### RSNA QIBA Open Image Archives Requirements Project

### FDG-PET User Requirements Gathering Session

October 21, 2011

# Goal

- RSNA needs to begin utilizing an Open Image Archive (OIA) to store, organize, and disseminate important imaging datasets.
- Understanding individual project requirements is critical to getting this right.
- The goal for this session is to walk through OIA requirements categories and capture FDG-PET priorities and needs.

## **OIA Requirements Categories**

#### • Archive Representation and Input

- Sheet 3: Data Acquisition
- Sheet 1: Data Model
- Sheet 2: Metadata

#### • Archive Functionality

- Sheet 7: View/Query/Analyze
- Sheet 4: Business Analytics and Metrics

#### • Additional Areas

- Sheet 6: Computing Environment
- Sheet 5: Workflow
- Sheet 8: Regulatory Aspects
- Sheet 12: Performance
- Sheet 14: Availability/Reliability
- Sheet 16: Accessibility/Usability

- ...

- Current Approach
  - Using ftp, mail CDs, ... paper
- Clinical trials
  - CTN Server: Keosys supports image archives in a clinical trial situation
  - Imaging CROs have their own archives.

- DICOM support is important
- Additional data needs
  - Need info about a study
  - Blood glucose levels
  - Output of any analysis
  - Scanner QA Information
  - CRF for patient data
  - ROIs as well as statistics
  - Listing DICOM header information

- General
  - Ease of being to look at and view data using dicom tools
  - Have suggested formats for non-imaging data (metadata)
  - May have a need for non-dicom data (e.g. saving ROIs)
  - Have the ability to associate image annotations with base imagery
  - Cross-platform support

- Viewing/Querying/Analyzing
  - Clustering of information associated with a study/experiment
  - Ability to query for image/metadata attributes
  - Searching different radio-isotopes
  - Having documentation is important