GRP 5 Performing Data Review

PURPOSE OF THE PROCEDURE

To outline the steps required to review datasets that have been imported into XNAT's prearchive and move them into the archive or request modification and re-upload.

APPLICABITLITY

This procedure applies to people performing reviews of data uploaded to XNAT for clinical trials supported by the Australian Centre for Quantitative Imaging/Australian Imaging Service to determine if the data is correct and meets the standards of the trial in term of anonymization and quality.

RELATED PROCEDURES

Procedure Number	Scope
GRP1	Gaining Access to XNAT
GRP2	Managing a project
GRP3	Preparing Data for Upload to XNAT
GRP4	Uploading Data to XNAT
GRP6	Analysing project data

PROCEDURES

Access the data for review

- When new data has been uploaded XNAT will send a notification email to the data reviewer with a link to the new dataset.
- Once you have been notified that there is data available for review log into XNAT (see GRP1)

Reviewing the dataset in XNAT

- Check that extracted information displayed on the screen is correct
- Click "View Images" from the actions menu on the right to access the image viewer.
- Check that the images are as expected.
- Click back to return to the experiment information.
- Go to the scan list and hover your mouse over the first scan then click the "View Details" link
- Click on the "View DICOM Headers" link and check that the data is as expected and has been anonymised correctly.
- Repeat these steps for every scan in the list

PROCEDURE TESTS
NB: These tests should be performed for cases where the upload was through whichever mechanism(s) you will be using for upload (Desktop Client vs Web Browser) as the mode of ingest

can impact how data is processed in XNAT. If you are using both methods of ingest, then the tests below need to be run for both types of data ingest.

Test description	Test completed	Pass/Fail	Comments
Confirm that an email is received by the reviewer notifying them of a new session being archived			
Can follow link in email to see the new session			
Check that all scans have uploaded and have the correct number of images or files			
Check that uploaded images look correct			
Check that headers are anonymised correctly			
Check that all required headers have not been modified.			

Reviewing the dataset outside of XNAT
- Log in to XNAT and select the central project for you trial
- Select "Download Images" from the "Actions" menu on the right
- Select the image sessions you want to download data from the left pane
- Select the type of data you want to download from the middle pane
- Chose how you want to download the images from the right pane
    - Download via XNAT client: This will send an xml digest directly to the desktop client and will download in the background. The desktop client will open, you will then need to set the download destination folder and then click download for your files to download. A default download location can be set in the Desktop Uploader.
    - Zip download: Directly download a zip file
    - Catalogue XML: This will download an xml catalogue of the files you want to download. This can then be used by an external application to download the images. For example, you can open the catalogue in the desktop client and begin downloading that way. This might be useful if you want to send the digest to someone else or download the images at a later time or on a different machine.
- Import the images into your reviewing software (eg MIM) and review.

Actions to take if there are issues with the dataset
    - If there are serious issues with the dataset such as problems with the anonymisation or an incomplete or incorrect set of images, then find the username of the user who

archived the image set in the brackets of the Date Added: value as below

- o If you don't have an email address for the user, then you can get it from your trial administrator (anyone with ownership rights on the project can look it up)
- o Delete the session by selecting "Delete" from the actions menu on the right when the image session is loaded.
- o Email the uploader to let them know what the issues were, and that the dataset will need to be reuploaded.
- If there are minor issues with the dataset then
  - o find the name and contact details of the person who uploaded the image set
    - o Click "View Details" on the scan then "View DICOM headers".
    - o Locate the Image Comments tag (0020,4000). This should contain the name and email of the person who uploaded the dataset.
  - o Notify the uploader of the issues
  - o Click "Edit" from the actions menu
  - o Add any comments in the Additional Notes section
  - o Click "Submit"
  - o Scroll down the bottom to the "Additional Notes" field and note any issues there
- See your trial coordinator for any actions to take once a dataset has been approved. Below is a description for one way of keeping track of approved datasets in XNAT. For this to work your trial will need a separate project for accepted data eg trial_accepted. After completing the following actions the data will be shared into the trial_accepted data. This trial could then be used to access only data that has been accepted.
  - o Open the imaging session
  - o Select the Projects tab (see below)

Browse ▾   New ▾   Upload ▾   Tools ▾

PROJECT: Pt1 > SUBJECT: 1061 > **1061_20050214**

CT Session: 1061_20050214

Details	**Projects**

This experiment is owned by: **Test**.

This experiment has been shared into **0** project(s):

Share into [Test2   ▾] [Add]

- o
- o   Select the project to Share into (e.g. myTrial_accepted) and click Add

PROCEDURE TESTS

Test description	Test completed	Pass/Fail	Comments
Confirm that an email is received by the reviewer notifying them of a new session being archived			
Can follow link in email to see the new session			
Can select "Download Images"			
Can choose required image sessions			
Can choose required image types			
Can download via the Desktop Client			
Can download a zip directly			
Can download a catalogue XML and use that to download via the Desktop Client			
All images are as expected after download. We expect them to match the images uploaded apart from anonymisation of the headers.			

DOCUMENT HISTORY

Author	Version	Effective Date	Changes
Angel Kennedy	1	23/08/2021	Initial release
Angel Kennedy	2	25/10/2021	Update for direct to archive uploads
Christel Norman	3	14/02/23	Update to add ACQI logo and review document