

2) Creating a report

In the previous video we uploaded several data files and created a dataset. A dataset is the numbers that feed into the planning model.

Now we are going to turn that dataset into a report. A report is the results that come out of the planning model.

To create a report, if we go to the Interactive Map, you can click the blue arrow between the dataset manager and the report manager here on the main screen. Personally I find it easier to go into the dataset manager, and then click the 3rd icon along which has the tooltip "Create a report".

We give the report a name... I like to use the dataset name followed by a letter, so that if I run different reports then I can just change the letter. In this case the dataset is called "Test Dataset 1" so I'll call this report "Test Dataset 1a".

You can put a description if you like, and we don't need to select the dataset because we already did that in the dataset manager. So I'll click Next.

We can just click through Step 2 because our data files included all the numbers we need so we don't need to review the default values, and we do want to edit the calculation settings. So I'll click Next.

Now we're in the Calculation Settings and these are really important so I'll go through them step by step. These are the settings that will apply to the whole of the planning model we are about to create.

The first two dates identify the start and end of the past period, and we mustn't change those because they match the data we have already uploaded.

The next two dates are the future period, which is the period we are about to model, and we can change those to whatever future period we would like to plan for. So it might run from today up to the end of this financial year, or cover the next financial year, or even the next 5 years – it's up to you.

The "Future activity should" dropdown is where we decide which activity scenario we want to select for this analysis. Or to put it another way, the planning model we are about to create is going to spell out the consequences of delivering the activity scenario we select here.

There are four main options when it comes to scenarios:

- "Match past activity rate", which is the business-as-usual scenario and assumes that activity in the future period will continue at the same daily rate as in the past period. This is the best scenario to use when you are still checking your data quality, because operational managers will be familiar with the activity they are currently delivering.
- The "Use data provided (FutActiv)" scenario allows you to specify exactly how much activity will be delivered in the future period, and your data files would need to have included the statistical data field "FutActiv" which contains future activity. For instance you might want to base the model on your core capacity, or the activity that was agreed in your financial plans. It's worth remembering that the amount of activity

must be appropriate to the future period you have chosen, so if you changed the future period to something that was shorter or longer, then you would first need to upload some FutActiv values that suited your new choice of future period.

- The scenario “Match new demand” will keep up with the demand for healthcare in every service. For waiting list services, this means that all the waiting lists will end up being the same size as they started. This is probably the most important scenario, because you should ensure that your core capacity is sufficient to keep up with demand... so this is a way of identifying what that core capacity *should* be.
- Finally the scenario “Match waiting list targets” will lay on just enough activity to hit the waiting list or waiting times targets on the last day of the future period. If you have specified both a waiting list and a waiting times target, then it will deliver whichever is the more difficult.
- There are three other scenarios but they are so rarely used that I won't go through them here.

In this case I'll select the “Match new demand” scenario.

Moving on to the next dropdown, this gives us the option to achieve our waiting list or waiting time targets in every week of the future period, rather than just at the end of the period. So for instance you might select an activity scenario to match new demand while achieving the waiting time targets throughout the year after next; then after you've run that model you can flip it backward and model the waiting list reduction that you need to get to the right starting point.

The next three options are all data quality checks and usually we can leave these alone, although if we are at the stage of checking data quality then we might want to lift the restrictions on the removal rate to help with diagnosis. [do it]

Then under “Data quality settings” we can let the model try to automatically correct some common data errors. In theory, every patient added to the waiting list should be reflected in the other data too i.e. treated as activity, or removed for other reasons, or still on the waiting list. So the model checks whether the number of additions to the list is balanced by activity plus removals plus growth in the waiting list. (We'll look at this in more detail in the next video.) If this reconciliation is way out, then we can allow the model to assume that it's the additions data that is wrong, and overwrite the additions data with the estimate of what it should be.

So there are two dropdowns that control how this data quality checking is done.

We usually want to allow the model to consider elective inpatients and daycases together when checking data quality, which is what the first dropdown does, to allow for patients being on the daycase waiting list but ending up staying overnight and converting to inpatient activity.

Then if we are at the stage of checking data quality, then we will probably want to change the second dropdown to “Do not adjust additions data”. Otherwise we can choose whether to trust the additions data that we've fed in, or whether to allow it to be “corrected” by selecting “Use reconciliation if additions differ by 10%”.

I should say that Gooroo Planner has been designed to be resilient to these common errors in the additions figures, but of course there are limits so it's always good to try to work out what's wrong if this reconciliation a long by some margin.

Then in the final set of controls, the first one is really important because it enables the elective pathway from outpatients through to admissions. If you want changes in outpatient activity to convert into admitted demand, which you usually will, then you should set this control to "Yes". However there could be times when you wanted to force the model to use a particular rate of demand growth at the admitted stage of treatment, and then you can disable the pathway by selecting "No".

At this point I should say that if you have some favourite settings that you always want to use in the Calculation Settings, then you can do that by clicking your email address at the very top of the screen and editing your default calculation settings there. Then this screen will always start with your favourite options selected.

The remaining controls are a bit more technical so I won't go through them in detail....you can usually just leave them as they are.

If you want to know more, you can refer to the Gooroo Planner documentation (under "Calculation and API settings". In outline, the next two controls allow you to plan elective activity around the peaks and troughs in non-elective demand, for instance to reduce elective inpatient surgery in winter.

The next control contains a number 6 and smooths additions to the waiting list to provide a more stable calculation of the best waiting times that can be achieved.

And the final two allow you to ignore small waiting lists.

So with these important Calculation Settings done, we can click Next.

We're nearly there now. Step 5 allows us to choose how the table of results is going to appear on the screen, and in a future video we'll look at how you can customise them to your own requirements.

Here we'll choose one of the built-in system report styles, which is the data quality one that we'll use in the next video. We'll look at some of the other options in future videos too, but if you're in doubt about which one to choose I would suggest starting with PastAndFutureWithRecurringDemand. Or if you want to dive into the detail of how the calculations work, you could try ExpandCalculations (but I should there is a lot there!).

And we can click Next, and then if we're happy we can click Finish or the Perform Calculations button – they both do the same thing. Now it's running the model across all the services we have loaded data for, which in this case is pretty much the entire hospital, and when it's done we end up in the Reports manager and our new report is there at the top of the list.

We can open the report by clicking its name or the first icon, and there are lots of other options too like Duplicate Report, Share Report with colleagues, Download Report to your computer, Convert to dataset (which also lets you

do some advanced things like roll the model forward to the next year, or backward to model a backlog clearance), and finally Move to trash (and the trash is found at the top of the screen).

In the next video we'll look at the contents of this report and examine the quality of the data in it.