DS Analytics: StrataJazz® Certification Course

Kelsey Mueller Priya Madan Stephen Hansen



STRATA DECISION SUMMIT CHICAGO | OCTOBER 21-23





Course Objectives

By the End of Class, You Will Be Able To:

- Create rules to use in DS Analytics
- Create and maintain service lines
- Create and maintain patient populations
- Create and maintain Calculated System Fields



Course Objectives

How Does This Help You?

- Increased independence
- More accurate reporting
- Save you time building and modifying analytic data
- Minimize the amount of times you must reach out to Strata Decision team members to help with a system change or issue

Introductions

Trainers

Kelsey Mueller Priya Madan Stephen Hansen

Room Helpers

Kristy Charlene Nicole Dylan

Gurprit Amanda

Anthony



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Topic	Time
Introductions and Logistics	15 min
Analytics Tool Overview	15 min
Rule Builder	45 min
Service Lines	45 min
Patient Populations	45 min
Reports	15 min
Calculated System Fields	30 min
Class Review: Assessment	15 mins
Certification Overview & Survey	10 mins

Class Logistics





Class Materials

- Training Manual
- Database Log In



WIFI Password

- Name: Strata Decision
- Password: summit2019



Questions

- In-System Workflow
- Organization
 Specific



Lunch

- 12:30 pm 1:30 pm
- Zurich level



Restrooms

 This floor near the stairs

Types of In-Class Activities





Trainer Demo:

• These are activities your trainer will demonstrate



In-Class Scenario:

These are activities that you do alongside the trainer



In-Class Scenario: On Your Own

These are activities that you will complete independently



Write It Down:

 These are activities that include tables or boxes to record definitions and examples for key terms or concepts



Partner Discussion:

 These are activities that include opportunities to discuss and troubleshoot with your partner. At this time, you can share ideas, prior knowledge, and expertise

Logging In



- 1. Open Internet Explorer.
- Type
 training.stratanetwork.com
 into the address bar.
- 3. Log in with the information on your database handout.

Only for accessing training databases (Your organization's database is accessed from a different URL)



Why Does Decision Support Analytics Matter?

Evolving from Data to Action







The Challenge

Even with accurate cost data, many healthcare organizations are **challenged with leveraging the data** to drive the right action to improve financial performance

Lack of access to meaningful data among leaders and limited accountability reduces ability to deliver measurable improvements to KPIs and the bottom line

Strata Decision

Market Dynamics for Decision Support Analytics

Service Line profitability

Understand the total cost, volume, revenue and margin for distinct service lines

Service Line Strategy & Growth

Align service line definitions and growth initiatives with organizational structure and strategy

Upstream and downstream financial impact

Measure the effects of Service Line initiatives along the continuum of care

Standard and Trusted Costing

Comprehensive and validated data that provides encounter-level visibility on cost drivers and variation

Contextual Analytics

Readily available, useful, and timely analytics across the organization

Solving Key Problems Requires Understanding Financial Performance



Visibility

Accountability

DS Governance

Solving Key Problems Requires Understanding Financial Performance



Visibility

Do your Operations & Service Line leaders know and understand their financial performance?

Accountability

How do your service line leaders manage performance?

DS Governance

Is your team equipped to support your organization's needs?

Email professionalservices@stratadecision.com

Rule Builder







Rule Building

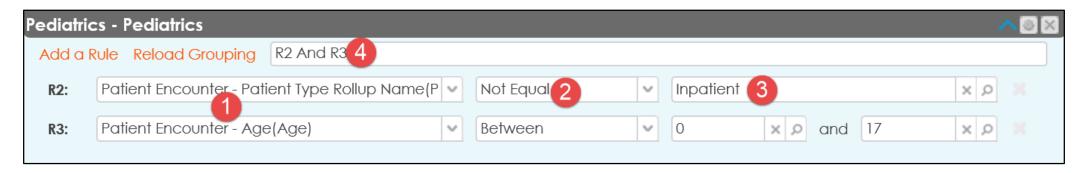
By the end of this section, you will be able to:

- Review the components of a rule set
- Review the types of rules
- Build a rule on your own



Overview of Rule Sets:

	Component	Description
1	Data Element	Identify the dimension or measure for the rule. You can use a drop-down list within the rule builder to select the data element.
2	Operator	Define the relationship between the data element and the value.
3	Value	This is the criteria that the rule has to meet in order to qualify. Enter a value in this field. To enter multiple values, separate each value with a comma.
4	Boolean Logic	(Evaluation Logic) Defines the relationship between multiple rules within a rule set.





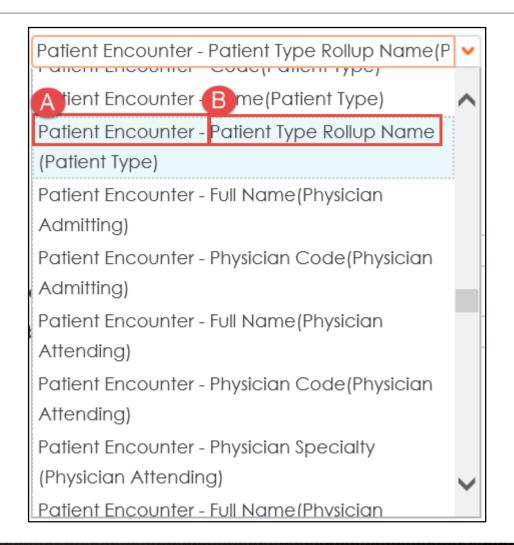
Rule Building: Data Element

Data is stored at different levels

- A. Indicates the level data is stored at
- B. Indicates the narrowed piece of data the system will test an encounter against

It is important to ask yourself first, "At what level is the data that I am looking for?"

 Is my data stored at the encounter level or billing line level?





Rule Building: Data Element

What Qualifier are you looking for when selecting a data element?

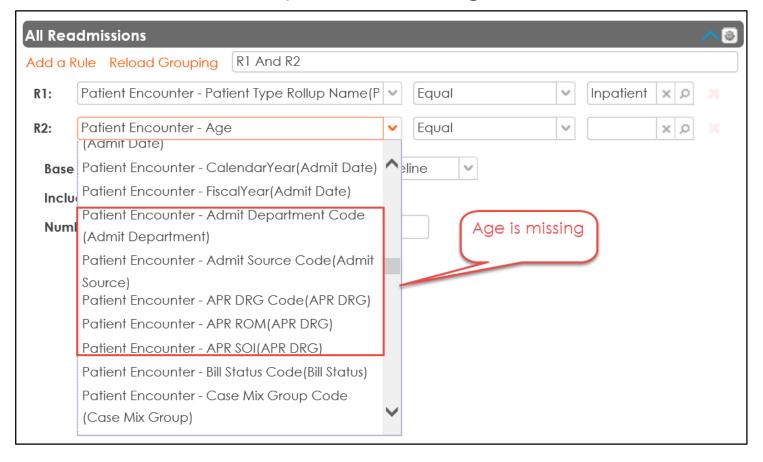
- A. In rule A, you are looking for a single charge to be greater than or equal to \$1,000
- B. In rule B, you are looking for the total charges for the entire encounter to be greater than or equal to \$1000

A	DSS Patient Billing Line Item Detail - Charge	~	Greater Than or Equa	1000	×
B	DSS Patient Encounter - TotalCharges	~	Greater Than or Equa	1000	



Troubleshooting: Adding Attributes and Measures for Rule Building

Can't Find the Attribute or Dimension you are looking for?





Trainer Demo: Add an Attribute

- Navigate to **Configure Attributes**
 - Path: Wrench > System Center > Decision Support > General > Rule Building > Drop Down Configuration
- Check the box for the missing attribute
- Click Save.

The Attribute will now show up for select

Numl

R2:

Patient Encounter - Age(Age)

Patient Encounter - Age(Age)

Patient Encounter - APR DRG Code(APR DRG)

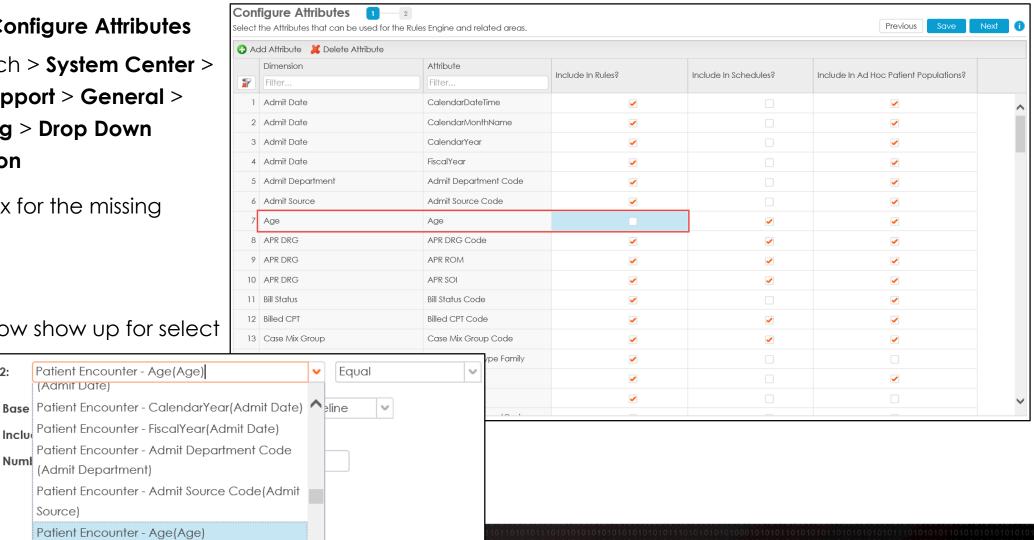
Patient Encounter - APR ROM(APR DRG)

(Admit Date)

Source)

(Admit Department)

in rule building





Troubleshooting: Adding Attributes and Measures for Rule Building

Can't Find the Attribute or Dimension you are looking for?

- Navigate to Configure
 Attributes
- Click Next to update to update a Dimension

Path: Wrench > System Center >
Decision Support > General > Rule
Building > Drop Down Configuration

) Ac	dd Attribute 💢 Delete Attribute					
	Dimension Attribute		Include In Rules?	Include In Schedules?	Include In Ad Hoc Patient Populations?	
F	Filter	Filter	III Clode II TROICS:	Include In seriodoles:	indidae iii / a nee i diicii i opodiio is-	
1	Admit Date	CalendarDateTime	✓		✓	
2	Admit Date	CalendarMonthName	✓		✓	
3	Admit Date	CalendarYear	✓		✓	
4	Admit Date	FiscalYear	✓		✓	
5	Admit Department	Admit Department Code	✓		✓	
6	Admit Source	Admit Source Code	✓		✓	
7	Age	Age	✓	✓	✓	
8	APR DRG	APR DRG Code	✓	✓	✓	
9	APR DRG	APR ROM	✓	✓	✓	
10	APR DRG	APR SOI	✓	✓	✓	
11	Bill Status	Bill Status Code	✓		✓	
12	Billed CPT	Billed CPT Code	✓	✓	✓	
13	Case Mix Group	Case Mix Group Code	✓	✓	☑	
14	Case Type Family MSDRG	MSDRG Case Type Family	✓			
15	Charge Code	Charge Code	✓		✓	
16	Charge Code	Cost Driver	✓			
17	Charge Department	ChargeDepartmentCode	✓		✓	
18	Charge Modifier 1	Charge Modifier 1 Code	<u> </u>	▽	▽	



Rule Building: Operators

Description		Example	
Equal	Specify a single specific value to look for.	MS DRG Code EQUAL 470	
Not Equal	Specify one specific value not to look for.	MS DRG Code NOT EQUAL 000	
Contains Indicate a search for any portion of the specified value. Use Contains to retrieve a single value contained within the returned values.		Charge Code CONTAINS Surgery	
Not Contains Identify any value that is not contained within the specified value.		ICD10 DX NOT CONTAINS Diabetes	
Starts With	Specify the starting characters of the values to match on.	ICD10 PX Code STARTS WITH 8E0	
In Use In to retrieve a list of comma-separated codes or values.		ICD10 PX Code IN 8E090CZ, 8E093CZ, 8E094CZ	
Not In	Ignores any encounters that have a value that is contained within the comma-separated list. For a dimension or measure rule, this operator enables the export or import of a comma-separated value file.	Payor Group NOT IN Medicare, Medicaid	
Between	Include the sequence of numbers that falls between the upper and lower range, including the specified range values.	UB Revenue Code BETWEEN 0270 and 0278	
Exclude Ignores any line items that have a value that is contained within the comma-separated list.		CPT Code EXCLUDE 88305, 88306, 88307	





Rule Building: Operators

	Description	Example	
Equal	Specify a single specific value to look for.	MS DRG Code EQUAL 470	
Starts With	Specify the starting characters of the values to match on.	Charge Code STARTS WITH SUP	
In	Use In to retrieve a list of comma-separated codes or values.	ICD10 PX Code IN 8E090CZ, 8E093CZ, 8E094CZ	
Between	Include the sequence of numbers that falls between the upper and lower range, including the specified range values.	UB Revenue Code BETWEEN 0270 and 0278	





Rule Building: Selecting the Correct Boolean Logic

	With	And	OR
Description	Within the Same Line Item Specify a value for which both the first and second conditions are true for the same line item.	On the Encounter Specify a value for which both the first condition and the second condition are true.	Specify a value for which either the first condition or section condition are true.
Comparison	one-to-one comparison	one-to-many comparison	R1 OR R2
CPT EQUAL 67028 WITH modifier 50		CPT EQUAL 67028 AND modifier 50	CPT IN 99201, 99203, 99204 OR UB Rev Code 450
System Evaluation	The system finds only encounters with modifier 50 attached to the CPT 67028 charge line.	The system finds any account with CPT 67028 and modifier 50 present for any charge line on the encounter.	The system finds any account with the correct CPT code or UB Rev code present for any charge line on the encounter.

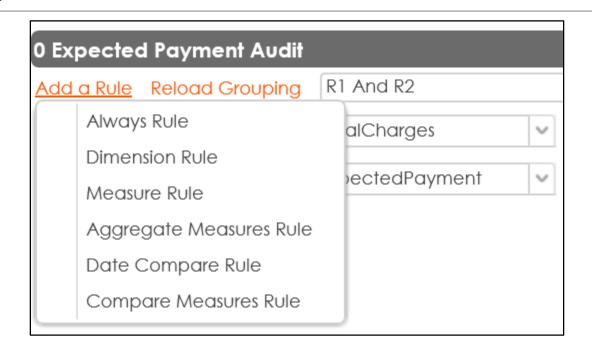


Rule Type: Overview of types of rules

Available Rule Types:

- Always Rule
- Dimension Rule
- Measure Rule
- Aggregate Measure Rule
- Date Compare Rule
- Compare Measure Rule

We will discuss each in more detail in the following slides





Rule Type: Always Rule

This rule is typically used as a catch-all. No additional criteria are required.

O	P Trigger		<u> </u>
	Add a Rule Add Reiml	bursement Method Reload Grouping R1	
	R1:	Always	×
	Case Rate:	0	⊕ () ×
	Expected Payment:	[Case Rate]	@



Rule Type: Dimension Rule

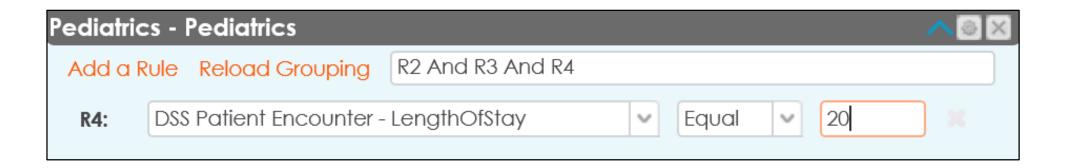
This rule specifies qualitative information such as patient type, charge code, or department. The list is filtered to include relevant dimensions.





Rule Type: Measure Rule

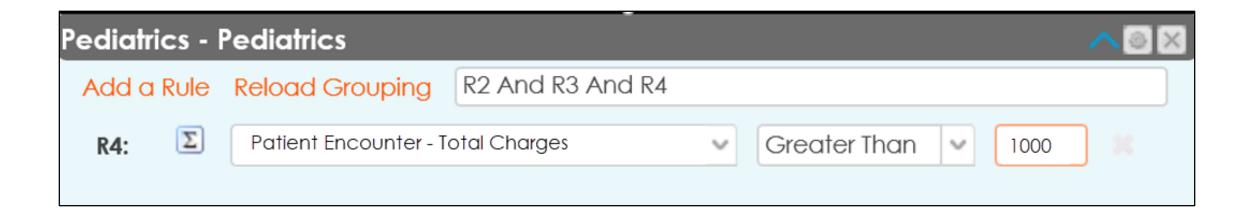
This rule specifies quantitative information such as total charges or length of stay. The list is filtered to include relevant measures.





Rule Type: Aggregate Measure Rule

This rule specifies quantitative information such as total charges or UB Rev Code. The list is filtered to include relevant measures.





Rule Type: Date Compare Rule

This rule allows you to enter two dates that you can compare for a given patient. For example, a Decision Support Administrator may want to report on a group of patients for whom surgery occurred within 24 hours of the admission date.





On Your Own: Rule Building

Part A: Answer the Questions

Part B: Build the Rule

Your organization wants to run a series of reports on pediatric patients admitted with a diagnosis of asthma. In this example, asthma is defined by ICD-10 DX Primary Codes J69.8, J82, J60, R06.2, J67.8, or J44.9. Both the age and the ICD-10 DX Primary Code data elements represent qualitative information; therefore, dimension rules are used to create the criteria.

- Both Patient Age and ICD 10 Primary DX can be found within the Patient Encounter Dimension.
- Pediatric patients are between the age of 0 and 18.









Write it Down: Answer the Questions

Based on the scenario information, answer the following questions on I. How many rule(s) do we need to build?	page 7:		
2. If we are looking for pediatric patients, which operator would we us	e to cap	ture aae?	
a) IN		3 3 3 3 3	
b) BETWEEN			
c) CONTAINS			
d) EQUAL			
3. If we are looking for one value in a list, which operator would we use	e to capt	ure one code in	a list of
IDC-10 DX?			
a)IN b) DETMEENT			
b) BETWEEN c) CONTAINS			
d) EQUAL			
4. TRUE FALSE In order for a patient population to qualify for the s	scenario,	the encounter r	needs to
contain both the correct ICD- 10 code and a pediatric patient.			
	0.0	A N I D	
I. What is the correct Boolean logic for the two rules (Circle One)?	OR	AND	





Write it Down: Answer the Questions

Based on the scenario information, answer the following questions on page #.

- 1. How many rule(s) do we need to build? 2
- 2. If we are looking for pediatric patients, which operator would we use to capture age?

b. BETWEEN

WHY? The BETWEEN operator is used to specify a range of values (in this case, ages 0 through 18).

3. If we are looking for one value in a list, which operator would we use to capture one code in a list of ICD-10 DX?

a. IN

WHY? The IN operator is used to specify a list of values (in this case, ICD-10 DX Primary Codes)

- 4. TRUE FALSE In order for a patient population to qualify for the scenario, the encounter needs to contain both the correct ICD- 10 code and a pediatric patient.
- 5. What is the correct Boolean logic for the two rules (Circle One)? OR AND

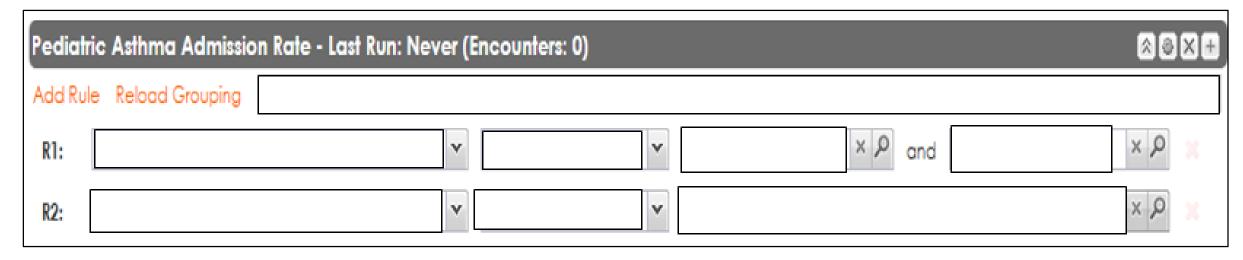






Based on the Scenario information and the questions, fill in the blanks to create your rule.

- Rule 1 is for the age; Pediatric patients are between the age of 0 and 18.
- Rule 2 is for ICD- 10 Primary DX codes.



Helpful Note: Both the Age and ICD – 10 DX attributes are on the Patient Encounter Dimension







Based on the Scenario information and the questions, fill in the blanks to create your rule.

- Rule 1 is for the age; Pediatric patients are between the age of 0 and 18.
- Rule 2 is for ICD- 10 DX codes.

Helpful Note: Both the Age and ICD – 10 DX attributes are on the Patient Encounter Dimension

Service Lines









Oncology Service Line Profitability

- Group Together all Oncology encounters
- Evaluate Profitability of Oncology Service Lines

All Encounters containing a DRG Code related to Oncology

Encounter A, B and C

D	epai	rtme	nt P	rofi	tabi	lity

- Group Together encounters per department
- Evaluate Profitability per department making it difficult to compare like encounters

5021	200	211
Encounter A	Encounter B	Encounter C

	Encounter A	Encounter B	Encounter C
Department:	5021	200	211
DRG Code:	146	597	840



Service Lines: Ortho Department

Service Line

- Group Together all Ortho encounters
- Evaluate Profitability of Oncology Service Lines

All Knee Replacement Encounters	All Hip Replacement Encounters	All Back Pain Encounters
Encounter A – Knee Replacement	Encounter B – Hip Replacement	Encounter C – Back Pain
Encounter D – Rehab on Knee	Encounter E – Post surgery rehab on hip	Encounter F – Pre Op for surgery

Department

- Group Together encounters per department
- Evaluate Profitability per department making it difficult to compare like encounters

5021 - Surgery

Encounter A – Knee	Encounter B – Hip	Encounter C – Pre-Op
Replacement	Replacement	Back Pain Appt

Strata Decision

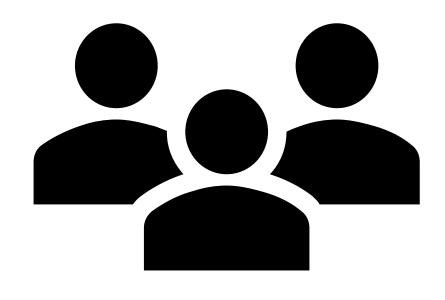
Service Lines

Scenario Overview:

You are the Analytics Administrator. After running the Service Line Validation Report, you notice some issues that cause you to add new service lines and update current service lines.

- In this section, we are going to:
 - Define Key Terms
 - Access Service Lines
 - Add a Service Line
 - Modify Service Lines





In Class Scenario:

Log In and Navigate to Service Lines

- 1. Log In
 - URL: Training.Stratanetwork.com
 - User Name: Financeadmin
 - Password: Password1
 - **Org Pin**: 9900
 - Database: Use the Database Information Sheet to find your Assigned Database
- 2. Navigate to Service Lines
 - Decision Support > Service Line Definitions



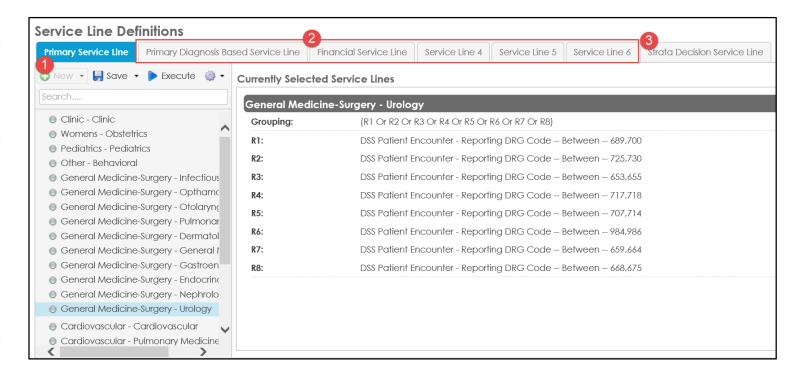






Complete the Table using the Help Center at the Service Line Definition activity

	StrataJazz® Description
Service Line	
(1) Primary Service Line	
(2) Service Lines 2-6	
(3) Strata Decision Service Line	







Defining Key Terms: Service Lines Review

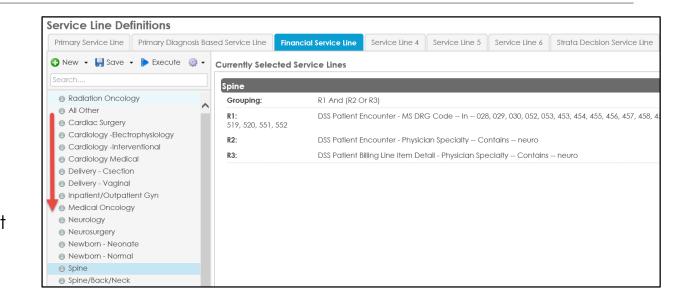
	StrataJazz® Description
Service Line	A service line represents a group of related services in a healthcare system (Example: Cardiac Surgery)
Primary Service Line	The financial service line shared by all solutions within the StrataJazz® platform. This service line is used during budget and forecast creation so service line creation and deletion is reserved for those modules. On this page, you can add rules and sort service lines members for the Primary Service Line. You can not add new detailed service lines.
Service Lines 2-	Custom service lines for decision support. You can rename these definitions and add new detailed service lines.
Strata Decision Service Line	Read-only. You cannot add detail service lines nor alter the rules for this service line. This service line is the same across all clients.



Overview of Service Lines



- An encounter can qualify for multiple service line definition tabs
- Within one service line tab, an encounter can only qualify for one service line.
 - Order of Operations on one tab: Top to Bottom
 - Best Practice: More detailed service lines should be first
- You can only edit the rules for the Primary Service Line (tab 1)
- You can add detail service lines to any of the custom service lines (2 -6)
- Strata Decision Service line tab is read only. You can not edit or add service line definitions or rules

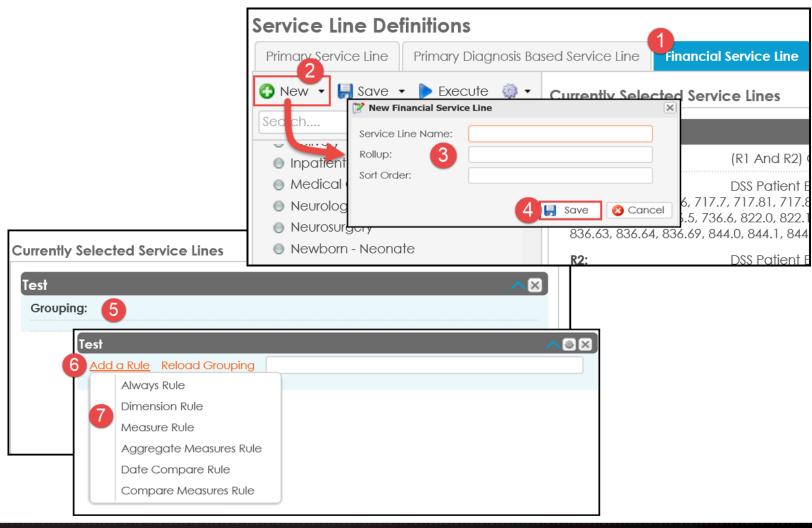




Add a Service Line



- Click Financial Service Line
- Click **New**
- Enter the **Service Line Name**. Rollup, and Sort Order
 - Service Line Rollup: Free Text field that helps you categorize
- Click Save
- Single-click in the grouping section to add a rule
- Click Add a Rule
- Select the appropriate rule type
- Enter the rule





Service Line Validation - Execute: DEMO ONLY

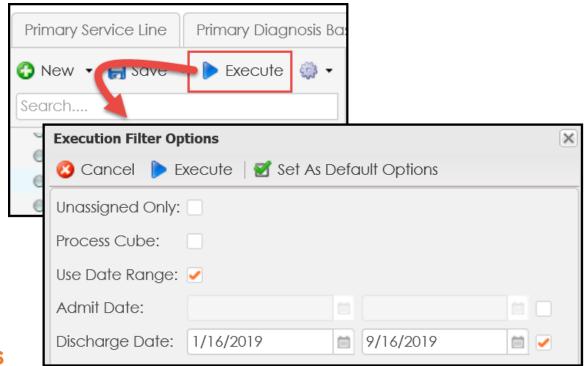


- Detail Service lines on each tab are executed independently
- The system continues processing until all the detail service lines have processed.

Executing service lines runs the selected service lines based on the specified filters.

In order to Execute a service line:

- Click Execute
- 2. Select the check boxes, as applicable
 - Description of each is on the following slide
- Click Execute



In training, you will not execute your service lines



Service Line Validation



Unassigned Only:

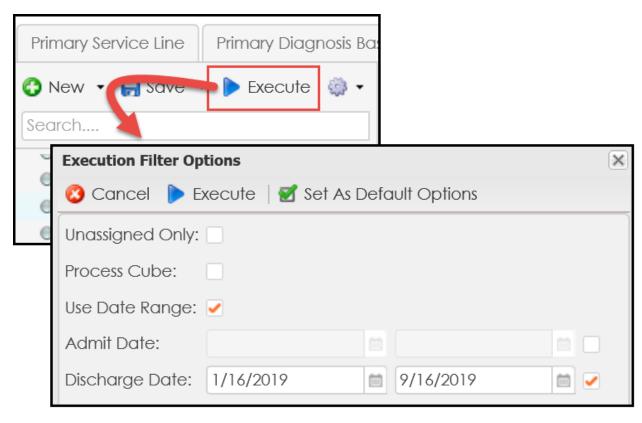
- Evaluates ONLY encounters that have not been assigned to a service line.
- Rare Use Case

Process Cube:

- Push results to reporting for immediate viewing
- If left unchecked will not be updated in reports until the next full cube processing

Use date range:

- Limit the encounters evaluated by date range
- Useful during build and validation phase as a smaller amount of data is processed faster.

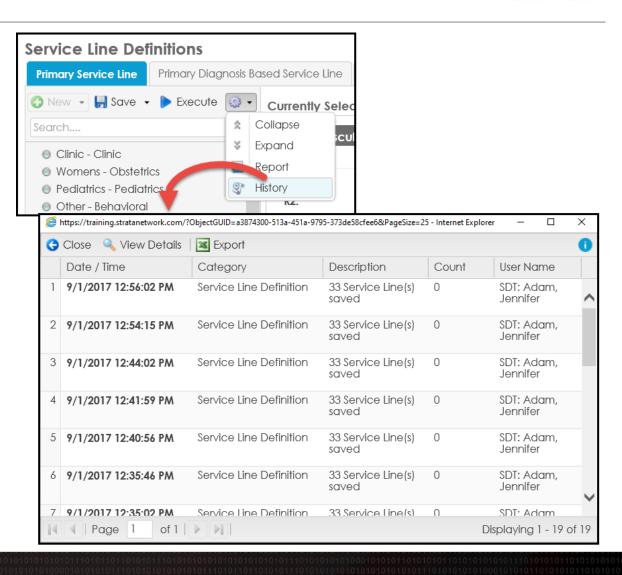




View History of a Service Line

You can view the history for all Service Lines. Once you are on the Service Line Definitions activity, follow the steps below.

- Click > History. The service line history window opens.
- 2. Review the following columns:
 - Date/Time
 - Category
 - Description
 - User Name
- 3. Click Close.







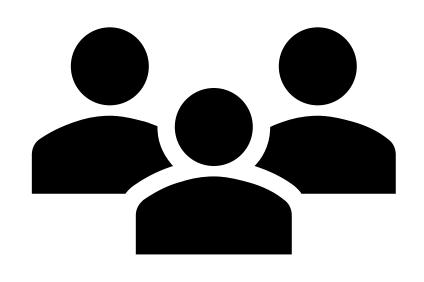
Trainer Demo:

Service Line Module Overview

- Navigate to Service Lines
 - Path: Decision Support > Reporting > Service Line Definition
- Orientation of Service Line Module
 - Reordering Service Lines within one Service Line Definition tab
 - Screen layout and key buttons
- Add and Edit a Service Line







In Class Scenario:

Modify a Service Line

Part A: Answer the Questions

Part B: Build the Rule

Scenario Overview: We no longer want to have separate service lines for Neonate and Normal newborns. When updating the current service line be sure to update the name of the service line, and include the rules include either MS DRGs 789, 790, 791, 792, 793, 794, 795 and includes the inpatient patient type rollup







Partner Discussion: Preparing for the Scenario

Based on the scenario information, answer the following questions on page 9. After we review the questions, we will complete the scenario together.

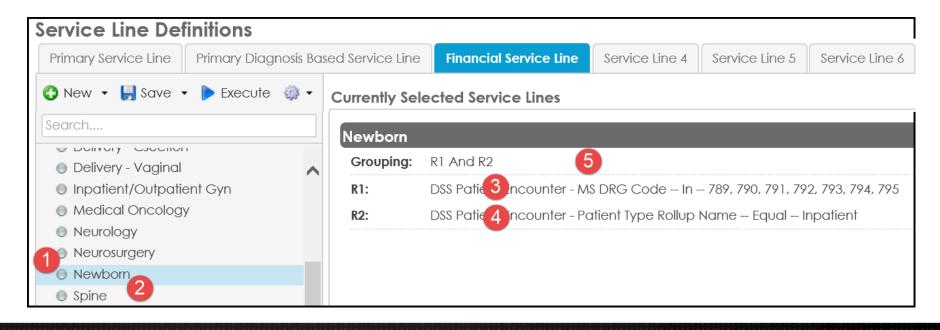
1. How many rules do we need to build based on the scenario? Provide a brief overview of each rule.

2. What is the Boolean Logic for our rules?



In Class Review: Modify a Service Line

- Rename the Service Line to read Newborn
- Delete the Service Line Newborn Normal
- 3. Add the MS DRG code 795 to the current rule
- Add an additional Dimension Rule for Inpatient Rollup
- Boolean Logic should read R1 And R2







On Your Own: Adding a Service Line

Part A: Answer the Questions

Part B: Build the Service Line

You notice the 208 – Respiratory System Dx with Ventilator Support 96 Hours DRG is not assigned to a Service line, but you want it to show as part of a Respiratory Service Line.

Complete the following steps:

- (1) **Add a Service Line** of Respiratory Services
- (2) Create the rule(s)

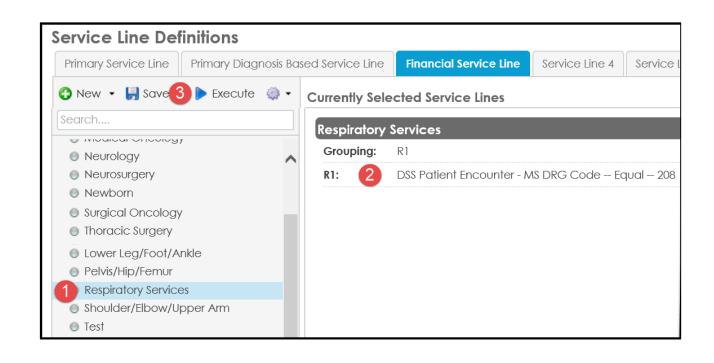


스 Check for Understanding: Reviewing Adding a Service Line



Confirm your screen looks like mine by checking the items below:

- Service line of Respiratory
 Services is added
- 2. One Dimension rule is added for the MS DRG code
- 3. (Not in Training) Execute the rules for the discharge dates



Strata Decision

Section Review

- ✓ Accessing Service Lines
- ✓ Adding a Service Lines
- ✓ Modify Service Lines
- ✓ Executing Service Lines
- ✓ Viewing History for a Service Line

Strata Decision

Section Review

We covered a lot of information in this section. Answer the questions below as a section review.

1. What is a service line?

2. Which Service Line is read-only?

3. Can an encounter qualify for multiple service lines rules within one service line tab?

Patient Populations







What are Patient Populations?

A tool that categorizes patient encounters for reporting purposes. Patient encounters can be assigned to multiple patient populations.



What is the Difference between Patient Populations and Service Lines Strata Decision

	Patient Populations	Service Lines
Definition	Help identify groups of patients that your organization may be interested in following	Mutually exclusive groups of like services or encounters
Can a patient encounter be assigned to multiple?	Yes	No (within one service line definition tab)
Key Detail	Group together and analyze like patients	Compare like encounters within one department and across the organization
Use Case	You want to report on and analyze pediatric asthma patients who have visited the ED	You want to define and report on the profitability of the pediatric asthma encounter across all departments



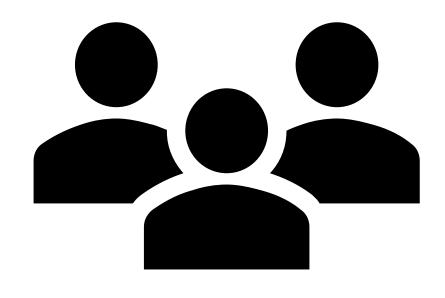
Strata Decision

Patient Populations

Scenario Overview:

- You are the Analytics Administrator and reviewing the Patient Population because you
 have new patient populations to add and need to update current patient
 populations.
- In this section, we are going to:
 - Define Key Terms
 - Access Patient Populations
 - Add a Patient Populations
 - Modify Patient Populations
- Once we have updated and adding our patient populations, we can use this data to drive robust and accurate reporting.





In Class Scenario:

Log In and Navigate to Patient Population

- 1. Log In
 - URL: Training.Stratanetwork.com
 - User Name: Finance Admin
 - Password: Password1
 - Database: Use the Database Information Sheet to find your Assigned Database
- 2. Navigate to Service Lines
 - Decision Support > Patient Populations

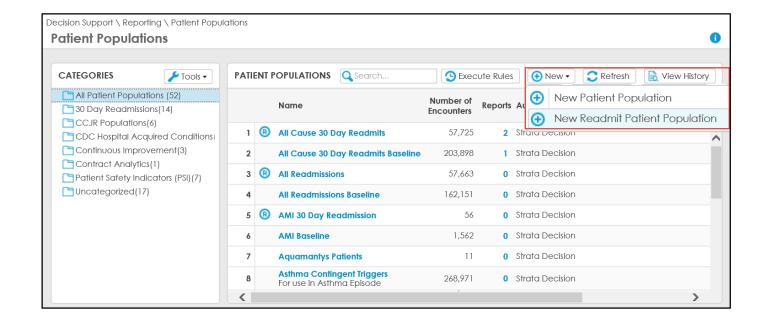




Defining Key Terms: Patient Populations



Term	StrataJazz® Description
Patient Population (aka Simple patient population)	
Readmit Patient Population	









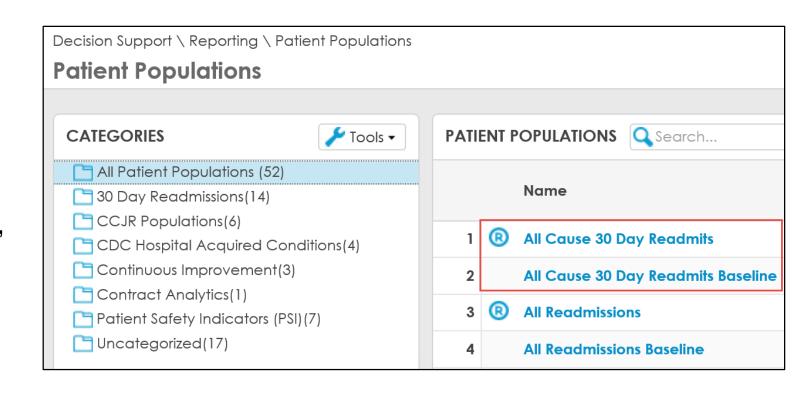
Patient Population (aka Simple Patient Population)	StrataJazz® Description A set of rules that define a particular group of patient encounters. A patient population can be broad, such as asthma patients, or can represent a narrower segment, such as pediatric asthma patients.	Example Asthma Patients Pediatric Asthma Patients
Readmit Patient Population	Identifies readmissions for a particular patient population. The configuration is very similar to the patient population configuration with additional readmission criteria, which includes readmissions for the base population and more specific criteria	Asthma Readmission



Overview of Patient Populations

Create a Patient Population and Readmit Patient Population using rules within StrataJazz®

Best Practice: Write "Baseline" on your patient population to easily distinguish from the readmit population

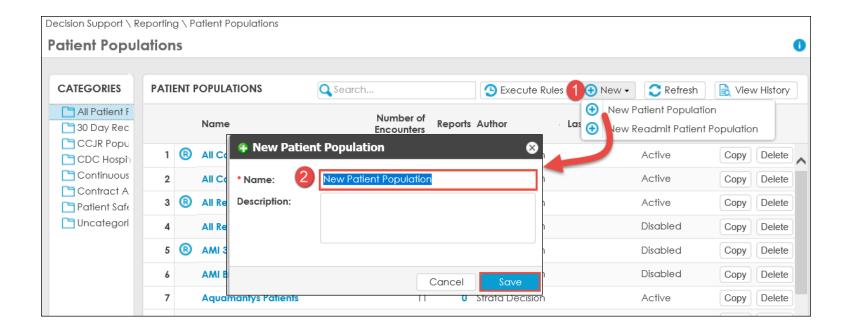




Add a Patient Population



- Click New > New Patient Population
- Type the name and click **Save**

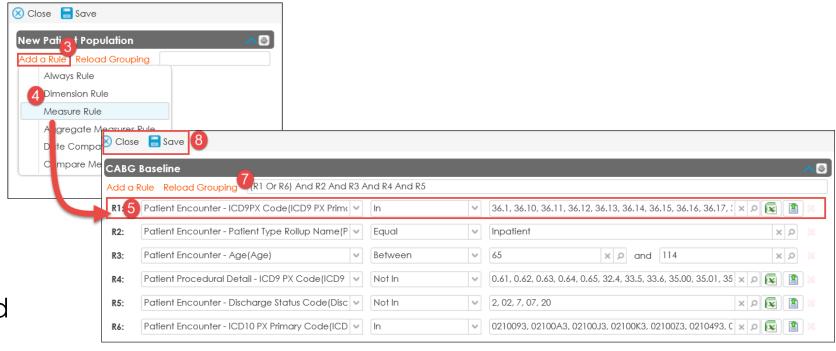




Add a Patient Population



- 3. Click Add a Rule
- 4. Select the appropriate rule type
- 5. Build your rule selecting the correct Data Element, Operator, and Value
- 6. Follow steps 3 5 to add your remaining rules
- 7. Enter the Boolean Logic
- 8. Click Save > Close

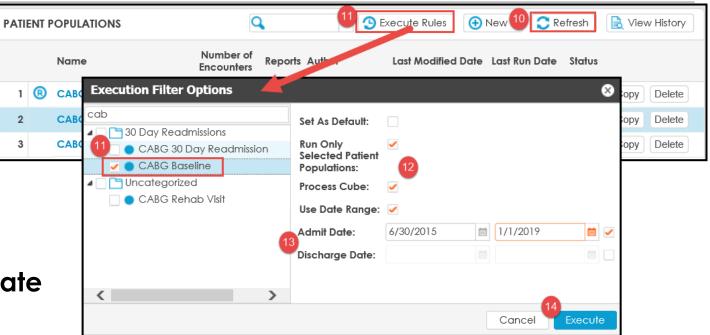




Add a Patient Population – Execute – Demo Only



- Click Refresh
- 10. Click Execute Rules
- 11. Search for and select the patient population you just created
- 12. Check Run Only Selected Patient Populations, Process Cube, and Use Date Range
- Leaving Run Only Selected Patient Populations deselected will allow you to execute for all patient populations.
- 13. Select the appropriate date range
- 14. Click Execute





Add a Readmit Patient Population



- A Readmit Patient Population is created following the same procedure with these variations:
 - Click New Readmit Patient Population
 - When creating your rules for your new readmit patient population, you will select the Base Population and define the Number of Days after discharge



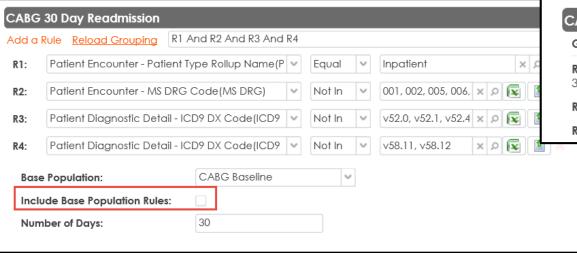
dd a Rule Reload Grouping			
Base Population:	CABG Baseline	~	
Include Base Population Rules:			
Number of Days:	0		



Readmit Patient Population: Include Base Population Rules

CABG 30 Day Readmission

Check Include Base Population Rules only when you want to look for patients that come back with the same rules defined for the base population with the additional rules created for your readmit population.



Add a F	Rule Reload Grouping R1	And R2 And R3 And R4	4				
R1:	Patient Encounter - Patient	Type Rollup Name(P	Equal	~	Inpatient	x o	
R2:	Patient Encounter - MS DRO	G Code(MS DRG)	Not In	~	001, 002, 005, C × 0		
R3:	Patient Diagnostic Detail - I	ICD9 DX Code(ICD9	Not In	~	v52.0, v52.1, v5 × 0		
R4:	Patient Diagnostic Detail - I	ICD9 DX Code(ICD9	Not In	~	v58.11, v58.12 × p		
Base	Population:	CABG Baseline	~				
Inclu	de Base Population Rules:	✓					
Num	ber of Days:	30					
CAI	BG Baseline						
Gre	ouping: (R1 C	Or R6) And R2 And R3 A	nd R4 And R5				
R1:	DSS P 17, 36.19	Patient Encounter - ICD	9PX Code II	n 10, 36.	11, 36.12, 36.13, 36.14	, 36.15, 36.16,	
R2:	DSS F	Patient Encounter - Pati	ent Type Rollu	ıÆqual -	Inpatient		
R3:	DSS P	atient Encounter - Age	- Between -	-			

In the image above, the system is looking for all patients that meet the criteria for the readmission AND the criteria for the baseline.



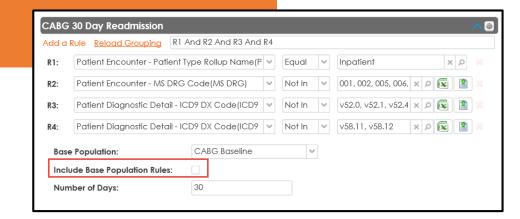
Overview of Include Readmit Population

Baseline **Patient Population**:

All Coronary Bypass Encounters

Readmit Patient Populations:

All Patients readmitted within 30 days of a coronary bypass surgery for ANY Diagnosis (pneumonia, infection, etc.)





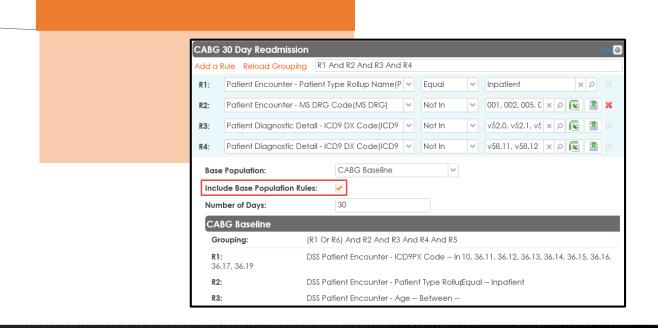
Overview of Include Base Population Rules

Baseline **Patient Population**:

All Coronary Bypass Encounters

Readmit Patient Populations:

Patients readmitted within 30 days of a coronary bypass surgery for the same Diagnosis





Overview of Readmit Base Patient Populations

Baseline Patient Population:

All Coronary Bypass Encounters

Readmit Patient Populations:

All Patients readmitted within 30 days of a coronary bypass surgery

Readmission Base Population

(Identifies the **initial encounter** (encounter 0) where patients were readmitted)

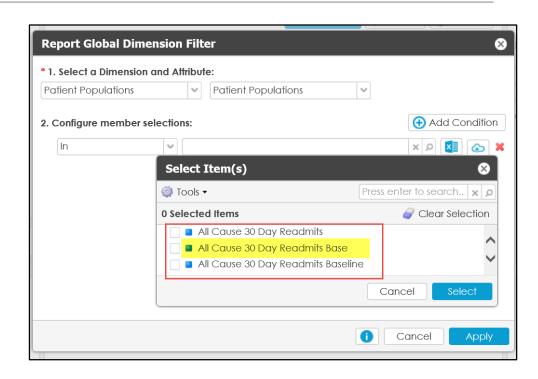
Automatically created by StrataJazz®

Note: this can be for any Dx

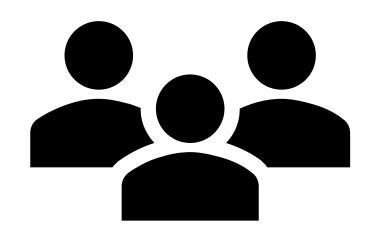


Overview of Readmission Base Population

- View in Reporting only (not viewable from the Patient Population module)
- Automatically created in the background
- Reporting Purposes
- Goal: Prevent readmissions by identifying:
 - Initial encounters for which patients were subsequently readmitted
 - Trends of readmit patient populations
 - Opportunities to improve care in those initial encounters
- Readmission / Baseline = % Reported to Medicare







In Class Scenario: Adding a Patient Population Part A: Answer the Questions

Part B: Build the Rule

You want to create a new patient population for orthopedics deep vein thrombosis and put it in the Hospital Acquired Conditions category. You want to flag any patients with the following ICD10 codes:

I82.0, I82.1, I82.2, I82.3
I82.409, I82.4, I82.5
Grouped with related MS DRGs codes:
299, 300, 301

- Complete the following steps:
 (1) Create a new patient population
- (2) Add your rules







Partner Discussion: Preparing for the Scenario

Based on the scenario information, answer the following questions on page 14. After we review the questions, we will complete the scenario together.

1. How many rules do we need to build based on the scenario? Provide a brief overview of each rule.

2. What is the Boolean Logic for our rules?



In-Class Scenario: Modify a Service Line



Based on the scenario information, answer the following questions

- How many rules do we need to build? 2 Rules
 - Dimension Rule for ICD 10 Primary Dx
 - Dimension Rule for MS DRG Codes

2. What is the Boolean Logic for the rules? R1 AND R2





On Your Own:

Modify a Patient Population

You notice not all your pneumonia patients are being captured in the population. You want to review the population criteria and possibly update it to capture the missing patients.

Complete the following steps:

- (1) Navigate to your Pneumonia Baseline
- (2) Update the rule to include all pneumonia patients

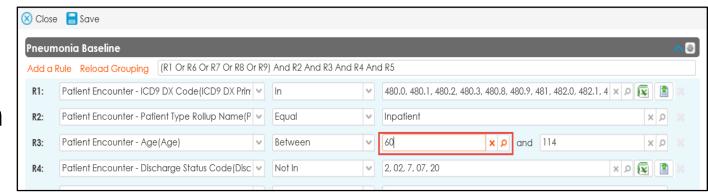


L Check for Understanding: Modify a Patient Population

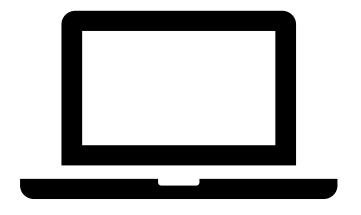


Confirm your screen looks like mine by checking the items below:

- R3 includes patients between
 60 114.
- 2. On the patient population screen, the last modified date and time is today indicating that you executed the patient population rules.







On Your Own:

Create a Readmission Patient Population

You want to create a patient population to monitor overall hospital readmissions 90 days after discharge. A baseline population has been created for all inpatient accounts. This population is called "All Readmissions Baseline."

Complete the following steps:

- (1) Create a New Readmission Patient Population
- (2) Add a Rule



Strata Decision

Section Review

- ✓ Accessing Patient Populations
- ✓ Adding a Patient Population
- ✓ Modify Patient Populations
- Executing Patient Populations

Reports: Using Service Lines and Patient Populations



STRATA DECISION SUMMIT CHICAGO | OCTOBER 21-23







Why are Service Lines and Patient Populations useful for reporting?

1 1010 01 -101 1014 010 9



Why are Service Lines and Patient Populations useful for reports?

- Organize information
- Decrease load time
- Decrease report maintenance
- Consistent data for defining criteria
- Ran with Nightly Processing
- When using a patient population filter, the system pulls data for the entire encounter





EXAMPLE

UB Revenue Code 0636 – Pharmacy

Filter

Displays only drug charges

Patient Population

Displays all patients that had a pharmacy drug charge + all of their other charges



Filter vs Patient Population

Encounter Data

ERN	Charge Code	Charge	UB Rev Code		
1234567	1002	\$800	0636		
1234567	3456	\$700	251		
1234567	7244	\$340	450		
1234567	0990	\$420	254		
9876543	1002	\$1,900	0636		
9876543	7282	\$100	254		
9876543	9827	\$420	450		
9876543	1236	\$700	251		

A report filter on UB Rev code 0636 will return the records that meet the criteria



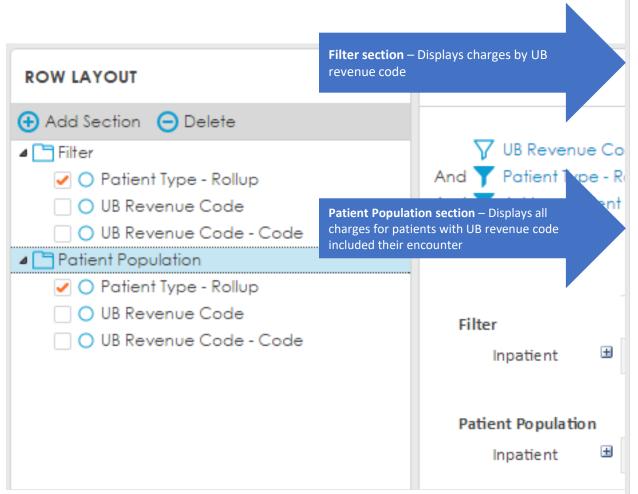
Filter vs Patient Population

Encounter Data

ERN	Charge Code	Charge	UB Rev Code
1234567	1002	\$800	0636
1234567	3456	\$700	
1234567	7244	\$340	
1234567	0990	\$420	
9876543	1002	\$1,900	0636
9876543	7282	\$100	
9876543	9827	\$420	
9876543	1236	\$700	

A patient population defined as encounters with the UB Rev code 0636 will return all the records for the encounter that meets the criteria

Inpatient Drug Charge Exam



NEW REPORT

Strata Decision

UB Revenue Code - Code (Filter): (In 0250, 0251, 0252, 0253, 0254, 0255, 0256)

And Y Patient Type - Rollup: (In Inpatient)

And Y Ad-hoc Patient Population: Drug Charges

Charge

\$232,930,973

Tile.		

Inpatient

0250 - PHARMACY (ALSO SEE 063X AN EXTENSION # \$230,129,532 OF 025X) - GENERAL CLASSIFICATION 0254 - PHARMACY (ALSO SEE 063X AN EXTENSION 3 OF 025X) - DRUGS INCIDENT TO OTHER DIAGNOSTIC \$484,656 0255 - PHARMACY (ALSO SEE 063X AN EXTENSION # \$2,316,784 OF 025X) - DRUGS INCIDENT TO RADIOLOGY Total Filter

255, 0256)

Patient Population

Inpatient

· Po	activity of the state of the st		
	0 - Not Specified	+	\$47,059,341
	0110 - ROOM BOARD - PRIVATE (ONE BED) - GENERAL CLASSIFICATION	+	\$46,948,548
	0111 - ROOM BOARD - PRIVATE (ONE BED) - MEDICALSURGICALGYN	+	\$121,047,060
	0112 - ROOM BOARD - PRIVATE (ONE BED) - OBSTETRICS (OB)	#	\$14,097,240
	0113 - ROOM BOARD - PRIVATE (ONE BED) - PEDIATRIC	#	\$5,078,820
	0117 - ROOM BOARD - PRIVATE (ONE BED) - ONCOLOGY	#	\$15,133,960
	0120 - ROOM BOARD - SEMI-PRIVATE TWO BEDS - GENERAL CLASSIFICATION	#	\$6,880
	0170 - NURSERY - GENERAL CLASSIFICATION	+	\$924,990
	0171 - NURSERY - NEWBORN - LEVEL I	+	\$4,073,558
	0172 - NURSERY - NEWBORN - LEVEL II	+	\$83,800
	0173 - NURSERY - NEWBORN - LEVEL III	+	\$18,945,658
	0174 - NURSERY - NEWBORN - LEVEL IV	#	\$28,659,060
	0200 - INTENSIVE CARE UNIT - GENERAL CLASSIFICATION	+	\$4,903,640

© Strata Decision Technology



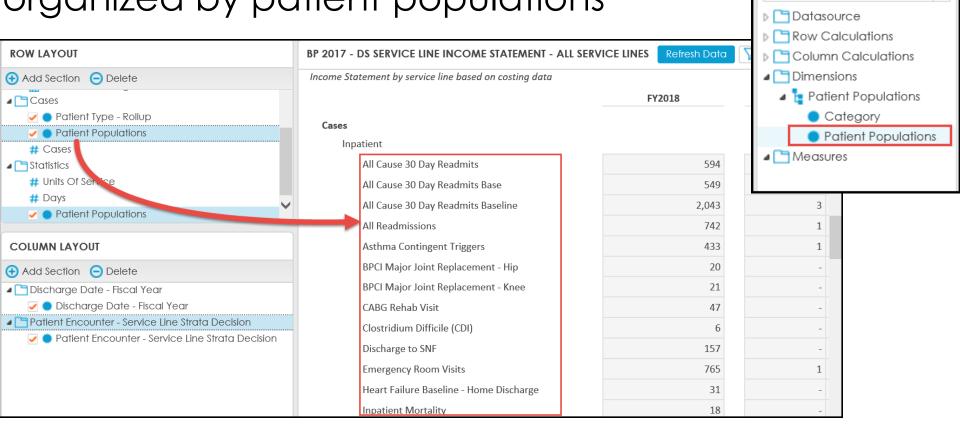
AVAILABLE CONTENT

patient population

Adding Patient Population as an Attribute

Adding a patient population as a row allows you to view data organized by patient populations

In this example, you can analyze the data organized by Patient Population

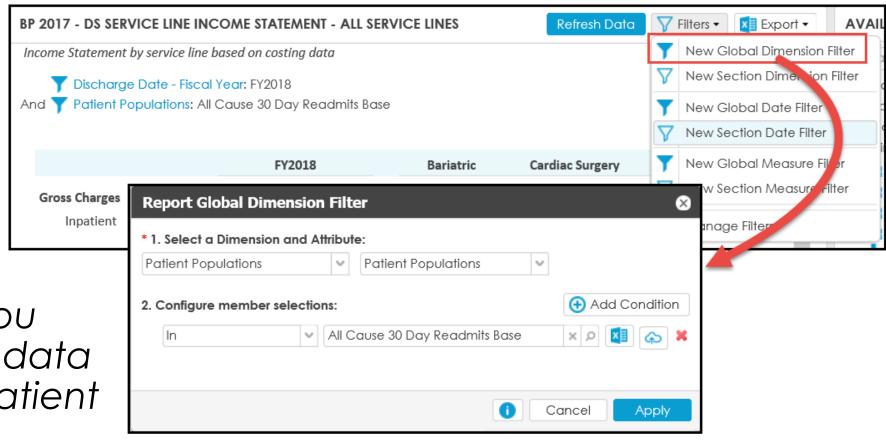




Adding Patient Population as a Global Filter

Adding a Patient Population as a Global Filter allows you to filter the data for a specific patient population.

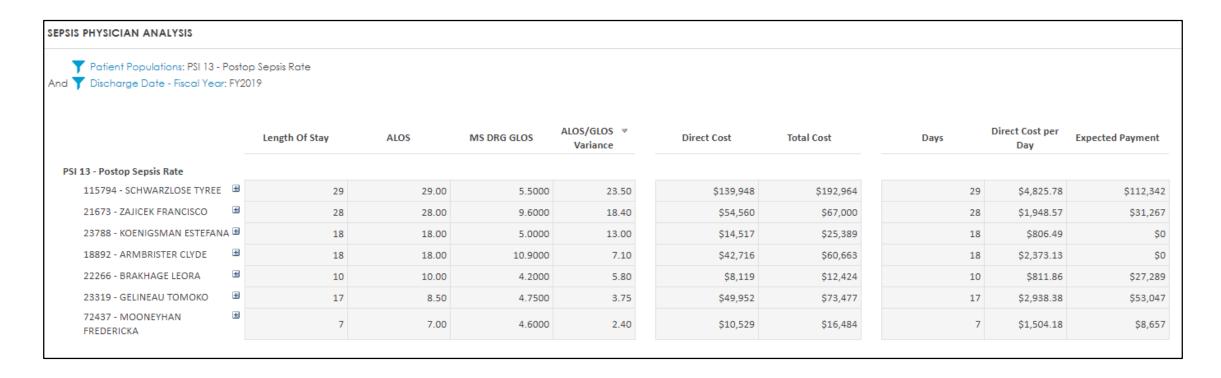
In this example, you can analyze your data for one specific patient population.





Example: Adding Patient Population as a Filter

Patient Populations

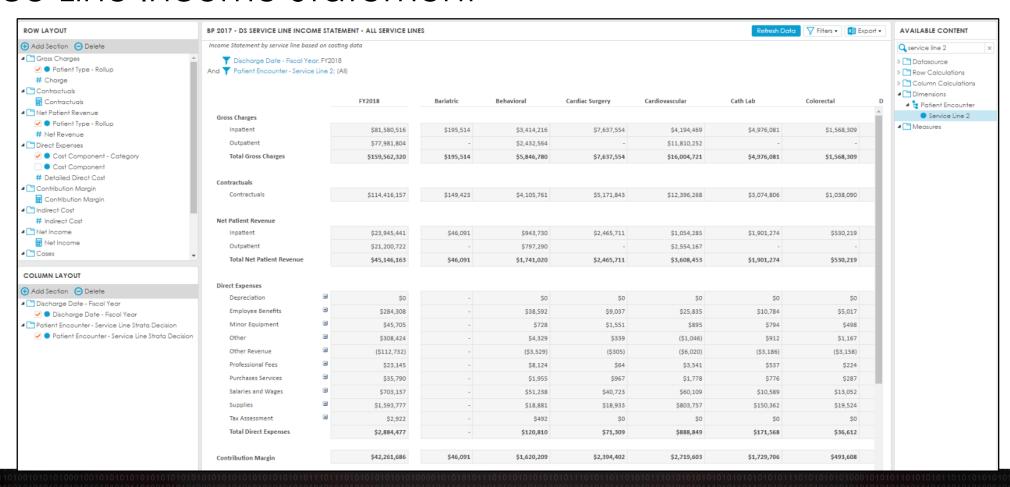


1 1010 01 -101 1011 019



Example: Adding Service Lines as a Filter

Service Line Income Statement



1 1010 01 1011 1011 019





In Class Scenario: Is it a Filter, Service Line, or Patient Population

Using what you know about the differences between filters, service lines, and patient populations, review the scenarios outlined below and decide whether you think the data presented is a service line, patient population or filter.





You want to report on a list of UB revenue codes. You want to view the costs associated with only these UB revenue codes.

- A. Filter
- B. Service Line
- C. Patient Population



You want to report on a list of UB revenue codes. You want to view the costs associated with only these UB revenue codes.

- A. Filter
- B. Service Line
- C. Patient Population



You want to sort patients into mutually exclusive groupings based on secondary diagnoses.

- A. Filter
- B. Service Line
- C. Patient Population



You want to sort patients into mutually exclusive groupings based on secondary diagnoses.

- A. Filter
- B. Service Line
- C. Patient Population



You want to report on any cardiology patients that have visited the emergency department. You want to do an analysis on the ALOS on these emergency department patients.

- A. Filter
- B. Service Line
- C. Patient Population



You want to report on any cardiology patients that have visited the emergency department. You want to do an analysis on the ALOS on these emergency department patients.

- A. Filter
- B. Service Line
- C. Patient Population

Calculated System Fields

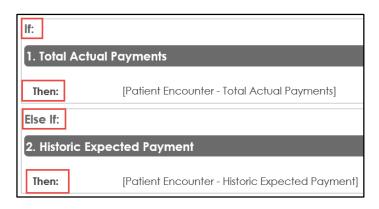


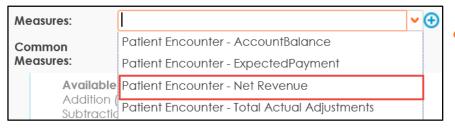




Calculated System Fields







What Are Calculated System Fields?

- Allows you to create calculated numeric or text fields for reporting in order to complete calculations accurately
- Use case statement (If/Then) logic to define new fields based on existing data elements

Fields available within all rule engines





Trainer Demo: Calculated System Fields Module Overview

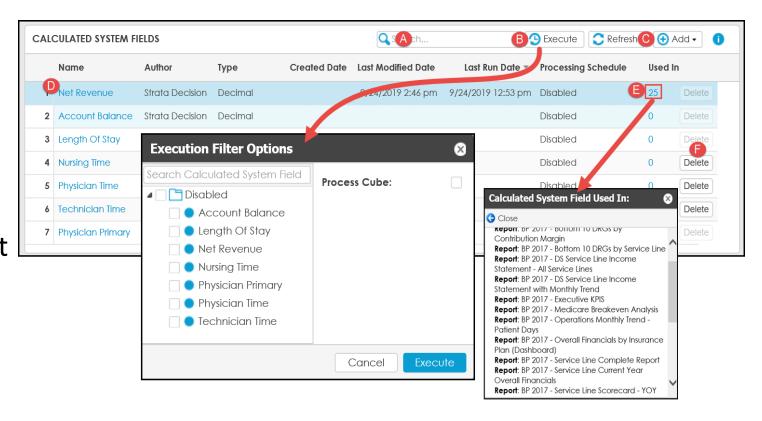
- Navigate to Calculated System Fields
 - Path: Decision Support > Reporting > Calculated System Fields
- Orientation of Module
 - Screen layout and key buttons
- Open Net Revenue CSF
 - Overview of editing a CSF
 - If/Then Logic





Overview of Calculated System Fields

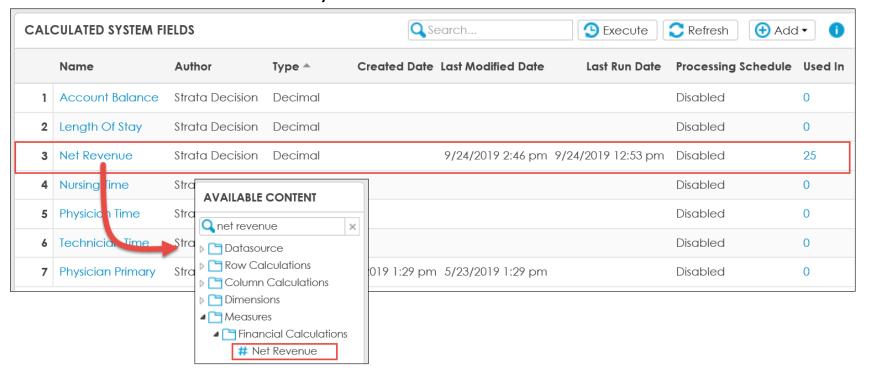
- A. Search for a CSF
- B. Click **Execute** to execute the rules and process the cube.
- C. Click Add to add a new CSF.
- D. Click the hyperlinked Calculated System Field to edit the CSF.
- E. Used In indicates the number of reports the CSF is used in. Click the hyperlink to see the list.
- F. Click **Delete** to delete a CSF.





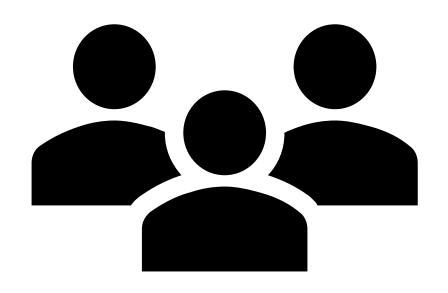
Calculated System Fields

The pre-calculated measure, Net Revenue, is available in Ad Hoc Reporter after being created as a Calculated System Field



Path: Click Decision Support > Calculated System Fields





In Class Scenario:

Modify the Net Revenue CSF so that you can better understand your margins in order to make decisions about services to expand for next year.



Class Review







Class Review: Rules

True False Encounter A qualifies for the CABG baseline patient population

Encounter A Information:

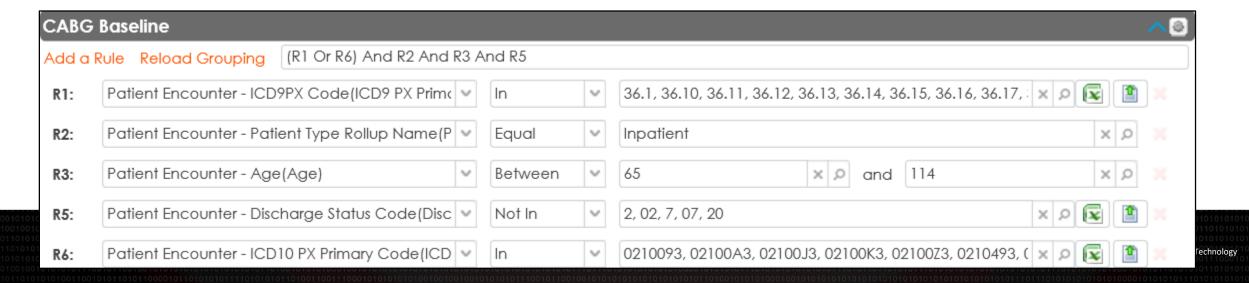
Patient Type: Inpatient

Patient Age: 72

Patient Sex: Female

Primary ICD 10: 02100J3

Discharge Status Code: 1





Class Review: Rules

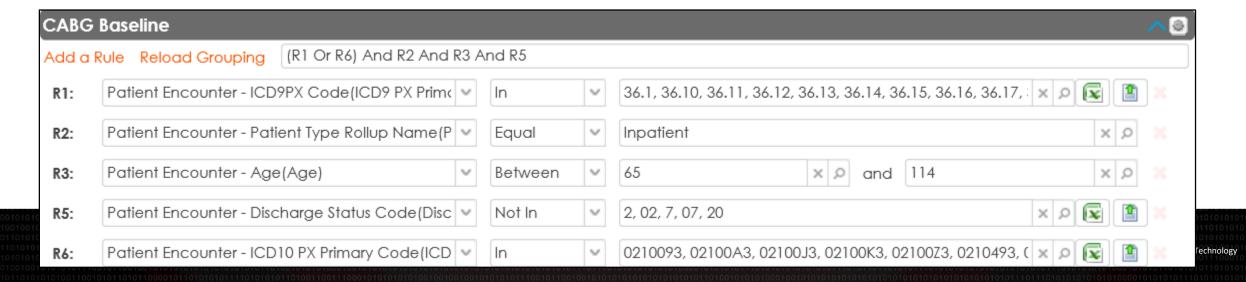
True False Encounter A qualifies for the CABG baseline patient population

Encounter A Information:

- R2 Patient Type: Inpatient
- R3 Patient Age: 72
- Patient Sex: Female

- **R6 Primary ICD 10**: 02100J3
- R5 Discharge Status Code: 1

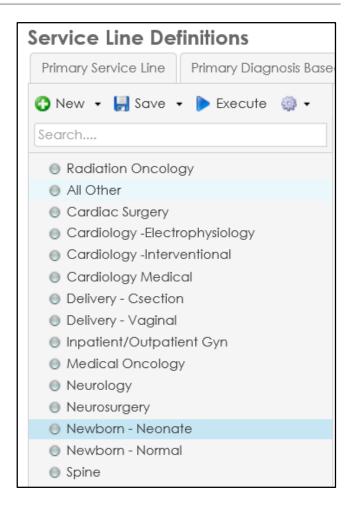
R6 AND R2 And R3 AND R5





Class Review: Service Lines

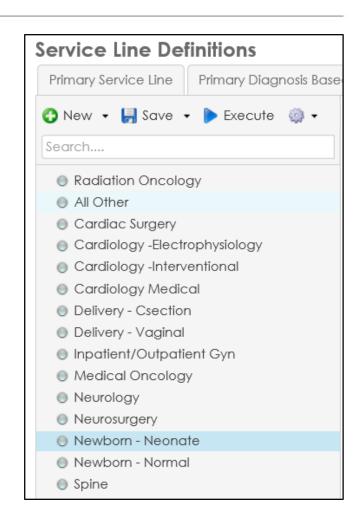
- True False The most general service line definitions should be listed first.
- 2. In this scenario, the **All Other** service line definition is a catch all for all other inpatient services. Will an encounter qualify for Cardiac Surgery? If no, what do you need to do.





Class Review: Service Lines

- 1. True False The most general service line definitions should be listed first.
- 2. In this scenario, the **All Other** service line definition is a catch all for all other inpatient services. Will an encounter qualify for Cardiac Surgery? If no, what do you need to do.
 - No, based on the set up all IP encounters will qualify for All Other and then stop. In order to set this Service Line Definition up correctly, move All Other to be last.





Class Review: Patient Population

True False Based on this screenshot, the pneumonia baseline and readmission populations are available in reporting.

WHY?

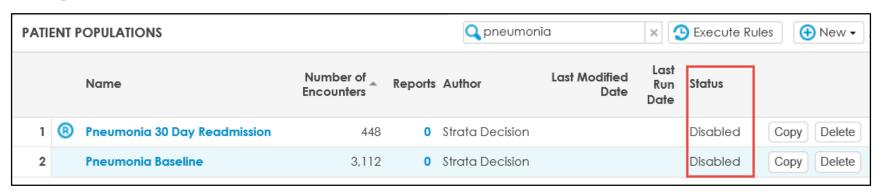
PATIENT POPULATIONS			Q pneumonia			x Secute Rules ⊕ New •			
		Name	Number of Encounters	Reports	Author	Last Modified Date	Last Run Date	Status	
1	R	Pneumonia 30 Day Readmission	448	0	Strata Decision			Disabled	Copy Delete
2		Pneumonia Baseline	3,112	0	Strata Decision			Disabled	Copy Delete



Class Review: Patient Population

True False Based on this screenshot, the pneumonia baseline and readmission populations are available in reporting.

Disabled patient populations are excluded from processing and unavailable in reporting.



Important Note: Patient populations run most efficiently when only active patient populations are included. We recommend that you delete any patient populations that you no longer use. A weekly task runs to disable patient populations that are not used in a report or rules engine, and have not been modified for three months

Certification Course Information and Closing Logistics



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Course Objectives

Now you are able to:

- ✓ Create rules to use in DS Analytics
- ✓ Create and maintain service lines
- Create and maintain patient populations
- ✓ Create and maintain Calculated System Fields

Strata Decision

Additional Resources

- This manual
- StrataJazz® eLearning (if purchased)
- Product documentation available through Help Center
- Your peers!
- Strata Decision staff



Training Evaluation

Please complete this five-minute survey prior to leaving training today. Your response will provide us valuable information so that we may constantly improve our delivery, content, and technology, and ultimately provide you with the best possible learning experience.



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Certification Training Session: Decision Support Analytics

Additional Steps To Finish Certification



Project

Test

75% score on each required to earn certification

Annually, will have an online quiz to keep certification current

Reach out directly to training@stratadecision.com for questions related to the certification class, project, or test