

Clinical Audit Template: “Minimizing CT Double-Coverage to Reduce Radiation Dose”

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1) Pre-intervention

- Using PACs software, collect data on CT chest, abdomen, pelvis (CHAP); and neck, chest, abdomen, pelvis (NCHAP) scans regarding:
 - Number of scan segments
 - Cranio-caudal length of each segment
 - Length of CC anatomic overlap between segments
 - Dose length product (mSv) for each segment
- Calculate radiation dose due to double-coverage

2) Intervention

- Modify CT protocols to minimize anatomic overlap
 - For example, at our centre:
 - For non-trauma patients, CHAP studies changed to a single portal venous phase requiring only one scan with no overlap. For NCHAP studies, two scans were utilized. Technologists were asked to keep the neck-chest overlap to a minimum.

3) Post-intervention

- Repeat pre-intervention methods and compare results