Courses

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 **Heirarchy (Data Model) page** if you are not familiar with these concepts.

1/3

During patient creation (i.e. Importing) a patient record is created containing a *Course* and a *Patient Model*. During Import the required data for the Course and Patient Model are entered, however, the Course remains incomplete. The Course will still require physician directive information including the breakdown of the treatment *Prescriptions* and (optionally) the specification of *Clinical Goals*. Before creating a *Plan* this information must be entered. Once the Prescription is complete, plans can be created. The following sections provide a walk through for completing the *Course* information.

Prescriptions are cumulative. For example: when adding a second prescription, it is assumed that the highest dose from the first Rx has already been delivered to the target for the second prescription. Therefore, the total dose to all targets in the second prescription will have the first prescription's highest dose added.

Completing the Course Prescription

- 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 Prescription information



- 3. The Prescription information is part of the Course, which can be edited by clicking on the blue *edit* button beside the Course label in the patient overview
- 4. The *Course* Prescription information is **mandatory** to fill out in order to proceed with planning and at a minimum one Prescription must be created (Clinical Goals are optional)
- 5. The Course contains some basic information as well as two blocks of data: Clinical Goals and

Prescriptions

- 6. *Clinical 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

2/3

- 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 *Clinical 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
- 7. The second major part of the Course are the Prescriptions
 - 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 prescription **must** be created in order to start the planning process
- 8. Click New Prescription under Prescriptions to create a new empty phase
 - 1. The *Prescription* label and description are free text fields that the user can enter to help identify a particular phase as needed
 - 1. If the structure chosen is not contained within the patient model a yellow triangle will appear next to the structure chosen alerting the user

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Course: course	_2017-Jun-27			edit
Name:	course_2017-Jun-27			
Description:				
Physician:		٠		
Treatment Site:	Generic			
Clinical Goa	ıls			
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min:	Add Statement			
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max DVH:	Add Statement			
Add Struct	ite 🔺			
≡ Prescript	ions			
New Prescri	iption			
			Done	Cancel

- 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)

Date	Name: MRN: Sex: of Birth:	SBRT P 1111119 Other 1946-01	ROSTA1 5	Έ							8	
	Chicken Charles											
*	Course: course_2017-May-08											
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	Des	cription:										
	Ph	ysician:				Ŧ	New Physi					
	Treatme	ent Site:	Prostate	Protoc								
	Clini	cal Goal	s									
		N 7020										
	PI	V_/920	70.0							,	•	
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		max	83.2		Gy(R	BE)	×					
	mir	n mean:	Add Stat									
	mac	c mean:	Add Stat									
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		max	Add Stat									
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	Ad	d Structur	e	•								
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- 4. Once all Prescription information has been entered, click the blue *Add* button to complete the Prescription
- 9. Additional prescriptions may be added at this point if needed (for example, for a treatment needing a base treatment and a boost)
- 10. The *Course* should now be complete
 - 1. Click on the Done button to return back to the Patient Overview

