

# DICOM Patient Import

In order to begin planning in the .decimal ElectronRT app you must first have patients set up. The easiest way to do so is to import existing DICOM files.

## Importing a New Patient

If you have a set of Ct Images and structures you can import them directly into a new patient through the “Import Patients” menu.

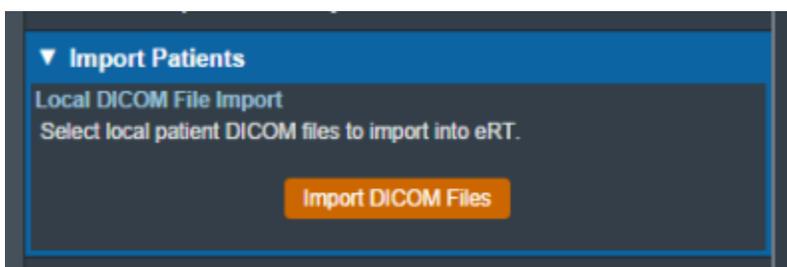


Fig. 1: Import in the Main App Page

Selecting the “Import New Patient” option will open the Importing UI.

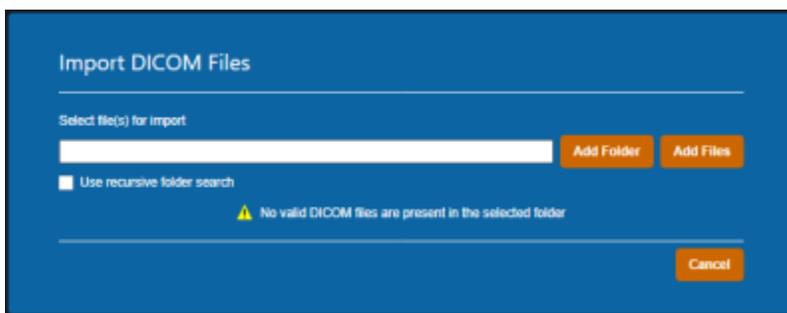


Fig. 2: Import Directory Input

Here you may either browse your computer or copy the path to the folder that contains the CT images and structures you wish to import.

Then the import will process:

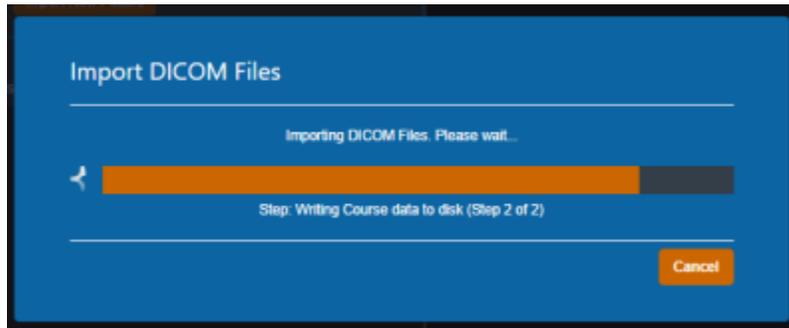


Fig. 4: Import Loading screen

If there are no Errors while importing you will be taken to a confirmation page for your import.

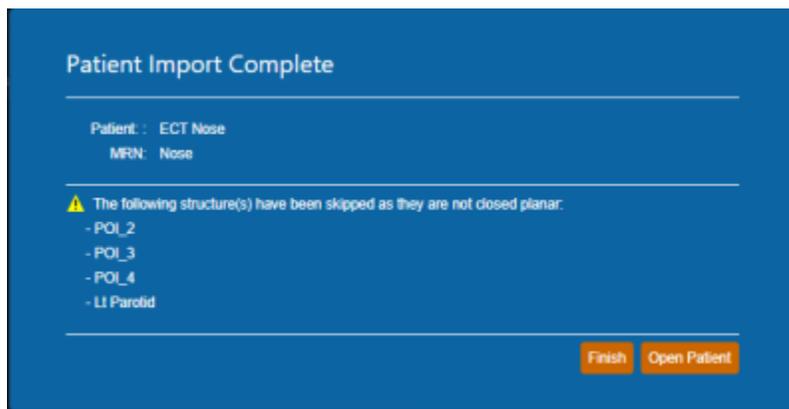


Fig. 5: Import Finalized

If there are errors please refer to the [Common Errors](#) section below.

## Common Errors

### Missing/Undefined External Structure

If the imported DICOM Structure Set does not have a structure flagged as *RT ROI Interpreted Type (3006,00A4) EXTERNAL* you will be directed to specify the external patient structure before the import resumes. The patient external structure must be set to the defining boundary of the patient's outer surface, and not a rind skin structure.

Note: You will be warned if the selected external structure is not the structure with the largest volume. This is to prevent incorrect structure selection (e.g.: when a 'External' and 'Skin' structure both exist, and the 'Skin' structure is a rind. If the user selects the 'Skin' structure the warning will state the 'External' structure has a larger volume, since that's the correct representation of the patient structure.

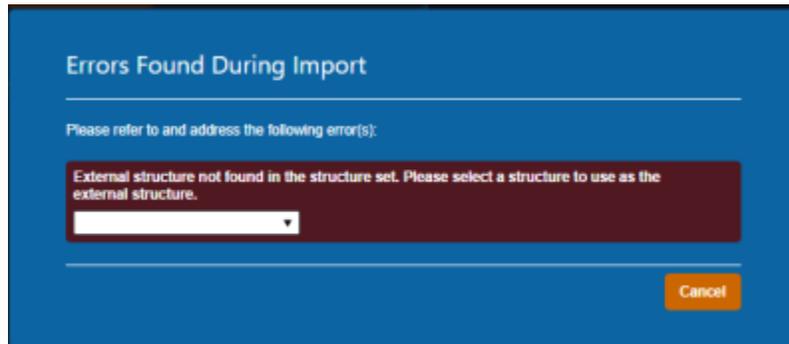


Fig. 6: Missing External Error

The drop down menu will have a list of the structures in the imported set. You will be able to select one as the external for this course then confirm your choice by pressing "Set External"

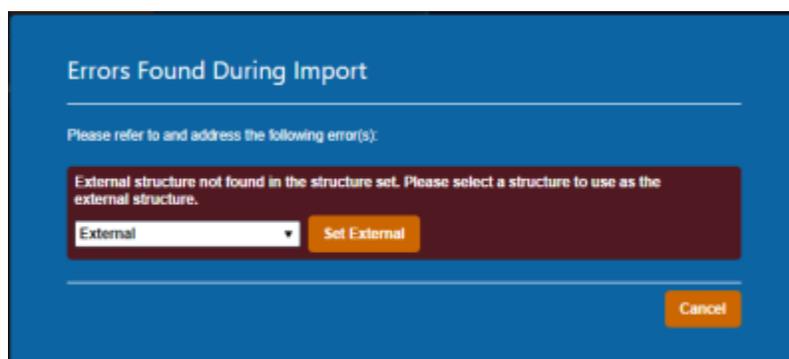


Fig. 7: Set External Dialog

## Importing an Existing Patient

If the files you have selected to import coincide with the MRN of a patient that already exists in the app you will receive this error.

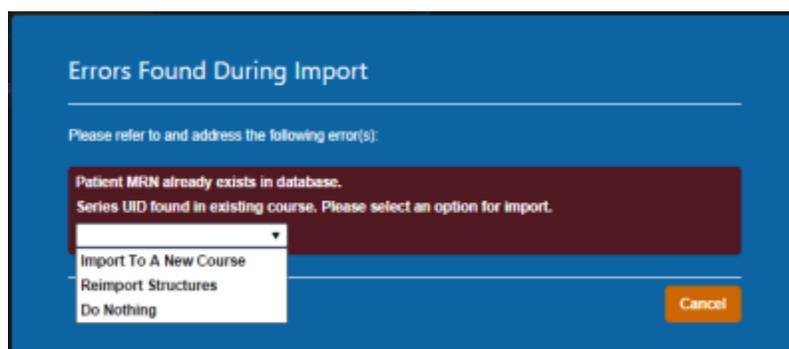


Fig. 9: Existing Patient Error

You have three options provided to resolve the error:

- **Import to a New Course**
- **Re-Import Structures**
- **Do Nothing**

## Import to a New Course

Importing to a new course will simply complete the import but instead of affecting existing courses or plans for the patient the app will create a new course for this patient using the new import.

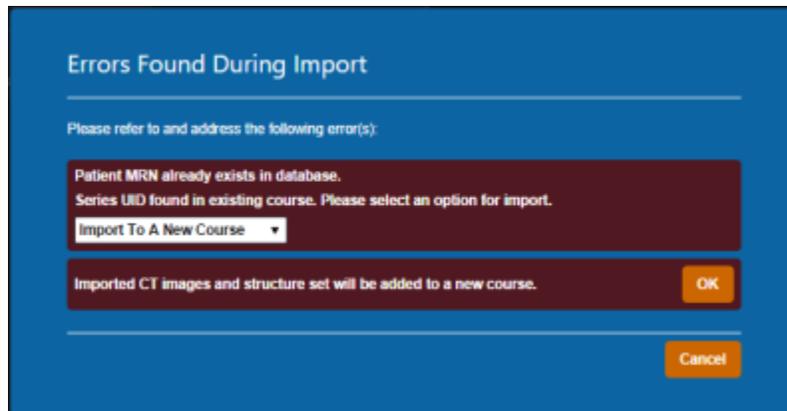


Fig. 10: Importing as a New Course

## Re-import Structures

Re-Importing structures can be used if your goal is to update or add structures to your existing patient.

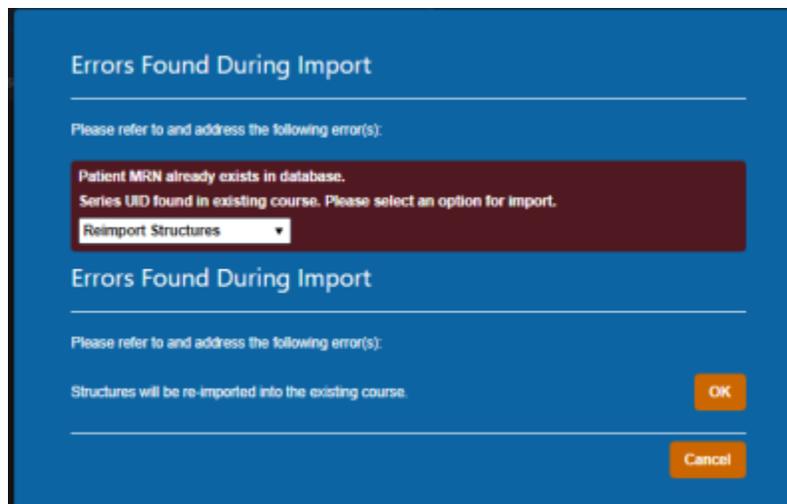


Fig. 11: Re-Import Structures

After selecting this option, you will be presented with a list of the structures in the import.

For each you may select one of three options:

- **Do not Re-import:** skips this structure for the re import.
- **Replace existing geometry:** replaces the existing structure with the imported one.
- **Import as new structure:** Imports the structure as brand new not affecting the existing one. Also, if the structure does not exist currently it creates it as normal.

Errors Found During Import

Please refer to and address the following error(s):

Patient MRN already exists in database.  
Series UID found in existing course. Please select an option for import.

Reimport Structures

Errors Found During Import

Please refer to and address the following error(s):

PTV	Do Not Reimport
PTV 6840	Do Not Reimport
Rt Parotid	Do Not Reimport
Cord	Do Not Reimport
Cord+5	Do Not Reimport
Ant avoid	Do Not Reimport
Post avoid	Do Not Reimport
Rt Eye	Do Not Reimport
Lt Eye	Do Not Reimport
External	Do Not Reimport
ROI US 1CM	Do Not Reimport

Cancel

Fig. 12: Re-Importing Structure List

Once you have made your decision for each structure you must select “Re Import Structures” to finalize your changes.

nose

90 % (Trial\_1\_1)

Structure: 90 % (Trial\_1\_1)

Electron Bolus

Structure: Electron Bolus

Do Not Reimport

Replace Existing Geometry

Replace Existing Geometry

Re-Import Structures

Cancel

Fig. 13: Finalize Re-Import

## Do Nothing

This is the simplest action, selecting to do nothing will cancel your import and return you to the main menu.

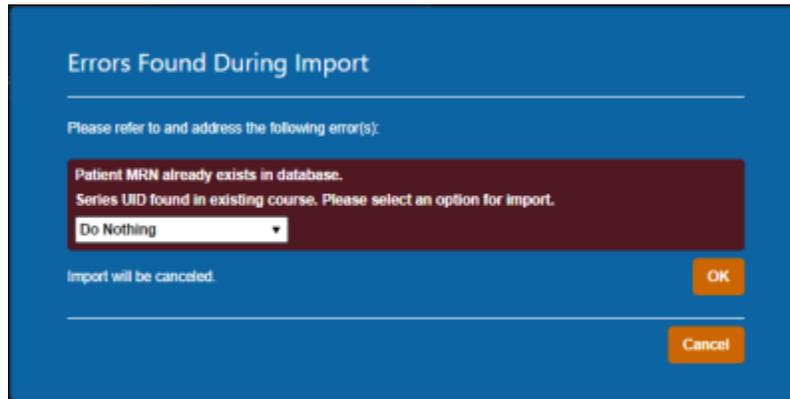


Fig. 14: Do Nothing

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