

**CBE ID**

3663e

**Title**

Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography (CT) in Adults (Facility Level)

**Endorsement Status**

Endorsed

**Is Under Review**

No

**Next Maintenance Cycle**

Fall 2027

**Previous Endorsement Cycle**

Fall 2021

**Initial Endorsement**

Tue, 08/02/2022 - 00:00

**Steward**

Alara Imaging

**1.0 New or Maintenance**

Maintenance

**1.1 Measure Structure**

Single Measure

**1.3 Electronic Clinical Quality Measure (eCQM)**

Yes

**1.6 Measure Description**

This electronic clinical quality measure (eCQM) provides a standardized method for monitoring the performance of diagnostic CT to discourage unnecessarily high radiation doses, a risk factor for cancer, while preserving image quality. It is expressed as a percentage of eligible CT exams that are out-of-range based on having either excessive radiation dose or inadequate image quality, relative to evidence-based thresholds based on the clinical indication for the exam. All diagnostic CT exams of specified anatomic sites performed in inpatient and hospital outpatient care settings are eligible.

**1.7 Measure Type**

Intermediate Outcome

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## 1.8 Level of Analysis

Facility

### 1.13 Data Dictionary

Not attached. I attest that all information will be provided where codes and/or value sets are needed (1.14a - 1.15c).

### 1.14 Numerator

Diagnostic CT exams that have a size-adjusted radiation dose value greater than the threshold specific to the CT category (reflecting the body region imaged and the radiation dose and image quality required for that exam given the reason for the exam), or a global noise value greater than a threshold specific to the CT Category.

### 1.15 Denominator

All diagnostic CT exams performed on adults (aged 18 years and older) during the measurement period of one year that have an assigned CT category, a size-adjusted radiation dose value, and a global noise value.

### 1.20 Types of Data Sources

Electronic Health Records

### 6.1.2 Current or Planned Use(s)

Payment Program, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Quality Improvement (Internal to the specific organization)

### 6.1.3 Current Use(s)

Not in use

## Exclusions

Denominator exclusions are CT exams that simultaneously include multiple body regions outside of four commonly encountered multiple region groupings (specified as LOINC code 96914-7, CT Dose and Image Quality Category, Full Body). Denominator exclusions are also CT exams with missing patient age, missing size-adjusted radiation dose, or missing global noise. These are technical exclusions ("missing data") from the initial population. Technical exclusions will be flagged, corrected whenever possible, and tracked at the level of the accountable entity.

## Measure Disclaimer

The Measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications.

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### **Planned Use**

Payment Program, Quality Improvement (Internal to the specific organization), Quality Improvement with Benchmarking (external benchmarking to multiple organizations)

### **Risk Adjustment**

Statistical risk model

### **Target Population**

Adults (Age >= 18)

### **The measure developer is different from the measure steward**

No

### **Steward Organization**

Alara Imaging

### **Steward POC email**

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