Courses, Intents, Directives, Requests, and Plans

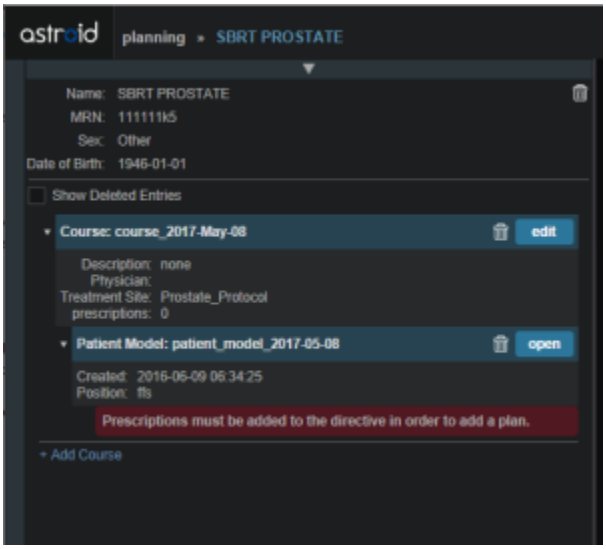
Overview

The Astroid patient data model uses a hierarchy of items to model the real world workflow patterns of the radiotherapy treatment process. Please refer to the **Data Model page** Fix Me! if you are not familiar with these concepts.

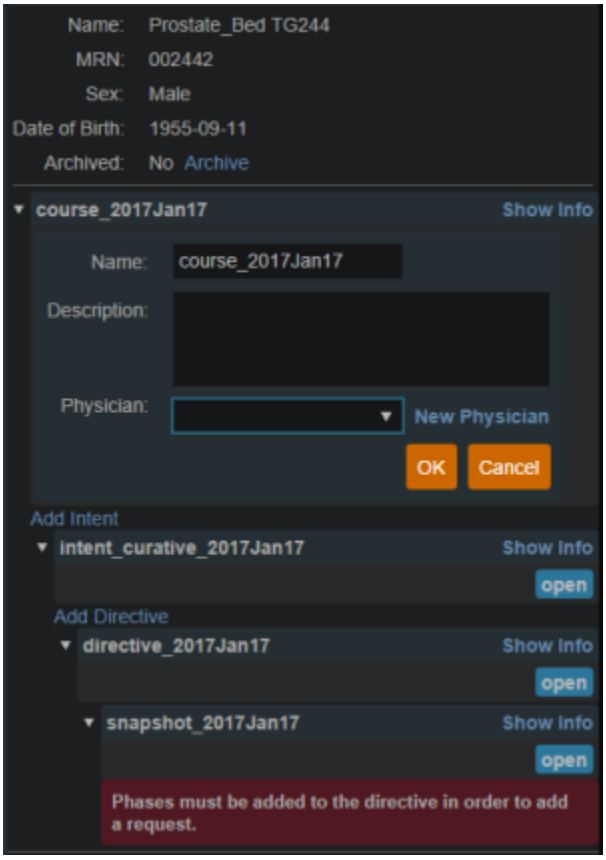
During patient creation (i.e. Importing) a patient record is created containing a *Course*, *Intent*, *Directive*, and *Snapshot*. During Import the required data for the Course, Intent, and Snapshot are entered, however, the Directive remains incomplete. The Directive contains the physician's prescription information including the breakdown of the treatment *Phases* and the specification of *Clinical Goals*. Before creating a *Request* or a *Plan* this information must be entered. Once the Directive is complete, a new request and plan can be created. The following sections provide a walk through for completing the *Directive* and creating *Requests* and *Plans*.

Completing the Directive

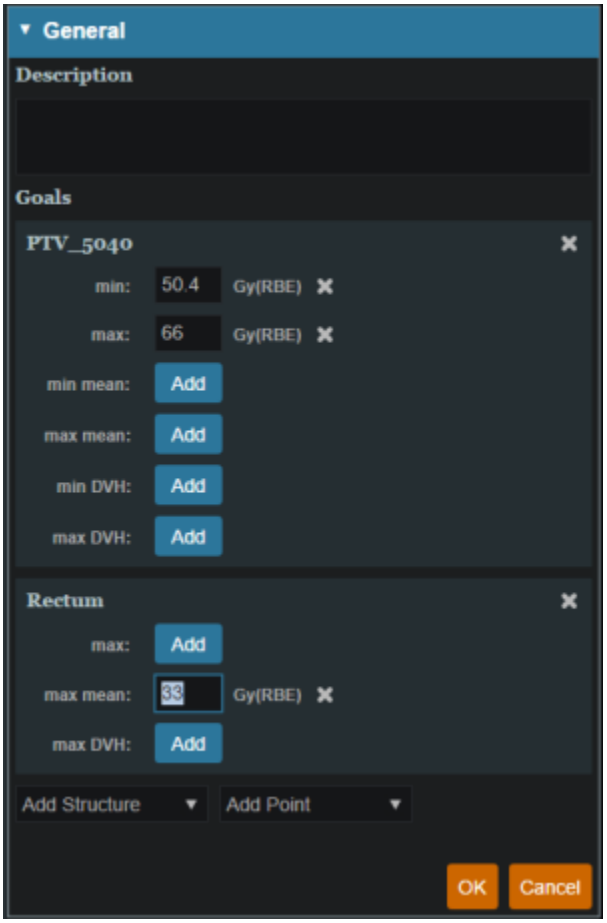
1. From the *Patient list*, select a patient to be opened by clicking the patient row
2. The patient will open to the *patient overview* task and a message will appear telling the user to complete the Directive Phase information



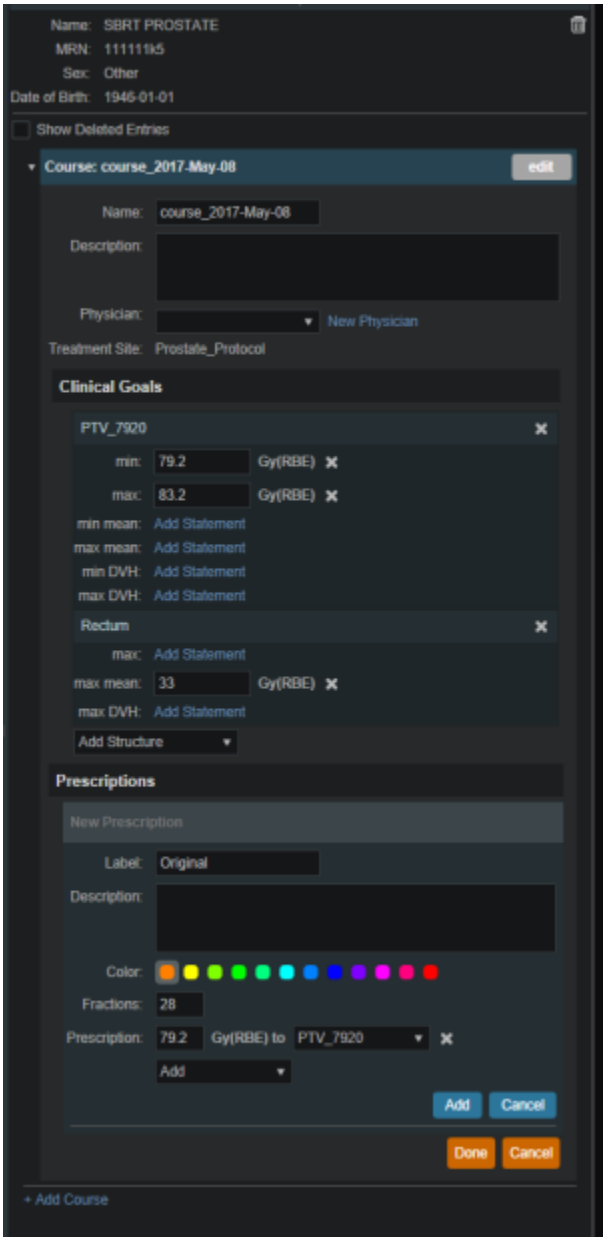
3. Before completing the *Directive* you may edit the *Course* or *Intent* by clicking on the appropriate blue *edit* or *open* button beside the desired item (this information is specified by the user while importing the patient, so this is typically unnecessary)



4. Now open the *Directive* by clicking on the blue *Open* button
5. The *Directive* information is **mandatory** to fill out in order to proceed with planning and at a minimum a Phase must be created with an appropriate *Prescription* for the case at hand
6. The *Directive* information is separated into two blocks of data: *Goals* and *Phases*
7. *Goals* are used fill in the “goals” (objectives) the physician would like to see achieved by the plan
    1. To add a goal, simply select click *Add Structure* and select a desired structure (the choices in the structure drop down will be set by the treatment site template) to which goals should be added
    2. The user can create goals for tumor volumes as well as Organs at Risk (OAR) and can specify minimum dose, maximum dose, mean dose, and volume based (DVH) goal types
    3. The *Goals* will be used for reporting purposes to describe the physician's intent for the treatment; these do not affect the calculation or plan directly



8. The second part of the *Directive* is the *Phases*
    1. This is where the user will fill in the number of fractions and the prescription dose that specified by the physician
    2. Note that a phase **must** be created in order to start the planning process
9. Click *New Phase* under *Phases* to create a new empty phase
    1. The *Phase* label and description are free text fields that the user can enter to help identify a particular phase as needed
    2. A color may be selected for the Phase to aid in identification as well
    3. The number of fractions to be treated should entered and at least one *Prescription* value must be added (the choices available in the structure drop down will be only the targets from the selected treatment site template)



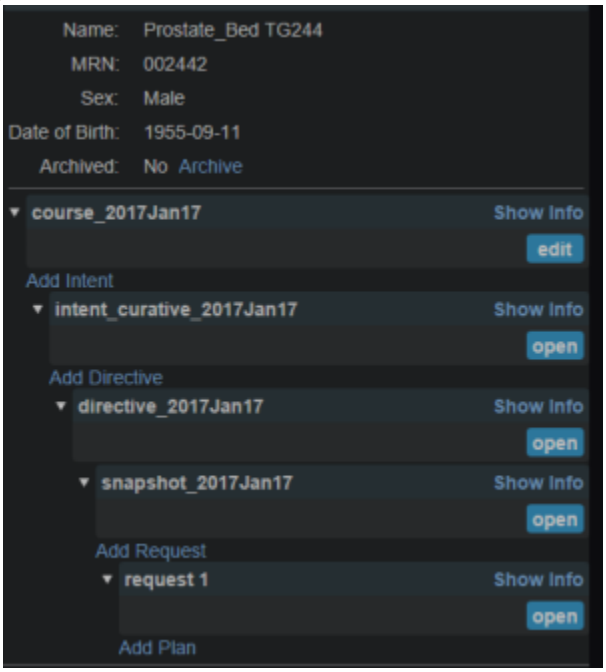
4. Once all Phase information has been entered, click the blue *Done* button to complete the Phase

10. Additional phases may be added at this point if needed (for example, for a treatment needing a base treatment and a boost)
11. The *Directive* should now be complete
    1. Click on the patient's name in the top row (breadcrumbs) to return back to the *Patient Overview*

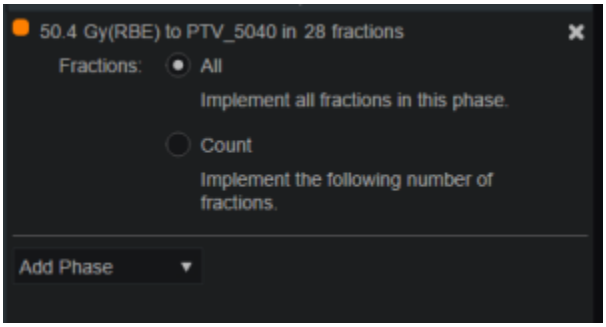
Creating a Request

1. The *Snapshot* generally does not require editing at this time (see Snapshots for more information) so the user can now proceed on to creating a *Request*
2. To add a *Request* click on the blue *Add Request* link underneath the *Snapshot*
    1. This will create a default *Request* that treats all Fractions for all Phases in the *Directive*
    2. If this requires modification, then click on the blue *open* button to open the *Request* then

click *Edit* to start editing



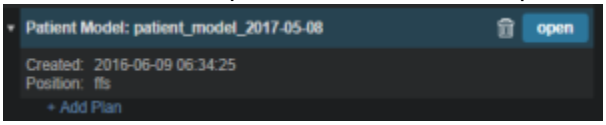
3. Phases may be added, removed, or fraction counts modified using the provided controls (the user can choose whether all fractions [All] are going to be implemented in this phase or if just a certain number [Count]).



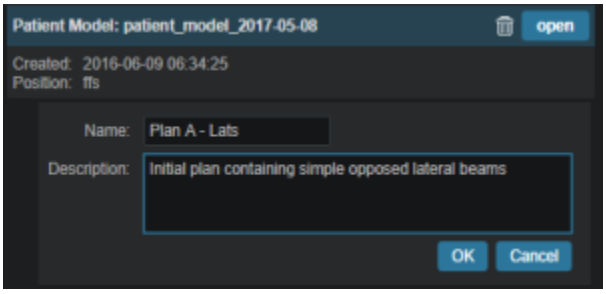
4. When editing is complete, click the blue *Ok* button at the bottom of the column to save your changes
5. Now click on the patient name to go back to the *Patient Overview*

Creating a Plan

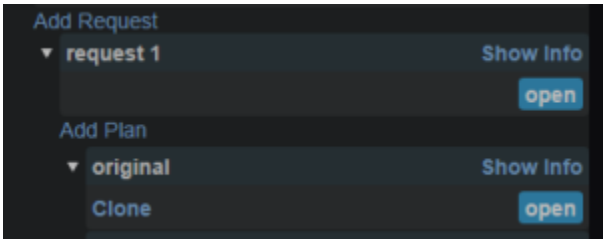
1. The point has now been reached where a *Plan* can be created
2. Click on the blue *Add Plan* link under the *Request* to create a new plan



1. In the box that opens the user should name the plan and add any description they may want



2. Click on the blue *OK* button when finished and the *Plan* has been created
3. Open the plan and begin the planning process by clicking on the blue *Open* button next to the new plan



1. Note that users are free to have as many plans as desired within a single *Request* however, each plan should be designed to fulfill the entire *Request* as only a single *Plan* per *Request* may be *Published* (approved) in the system