Tutorial session P5

The aims of this tutorial session are to:

* Make a framework
* Fill in framework file
* Upload a framework file

You are asked to **work in groups**. The session will last for **40 minutes**.

**Q1. Consider the simple cascade model illustrated below.**

1. Translate this cascade representation into a pathway diagram

*Hint: a possible pathway diagram corresponding to this cascade was provided as part of session C5. It is reproduced below and you are welcome to use it directly if you’d like to skip ahead to the next question.*

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1. Now we will use the cascade analysis tool to create a framework file to represent this cascade.
	1. Go to <http://ui.cascade.tools/>
	2. Click “Create new framework”. You will see a pop-up window. Enter the following:
		1. Under “Name”, enter the name you wish to give to this framework (examples: “3-stage treatment cascade”, or “UDT”)
		2. Under “Number of compartments”, enter the number of stages in the pathway diagram.
		3. Click “Create”. This will download an Excel spreadsheet with a framework template.
	3. Open the Excel spreadsheet you just downloaded and fill in the following pages:
		1. **Compartments**: give some names to the compartments in the “Display name” column. All other columns can be ignored. For example, if you’re using the pathway diagram above, you would call the compartments Undiagnosed, Diagnosed, and Treated.
		2. **Transitions**: Enter the name of the flow rates that determine how people flow from one stage to another. For example, if you’re using the pathway diagram above, your transitions page would look like this:



* + 1. **Characteristics**: Enter the names of the cascade stages – e.g., All people with condition, Aware of status and Treated. For each cascade stage, list out the compartments to include in the stage (separate multiple compartments with commas e.g. ‘dx, tx’
		2. **Parameters**: Enter the parameters that define the flow rates between stages (e.g., “test”, “initiate” and “loss” if you are following the example above). For the rest of the columns,
			1. Format: These are things that you are going to collect data on, so think about the format that the data are likely to come in. Will it be number of diagnoses? Or the proportion of the population who got tested and know their results? Or something else?
			2. Minimum/maximum values: if you are going to collect data on testing rates, you may wish to specify that the min/max values are 0 and 1. That will tell the model that the data that you collect must be within that range.
			3. Targetable: this column can be used to indicate whether a given parameter can be targeted by interventions.
	1. Once you have filled out the Excel sheet, go back to the tool.
		1. On the “Frameworks” page, you will see a table that contains the framework that you created previously. Under the column “Framework book”, click “Upload”, and then upload the filled-in Excel template that you created at the previous step.

**Q2. Creating a new framework is not a particularly easy task! The cascade analysis tool comes pre-loaded with a selection of commonly-used frameworks for different disease applications. You can select these by clicking “Load framework from library”. Add one of the possible frameworks, and then “Download” the framework book. Examine this and discuss in groups.**