# Testing Segment A

# Unit 1 Testing Script for Team Lead and Players

## Notes

Players will not be able to select a simulation nor load model parameter files. Although indicated in the script below, players will not do task 1.2 and 1.3. After a Team Lead starts an active game, then players can select and interact with simulation.

## Tasks

1. Login, select data and run a simulation session for each model (Care Coordination, Medication Management, Psychotherapy and Aggregate.)
2. Set up an experiment using the Experiments Tile and the Expanded Outputs Tile
3. Save and compare experiments.
4. Compare patient cohorts.
5. Save, copy, paste and export data from Outputs and Expanded Outputs tiles.

## Condition

Given inclusion into a Forio Epicenter World with other users and assigned the role of Team Lead.

## Procedures

| Item | Task | Procedure | Expected Result |
| --- | --- | --- | --- |
| **1.0 Login, select data, run model** | | | |
| 1.1 | Login | Enter username and password in the indicated fields, click on “Login” button | User should progress to “Home” screen that displays the “Select” tile. |
| 1.2 | Select “Start New Game” | Click on “Start New Game” radio button | Radio button should fill in with solid dot. |
| 1.3 | Select Game (Team Leads only) | Click on “Care Coordination” radio button | Radio button should fill in and “Select Data” button should appear. |
| 1.4 | Select Data | Click on “Select Data” button. Select model file from drop down menu. Click “Get File” button. | Dialogue box should appear asking you to select Model Input Files from a drop down. After clicking “Get File Button” the name of the data file selected should appear below the “Select Data’ button. |
| 1.5 | Play Simulation | Click on the “Play Simulation” button | If there is a current game running, a dialogue box should appear that warn that “Starting a new simulation will stop the previous game for all team members.” Click on “Start” button. Care Coordination main UI, and Outputs Tile should display. There should be no information displayed in the “Outputs Tile.” The “Experiments Tile” should be minimized. The “Play” icon at the top of the screen should be red, indicating the users current location in the simulation. |
| 1.6 | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients,” “Overbooking Effects on No Shows,” and “Wait Time Affects Referrals” feedback loops. |
| 1.7 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 1.8 | Run simulation | Click on the “Run” simulation icon in the “Experiments Timeline” box. | The model should run and return values. These values should be displayed in the stocks and flows icons in the main UI, and as 6 graphs in the “Outputs” tile. The time graph placeholder (indicated in red) should be at “2 Years” on the timeline. |
| 1.9 | Reset simulation | Click on the “Reset” button in the “Experiment Timeline” box.  Review items in the dialogue box for completeness, then click on “Discard” button.  Go to top of the screen and click “Log Off” button.  *Note: After reset, the UI should re-render and present the default view with no builds or depths.* | A dialogue box should present that indicates the following model parameters: Vensim Model: Care Coordination  Data File: Name of the data file you are using  UserID: Your user ID  Model Time: should be the end time you selected in the previous step.  Scenario Name: should be blank.  At the bottom should be a “Save” and a “Discard” button.  After “Discard” button is pressed, simulation should reset.  Clicking “LOGOFF” button should return user to login screen. |
| **2.0 Set experimental values and provide inputs in the Expanded Outputs tile** | | | |
| 2.1 | Login (See 1.1 to 1.5 above). Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients,” “Overbooking Effects on No Shows,” and “Wait Time Affects Referrals” feedback loops. |
| 2.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 2.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  Click on the “I” icon of each experimental value.  *Note: Ensure the “Use Team Data for Starting Rate” switch is “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme right, “BC” should be presented in the number box. Clicking on the “I” icon should present a dialogue with a description of the experimental value. The Color of the title in the dialogue box should correspond to the color of the experimental value. |
| 2.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 2.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 2.6 | Run Experiment (1 Year) | Go to the Experiment Timeline box in the upper right corner of tile. Go to “Advance” drop down menu and select “1 Year.” Click the “Run” button.  Once the simulation returns values, go to “Results Dashboard” area of tile. Review the graphs, use pull-down menus to select different variables.  Select “Table” button above the “Experiment Timeline” box. | The simulation should run and return values. The values should be displayed in the graphs with the data lines terminating at 1 Year. The red time indicator should be positioned over the “1 Year” mark.  Selecting different variables should change the graph to reflect the values associated with that variable.  Selecting the “Table” button should change graphs to data tables and the “Table” button should darken. Clicking the “Table” button again should return the graphs and lighten the “Table” button. |
| 2.7 | Run Experiment (End) | Go to Experiment Timeline box. Leave “Advance” setting at “1 Year.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data on the graphs should extent out to the two-year mark. |
| 2.8 | Reset simulation and save experiment | Go to Experiment Timeline box. Click on “Reset” button.  In Scenario text box, name scenario “Test Scenario 1”  Click “Save” button | “Save Scenario” dialogue box should appear that reflects simulation parameters (see 1.9).  After clicking save, the simulation should indicate the Scenario was successfully saved and then reset the simulation back to the default main user interface tile. |
| **3.0 Save, compare and display experiments** | | | |
| 3.1 | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients,” “Overbooking Effects on No Shows,” and “Wait Time Affects Referrals” feedback loops. |
| 3.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 3.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  *Note: Ensure the “Use Team Data for Starting Rate” switch is “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme left, “BC” should be presented in the number box. |
| 3.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 3.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 3.6 | Select Experiment – Alternative 1 | Go to “Select Experiment” on the “Control Panel” and select previously saved Test Scenario. | The simulation should return the values from the selected experiment and display as a red line on the graph. |
| 3.7 | Run Experiment (End) | Go to Experiment Timeline box, “Advance” setting and set to “End.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data for the current run should display in black on the graphs and should extend out to the two-year mark. The Alternative 1 Experiment should still be displayed in Red. |
| 3.8 | Check Experiment Alternative Information | Go to “Control Panel” down to “Select Experiment”. Click on the “?” question mark to the right of the drop-down menu. | A pop-up window should appear that displays the “Our Question,” “Our Hypothesis,” and etcetera of that alternative. It should also indicate the Experiment Values. |
| 3.9 | Check Graph display on “Outputs” tile next to main UI | Click on the left and right arrows below the graphs in the “Outputs” tile.  Click on numbers directly below to “jump” to a graph. | The graphs should display the information as from the “Expanded Outputs” tile. Clicking the arrows should advance the slides through the 6 graphs displayed in the “Expanded Outputs” tile. |
| **4.0 Copy and Paste, save, and export data** | | | |
| 4.1 | Copy and Paste data from “Expanded Outputs” tile | Click on “Copy” button. Open a blank Excel document. Paste values from clipboard | A dialogue box should appear that says, ”Copied run data to clipboard.” Run data should present when pasted to Excel document. |
| 4.2 | Export data from “Expanded Outputs” tile | Click on “Export” button. Name file and click “ok.” | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |
| 4.3 | Save data from “Expanded Outputs” tile | Click on “Save” button. Name experiment Scenario and click “Save.” | A “Save Scenario” dialogue box should appear displaying model information. After naming the scenario and clicking “Save” a dialogue should display “Scenario saved successfully.” Go to your downloads file and check for an Excel file. |
| 4.4 | Copy and Paste data from “Outputs” tile | Click on “Copy” button. Open a blank Word document. Paste values from clipboard.  *Note: Data from all variables for entire run will be copied to clipboard.* | A dialogue box should appear that says,” Copied run data to clipboard.” Run data should present when pasted to word document. |
| 4.5 | Export data from “Outputs” tile | Click on “Export” button. Name file and click “ok.”  *Note: Data from all variables for entire run will be exported to an Excel file.* | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |

# Testing Script for Medication Management

| Item | Task | Procedure | Expected Result |
| --- | --- | --- | --- |
| **1.0 Login, select data, run model, reset model, logoff** | | | |
| 1.1 | Login | Enter username and password in the indicated fields, click on “Login” button | User should progress to “Home” screen that displays the “Select” tile. |
| 1.2 | Select “Start New Game” | Click on “Start New Game” radio button | Radio button should fill in with solid dot. |
| 1.3 | Select Game | Click on “Medication Management” radio button | Radio button should fill in and “Select Data” button should appear. |
| 1.4 | Select Data | Click on “Select Data” button. Select model file from drop down menu. Click “Get File” button. | Dialogue box should appear asking you to select Model Input Files from a drop down. After clicking “Get File Button” the name of the data file selected should appear below the “Select Data’ button. |
| 1.5 | Play Simulation | Click on the “Play Simulation” button | A dialogue box should appear that warn that “Starting a new simulation will stop the previous game for all team members.” Click on “Start” button. Care Coordination main UI, and Outputs Tile should display. There should be no information displayed in the “Outputs Tile.” The “Experiments Tile” should be minimized. The “Play” icon at the top of the screen should be red, indicating the users current location in the simulation. |
| 1.6a | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients,” “Overbooking Effects on No Shows,” and “Wait Time Affects Referrals” feedback loops. |
| 1.6b | Display Patient Cohort | Click the radio buttons below the “Display Patient Cohorts” | Clicking radio buttons will change the values of the stocks and flows to reflect the value of the selected cohort. |
| 1.7 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 1.8 | Run simulation | Click on the “Run” simulation icon in the “Experiments Timeline” box. | The model should run and return values. These values should be displayed in the stocks and flows icons in the main UI, and as 6 graphs in the “Outputs” tile. The time graph placeholder (indicated in red) should be at “2 Years” on the timeline. |
| 1.9 | Reset simulation | Click on the “Reset” button in the “Experiment Timeline” box.  Review items in the dialogue box for completeness, then click on “Discard” button.  Go to top of the screen and click “Log Off” button. | A dialogue box should present that indicates the following model parameters: Vensim Model: Care Coordination  Data File: Name of the data file you are using  UserID: Your user ID  Model Time: should be the end time you selected in the previous step.  Scenario Name: should be blank.  At the bottom should be a “Save” and a “Discard” button.  After “Discard” button is pressed, simulation should reset.  Clicking “LOGOFF” button should return user to login screen. |
| **2.0 Login, set experimental values and provide inputs in the Expanded Outputs tile** | | | |
| 2.1 | Login (See 1.1 to 1.5 above). Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients,” “Overbooking Effects on No Shows,” and “Wait Time Affects Referrals” feedback loops. |
| 2.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 2.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  Click on the “I” icon of each experimental value.  *Note: Ensure the “Use Team Data for Starting Rate” switch is “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme right, “BC” should be presented in the number box. Clicking on the “I” icon should present a dialogue with a description of the experimental value. The Color of the title in the dialogue box should correspond to the color of the experimental value. |
| 2.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 2.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 2.6 | Run Experiment (1 Year) | Go to the Experiment Timeline box in the upper right corner of tile. Go to “Advance” drop down menu and select “1 Year.” Click the “Run” button.  Once the simulation returns values, go to “Results Dashboard” area of tile. Review the graphs, use pull-down menus to select different variables.  Select “Table” button above the “Experiment Timeline” box. | The simulation should run and return values. The values should be displayed in the graphs with the data lines terminating at 1 Year. The red time indicator should be positioned over the “1 Year” mark.  Selecting different variables should change the graph to reflect the values associated with that variable.  Selecting the “Table” button should change graphs to data tables and the “Table” button should darken. Clicking the “Table” button again should return the graphs and lighten the “Table” button. |
| 2.7 | Run Experiment (End) | Go to Experiment Timeline box. Leave “Advance” setting at “1 Year.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data on the graphs should extent out to the two-year mark. |
| 2.8 | Reset simulation and save experiment | Go to Experiment Timeline box. Click on “Reset” button.  In Scenario text box, name scenario “Test Scenario 1”  Click “Save” button | “Save Scenario” dialogue box should appear that reflects simulation parameters (see 1.9).  After clicking save, the simulation should indicate the Scenario was successfully saved and then reset the simulation back to the default main user interface tile. |
| **3.0 Save, compare and display experiments (Compare Experiments, Compare Patient Cohorts)** | | | |
| **3.1 Compare Experiments** | | | |
| 3.1.1 | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients,” “Overbooking Effects on No Shows,” and “Wait Time Affects Referrals” feedback loops. |
| 3.1.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward and show sliders. The “Team Data” table should have the base-case values displayed. |
| 3.1.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  *Note: Ensure the “Use Team Data for Starting Rate” switch is “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme right, “BC” should be presented in the number box. |
| 3.1.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 3.1.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 3.1.6 | Select Experiment – Alternative 1 | Go to “Select Experiment” on the “Control Panel” and select previously saved Test Scenario. | The simulation should return the values from the selected experiment and display as a red line on the graph. |
| 3.1.7 | Run Experiment (End) | Go to Experiment Timeline box, “Advance” setting and set to “End.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data for the current run should display in black on the graphs and should extend out to the two-year mark. The Alternative 1 Experiment should still be displayed in Red. |
| 3.1.8 | Check Experiment Alternative Information | Go to “Control Panel” down to “Select Experiment”. Click on the “?” question mark to the right of the drop-down menu. | A pop-up window should appear that displays the “Our Question,” “Our Hypothesis,” and etcetera of that alternative. It should also indicate the Experiment Values. |
| 3.1.9 | Check Graph display on “Outputs” tile next to main UI | Click on the left and right arrows below the graphs in the “Outputs” tile.  Click on numbers directly below to “jump” to a graph. | The graphs should display the information as from the “Expanded Outputs” tile. Clicking the arrows should advance the slides through the 6 graphs displayed in the “Expanded Outputs” tile. |
| **3.2 Compare Patient Cohorts (Start from Expanded Outputs tile)** | | | |
| 3.2.1 | Check Experiment Patient Cohort values | Go to “Control Panel” down to “Control Panel View”. Click on the “Compare Patient Cohorts” radio button.  Select Checkboxes of Patient Cohorts you wish to display. | Clicking the “Compare Patient Cohorts” radio button should result in the display of Patient Cohorts for the current run. By de-selecting a Patient Cohort, the charts should re-render and remove the de-selected Cohort. |
| 3.2.2 | Check Graph display on “Outputs” tile next to main UI | Click on the left and right arrows below the graphs in the “Outputs” tile.  Click on numbers directly below to “jump” to a graph. | The graphs should display the information as from the “Expanded Outputs” tile. Clicking the arrows should advance the slides through the 6 graphs displayed in the “Expanded Outputs” tile. |
| **4.0 Copy and Paste, save, and export data** | | | |
| 4.1 | Copy and Paste data from “Expanded Outputs” tile | Click on “Copy” button. Open a blank Excel document. Paste values from clipboard | A dialogue box should appear that says, ”Copied run data to clipboard.” Run data should present when pasted to Excel document. |
| 4.2 | Export data from “Expanded Outputs” tile | Click on “Export” button. Name file and click “ok.” | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |
| 4.3 | Save data from “Expanded Outputs” tile | Click on “Save” button. Name experiment Scenario and click “Save.” | A “Save Scenario” dialogue box should appear displaying model information. After naming the scenario and clicking “Save” a dialogue should display “Scenario saved successfully.” Go to your downloads file and check for an Excel file. |
| 4.4 | Copy and Paste data from “Outputs” tile | Click on “Copy” button. Open a blank Excel document. Paste values from clipboard.  *Note: Data from all variables for entire run will be copied to clipboard.* | A dialogue box should appear that says,” Copied run data to clipboard.” Run data should present when pasted to Excel document. |
| 4.5 | Export data from “Outputs” tile | Click on “Export” button. Name file and click “ok.”  *Note: Data from all variables for entire run will be exported to an Excel file.* | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |

# Testing Script for Psychotherapy

| Item | Task | Procedure | Expected Result |
| --- | --- | --- | --- |
| **1.0 Login, select data, run model** | | | |
| 1.1 | Login | Enter username and password in the indicated fields, click on “Login” button | User should progress to “Home” screen that displays the “Select” tile. |
| 1.2 | Select “Start New Game” | Click on “Start New Game” radio button | Radio button should fill in with solid dot. |
| 1.3 | Select Game | Click on “Psychotherapy” radio button | Radio button should fill in and “Select Data” button should appear. |
| 1.4 | Select Data | Click on “Select Data” button. Select model file from drop down menu. Click “Get File” button. | Dialogue box should appear asking you to select Model Input Files from a drop down. After clicking “Get File Button” the name of the data file selected should appear below the “Select Data’ button. |
| 1.5 | Play Simulation | Click on the “Play Simulation” button | A dialogue box should appear that warn that “Starting a new simulation will stop the previous game for all team members.” Click on “Start” button. Care Coordination main UI, and Outputs Tile should display. There should be no information displayed in the “Outputs Tile.” The “Experiments Tile” should be minimized. The “Play” icon at the top of the screen should be red, indicating the users current location in the simulation. |
| 1.6 | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients” and ”Engagement after 3 Months” feedback loops. |
| 1.7 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 1.8 | Run simulation | Click on the “Run” simulation icon in the “Experiments Timeline” box. | The model should run and return values. These values should be displayed in the stocks and flows icons in the main UI, and as 6 graphs in the “Outputs” tile. The time graph placeholder (indicated in red) should be at “2 Years” on the timeline. |
| 1.9 | Reset simulation | Click on the “Reset” button in the “Experiment Timeline” box.  Review items in the dialogue box for completeness, then click on “Discard” button.  Go to top of the screen and click “Log Off” button.  *Note: After reset, the UI should re-render and present the default view with no builds or depths.* | A dialogue box should present that indicates the following model parameters: Vensim Model: Care Coordination  Data File: Name of the data file you are using  UserID: Your user ID  Model Time: should be the end time you selected in the previous step.  Scenario Name: should be blank.  At the bottom should be a “Save” and a “Discard” button.  After “Discard” button is pressed, simulation should reset.  Clicking “LOGOFF” button should return user to login screen. |
| **2.0 Set experimental values and provide inputs in the Expanded Outputs tile** | | | |
| 2.1 | Login (See 1.1 to 1.5 above). Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients” and ” Engagement after 3 Months” feedback loops. |
| 2.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 2.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  Click on the “I” icon of each experimental value.  *Note: Ensure the “Use Team Data for Starting Rate” switch is “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme right, “BC” should be presented in the number box. Clicking on the “I” icon should present a dialogue with a description of the experimental value. The Color of the title in the dialogue box should correspond to the color of the experimental value. |
| 2.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 2.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 2.6 | Run Experiment (1 Year) | Go to the Experiment Timeline box in the upper right corner of tile. Go to “Advance” drop down menu and select “1 Year.” Click the “Run” button.  Once the simulation returns values, go to “Results Dashboard” area of tile. Review the graphs, use pull-down menus to select different variables.  Select “Table” button above the “Experiment Timeline” box. | The simulation should run and return values. The values should be displayed in the graphs with the data lines terminating at 1 Year. The red time indicator should be positioned over the “1 Year” mark.  Selecting different variables should change the graph to reflect the values associated with that variable.  Selecting the “Table” button should change graphs to data tables and the “Table” button should darken. Clicking the “Table” button again should return the graphs and lighten the “Table” button. |
| 2.7 | Run Experiment (End) | Go to Experiment Timeline box. Leave “Advance” setting at “1 Year.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data on the graphs should extent out to the two-year mark. |
| 2.8 | Reset simulation and save experiment | Go to Experiment Timeline box. Click on “Reset” button.  In Scenario text box, name scenario “Test Scenario 1”  Click “Save” button | “Save Scenario” dialogue box should appear that reflects simulation parameters (see 1.9).  After clicking save, the simulation should indicate the Scenario was successfully saved and then reset the simulation back to the default main user interface tile. |
| **3.0 Save, compare and display experiments** | | | |
| 3.1 | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients” and ”Engagement after 3 Months” feedback loops. |
| 3.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 3.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  *Note: Ensure the “Use Team Data for Starting Rate” switch is “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme right, “BC” should be presented in the number box. |
| 3.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 3.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 3.6 | Select Experiment – Alternative 1 | Go to “Select Experiment” on the “Control Panel” and select previously saved Test Scenario. | The simulation should return the values from the selected experiment and display as a red line on the graph. |
| 3.7 | Run Experiment (End) | Go to Experiment Timeline box, “Advance” setting and set to “End.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data for the current run should display in black on the graphs and should extend out to the two-year mark. The Alternative 1 Experiment should still be displayed in Red. |
| 3.8 | Check Experiment Alternative Information | Go to “Control Panel” down to “Select Experiment”. Click on the “?” question mark to the right of the drop-down menu. | A pop-up window should appear that displays the “Our Question,” “Our Hypothesis,” and etcetera of that alternative. It should also indicate the Experiment Values. |
| 3.9 | Check Graph display on “Outputs” tile next to main UI | Click on the left and right arrows below the graphs in the “Outputs” tile.  Click on numbers directly below to “jump” to a graph. | The graphs should display the information as from the “Expanded Outputs” tile. Clicking the arrows should advance the slides through the 6 graphs displayed in the “Expanded Outputs” tile. |
| **4.0 Copy and Paste, save, and export data** | | | |
| 4.1 | Copy and Paste data from “Expanded Outputs” tile | Click on “Copy” button. Open a blank Excel document. Paste values from clipboard | A dialogue box should appear that says, ”Copied run data to clipboard.” Run data should present when pasted to Excel document. |
| 4.2 | Export data from “Expanded Outputs” tile | Click on “Export” button. Name file and click “ok.” | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |
| 4.3 | Save data from “Expanded Outputs” tile | Click on “Save” button. Name experiment Scenario and click “Save.” | A “Save Scenario” dialogue box should appear displaying model information. After naming the scenario and clicking “Save” a dialogue should display “Scenario saved successfully.” Go to your downloads file and check for an Excel file. |
| 4.4 | Copy and Paste data from “Outputs” tile | Click on “Copy” button. Open a blank Word document. Paste values from clipboard.  *Note: Data from all variables for entire run will be copied to clipboard.* | A dialogue box should appear that says,” Copied run data to clipboard.” Run data should present when pasted to word document. |
| 4.5 | Export data from “Outputs” tile | Click on “Export” button. Name file and click “ok.”  *Note: Data from all variables for entire run will be exported to an Excel file.* | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |
| 5.0 Review Sankey Charts | | | |
| 5.1 | Review Sankey Chart | Click on “Expand” button from “Outputs” tile.  In the “Control Panel” dialogue find and click the “Sankey” button | A pop-up window should display . . . |
|  |  |  |  |

# Testing Script for Aggregate

| Item | Task | Procedure | Expected Result |
| --- | --- | --- | --- |
| **1.0 Login, select data, run model, reset model, logoff** | | | |
| 1.1 | Login | Enter username and password in the indicated fields, click on “Login” button | User should progress to “Home” screen that displays the “Select” tile. |
| 1.2 | Select “Start New Game” | Click on “Start New Game” radio button | Radio button should fill in with solid dot. |
| 1.3 | Select Game | Click on “Aggregate” radio button | Radio button should fill in and “Select Data” button should appear. |
| 1.4 | Select Data | Click on “Select Data” button. Select model file from drop down menu. Click “Get File” button. | Dialogue box should appear asking you to select Model Input Files from a drop down. After clicking “Get File Button” the name of the data file selected should appear below the “Select Data’ button. |
| 1.5 | Play Simulation | Click on the “Play Simulation” button | A dialogue box should appear that warn that “Starting a new simulation will stop the previous game for all team members.” Click on “Start” button. Care Coordination main UI, and Outputs Tile should display. There should be no information displayed in the “Outputs Tile.” The “Experiments Tile” should be minimized. The “Play” icon at the top of the screen should be red, indicating the users current location in the simulation. |
| 1.6.0 | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Supply Affects Patient Services,” “Effects of Overtime,” and “RVI and Wait Times” feedback loops. |
| 1.6.1 | Display Patient Services | Click the radio buttons below the “Display Patient Services” | Clicking radio buttons will change the values of the stocks and flows to reflect the values of the selected Patient Service. |
| 1.7 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 1.8 | Run simulation | Click on the “Run” simulation icon in the “Experiments Timeline” box. | The model should run and return values. These values should be displayed in the stocks and flows icons in the main UI, and as 6 graphs in the “Outputs” tile. The time graph placeholder (indicated in red) should be at “2 Years” on the timeline. |
| 1.9 | Reset simulation | Click on the “Reset” button in the “Experiment Timeline” box.  Review items in the dialogue box for completeness, then click on “Discard” button.  Go to top of the screen and click “Log Off” button. | A dialogue box should present that indicates the following model parameters: Vensim Model: Care Coordination  Data File: Name of the data file you are using  UserID: Your user ID  Model Time: should be the end time you selected in the previous step.  Scenario Name: should be blank.  At the bottom should be a “Save” and a “Discard” button.  After “Discard” button is pressed, simulation should reset.  Clicking “LOGOFF” button should return user to login screen. |
| **2.0 Login, set experimental values and provide inputs in the Expanded Outputs tile** | | | |
| 2.1 | Login (See 1.1 to 1.5 above). Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Balancing Patients,” “Overbooking Effects on No Shows,” and “Wait Time Affects Referrals” feedback loops. |
| 2.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward d show sliders. The “Team Data” table should have the base-case values displayed. |
| 2.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  Click on the “I” icon of each experimental value.  *Note: Ensure the “Use Team Data for Referral Rate” switch is “off” and the “Use Team Data for within Team Referral Rate” is also “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme right, “BC” should be presented in the number box. Clicking on the “I” icon should present a dialogue with a description of the experimental value. The Color of the title in the dialogue box should correspond to the color of the experimental value. |
| 2.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 2.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 2.6 | Run Experiment (1 Year) | Go to the Experiment Timeline box in the upper right corner of tile. Go to “Advance” drop down menu and select “1 Year.” Click the “Run” button.  Once the simulation returns values, go to “Results Dashboard” area of tile. Review the graphs, use pull-down menus to select different variables.  Select “Table” button above the “Experiment Timeline” box. | The simulation should run and return values. The values should be displayed in the graphs with the data lines terminating at 1 Year. The red time indicator should be positioned over the “1 Year” mark.  Selecting different variables should change the graph to reflect the values associated with that variable.  Selecting the “Table” button should change graphs to data tables and the “Table” button should darken. Clicking the “Table” button again should return the graphs and lighten the “Table” button. |
| 2.7 | Run Experiment (End) | Go to Experiment Timeline box. Leave “Advance” setting at “1 Year.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data on the graphs should extent out to the two-year mark. |
| 2.8 | Reset simulation and save experiment | Go to Experiment Timeline box. Click on “Reset” button.  In Scenario text box, name scenario “Test Scenario 1”  Click “Save” button | “Save Scenario” dialogue box should appear that reflects simulation parameters (see 1.9).  After clicking save, the simulation should indicate the Scenario was successfully saved and then reset the simulation back to the default main user interface tile. |
| **3.0 Save, compare and display experiments (Compare Experiments, Compare Services)** | | | |
| **3.1 Compare Experiments** | | | |
| 3.1.1 | Build Main UI Tile Complexity | Click the checkboxes in the “Experiment Timeline” box underneath the label “Reveal Complexity.” | Clicking the checkboxes will reveal “Supply Affects Patient Services,” “Effects of Overtime,” and “RVI and Wait Times” feedback loops.  . |
| 3.1.2 | Reveal “Experiments” tile | Click on the arrow on the right of the title bar. | The “Experiments” tile should expand downward and show sliders. The “Team Data” table should have the base-case values displayed. |
| 3.1.3 | Input experimental values in the “Experiments” tile. | Go to each slider and click on the slider, so a value is presented in the box. Set values as you see fit.  *Note: Ensure the “Use Team Data for Referral Rate” switch is “off” and the “Use Team Data for within Team Referral Rate” is also “off.”* | As the user slides the slider the numerical value should track up or down as the slider moves. If the slide supports a Base Case (BC) setting, when the slider is moved to the extreme right, “BC” should be presented in the number box. |
| 3.1.4 | Go to “Expanded Outputs” tile | Minimize “Experiments” tile and expand “Outputs” tile by clicking on the arrows on the right of the title bars of each.  Click on “Expand” icon | “Outputs” tile should properly display. |
| 3.1.5 | Input data into “Expanded Outputs” tile | Click in “Our Question” tile and enter “TEST DIALOGUE.” Press “tab key” and repeat procedure for “Our Hypothesis,” “Our Findings” and “Our Decisions.” | Text should display in each of the text boxes. Pressing the “tab key” on your keyboard should progress the cursor through the text boxes top to bottom, left to right. Under the “Results Dashboard” title, in the “Control Panel”, the experimental values selected in the previous step, should be displayed in the “Current Experiment Values” box. “Charts” should not be displayed as the model has not run. |
| 3.1.6 | Select Experiment – Alternative 1 | Go to “Select Experiment” on the “Control Panel” and select previously saved Test Scenario. | The simulation should return the values from the selected experiment and display as a red line on the graph. |
| 3.1.7 | Run Experiment (End) | Go to Experiment Timeline box, “Advance” setting and set to “End.” Click on “Run” button. | The red time indicator on the “Experiment Timeline” should advance another year and rest on the “2-Year” mark. Data for the current run should display in black on the graphs and should extend out to the two-year mark. The Alternative 1 Experiment should still be displayed in Red. |
| 3.1.8 | Check Experiment Alternative Information | Go to “Control Panel” down to “Select Experiment”. Click on the “?” question mark to the right of the drop-down menu. | A pop-up window should appear that displays the “Our Question,” “Our Hypothesis,” and etcetera of that alternative. It should also indicate the Experiment Values. |
| 3.1.9 | Check Graph display on “Outputs” tile next to main UI | Click on the left and right arrows below the graphs in the “Outputs” tile.  Click on numbers directly below to “jump” to a graph. | The graphs should display the information as from the “Expanded Outputs” tile. Clicking the arrows should advance the slides through the 6 graphs displayed in the “Expanded Outputs” tile. |
| **3.2 Compare Patient Services (Start from Expanded Outputs tile)** | | | |
| 3.2.1 | Check Experiment Patient Services values | Go to “Control Panel” down to “Control Panel View”. Click on the “Compare Services” radio button.  Select Checkboxes of Patient Services you wish to display. | Clicking the “Compare Services” radio button should result in the display of Patient Services for the current run. By de-selecting a Service, the charts should re-render and remove the de-selected Service. |
| 3.2.2 | Check Graph display on “Outputs” tile next to main UI | Click on the left and right arrows below the graphs in the “Outputs” tile.  Click on numbers directly below to “jump” to a graph. | The graphs should display the information as from the “Expanded Outputs” tile. Clicking the arrows should advance the slides through the 6 graphs displayed in the “Expanded Outputs” tile. |
| **4.0 Copy and Paste, save, and export data** | | | |
| 4.1 | Copy and Paste data from “Expanded Outputs” tile | Click on “Copy” button. Open a blank Excel document. Paste values from clipboard | A dialogue box should appear that says, ”Copied run data to clipboard.” Run data should present when pasted to Excel document. |
| 4.2 | Export data from “Expanded Outputs” tile | Click on “Export” button. Name file and click “ok.” | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |
| 4.3 | Save data from “Expanded Outputs” tile | Click on “Save” button. Name experiment Scenario and click “Save.” | A “Save Scenario” dialogue box should appear displaying model information. After naming the scenario and clicking “Save” a dialogue should display “Scenario saved successfully.” Go to your downloads file and check for an Excel file. |
| 4.4 | Copy and Paste data from “Outputs” tile | Click on “Copy” button. Open a blank Word document. Paste values from clipboard.  *Note: Data from all variables for entire run will be copied to clipboard.* | A dialogue box should appear that says,” Copied run data to clipboard.” Run data should present when pasted to word document. |
| 4.5 | Export data from “Outputs” tile | Click on “Export” button. Name file and click “ok.”  *Note: Data from all variables for entire run will be exported to an Excel file.* | A dialogue box requesting a file name should appear. After naming file, clicking “OK” should result in the download of an Excel file. |