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RADIOGRAPHERS
& RADIOLOGICAL
TECHNOLOGISTS

QA/QC in CT by the QC Radiographer/Radiological Technologist

Quality Assurance (QA) in CT, is an integral process for monitoring and evaluating the overall performance of a CT department in terms of safety and quality. Whereas QC involves the measurement of key performance indicators of the CT system. It is a reliable tool when innovative methods are installed and for the review of existing practice to enhance outcomes to the patient, the department and the community.

The CT QC radiographer's / radiological technologist's responsibility entails calibration and testing to ensure that the CT system performs within manufacturers' specifications and functions optimally.

The following flow chart serves as a global preliminary task chart for QC radiographers / radiological technologists in CT. It involves systematic teamwork among the radiographer, medical physicist and radiologist of the designated QC team. The professionals involved in CT QC should collaborate with the CT service engineer to achieve the set objectives of the QA program.



QUALITY CONTROL FLOW CHART by QC Radiographer/Radiological Technologist in Computed Tomography

INITIATE

daily, monthly, annual routine QC procedures in CT and following:

- repair,
- corrective actions by manufacturer, scheduled service, new installation
- educational activities associated for CT system and auxillary equipment fine tuning



PERFORM

the self diagnostics procedure for QC/QA in image quality intergrated in the CT scanner timely and according to system manual and within departmental policy



CHECK

- monitor inconsistencies in scanner image quality indicator measurements and
- correlate findings with manufacturers' image quality reference values (as defined by national guidelines and CT QA/QC manuals)



ACT

- consult findings with medical physicist and radiologist
- perform CT system fine tuning and testing procedures according to operator's manual and departmental policy
- contact manufacturer for corrective actions when required
- record QC data and communicate outcomes with both, TQM and CT teams

Note: Must consider for variations in:

1. Educational cultures
2. Professional role and responsibilities of radiographers/radiological technologists
3. National, regional, local and departmental policies
4. CT system and auxillary equipment (i.e. hardware and software)
5. Clinical settings
6. Socioeconomical factors