

LIDC Process Model

Draft 3.0

Low Dose Lung Screen CTs

Detection Task ONLY

(Type DtA)

Overview

- Prerequisites
- major data collection steps, and
- data collected at each step.

Prerequisites

IRB approvals

Steps



Participants Scanned as part of Other Study/Clinical Program

Data Collected

LIDC Activities

Technical and Image Quality Criteria

Patient/Nodule Criteria

Initial Review –
Apply Inclusion Criteria (Radiologist Review)
[NOTE: All NLST & ELCAP eligible to be included]

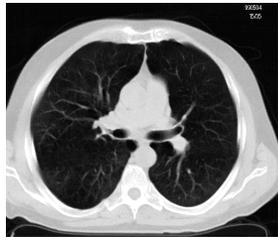


Image Data/Dicom Data

Non-Image Data
Demographic Data
Image Quality review
Scan Classification
Patient Classification

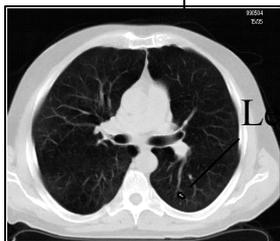
Prerequisites

- Review workstation
- Vocabulary for Labeling
- Radiologist Training Set
- Agreement on Marking /contouring process
- Reconciliation Process

LIDC Activities

Radiologist Review & Reconcile

- 4 radiologists (all blinded) – R1B, R2B, R3B, R4B
- All submit markings to center/mediator
- All 4 radiologists then see: (a) those lesions that everyone saw, (b) those lesions that NOT everyone saw, and (c) those lesions which a radiologist saw, but that not everyone saw (one can withdraw a lesion)
- All 4 radiologists then read unblinded (R1U, R2U, R3U, R4U)



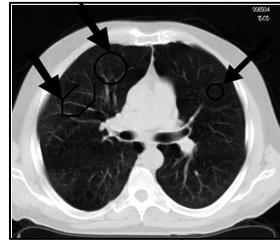
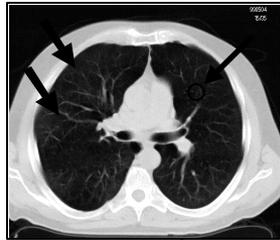
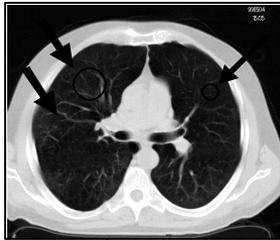
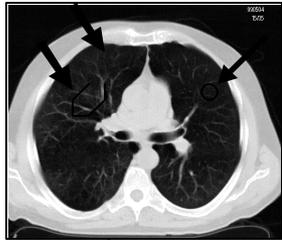
Reconcile only location
NOT outlines, shape, etc.

Lesions for each condition: (R1B, R2B, R3B, R4B,
R1U, R2U, R3U, R4U)

- Location
- Outline
- Label

Radiologist Review & Reconcile

- 4 radiologist (blinded) – R1B, R2B, R3B, R4B
- Submit to Center Mediator
- 4 Radiologists see markings – (a) Everyone, (b) Some, (c) Only you
- 4 Radiologists Unblinded (R1U, R2U, R3U, R4U)



R1B

R2B

R3B

R4B

R1U

R2U

R3U

R4U

Central Mediator/Database