Skeleton structure for MH Shiny model walk-through (<60 mins).

1. Introduction – basic background, rationale, aims and model overview (5-10 mins)
2. Limitations to cover (5 mins)
   1. scope of the model relatively narrow – not able to include everything that folk asked for in the insight visits.
   2. methodology = relatively simple (pros and cons)
   3. blunt global assumptions versus nimble differential
   4. However, the pro’s are:
      1. Consistent approach for ICB’s to follow
      2. Cost effective
      3. Easy to scenario plan
3. Accessing the tool (3-4 mins)
   1. Describing process to access – email with all the details, registration with posit connect, link
   2. Process to get data i.e. we will send
   3. Nominated emails/accounts only (for now – hoping to make public…TBC)
4. Demonstration 1 – Navigating the tool (5-7 mins).
   1. Linear walkthrough of the tabs, super high-level summary with focus on the introduction
5. Demonstration 2 – Loading data and parameters (7-8 mins)
   1. Follow the instructions!
   2. Find csv of baseline data – have a quick look at this in excel before loading
   3. Quick scan for errors in glimpse of the data when loaded.
   4. Point out that you could override the data in the baseline file but you **MUST** conform to the same formats else the load (and therefore model) will fail!
   5. **Explain about the 1 hour timeout – will need to reload any data and parameters**
6. Demonstration 3 – Adjusting the parameters (8-10 mins)
   1. Overview of the layout panels.
   2. Point out that useful to read the descriptions of the parameters in right panel as or before you change them.
   3. Highlight the demographic growth table and that this **can’t be modified**.
   4. Point out the selector drop-down should be your ICB, but where there are multiples in the data it chooses the highest volume one as default.
   5. Demonstrate changing a few parameters by typing or clicking the arrows.
   6. Show how to reset to default.
   7. Show how to export for future use.
   8. Switch back to the data tab to show how to upload saved parameters.
7. Demonstration 4 – Exploring the main outputs (5-6 mins)
   1. First time you view, it may take a few seconds to render.
   2. Overview of the layout panels
   3. Firstly focus on modelled changes
      1. Difference between 3 tabs for demand activity – bed days, bed days excl HL and spells
      2. Describe the waterfall and what each element represents
      3. Flick back to assumptions, change a few then switch back to see the impact on demand.
      4. Show how to download the modelled data and what it includes.
   4. Now focus on the occupancy rates and conversion to bed numbers
      1. Point out there are 2 parameters – now and future. We don’t have data to support these so will almost certainly change.
      2. Point out the bed requirements rely heavily on these 2 figures!
      3. Briefly explain the table, the annualization formula and change the values to show the impact.
      4. Indicate the reset default button if required.
8. Demonstration 5 – Reviewing the sub-group outputs (8-10 mins)
   1. Overview of layout panels
   2. Describe what the chart shows
   3. Cycle through a few variables to show how to explore
   4. Limitations of these sub-group projections i.e. that the assumptions are global for the whole baseline therefore affect these groups proportionally.
   5. If users wanted to create a demand model for each of these sub groups with different parameters for each you can do – either:
      1. load only the relevant sub-group data, set parameters, export. Repeat for each sub group, merge and aggregate.
      2. Load whole dataset, change parameters according to sub-group of interest, export, keep only the demand for that sub-group. Repeat, merge and aggregate.
      3. In both of the above, careful of double counting as groups of patients will feature in multiple sub-groups.
9. Demonstration 6 – Bed policy and management (5-6 mins)
   1. Overview of layout panels – basic description of tables.
   2. Limitations of this – only cover these two factors.
   3. Point out the difference in repat and expat to be clear. Highlight the figures in demo dataset (Notts) – they’re a net exporter of patients!
   4. Point out these parameters don’t affect demand, simply the future flow of in-out of area activity and independent provision.
   5. These factors may be used to ‘rebalance’ beds based on growth or demand from
      1. Show what happens when change one OAP factor.
      2. Show what happens when change both (different directions)
      3. Show what happens when change IP parameter
   6. Flick back to main outputs table/data to show this alongside the demand changes in beds
   7. Remind folk that the export data button is on main outputs tab and will include the OAP and IP conversions in the data as well.
10. Review of metadata and glossary tab:
    1. Briefly describe what it is
11. **Scenario development (QT1)**
    1. **1 Demographics only**
    2. **2 Default**
    3. **3 Optimistic**
    4. **4 Pessimistic**
    5. **Comparing them all…? Excel file pre-poluated**
12. Other things you might want to try
    1. Applying the relative changes in demand and beds to your own bed data and service model
    2. Adding your own additional demand factors and mitigators (done outside of our tool in e.g. excel, PowerBI etc…)
    3. Try different combinations of demand and bed policy
    4. Divide and treat in and out of area beds differently
    5. Convert each of the bed day adjustments in export to beds
13. Next steps (5 mins)
    1. sharing links and associated files
    2. issues log and FAQ
    3. Share final models with project team for regional analysis?