIREMENTS: RADIOLOGIST AVAILABLE BY REMOTE DIGITAL CONNECTION

To provide guidance when applying to license to Use a Computed Tomography system where a Radiologist is available only by remote connection.

Document History

Final Version	Reason for Amendment	Effective Date
0	First issue and published for implementation	August 2012
1	 Content structured on the latest SAHPRA Guideline Template A unique document number SAHPGL-RDN-XR-23 allocated to this Guideline 	September 2022

DR BOITUMELO SEMETE-MAKOKOTLELA CHIEF EXECUTIVE OFFICER

Contents

Doc	ument History	1	
Glos	Glossary		
1.	INTRODUCTION	4	
1.1	Purpose	4	
1.2	Scope	4	
2.	LEGAL PROVISION	4	
3.	PROCEDURE	4	
3.1	The applicant must provide the following information in writing and submit the applicable	4	
3.2	CT Protocols:	4	
3.3	Rules for requesting CT examinations:	4	
3.4	RSSA Policy on CT Examinations:	6	
4.	REFERENCES	7	
5.	VALIDITY	7	

Glossary

Abbreviation/ Term	Meaning
CT Examination	A computerized tomography (CT) examination combines a series of X-Ray images taken from different angles around your body and uses computer processing to create cross-sectional images (slices) of the bones, blood vessels and soft tissues inside your body.
Radiologist	Radiologists are medical doctors that specialize in diagnosing and treating injuries and diseases using medical imaging (radiology) procedures (exams/tests) such as X-Rays, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, positron emission tomography (PET) and ultrasound.
Teleradiology	Teleradiology involves first obtaining medical images, following by the viewing and interpretation of these images for diagnostic or consultative purposes by a radiologist. The process of teleradiology is based on an essential triad; an image sending station, a transmission network, and a receiving image station that must have a high-quality display screen that has been cleared for clinical purposes
RSSA	Radiological Society of South Africa

1. INTRODUCTION

Radiology encompasses the diverse techniques used by medical professionals to capture images of the internal body to aid in the process of diagnosis or treatment. These imaging techniques can include X-Ray imaging, computed tomography (CT), magnetic resonance imaging (MRI), and several others.

The advantages of CT over X-Ray radiography are that it enables a three-dimensional insight into the body, giving a more accurate presentation of the area of interest, which makes it a valuable diagnostic tool. Remote reporting of radiological images addresses the lack of adequate staff and has the potential to improve patient care by ensuring availability of Radiologists to the larger population especially those in outlying areas.

1.1 Purpose

To ensure access to computed tomography services via remote digital connection.

1.2 Scope

To prescribe minimum requirements and supporting documents when applying for a license to a Use a Computed Tomography System in cases where a Radiologist is not available in person.

2. LEGAL PROVISION

The SAHPRA Radiation control regulates ionizing devices as promulgated by the hazardous Substances 15 of 1973 with its related regulations R1332 concerning the control of electronic products.

3. **PROCEDURE**

3.1 The applicant must provide the following information in writing and submit the applicable documents:

- Proof of remote digital connection.
- Signed contracts between the hospital and radiologist/s concerned.

3.2 CT Protocols:

- Scan protocols must be available for each CT examination.
- Exposure parameters must be optimized for each examination to minimize radiation dose while providing the necessary information to allow for diagnosis.
- Must include procedures/actions to minimize radiation dose to children and young adults.

3.3 Rules for requesting CT examinations:

- Medical Specialists may request CT examinations.
- General Practitioners (GP) working in an Emergency Room environment are restricted to

requesting CT examinations in cases with acute trauma (head, spinal and body), acute Cerebrovascular Accidents, Computed Tomography examinations for acute pulmonary embolisms.

- General Practitioners in hospital/general practice restricted to requesting CT scans of the brain and limited CT scans of the paranasal sinuses.

3.4 RSSA Policy on CT Examinations:



The Radiological Society of South Africa Die Radiologiese Vereniging Van Suid-Afrika Umbutho wenzululwasi ngeX-reyi woMzantsi-Afrika The Professional Association of Radiologists in South Africa, Namibia and Botswana

RSSA Policy – CT Examinations

- A radiologist must approve all cross-sectional imaging (both CT and MRI) examinations and determine the appropriate scanning protocols, with regard to clinical indication, appropriateness and patient safety.
- A radiologist must be available, either in person or by remote digital connection, to view and approve the images at the completion of the examination.
- The decision to administer contrast media either intravenously or by any other route is the sole responsibility of the radiologist.
- A prescription for the contrast medium must be completed and either stored in its original form, or scanned in to the Radiology Information System (RIS) or entered directly into the patient's record in the RIS.
- A medical practitioner, trained in resuscitation, must be present or immediately available in the radiology department, when intravenous contrast media is administered.
- An appropriately qualified Radiologist must report on all cross-sectional imaging studies, done for diagnostic purposes. All reports must be signed either physically or digitally and stored for at least 7 years.

Version 1.0 - 8 March 2012

P O Box 3475, Cresta, 2118, South Africa Tel: 011-794-4395 Fax: 011-794-4313 e-mail: radsoc@iafrica.com President: Dr C Sperryn Vice-President: Dr S Godinho Past President: Dr R J Tuft Secretary: Dr M Velleman Treasurer: Dr T Mngoma University Representative: Prof C de Vries Congress Chairman: Prof. L Janse van Rensburg Member Without Portfolio: Dr A Ranchod Dr G Buchanan Executive Director: Dr Bates Alheit www.rssa.co.za

4. **REFERENCES**

The following related documents are referenced:

- 4.1 Guideline for Reducing Radiation Risk from Computer Tomography for Pediatric and Small Adult patients (SAHPGL-RDN-XR-06), <u>https://www.sahpra.org.za/document/guideline-for-reducing-radiation-risk-from-computer-tomography-for-pediatric-and-small-adult-patients/</u>
- 4.2 Guideline for Code of Practice for Users of Medical X-Ray Equipment (SAHPGL-RDN-XR-02), https://www.sahpra.org.za/document/guideline-for-code-of-practice-for-users-of-medical-xray equipment
- 4.3 Hazardous Substance Act 15 of 1973 (Act 15, of 1973), <u>https://www.sahpra.org.za/radiation-control-acts-and-regulations/.</u>
- 4.4 Regulation concerning the control of electronic products, (R1332), https://www.sahpra.org.za/radiation-control-acts-and-regulations/.

5. VALIDITY

This guideline is valid for a period of 5 years from the effective date of revision and replaces the old guideline for CT Examinations Pre-licensing Requirements: Radiologist only Available by Remote Digital Connection, revised August 2012. It will be reviewed on this timeframe or as and when required.