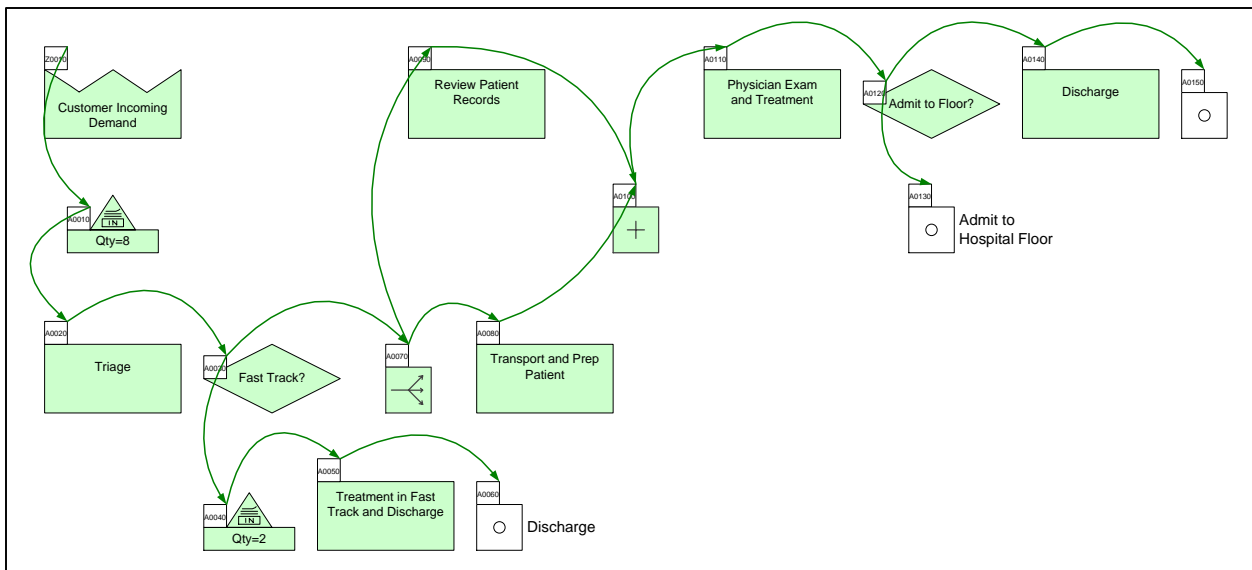


Quick Healthcare Tutorial

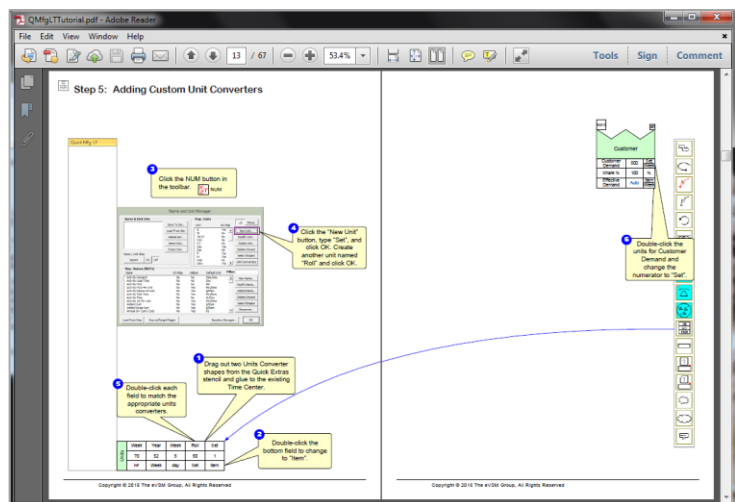
This tutorial will guide you through the steps to draw a simple map, perform common calculations, and plot charts using the Quick Transactional Pro stencil.



Viewing/printing eVSM Tutorial:

This tutorial is designed for two page layout. If printing, you will need double-sided print.

For on-screen viewing, save the PDF file to your PC and then open it in Acrobat Reader (not in a web browser). In the Acrobat menus, click “View>Page Display”, make sure “Show Cover Page in Two Page View” is checked and then select “Two Page View”.



Step 1: Start eVSM

1 On your Desktop, click the "Start eVSM" icon.

2 If you see a message like this, you must "Enable" macros.

3 Click to enable macros.

4 Click "Trust all from publisher" to avoid the security notice in future.

Microsoft Visio Security Notice

Microsoft Office has identified a potential security concern.

Note: The digital signature is valid, but the signature is from a publisher whom you have not yet chosen to trust.

File Path: C:\Program Files\evsm\Setup\Solutions\evsmIcons.vss

Macros have been disabled. Macros might contain viruses or other security hazards. Do not enable this content unless you trust the source of this file.

[More information](#)

[Show Signature Details](#)

Trust all from publisher Enable Macros Disable Macros

Step 2: Learn eVSM Basics

Quick Transactional Pro

2

Avoid re-sizing eVSM shapes. Instead grow the drawing page when needed. To resize the page, hold down the "Ctrl" key, and then drag any page edge to the required size. This method works on all four edges of the page.




6

Save your Visio file and then insert a new page via the right-mouse menus on the page-tabs.

VSM

Quick_eVSM

Step 3: Initiate the map for Quick Transactional Pro

1 Click the Open button. Select Healthcare and click OK. The Quick Transactional Pro stencil will open on the left.  Open

2 Drag out the two red icons first. This is very important!

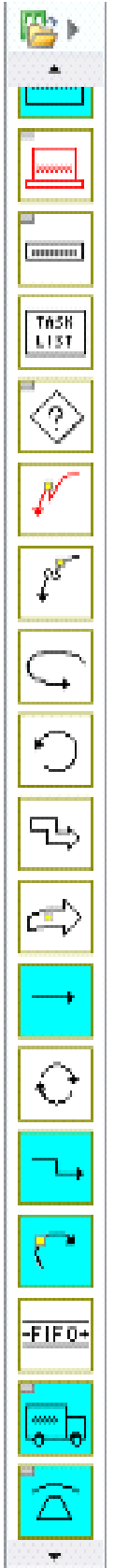
3 Align all new shapes to the grid as you drop them.

4 Enter the number of incoming patients.

5 Enter available hours per day here. This is actual work hours after subtracting break time.

20010		
Incoming Patients		
Customer Demand	150	Unit Day

Units	Day	Wk	Year
	24	5	52
	Hr	Day	Wk



Step 4: Adding a Unit Converter

Quick Transactional Pro

Z0010

Customer Incoming Demand		
Customer Demand	150	Pts Day

6 Double-click the units for Customer Demand and change the numerator to "Pts".

Name and Unit Manager

Name & Unit Sets

Save To Set..
Load From Set..
Delete Set..
Import Set..
Export Set..

Name / Unit Alias
Import On Off

Map : Units

Unit	On Map	US	Metric
\$	Yes		
%	No		
1to10	No		
Cntr	No		
CO	No		
Day	Yes		
Doc	No		
ft	Yes		
Hr	Yes		
Impr	No		
Item	Yes		

New Unit..
Modify Unit..
Delete Unit..
Delete Unused
Select Shapes
Unit Converters

Map : Names (NVU's)


Name	On Map	Hidden	Default Unit	Filter:
Activity Demand	No	No	Item/Day	
Activity Lead Time	No	No	Day	
Activity NVA	No	No	Min	
Activity NVA Per Unit	No	Yes	Min/Item	
Activity Resource Cost	No	Yes	\$/Item	
Activity Takt Time	No	Yes	Min/Item	
Activity Time	No	No	Hr/Day	
Activity VA Per Unit	No	Yes	Min/Item	
Added Cost	No	Yes	\$/Item	
Added Scrap Cost	No	Yes	\$/Item	
Annual Inv Carry Cost	No	Yes	K\$	

Load From Map Source/Target Pages Equation Manager.. OK

4 Create a new unit for patients by clicking the "New Unit" button, type "Pts", and click OK.

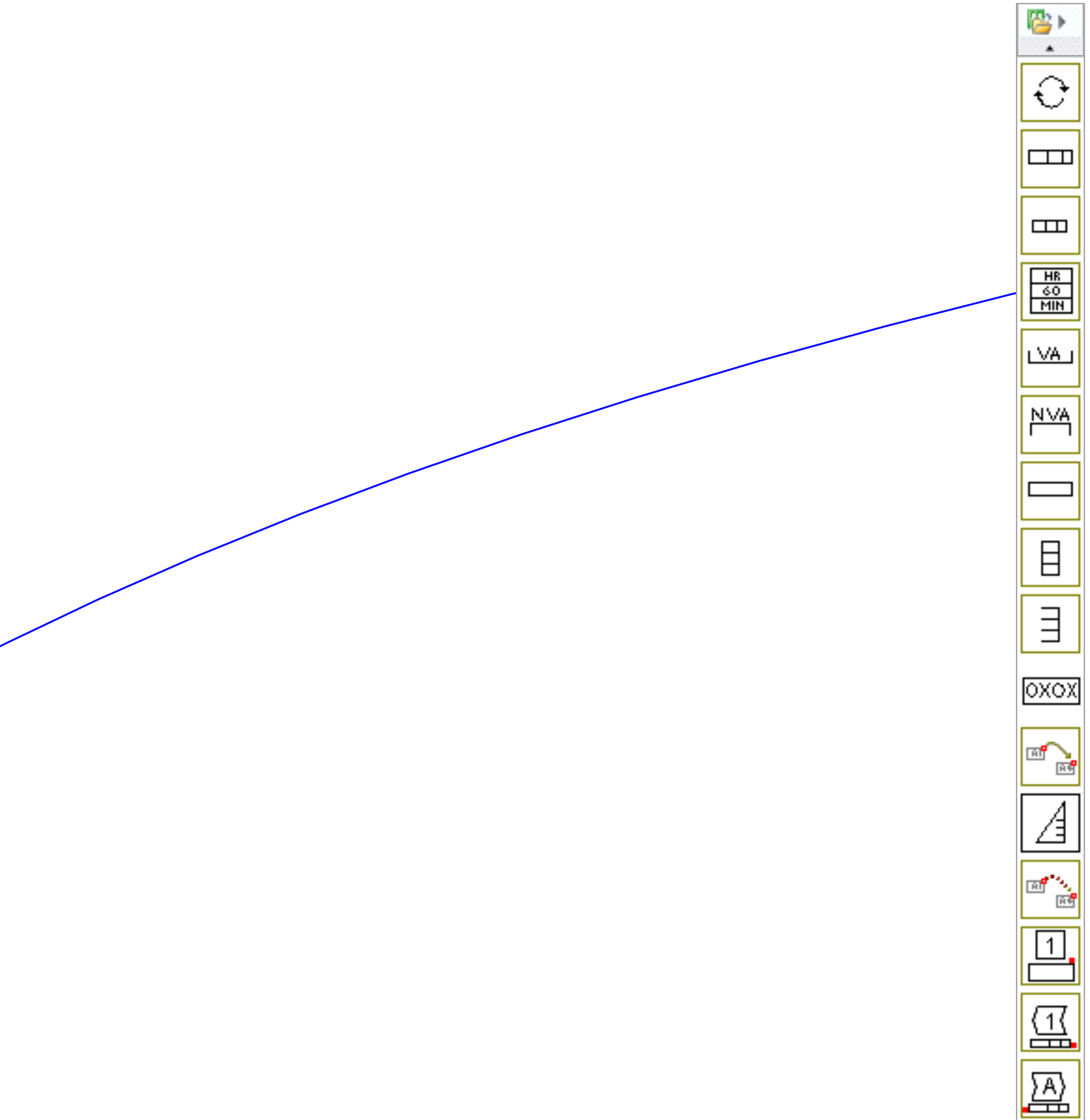
5 Double-click the top field and change to "Pts".

1 Drag out a Units Converter shape from the Quick Extras stencil and glue to the existing Time Center.

3 Click the NUM button in the toolbar.  NUM

2 Double-click the bottom field to change to "Unit", and change the value to 1.

Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit








Step 5: Draw the flow

1 Complete as shown below, including annotation and data values.

2 The green shapes are called "Centers". Drag out the centers to represent the flow.

3 Do not change any blue fields. These will get calculated automatically later.

Quick Transactional Pro

-  Activity Center
-  Decision Center
-  Split Center
-  Queue Center
-  Terminate Center

Z0010

Customer Incoming Demand		
Customer Demand	150	Pts Day

A0020

Qty=8		
Wait	0.5	Hr
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0030

Triage		
RN		
Information Systems		
PT	20	Min
LT	25	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0040

Fast Track?		
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0080

Split Center		
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0100

Review Patient Records		
Doctor		
Information Systems		
PT	10	Min
LT	15	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0090

Transport and Prep Patient		
RN		
Information Systems		
PT	10	Min
LT	15	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0050

Qty=2		
Wait	15	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0060

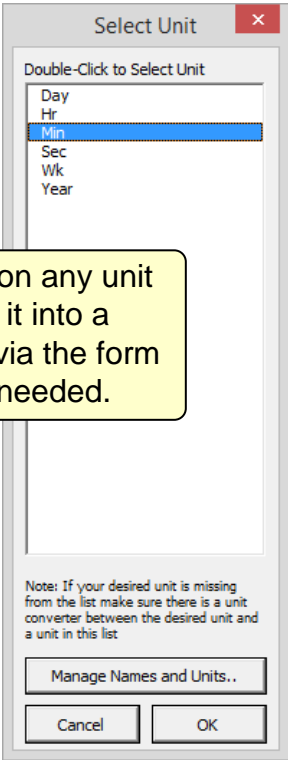
Treatment in Fast Track and Discharge		
RN		
Information Systems		
PT	25	Min
LT	1	Hr
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0070

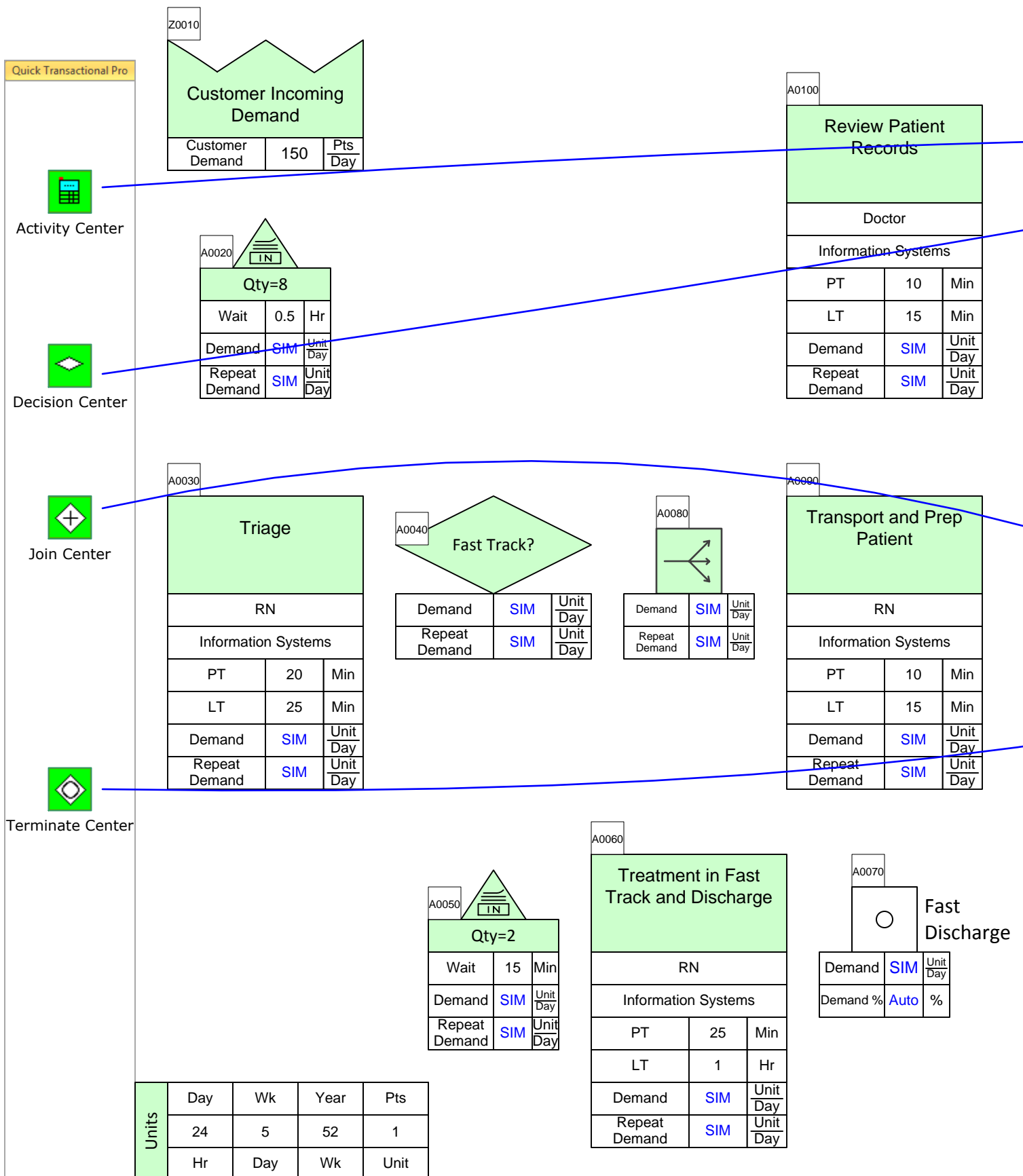
Terminate Center		
Demand	SIM	Unit Day

Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit

4 Double-click on any unit to change it into a different one via the form wherever needed.



Step 6: Draw the flow part 2



1 Complete as shown below, including annotation and data values.

A0120

Physician Exam and Treatment		
Doctor		
Information Systems		
PT	10	Min
LT	1.5	Hr
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0130

Admit to Floor?		
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0150

Discharge		
RN		
Information Systems		
PT	35	Min
LT	1	Hr
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0160

Discharge		
Demand	SIM	Unit Day
Demand %	Auto	%

2 Double-click the Terminate Centers to add text.

A0110

+		
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

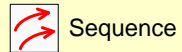
A0140

Admit to Hospital Floor		
Demand	SIM	Unit Day
Demand %	Auto	%

Step 7: Sequence Arrows

1 Sequence arrows are needed for upstream and downstream calculations. To add them, hold down the Ctrl key and select the green shapes in the order shown here.

2 Click the Sequence button to attach sequence arrows.



Quick Transactional Pro

Z0010

A

Customer Demanding

Customer Demand	150	Pts Day
-----------------	-----	---------

A0020

B

Wait	0.5	Hr
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0100

F

Review Patient

Doctor

Information Systems

PT	10	Min
LT	15	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0030

C

RN

Information Systems

PT	20	Min
LT	25	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0040

D

Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0080

E

Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0090

E

Transport and Prep Patient

RN

Information Systems

PT	10	Min
LT	15	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0050

I

Qty=2

Wait	15	Min
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

A0060

I

Treatment in Fast Track and Discharge

RN

Information Systems

PT	25	Min
LT	1	Hr
Demand	SIM	Unit Day
Repeat Demand	SIM	Unit Day

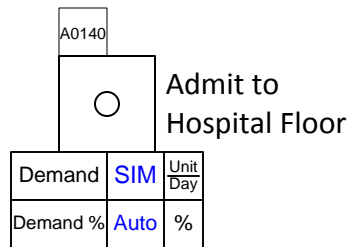
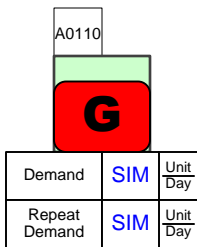
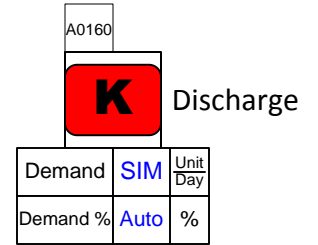
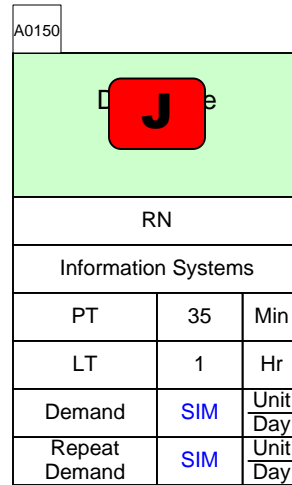
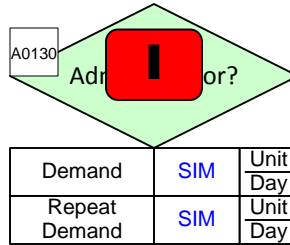
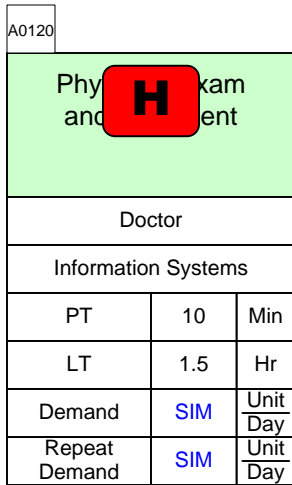
A0070

O

Fast Discharge

Demand	SIM	Unit Day
Demand %	Auto	%

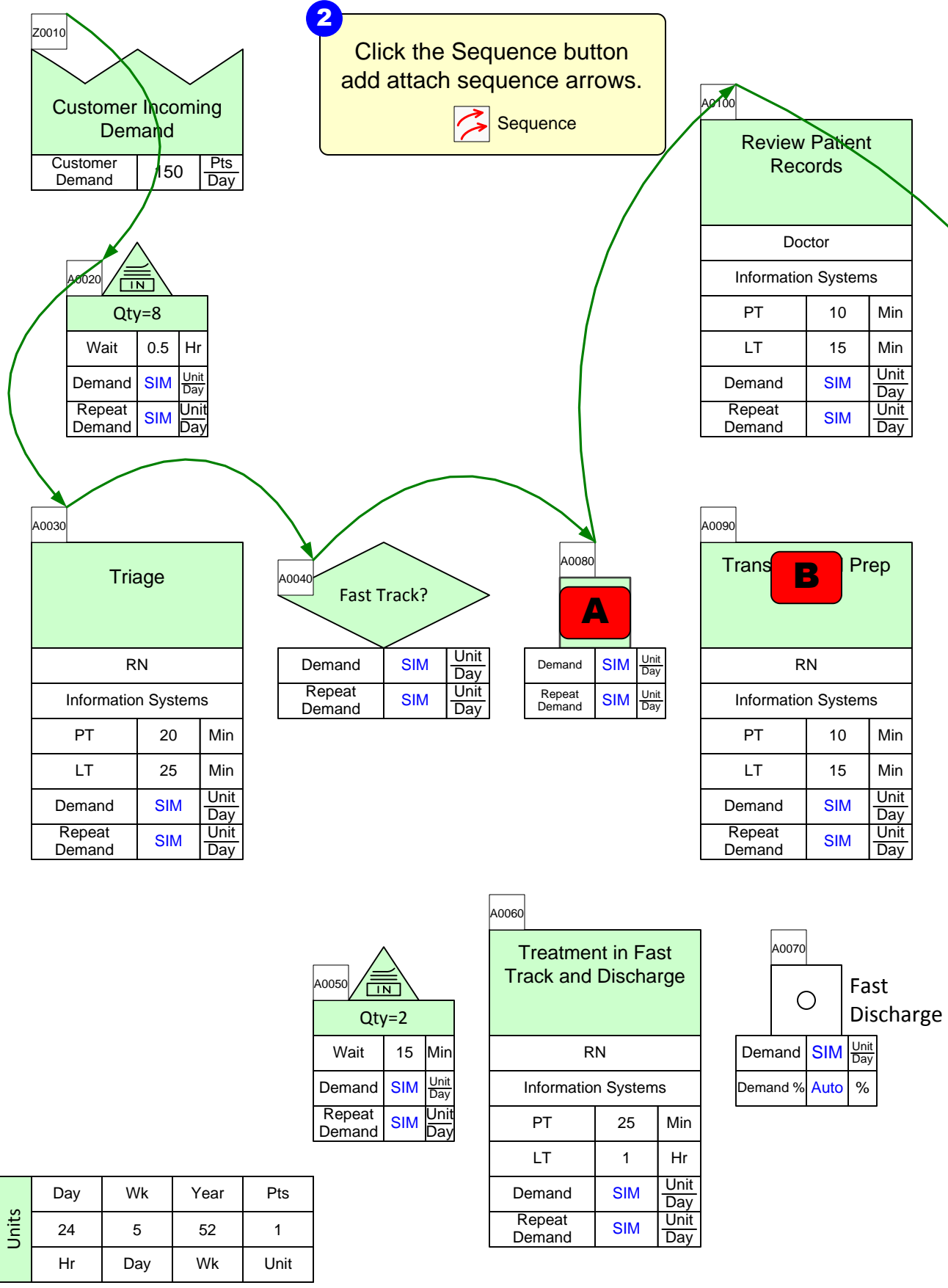
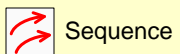
Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit

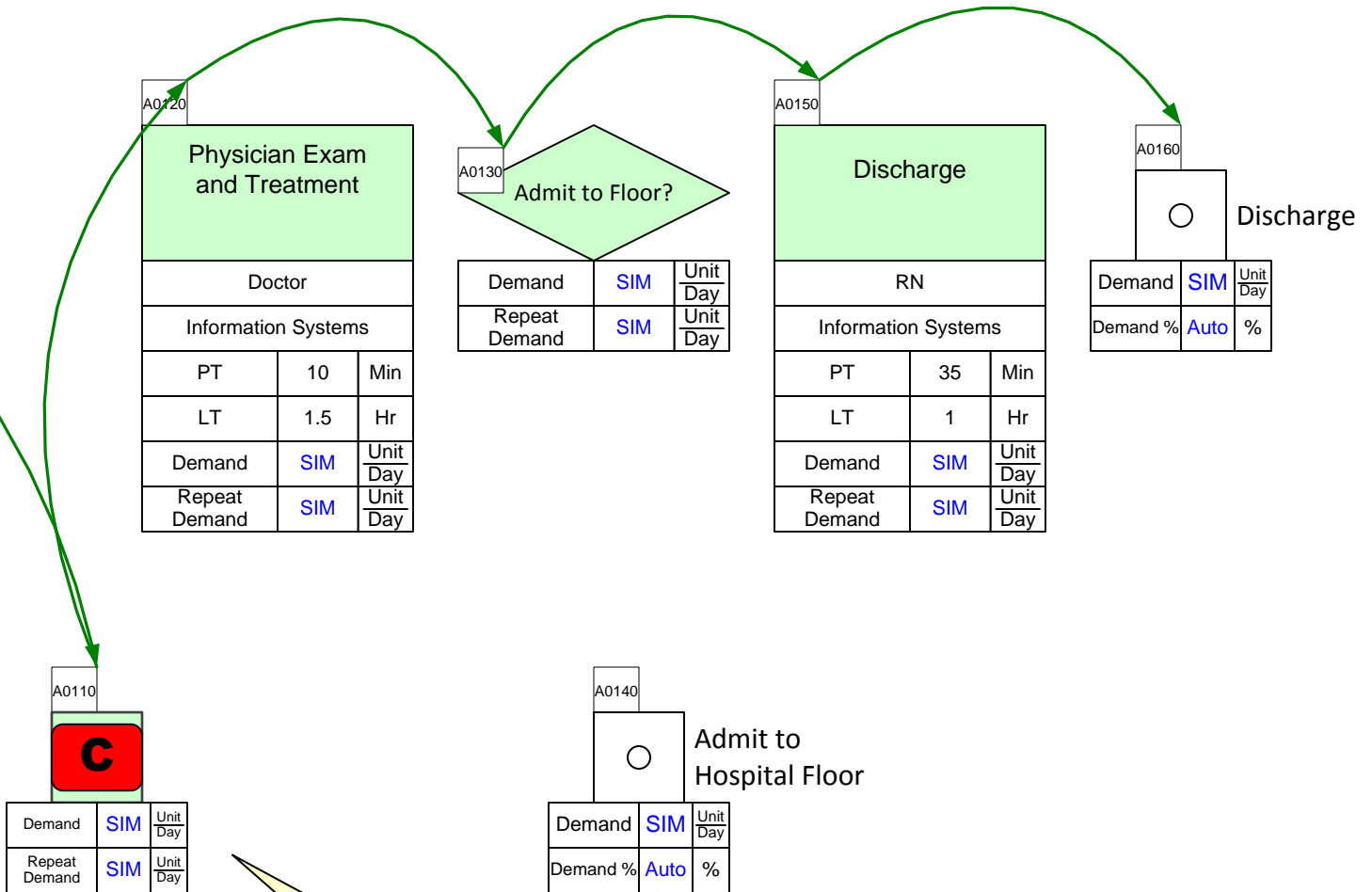


Step 8: Sequence Arrows part 2

Quick Transactional Pro

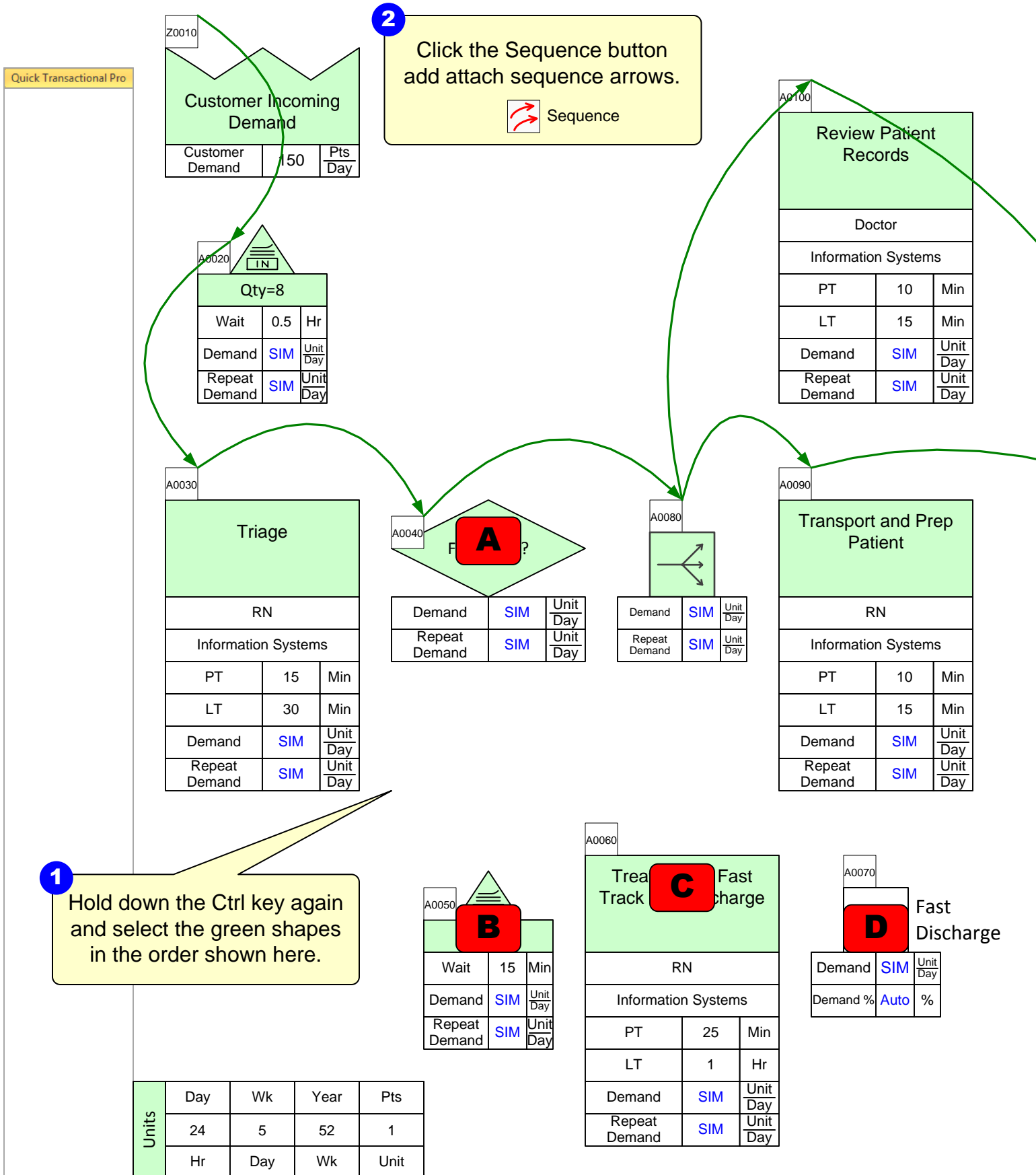
2 Click the Sequence button add attach sequence arrows.

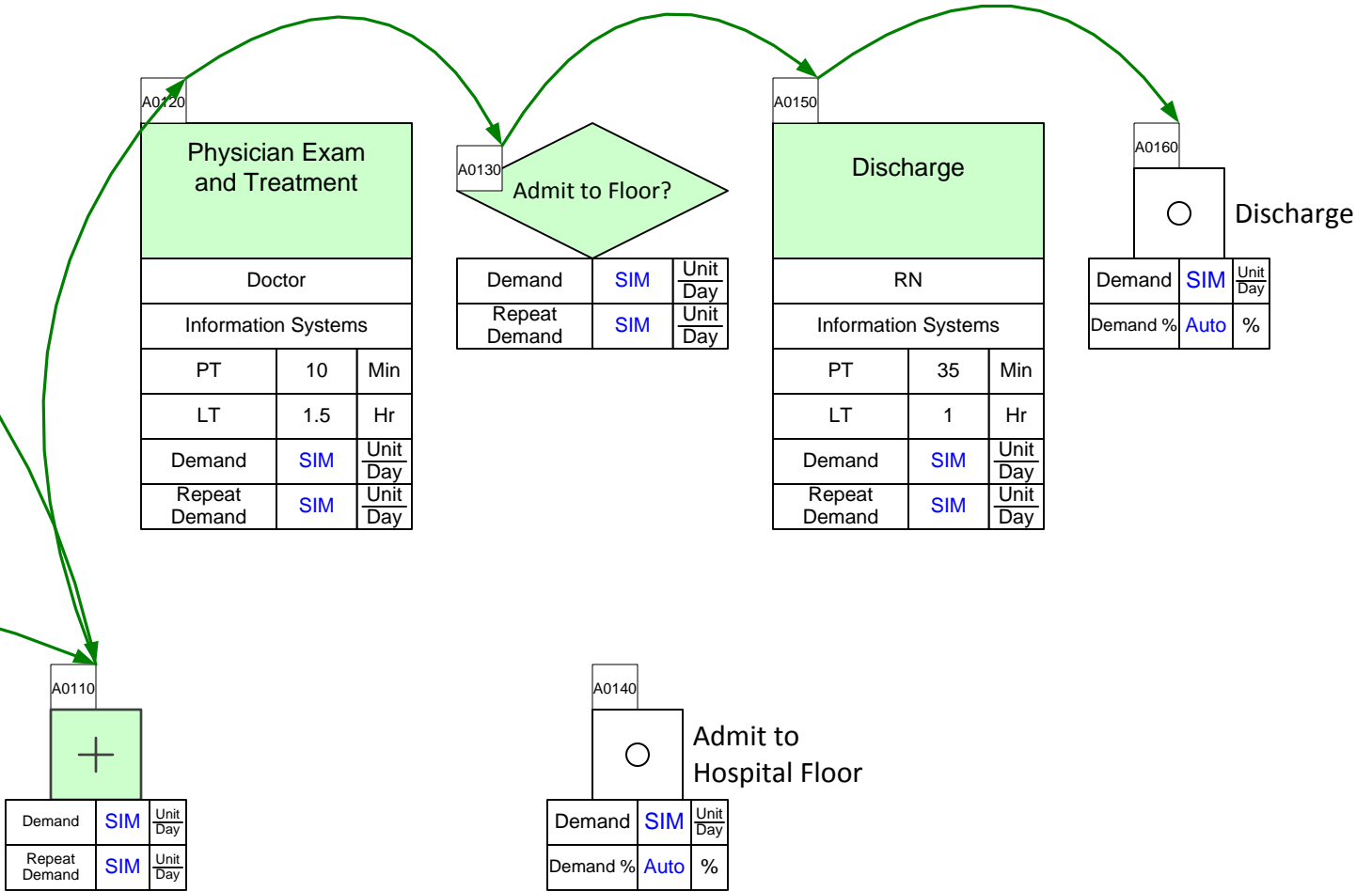




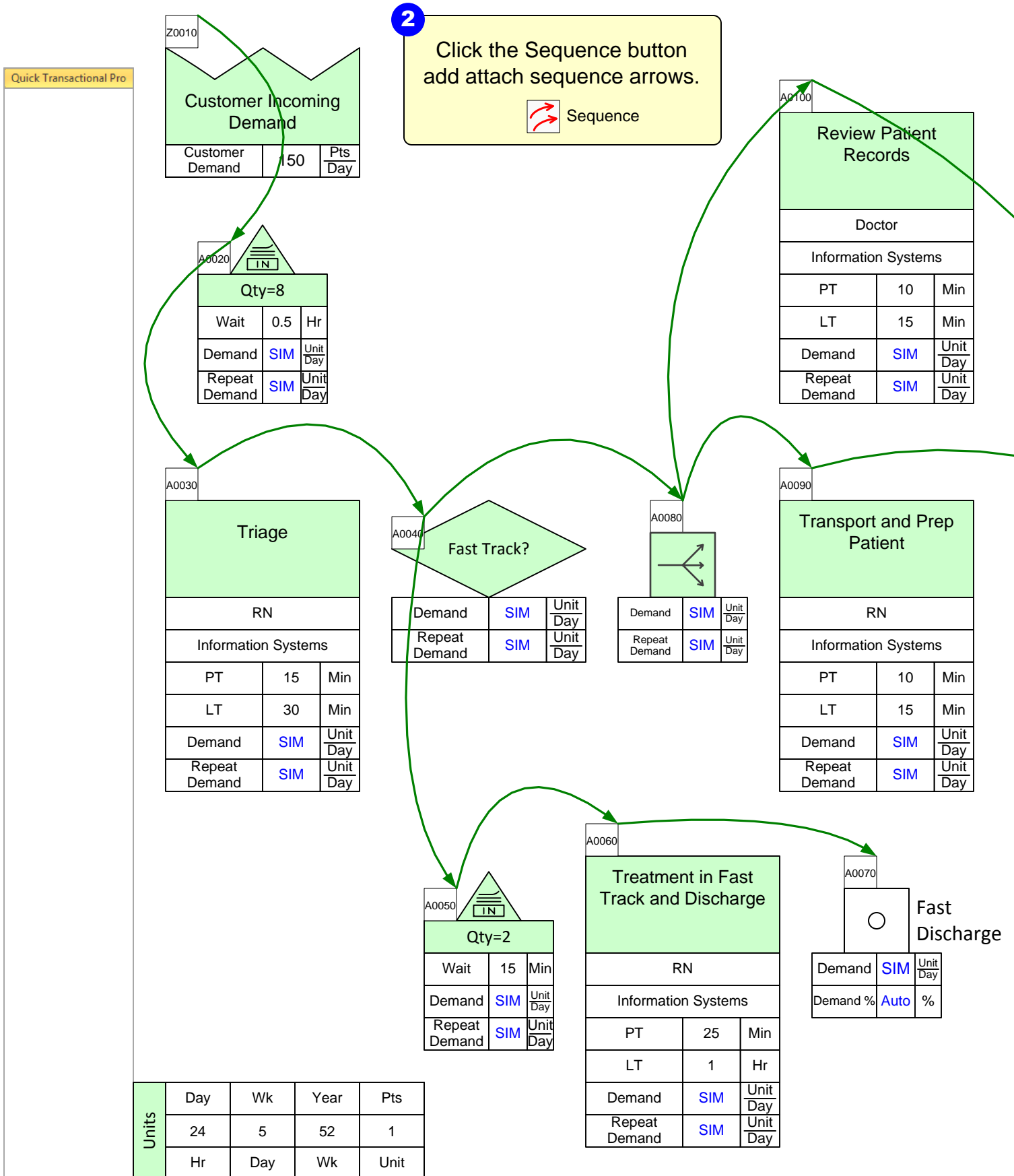
1 Hold down the Ctrl key again and select the green shapes in the order shown here.

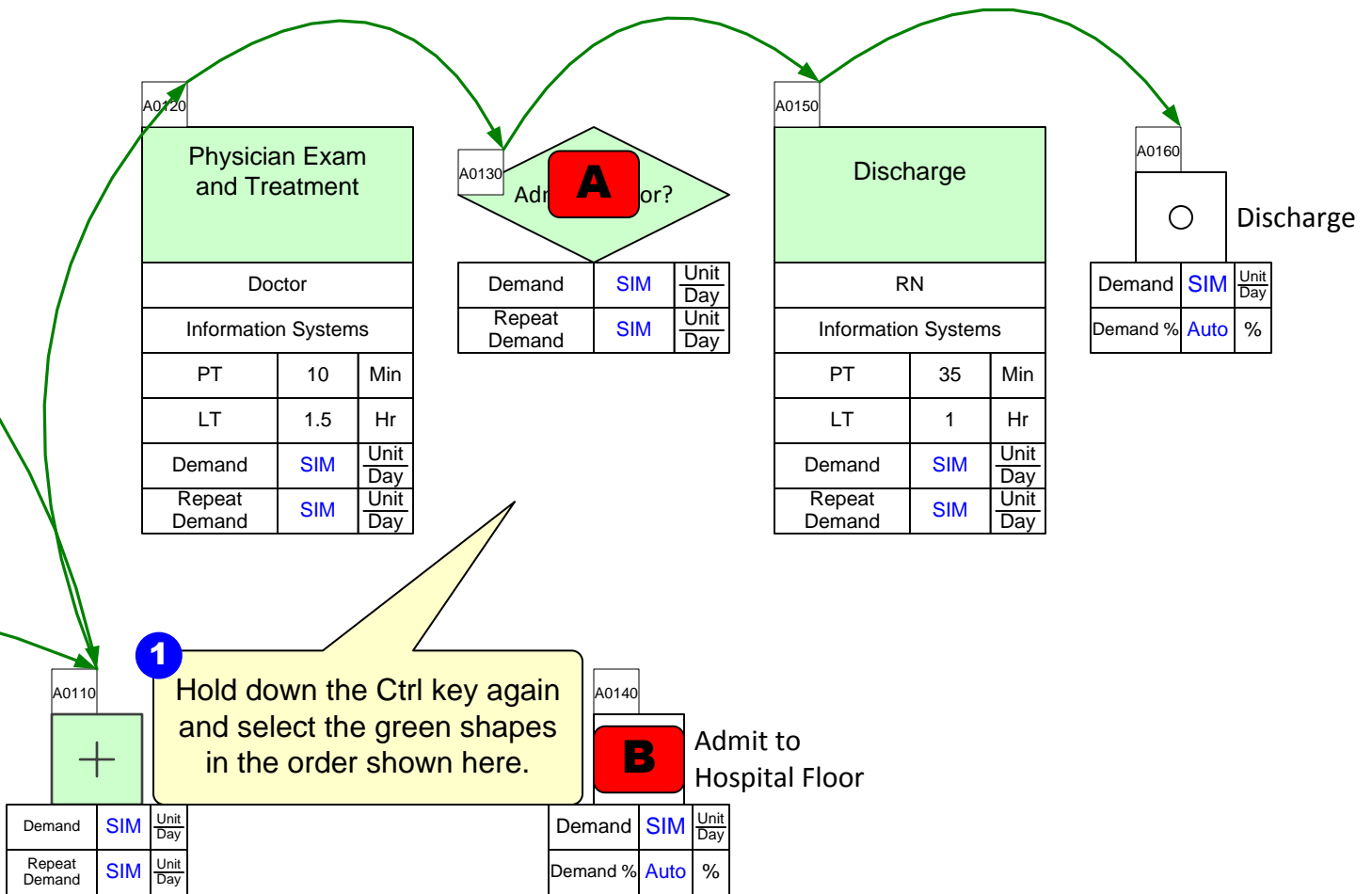
Step 9: Sequence Arrows part 3



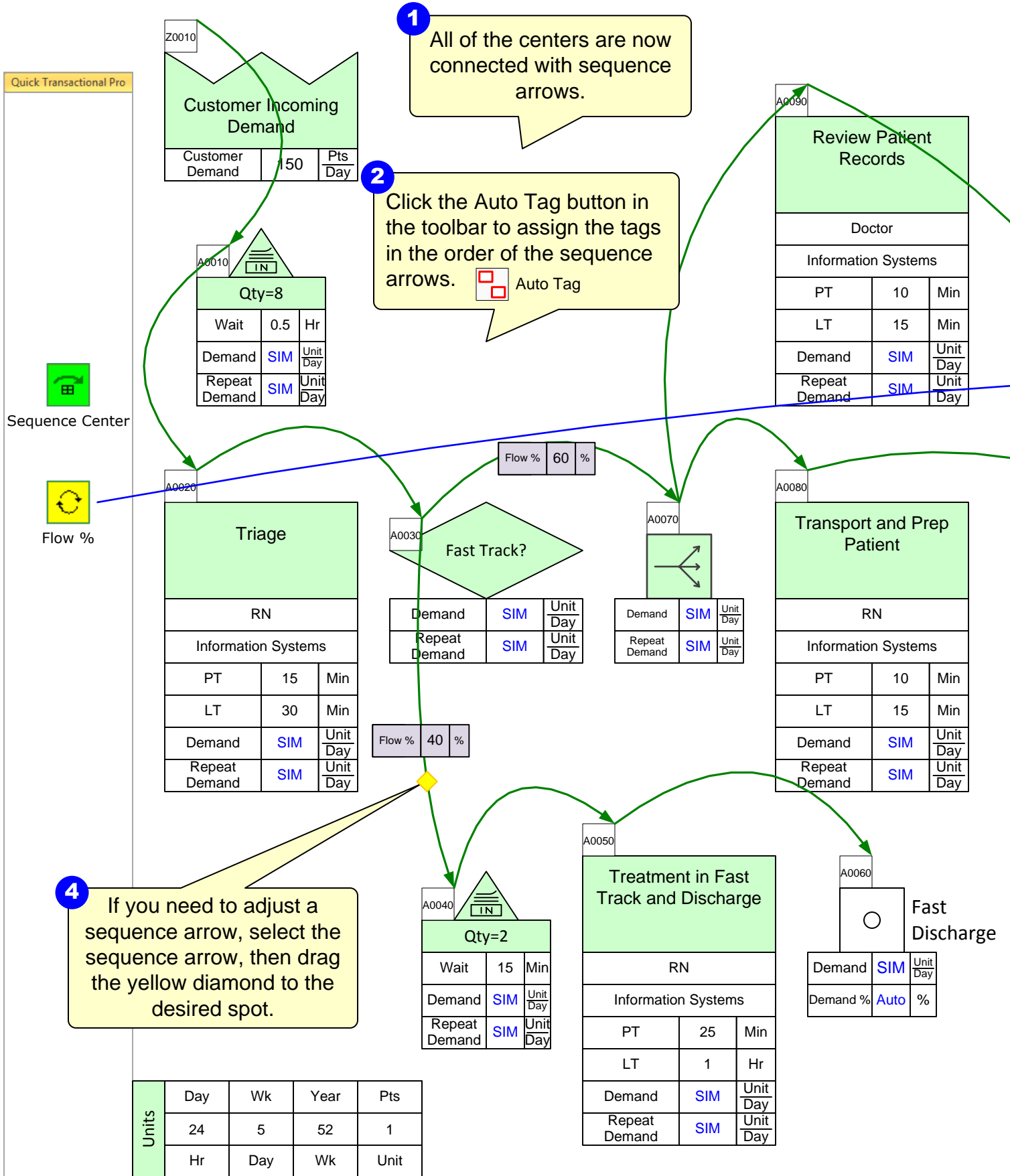


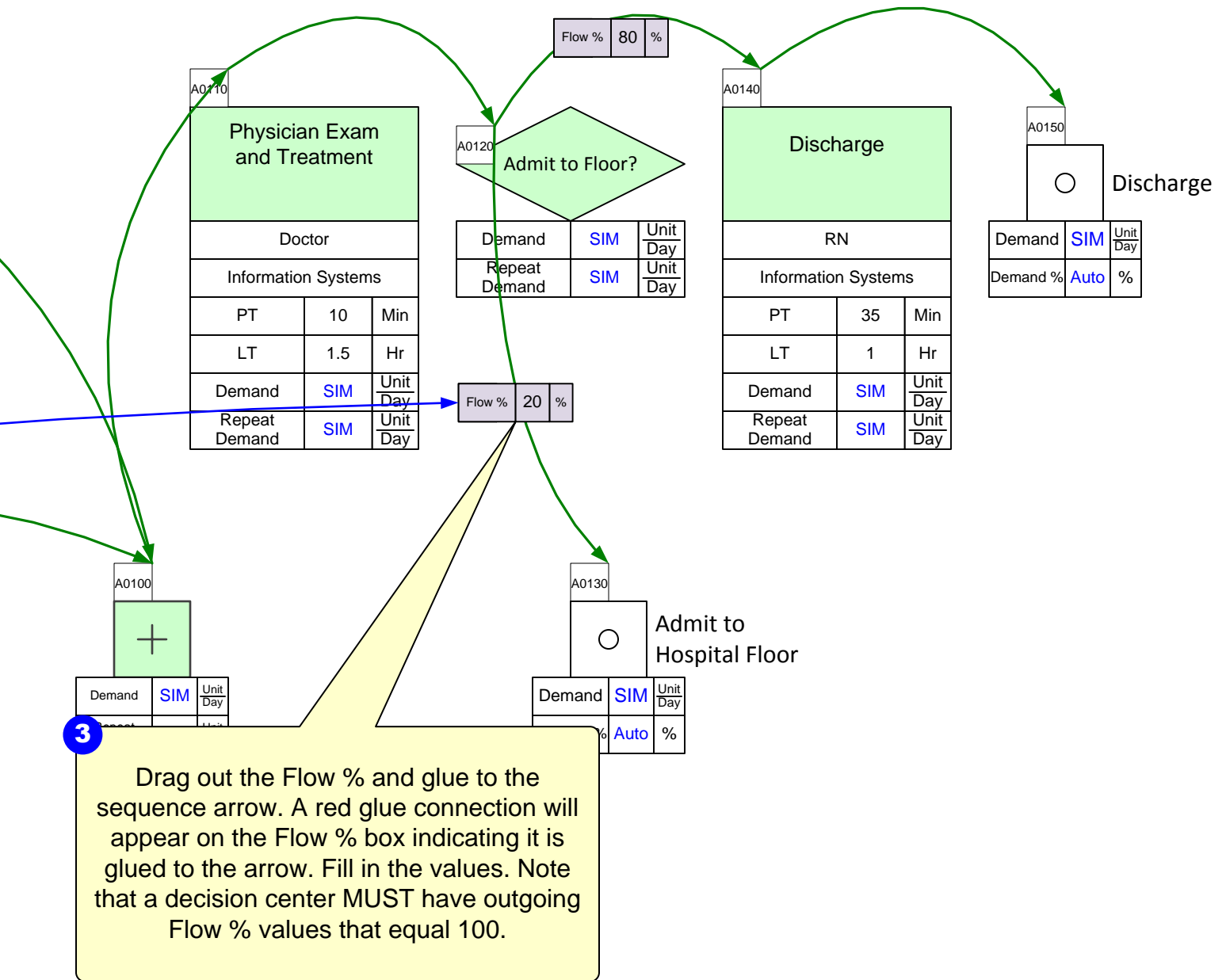
Step 10: Sequence Arrows part 4



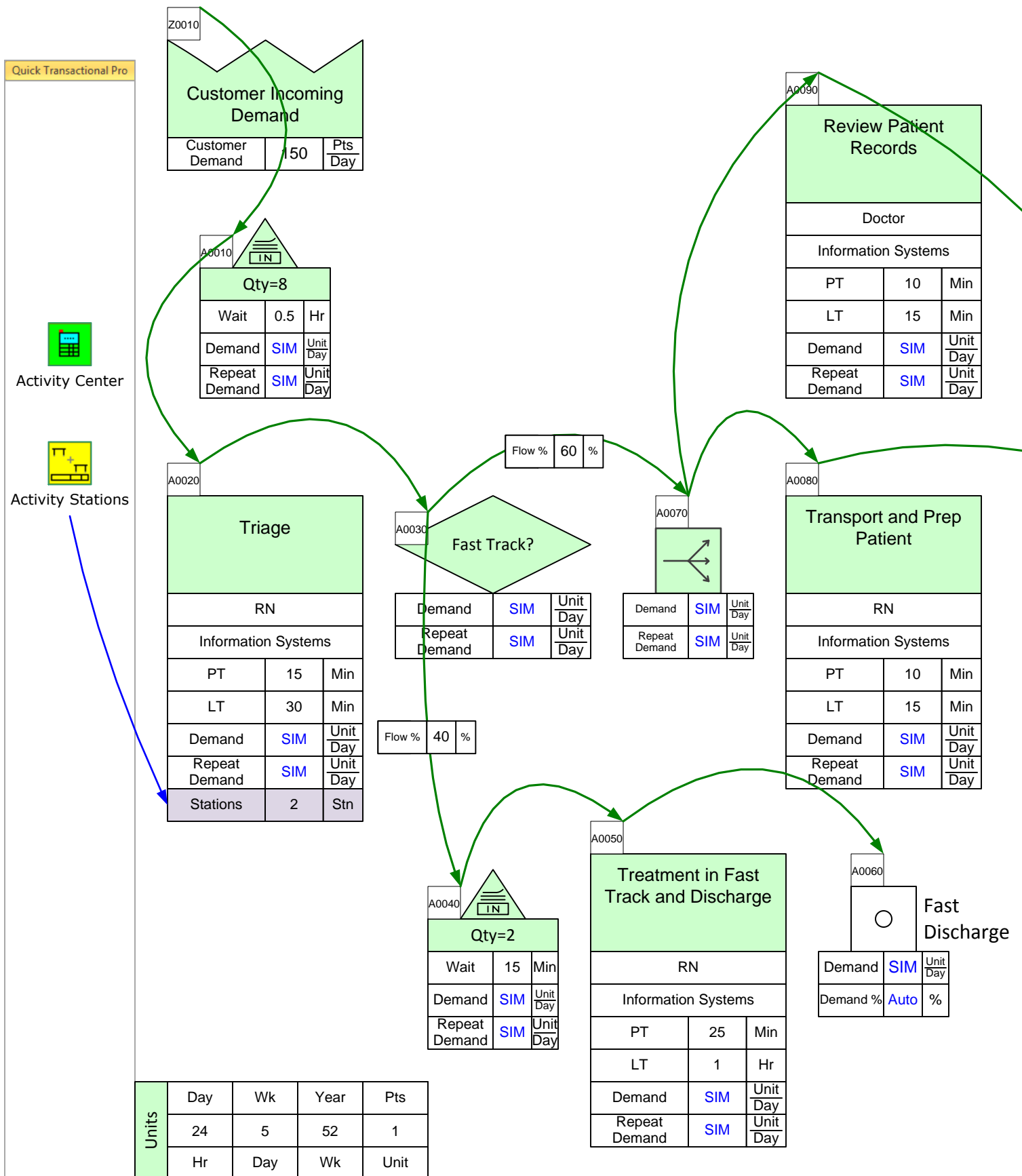


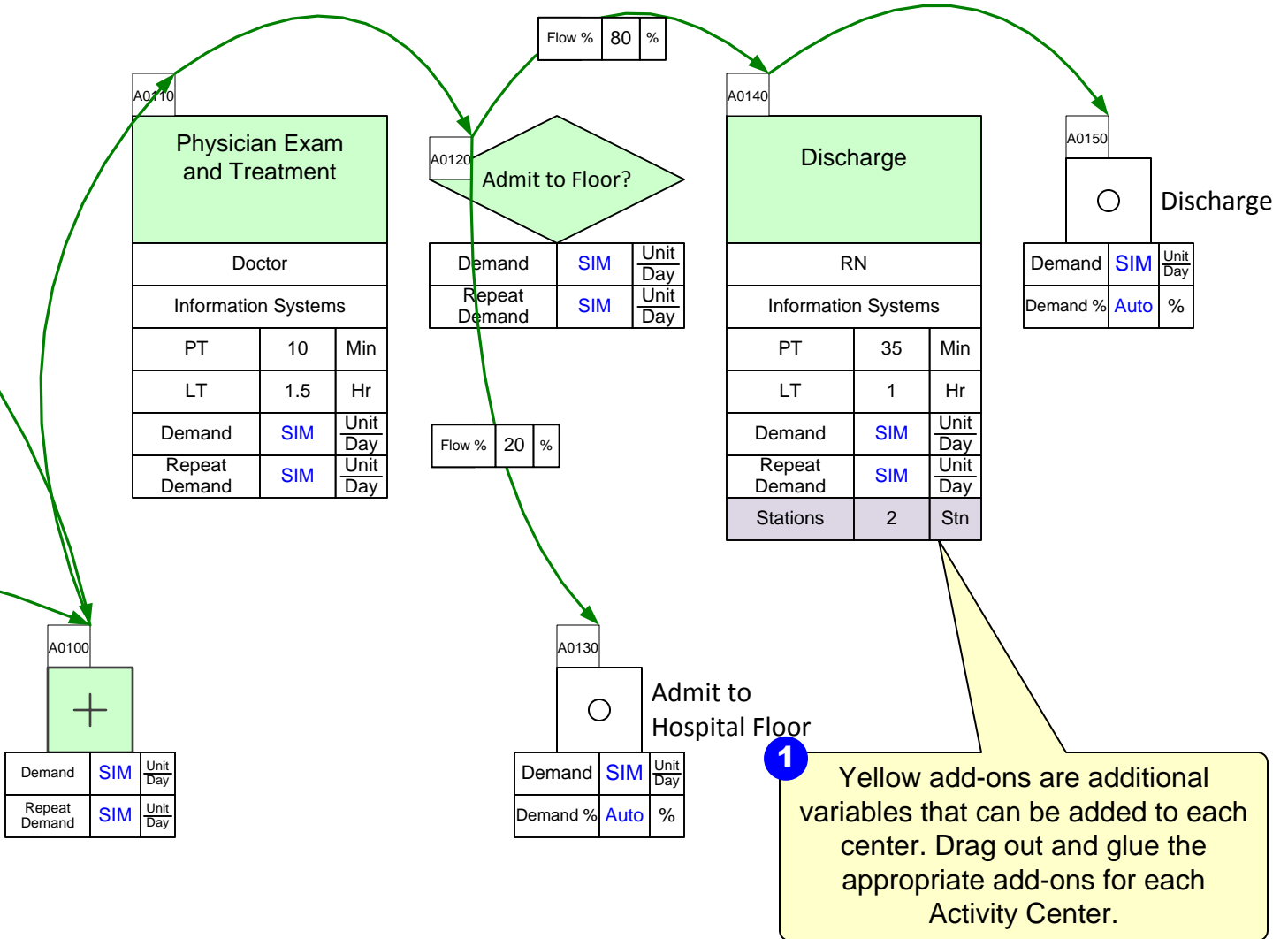
Step 11: Sequence Arrow add-ons



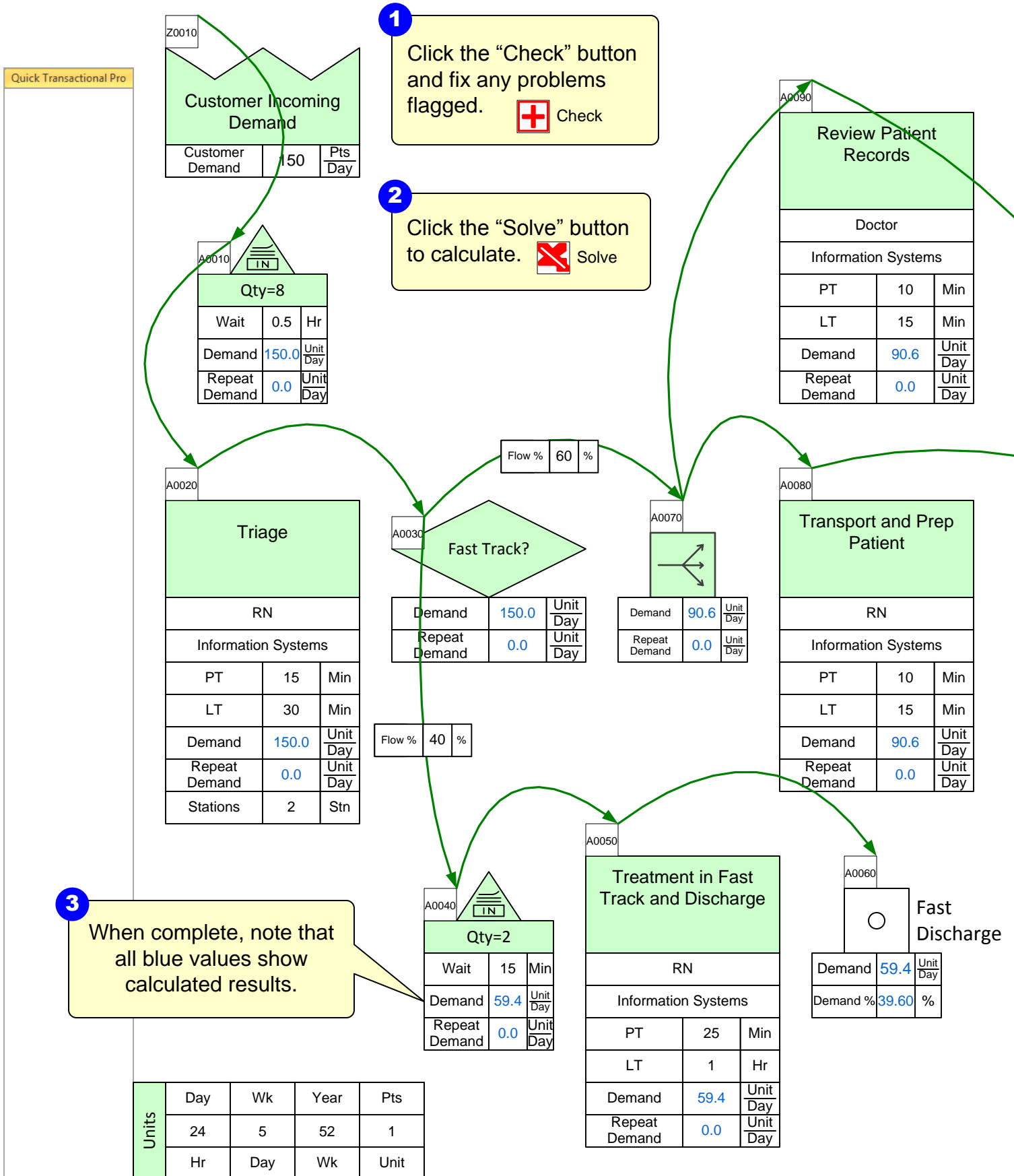


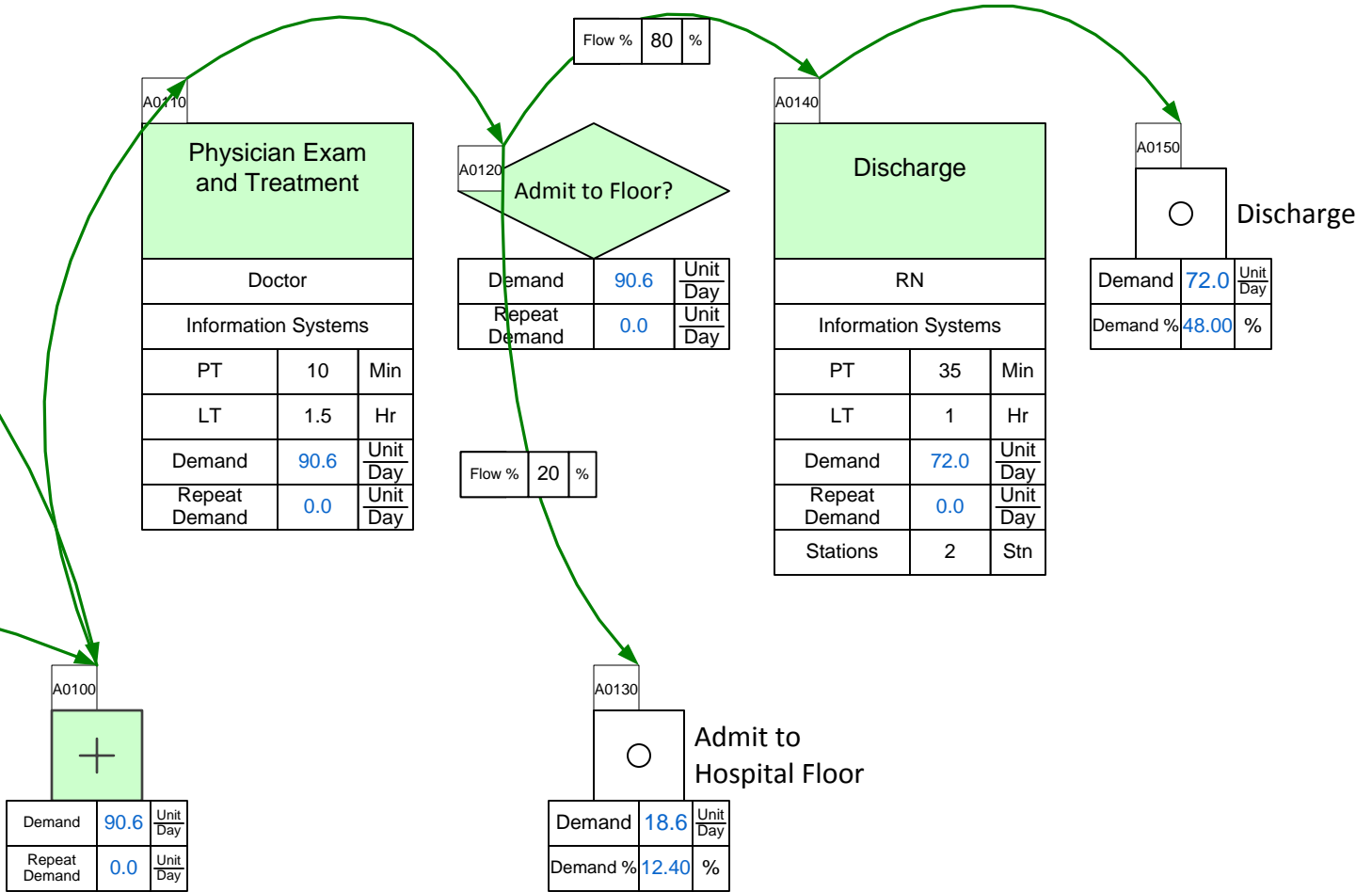
Step 12: Add-on variables



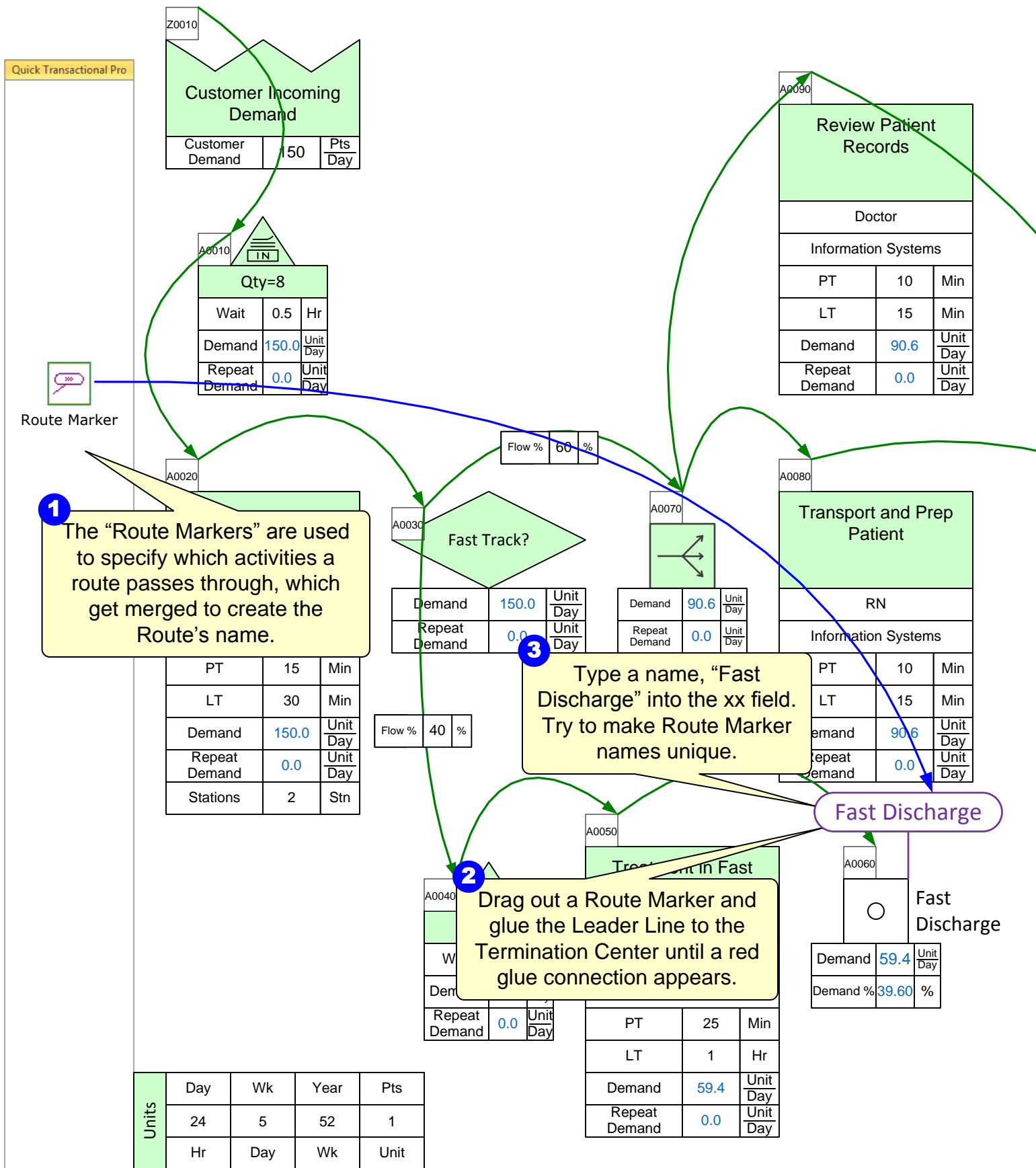


Step 13: Perform calculations





Step 14: Route Markers



Z0010

Customer Incoming Demand		
Customer Demand	150	Pts Day

A0010

Qty=8		
Wait	0.5	Hr
Demand	150.0	Unit Day
Repeat Demand	0.0	Unit Day

A0090

Review Patient Records		
Doctor		
Information Systems		
PT	10	Min
LT	15	Min
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

Route Marker

Flow % 60 %

A0020

A0030

Fast Track?		
Demand	150.0	Unit Day
Repeat Demand	0.0	Unit Day

A0070

Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

A0080

Transport and Prep Patient		
RN		
Information Systems		
PT	10	Min
LT	15	Min
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

PT	15	Min
LT	30	Min
Demand	150.0	Unit Day
Repeat Demand	0.0	Unit Day
Stations	2	Stn

Flow % 40 %

Type a name, "Fast Discharge" into the xx field. Try to make Route Marker names unique.

A0050

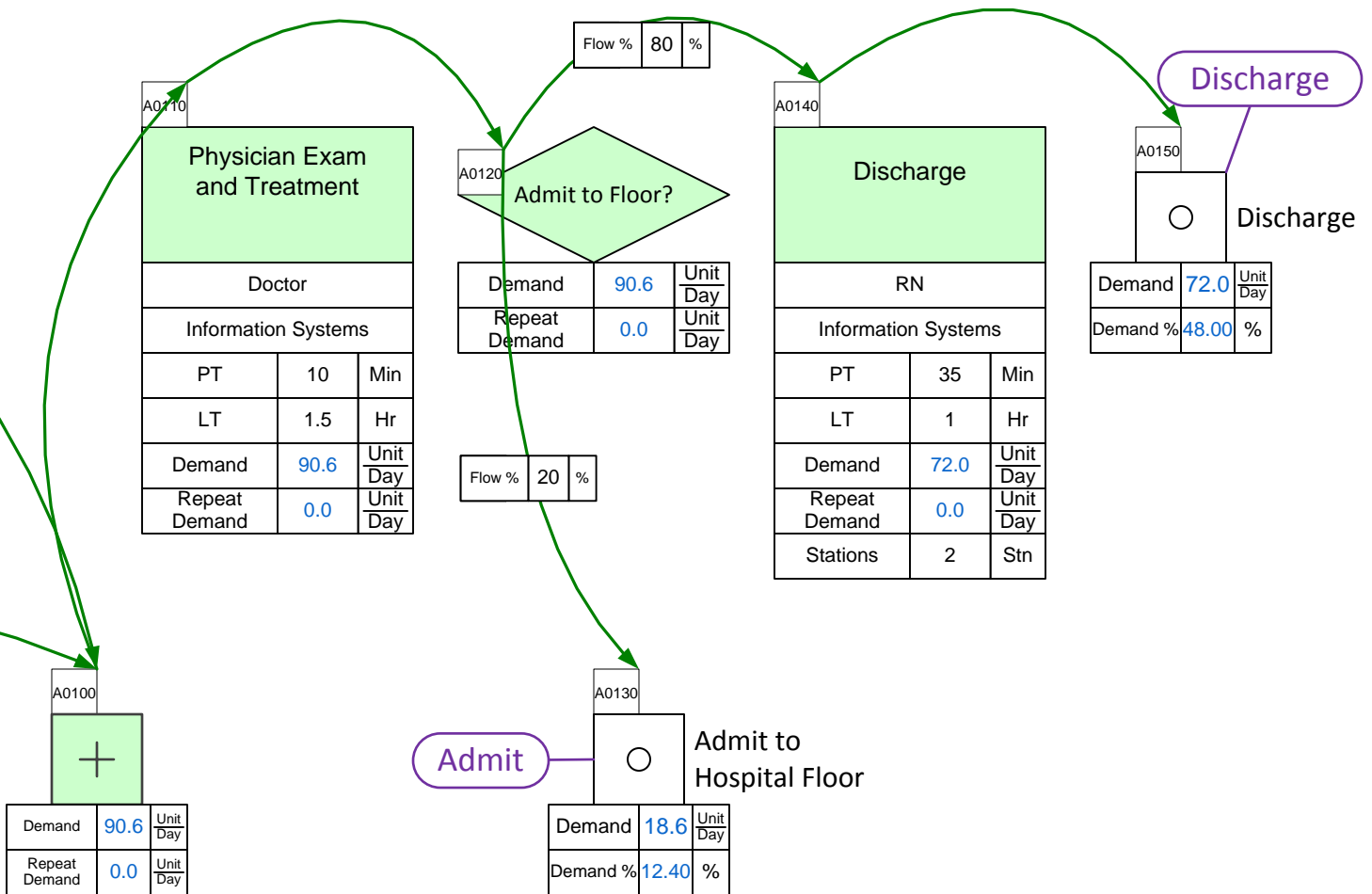
A0040

Treatment in Fast		
W		
Demand		
Repeat Demand	0.0	Unit Day
PT	25	Min
LT	1	Hr
Demand	59.4	Unit Day
Repeat Demand	0.0	Unit Day


A0060

Fast Discharge		
Demand	59.4	Unit Day
Demand %	39.60	%

Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit

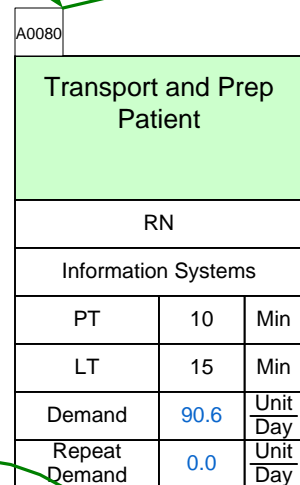
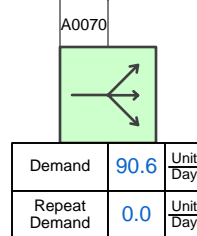
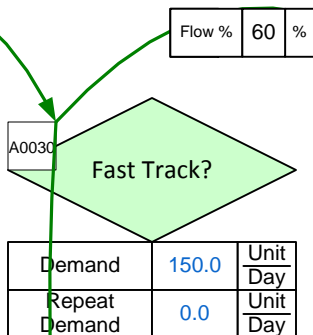
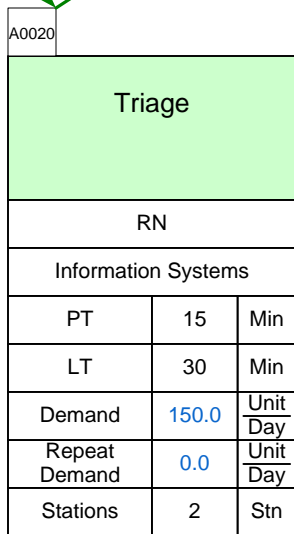
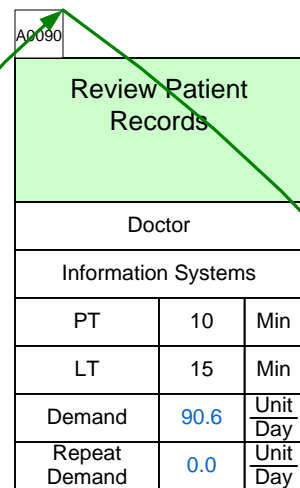
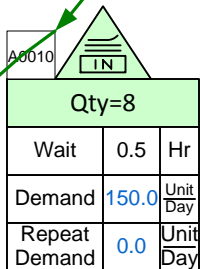
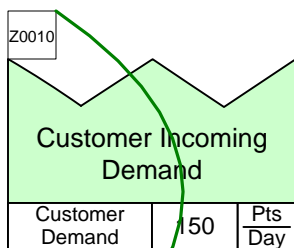


4 Add the other two Route Markers with the labels shown, and glued to the appropriate center.

5 Make sure to "Solve" again after adding any Route Markers.  Solve

Step 15: Route Table

Quick Transactional Pro

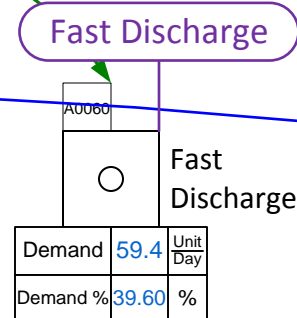
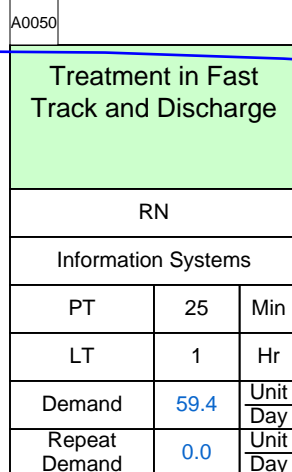
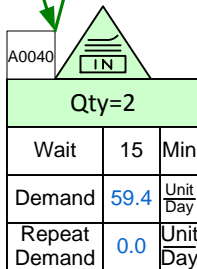


Flow % 40 %

Flow % 60 %

Route Table

1 Drag out the Route Table shape.



Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit

Route	Route Name	Route Traversals	Route %	Cumulative Route %	Lead Time (longest)	Total Wait	Total PT	PT Percent	Termination Name
	Txt	Unit/Day	%	%	Day	Hr	Hr	%	Txt
1	Discharge	72.00	48.00	48.00	0.16	4.00	1.33	33.33	Discharge
2	Fast Discharge	59.40	39.60	87.60	0.09	2.25	0.67	29.63	Fast Discharge
3	Admit	18.60	12.40	100.00	0.11	3.00	0.75	25.00	Admit
Summary		150.00	100.00	100.00	0.13	3.18	1.00	30.83	

7 The Route Markers now show the sequence of the marked activities that each Route that passes through.

PT	10	Min
LT	1.5	Hr
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

Flow %	20	%
--------	----	---

A0100

Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

Admit

A0130 Admit to Hospital Floor

Demand	18.6	Unit Day
Demand %	12.40	%

A0140

Discharge		
RN		
Information Systems		
PT	35	Min
LT	1	Hr
Demand	72.0	Unit Day
Repeat Demand	0.0	Unit Day
Stations	2	Stn

A0150 Discharge

Demand	72.0	Unit Day
Demand %	48.00	%

6 Use the "Sort Table" right-mouse option to sort the table by the various columns.

Edit Route Table

- Route %
- Lead Time (longest)
- Period Cost
- Termination Name

Cancel OK

2 Right-click and select "Edit Table" to configure the Route Table columns.

Edit Route Table - Variables

Visibility	Variable	Units
<input checked="" type="checkbox"/>	Route Name	Txt
<input checked="" type="checkbox"/>	Route Traversals	Unit/Day
<input checked="" type="checkbox"/>	Route %	%
<input checked="" type="checkbox"/>	Cumulative Route %	%
<input checked="" type="checkbox"/>	Lead Time (longest)	Day
<input checked="" type="checkbox"/>	Route Lead Times Total	Hr
<input checked="" type="checkbox"/>	Route Process Times Total	Hr
<input checked="" type="checkbox"/>	Route Activity Ratio	%
<input type="checkbox"/>	Period Cost	\$/Day
<input type="checkbox"/>	Cumulative Cost %	%
<input checked="" type="checkbox"/>	Termination Name	Txt

Only show summary data

Cancel OK

3 Uncheck "Period Cost, and "Cumulative Cost %" and click OK.

5 Use the "Filter Table" right-mouse option to filter rows in the table.

Edit Route Table - Filter

Route % > 0 %

Period Cost > 0 \$/Day

Include Markers

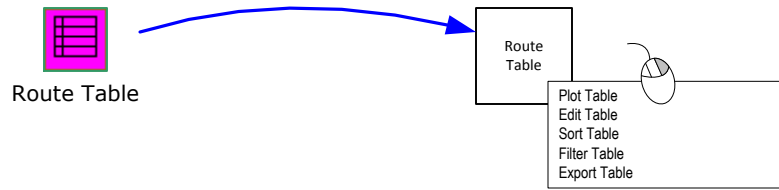
App Check Deny Prep

All None

Cancel OK

4 Right-click and select "Plot Table".

Transactional Pro Route Table



Route	Route Name	Route Traversals	Route %	Cumulative Route %	Lead Time (longest)	Total Wait	Total PT	PT Percent	Period Cost	Cumulative Cost %	Termination Name
	Txt	Unit/Day	%	%	Day	Hr	Hr	%	\$/Day	%	Txt
1	Prep Check Approve	500.00	100.00	100.00	1.88	15.00	0.25	1.67	0.00	0.00	Approve
Summary		500.00	100.00	100.00	1.88	15.00	0.25	1.67	0.00	0.00	

Transactional Pro has a customizable Route Table. Right-click the Route Table shape and select “Edit Table” for visibility settings of variables in the table.

Use the “Only show summary data” for quickly plotting summary data only.

Once you have clicked OK, you can right-click the Route Table shape and click “Plot Table” to plot.

Edit Route Table - Variables

Visibility	Variable	Units
<input checked="" type="checkbox"/>	Route Name	Txt
<input checked="" type="checkbox"/>	Route Traversals	Unit/Day
<input checked="" type="checkbox"/>	Route %	%
<input checked="" type="checkbox"/>	Cumulative Route %	%
<input checked="" type="checkbox"/>	Lead Time (longest)	Day
<input checked="" type="checkbox"/>	Route Lead Times Total	Hr
<input checked="" type="checkbox"/>	Route Process Times Total	Hr
<input checked="" type="checkbox"/>	Route Activity Ratio	%
<input checked="" type="checkbox"/>	Period Cost	\$/Day
<input checked="" type="checkbox"/>	Cumulative Cost %	%
<input checked="" type="checkbox"/>	Termination Name	Txt
<input type="checkbox"/>	Only show summary data	

Once you have seen the values, and would like to sort the values based on the following variables, right-click the Route Table and select “Sort Table”.

Edit Route Table - Sort

Route %

 Lead Time (longest)

 Period Cost

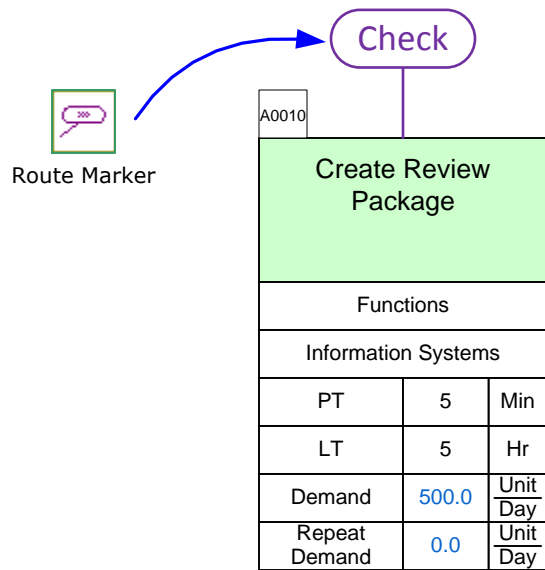
 Termination Name

Route Marker

“Route Markers” are used to specify which center a route passes through, which get merged to create the Route’s name. Drag out a Route Marker and glue the Leader Line to a center. Type a unique name to avoid confusion. After adding all markers to the map, you must click the Solve button.



Solve

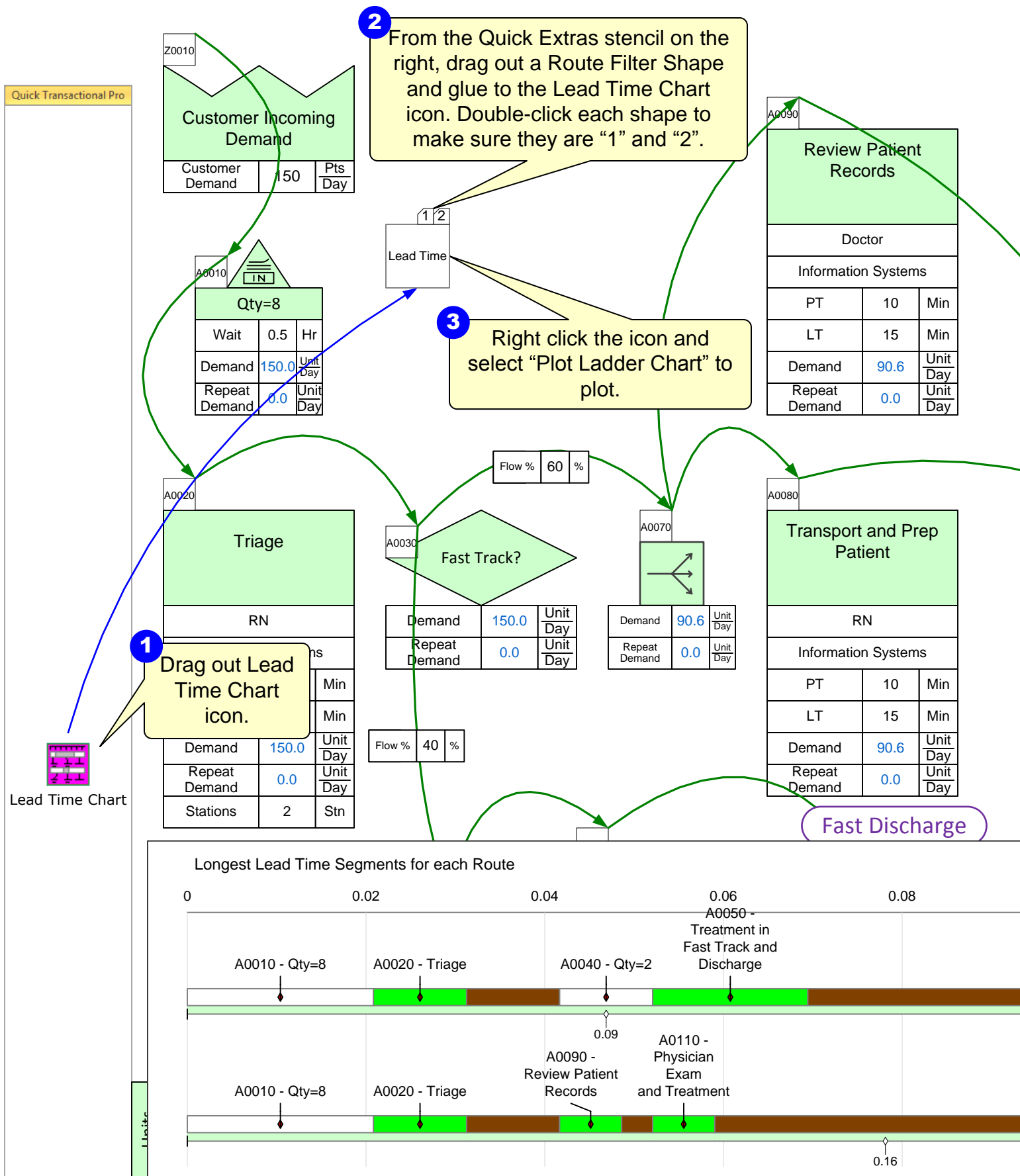


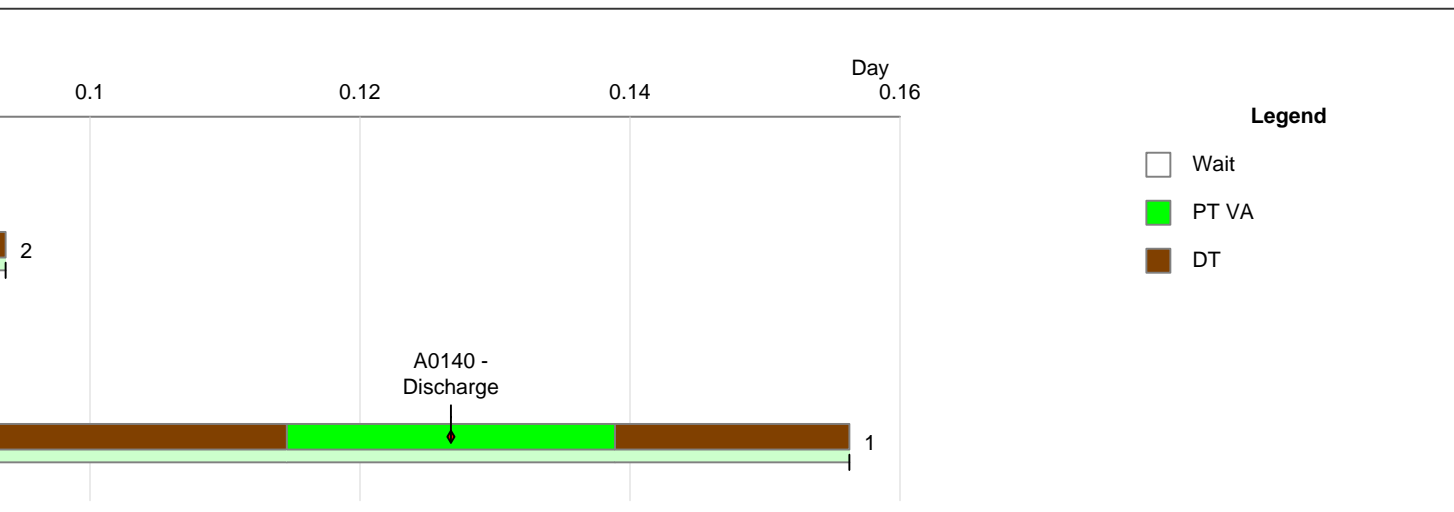
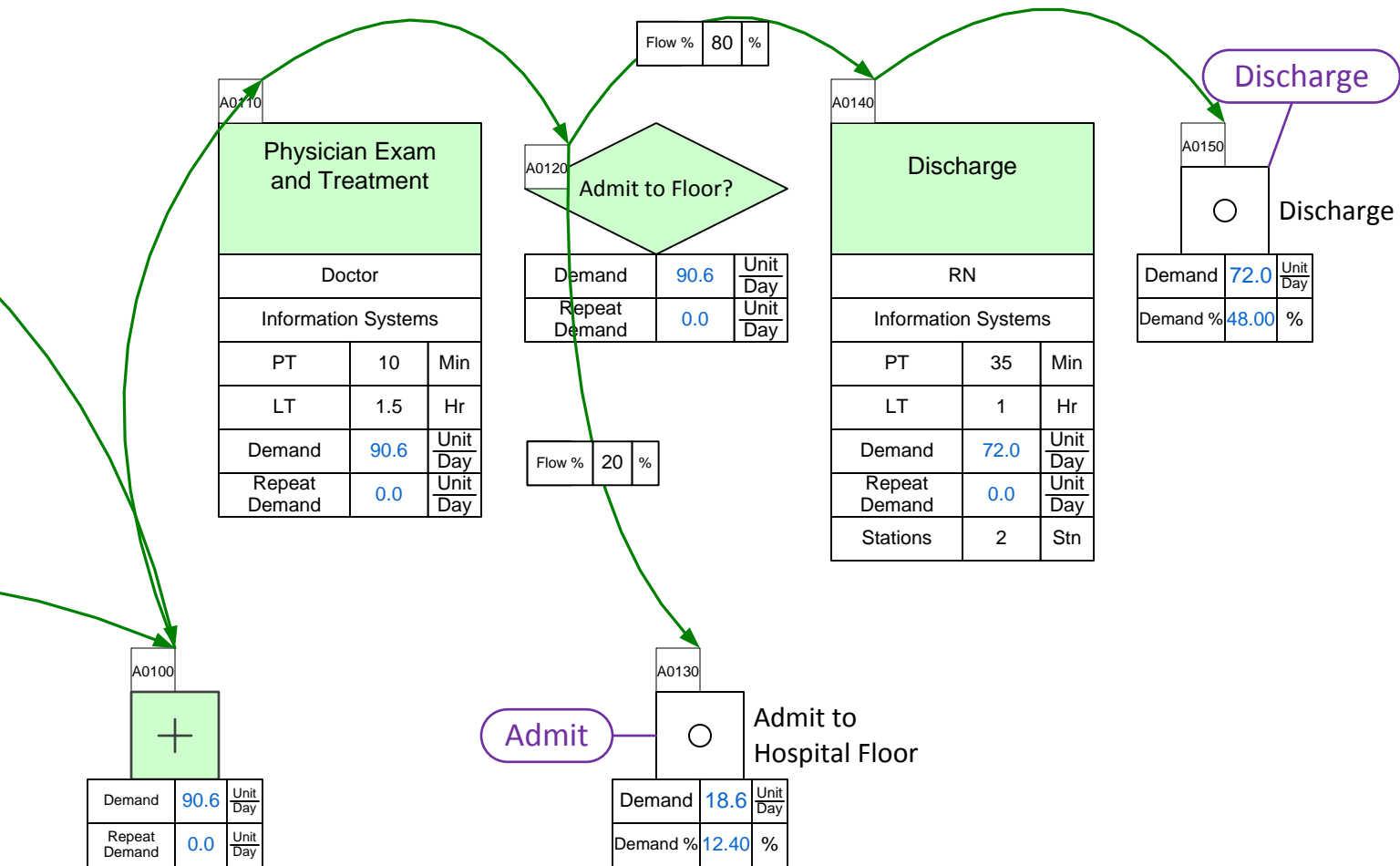
You can filter the Route Table by showing routes that have a certain Route Percentage, Period Cost, or by specific Route Markers. If you connect Route Markers to Termination Centers, you can filter table summaries for each termination point by selecting the appropriate marker in the form. Use the right-mouse menu option of “Filter Table” for the Route Table.

Lastly, you can export the entire table to Excel by right-clicking the Route Table and selecting “Export Table”.

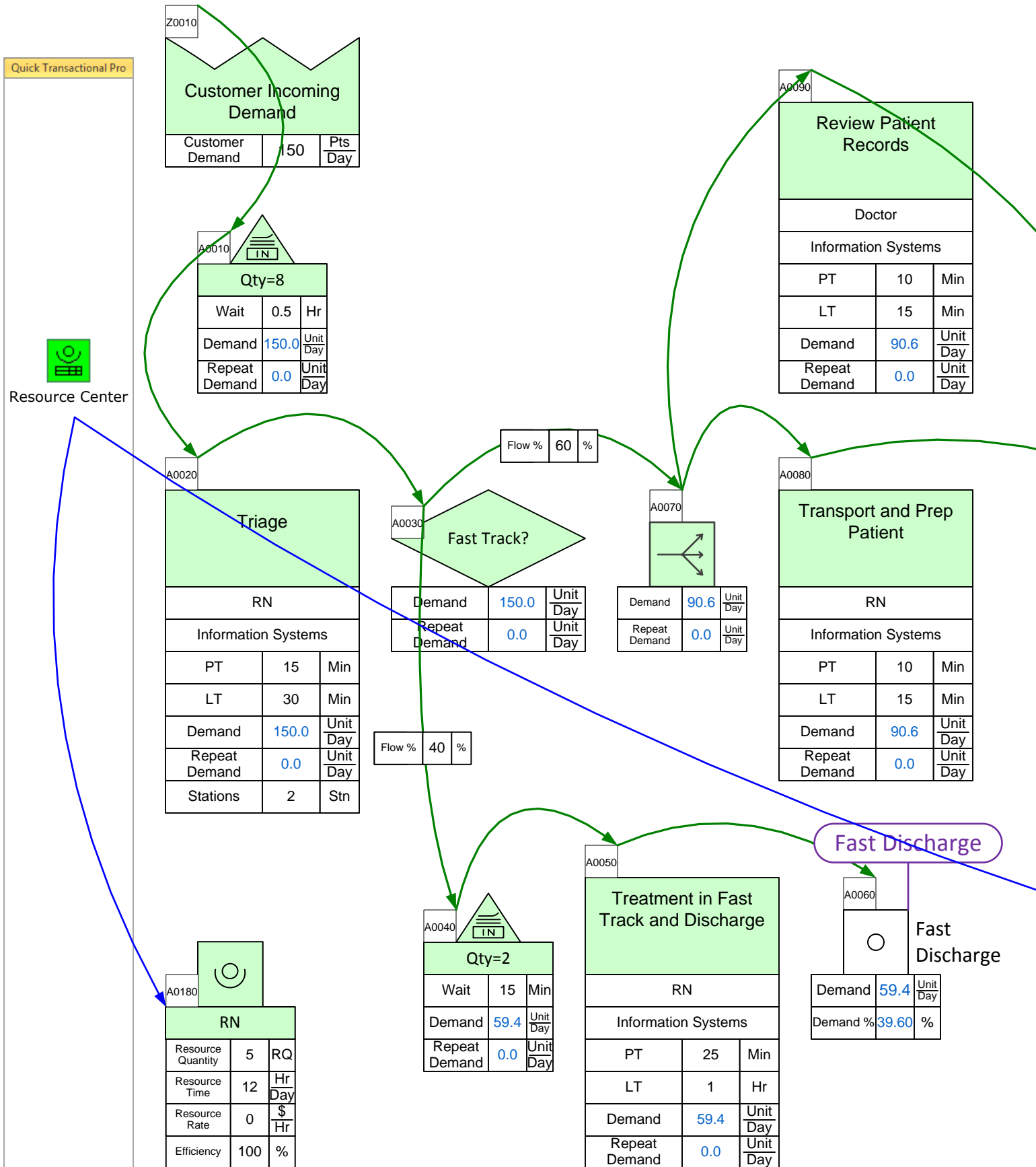
		Cumulative Cost %	Cumulative Route %	Lead Time (longest)	Period Cost	Route %	Route Activity Ratio	Route Lead Times Total	Route Name	Route Process Times Total	Route Traversals	Termination Name
		%	%	Day	\$/Day	%	%	Hr	Txt	Hr	Unit/Day	Txt
RT0020	Prep Check Approve	0.0%	10000.0%	1.88	0.00	10000.0%	167.0%	15.00	Prep Check Approve	0.25	500	Approve

Step 16: Plot Lead Time Chart

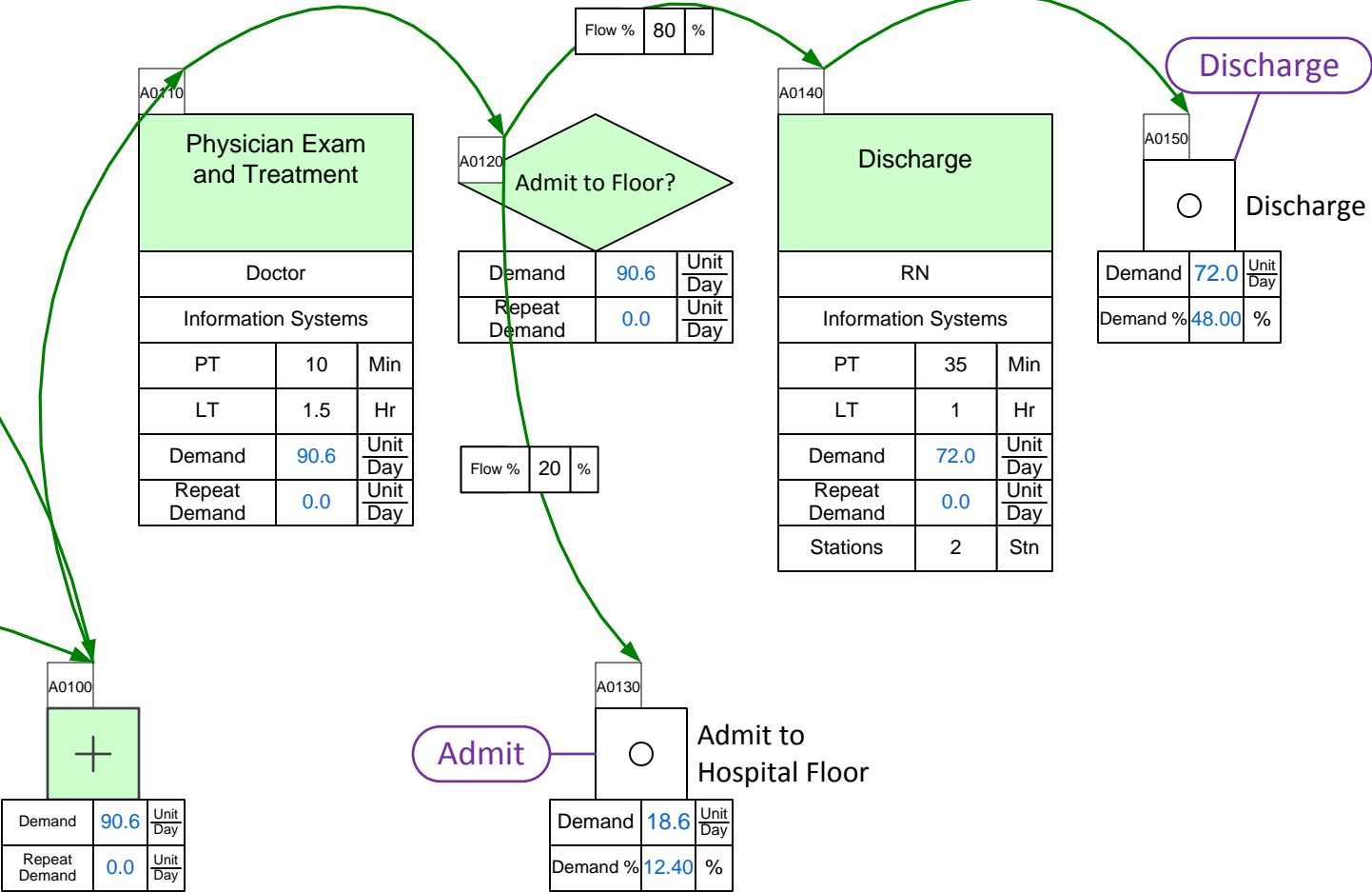




Step 17: Adding Resources



Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit

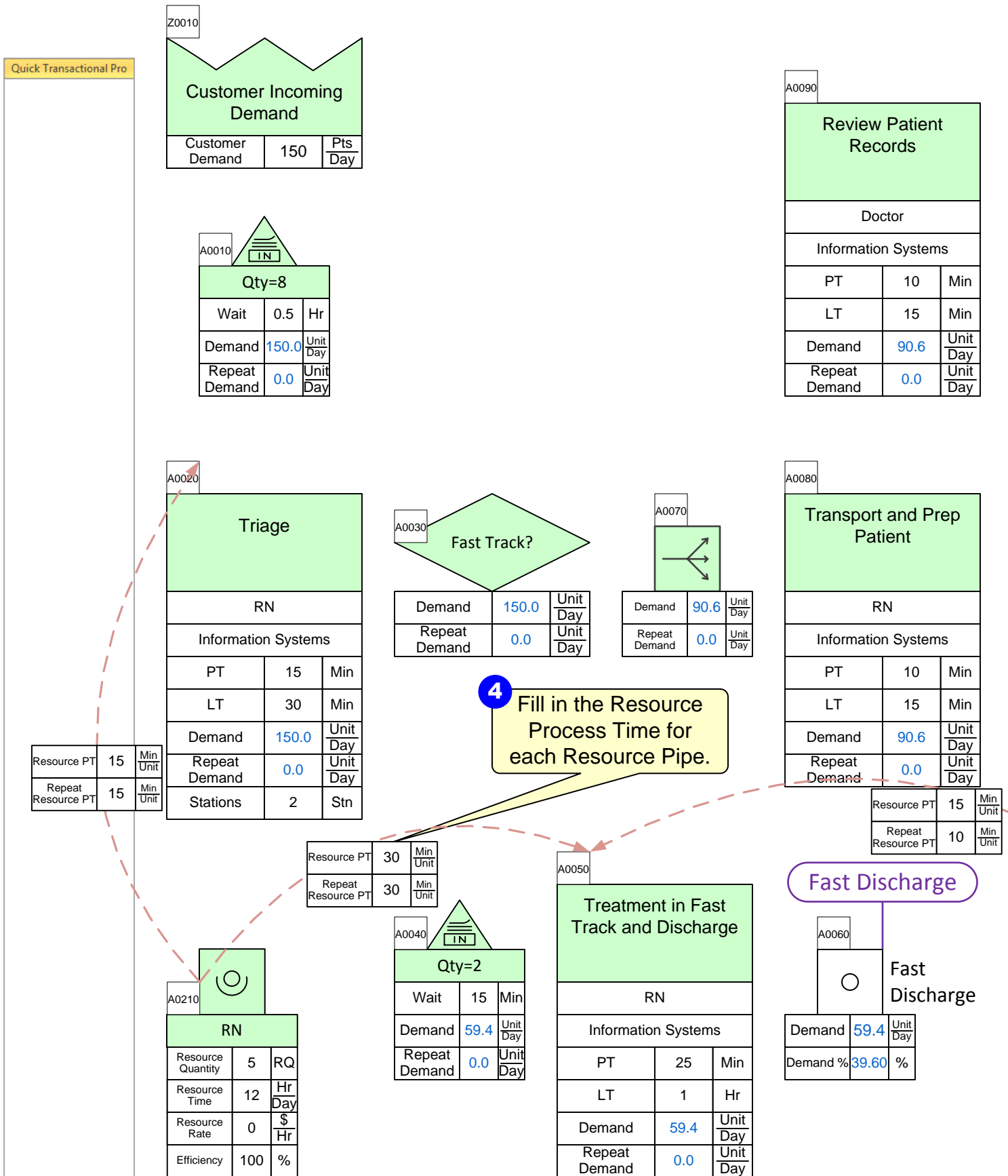


1 Drag out the Resource Centers and fill in the data.

A0200

Admin		
Resource Quantity	2	RQ
Resource Time	8	Hr Day
Resource Rate	0	\$ Hr
Efficiency	100	%

Step 18: Creating Pipe Arrows



Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit

A0110

Physician Exam and Treatment		
Doctor		
Information Systems		
PT	10	Min
LT	1.5	Hr
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

A0120

Admit to Floor?		
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

A0140

Discharge		
RN		
Information Systems		
PT	35	Min
LT	1	Hr
Demand	72.0	Unit Day
Repeat Demand	0.0	Unit Day
Stations	2	Stn

A0150


Discharge		
Demand	72.0	Unit Day
Demand %	48.00	%

A0100

+		
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

A0130


Admit to Hospital Floor		
Demand	18.6	Unit Day
Demand %	12.40	%

1 Click the Show Seq. button to hide the sequence arrows.
 Show Seq.

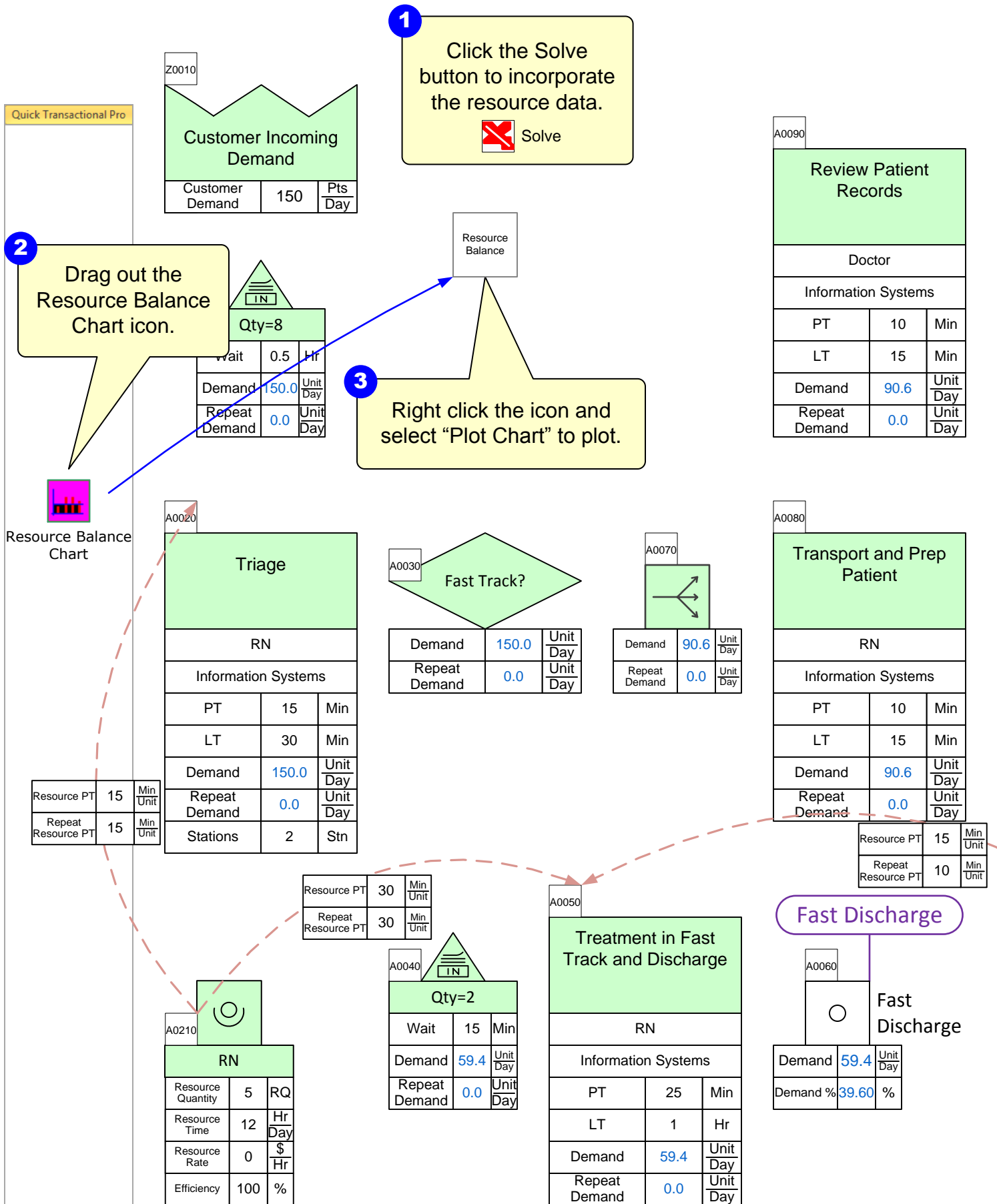
2 To pipe the data from the resources to the activities, hold down the SHIFT key and select the Resource Center first, and then the Activity Center it serves.

A0220

Admin		
Resource Quantity	2	RQ
Resource Time	8	Hr Day
Resource Rate	0	\$ Hr
Efficiency	100	%

3 Click the Auto Pipe button in the toolbar. Repeat for the rest of the Resource Centers.
 Auto Pipe

Step 19: Resource Balance Chart



Units	Day	Wk	Year	Pts
	24	5	52	1
	Hr	Day	Wk	Unit

A0110

Physician Exam and Treatment			
Doctor			
Information Systems			
PT	10	Min	
LT	1.5	Hr	
Demand	90.6	Unit	Day
Repeat Demand	0.0	Unit	Day

A0120

Admit to Floor?		
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

A0140

Discharge		
RN		
Information Systems		
PT	35	Min
LT	1	Hr
Demand	72.0	Unit Day
Repeat Demand	0.0	Unit Day
Stations	2	Stn

A0150

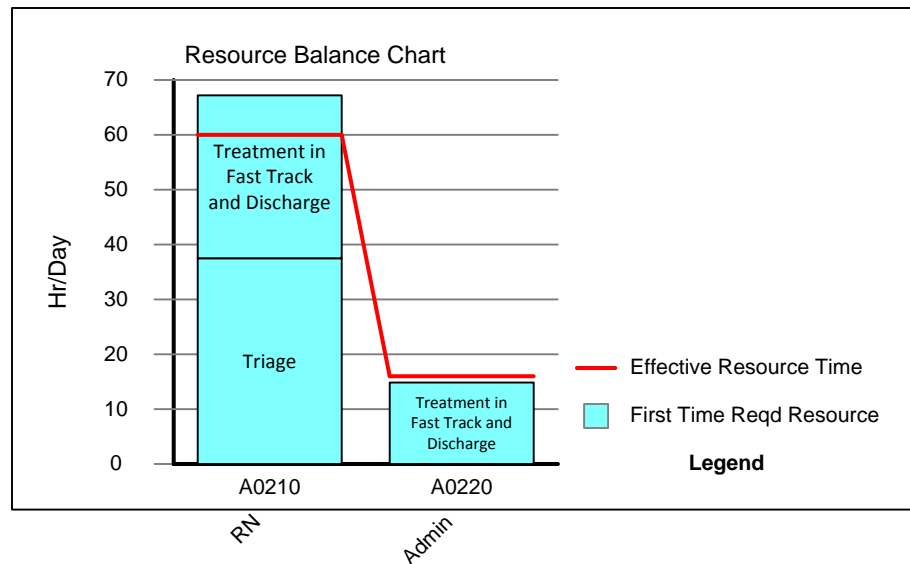
Discharge		
Demand	72.0	Unit Day
Demand %	48.00	%

A0100

+		
Demand	90.6	Unit Day
Repeat Demand	0.0	Unit Day

A0130

Admit to Hospital Floor		
Demand	18.6	Unit Day
Demand %	12.40	%



A0220

Admin		
Resource Quantity	2	RQ
Resource Time	8	Hr Day
Resource Rate	0	\$ Hr
Efficiency	100	%