### <u>SUGGESTED</u> PROTOCOLS FOR CT SERVICES AT A FACILITY

### **REQUIRED PROTOCOLS FOR CT OPERATIONS**

- 1. Radiation Safety Policy.
- 2. Default Protocols for each CT approved scan: including kVp, mA, time, interval, pitch, patient features, etc.
- 3. Select upper threshold CTDIvol dose values. Investigation of each exam that exceeds the threshold CTDIvol values. See Table 1 below.
- 4. Policy for authorization of interpreting physicians of CT scans.

# PROTOCOLS FOR CT OPERATORS

- 1. Policy for authorization of CT operators: Credentials, understand CTDIvol, AEC features, upper threshold CTDIvol values, record CTDIvol on all CT exams, compare CTDIvol to reference levels, and forward CTDIvol values to PAC workstations.
- 2. Training requirements of CT operators.
- 3. Record patient exposure, CTDIvol, for each patient exam.

## PROTOCOLS FOR INTERPRETIN PHYSICIANS

- 1. Policy for authorization of CT interpreting physicians.
- 2. Understanding of meaning of CTDIvol numbers.

### PERIODIC REVIEWS

- 1. An internal review of CT protocols for correctness and implementation by the Lead CT Technologist is required monthly.
- 2. The Medical Physicist must review the CT default protocols at least annually, with special observation of dose trends.
- 3. A review of CT protocols, the AEC-dose reduction system, cases that exceeded the upper CTDIvol threshold, Monthly Tech review, and a determination of potential ALARA reductions are required annually by Lead CT Tech, Medical Physicist, and CT Director.

Table 1   Upper Threshold CTDIvol reference levels:	
<u>CT EXAM</u>	UPPER THERSHOLD
CT head	<75mGy (7.5 rad)
CT abdomen	<25mGy (2.5 rad)
CT chest	<25mGy (2.5 rad)
Pediatric Abdomen	<20mGy (2.0 rad)

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