

COG170

COGITO FUNDAMENTALS WITH <TRAINERS>

We'll get started at 8:30 am Central Time.

Agenda

Day 1

- Introduction
- Radar Dashboards
- SlicerDicer Populations
- Data Lineage
- Day 1 Lab: Chronicles & the Record Viewer

Day 2

- Dashboard Metrics
- Workbench Reports
- Day 2 Lab: Epic-Released Content

Day 3

- Summaries
- Report Requests
- Troubleshooting
- Analytics Catalog
- Cogito Roles
- Day 3 Lab: Building Reports

Day 4

- Security
- Cogito Build

- Study Hall

Agenda: Day 1

- **Introduction**
- Radar Dashboards
- SlicerDicer Populations
- Data Lineage
- Day 1 Lab: Chronicles & the Record Viewer

Agenda: Day 1

- Introduction
- **Radar Dashboards**
- SlicerDicer Populations
- Data Lineage
- Day 1 Lab: Chronicles & the Record Viewer

Exercise 1: Radar Exploration

This first exercise is used to give you a tour of a Radar dashboard and familiarize you with the various component types available in Radar.

Dashboard Editor

- Basic Information
 - Layout
 - Content
 - ~~◦ Resource Settings~~
 - Parameters
- Access

Component Editor

Component Editor consists of 3-4 sections:

- *Basic Information*
- **Data Source**
- **Output Format (for some component types)**
- *Distribution*

Same for all components, vary based on component type

Exercise 2: Build a Dashboard and a Message Board Component

Create a new <your initials> Starter Dashboard and add components to it.

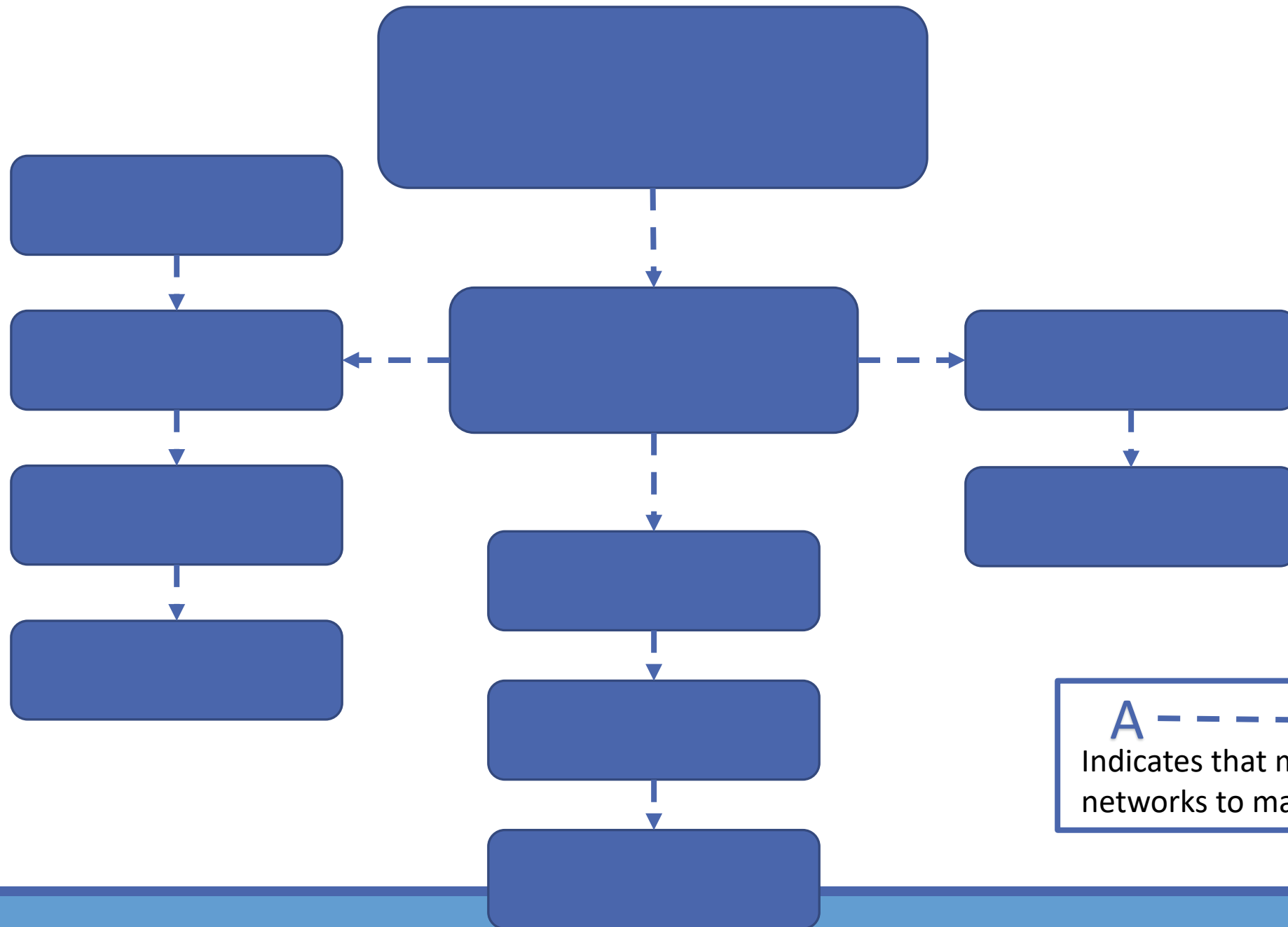
If you finish early... Review the Reference: Activity Links section that follows the exercise

Exercise 3: Document your Findings

You've seen a lot of material about Radar in this lesson. Take this opportunity to challenge your understanding of its major concepts and features.

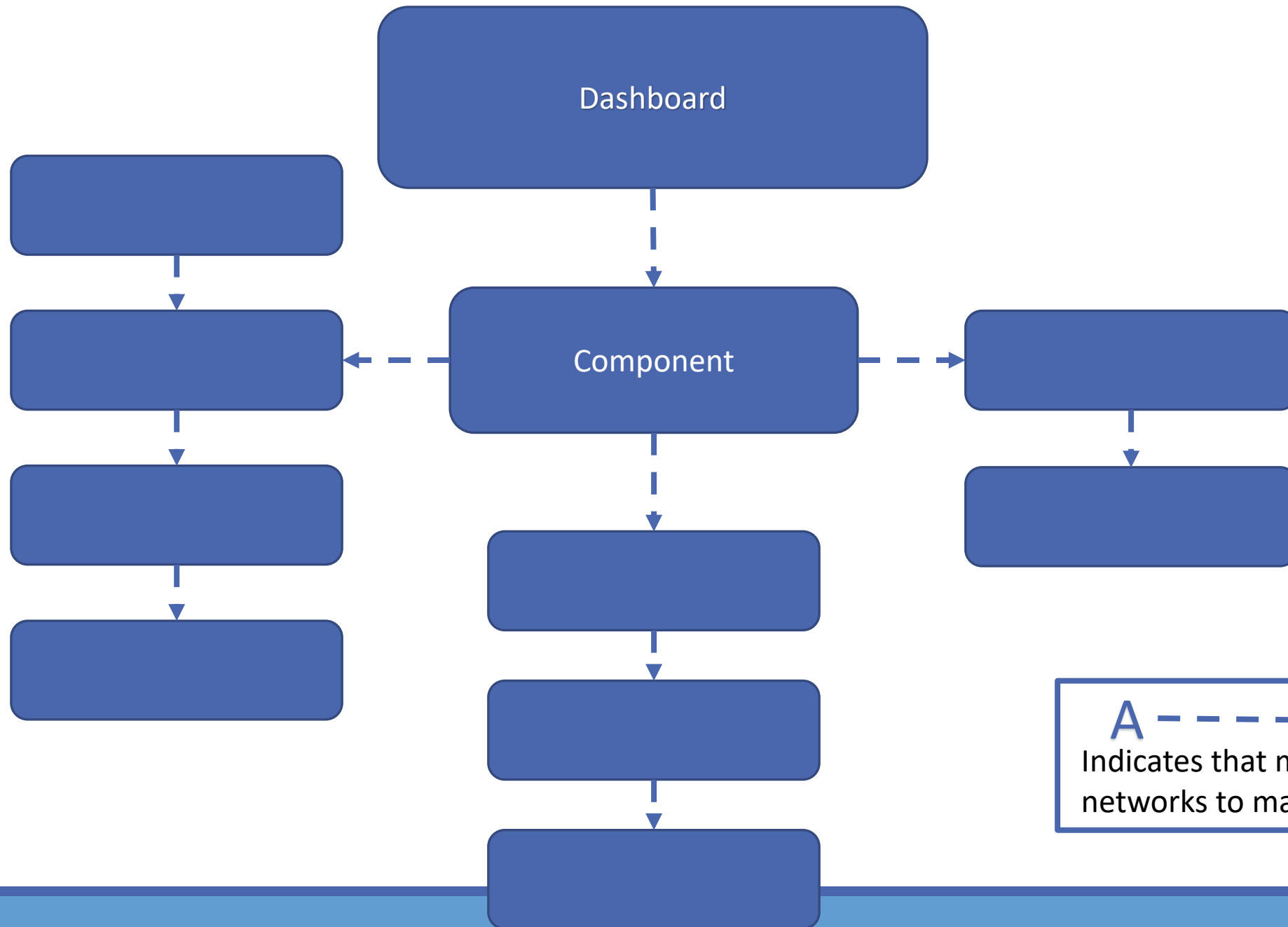
Exercise 3: Document your Findings

Task	Dashboard View	Component Editor	Dashboard Editor
Change the layout of a dashboard from two columns to three columns			✓
Add a component to a dashboard for all users			✓
Add a component to just your dashboard	✓		
Rearrange components on a dashboard	✓		✓
Change the color of a component	✓	✓	✓
Change the displayed title of a dashboard			✓



A - - - - -> B

Indicates that master file A
networks to master file B



A - - - - -> B

Indicates that master file A
networks to master file B

Agenda: Day 1

- Introduction
- Radar Dashboards
- **SlicerDicer Populations**
- Data Lineage
- Day 1 Lab: Chronicles & the Record Viewer

Exercise 1: SlicerDicer Tutorial

Work through the tutorial. Write down any notes or questions you may have.

What is SlicerDicer?

SlicerDicer is:

- **A self-service reporting tool**

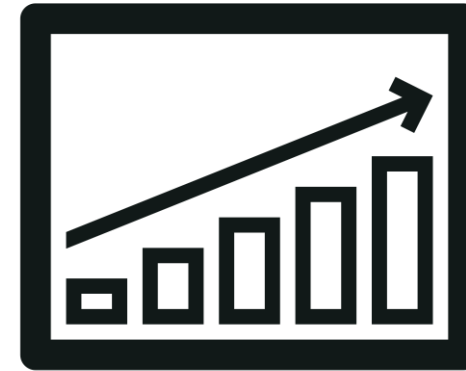


A pharmacy manager might have a hunch about which non-formulary medications are ordered the most. They could use SlicerDicer to confirm their suspicions instead of submitting a ticket!

What is SlicerDicer?

SlicerDicer is:

- A self-service reporting tool
- **For large data sets**

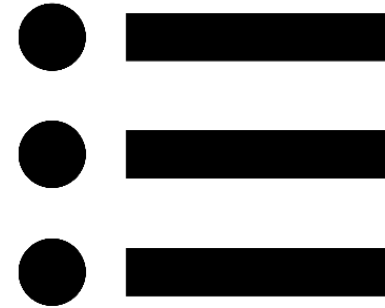


Identify the DRGs (Diagnosis Related Groups) that are most commonly coded on hospital accounts over the last two years. Coding managers can use this information to target coder training efforts on specific common DRGs to have the biggest impact.

What is SlicerDicer?

SlicerDicer is:

- A self-service reporting tool
- For large data sets
- **For small data sets**



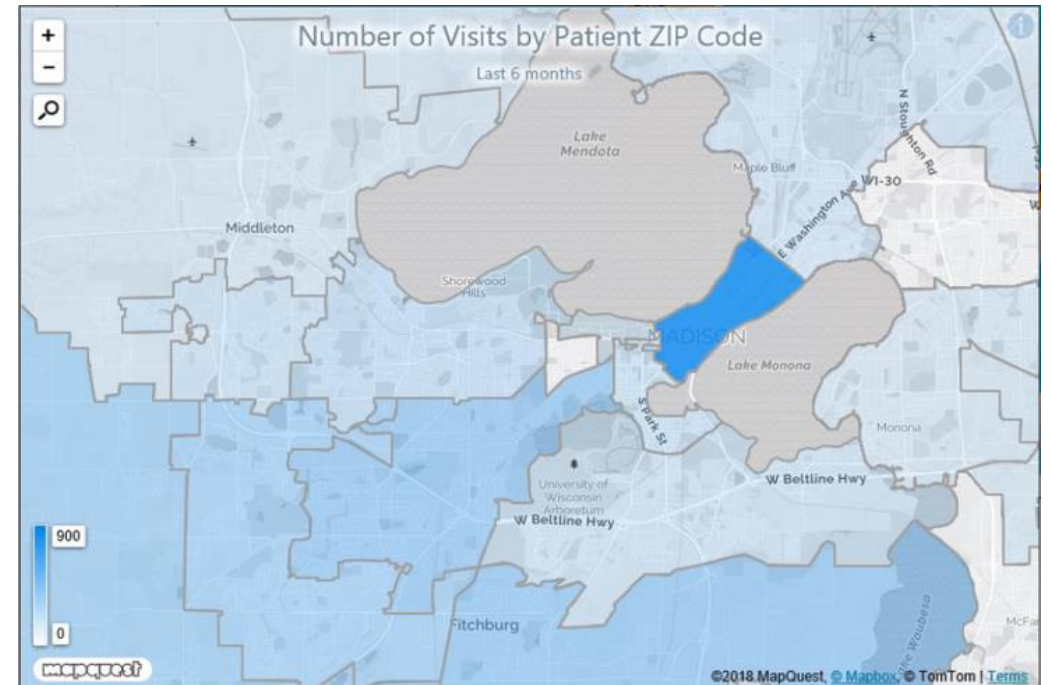
Identify my patients with upcoming appointments who have diabetes and a prescription for brand-name medication. Providers can follow up with these patients and change their prescription to a generic medication, saving money for both the patient and the organization.

What is SlicerDicer?

SlicerDicer is:

- A self-service reporting tool
- For large data sets
- For small data sets
- **For visualizing data**

Use a geographic visualization to break down the number of visits by age, sex or visit type by patient zip code



What is SlicerDicer?

SlicerDicer is:

- A self-service reporting tool
- For large data sets
- For small data sets
- For visualizing data
- **Customizable**



Build your own custom filters and data models.
Include non-Epic data from payroll, questionnaires,
external claims, and much more...

What isn't SlicerDicer?



You could not use SlicerDicer to see the current wait times in your Emergency Department or a list of your patients who currently have overdue medications

SlicerDicer is **NOT**:

- **For looking at today's data**

Write in Workbook

A scheduler wants a population that shows how many appointments there are today with a status of 'Scheduled.' They want to reference this throughout the day to keep track of how many appointments are left to check in. Could this be done in SlicerDicer? Why?

No. A list of scheduled appointments wouldn't change throughout the day.

A user wants a list of surgical cases scheduled in the next week grouped by procedure. They will reference this list at the start of each week to audit room and staff usage. Could SlicerDicer meet this need? Why?

Yes. Even though the list has to include cases scheduled in the future, the cases were scheduled in advance.

What isn't SlicerDicer?



SlicerDicer is **NOT**:

- For looking at today's data
- **For building a static, publicly available shared report.**

Two users want to find out how many times patients canceled appointments in the last month:

- George finds a list of all appointments in the last month with a status of 'Canceled'
- Mildred finds a list of all appointments in the last month with a status of 'Canceled' and a cancel initiator of 'Patient'

SlicerDicer Vocabulary

➤ Population:

- Base with Criteria applied

➤ Filter:

- A data point used for defining the search, grouping the results, aggregating, or display
- Usually corresponds to a single column in the Caboodle database

➤ To Slice:

- To visually break up one population into many “slices” using a single filter

Exercise 2: Build a Session

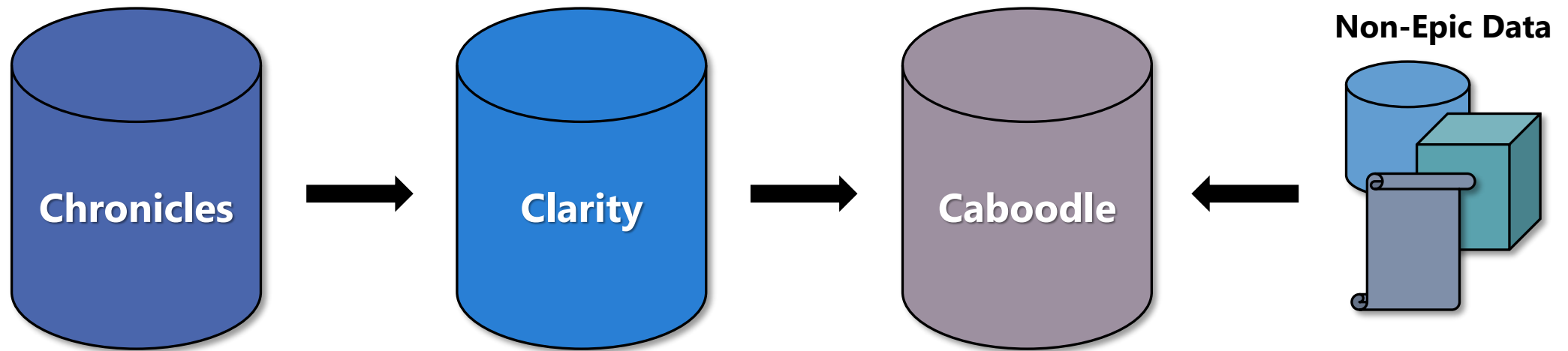
Build a new SlicerDicer session

If you finish early... If You Have Time – Exercise 3: Explore a Session

Agenda: Day 1

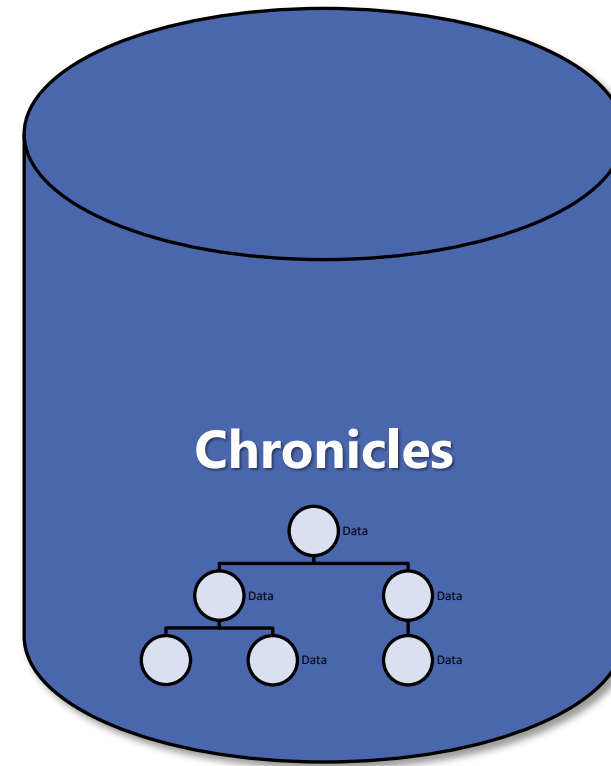
- Introduction
- Radar Dashboards
- SlicerDicer Populations
- **Data Lineage**
- Day 1 Lab: Chronicles & the Record Viewer

Databases

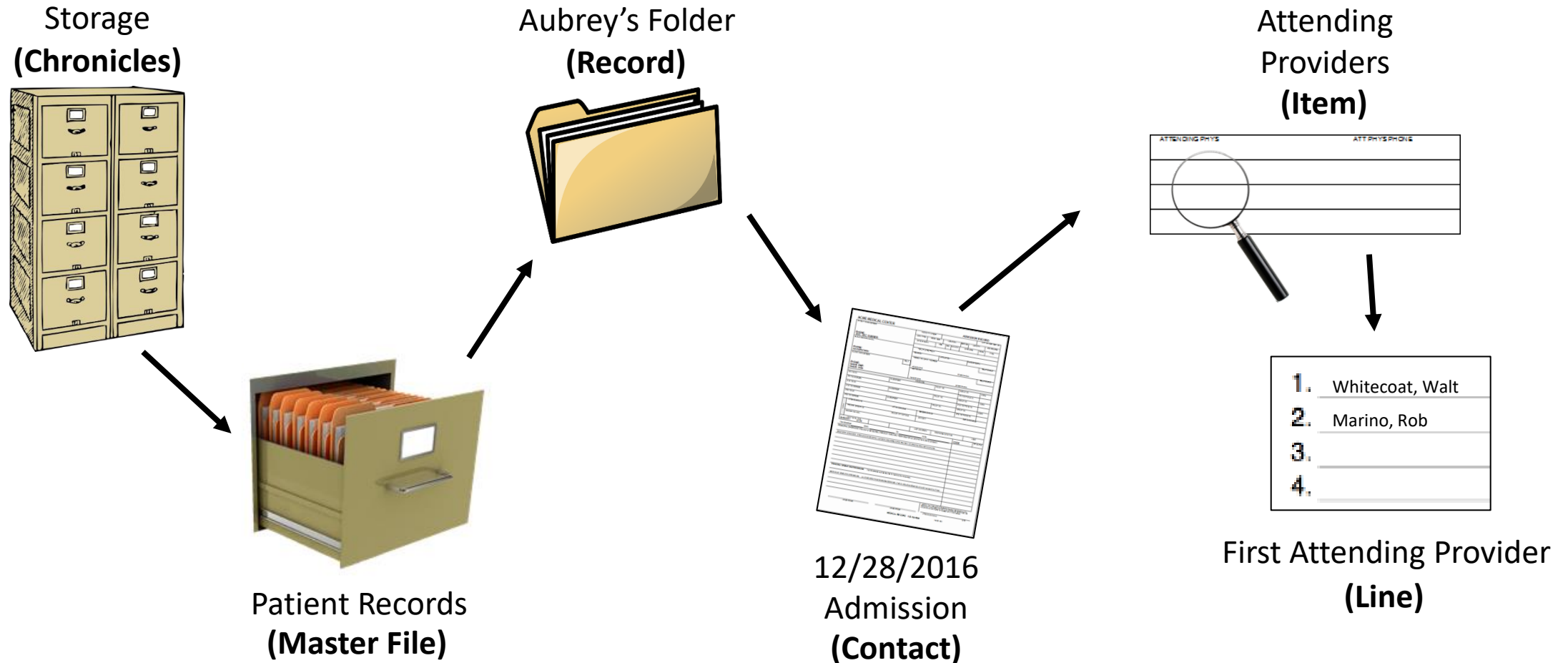


Chronicles

- Hierarchical database ("tree like")
- Real-time
- Daily operations

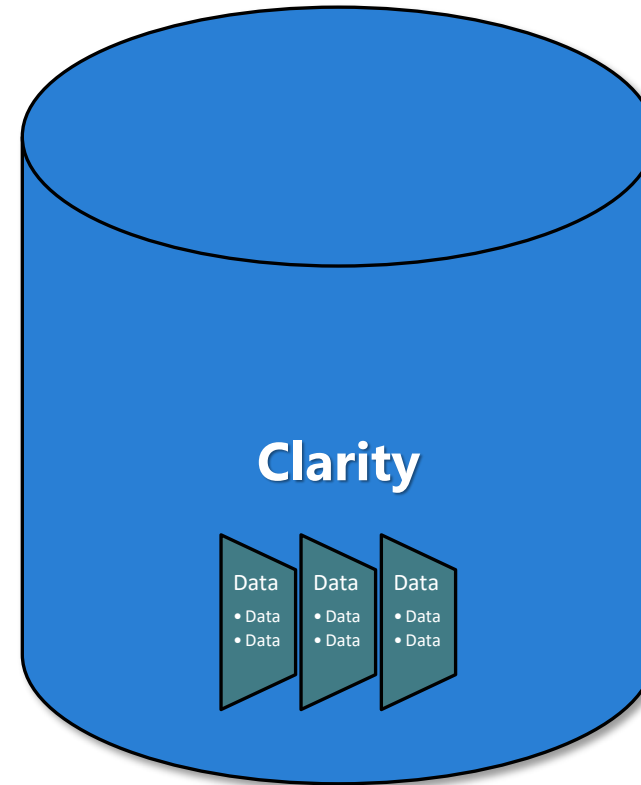


Chronicles Structure



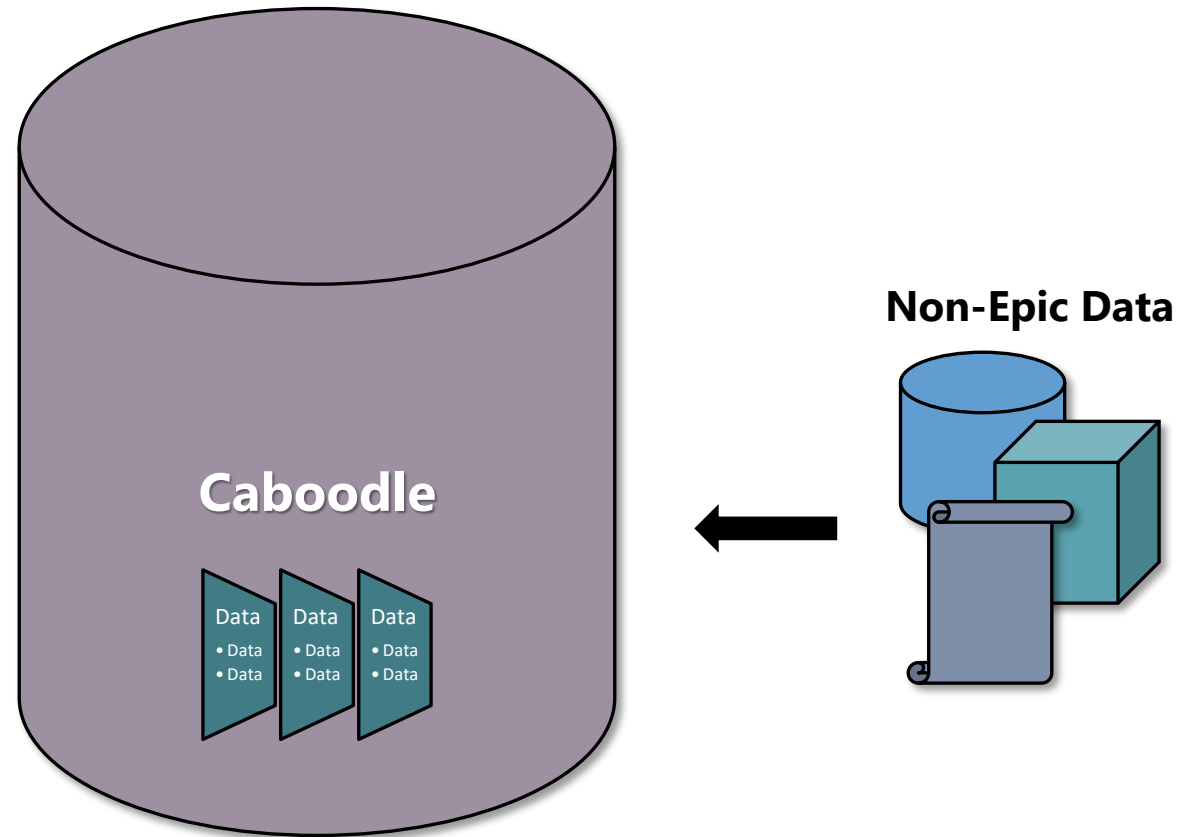
Clarity

- Relational database
- For reporting
- Normalized



Caboodle

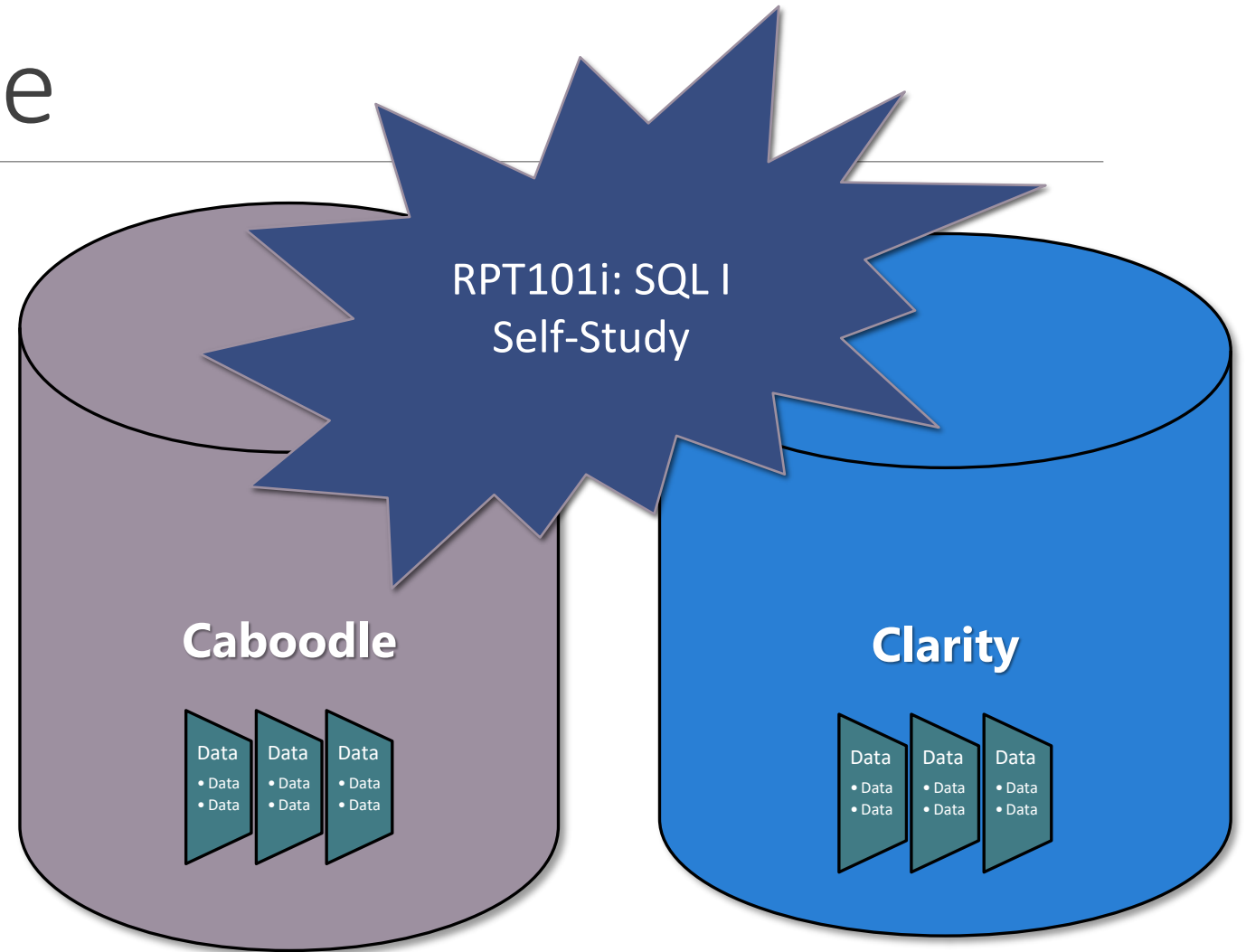
- Relational database
- Optimized for reporting and data exploration
- Dimensional
- Includes non-Epic data



Clarity & Caboodle

- Accessed using SQL

SELECT
FROM
WHERE
GROUP BY
HAVING
ORDER BY

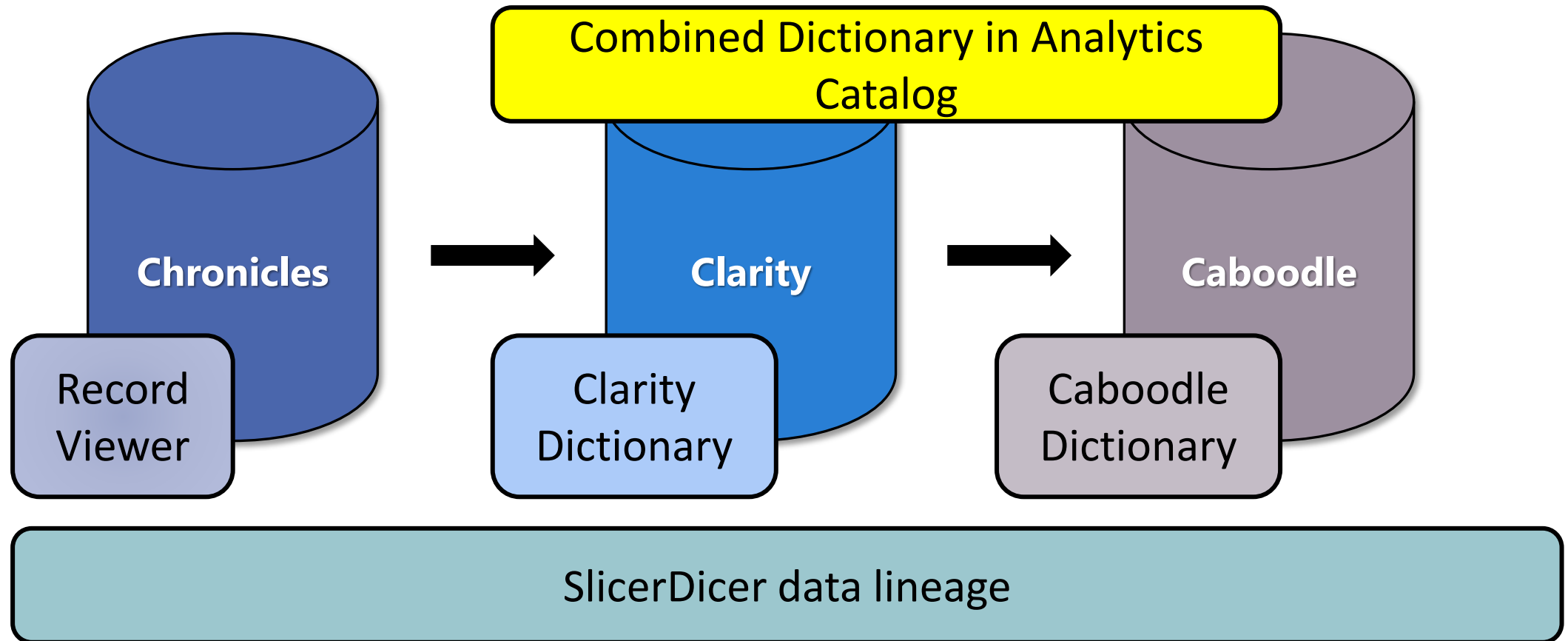


Write in Workbook

When you can, write reports using [Caboodle](#) rather than [Clarity](#).

Use [Clarity](#) if the information you're looking for is not in [Caboodle](#).

Investigating Data



Write in Workbook

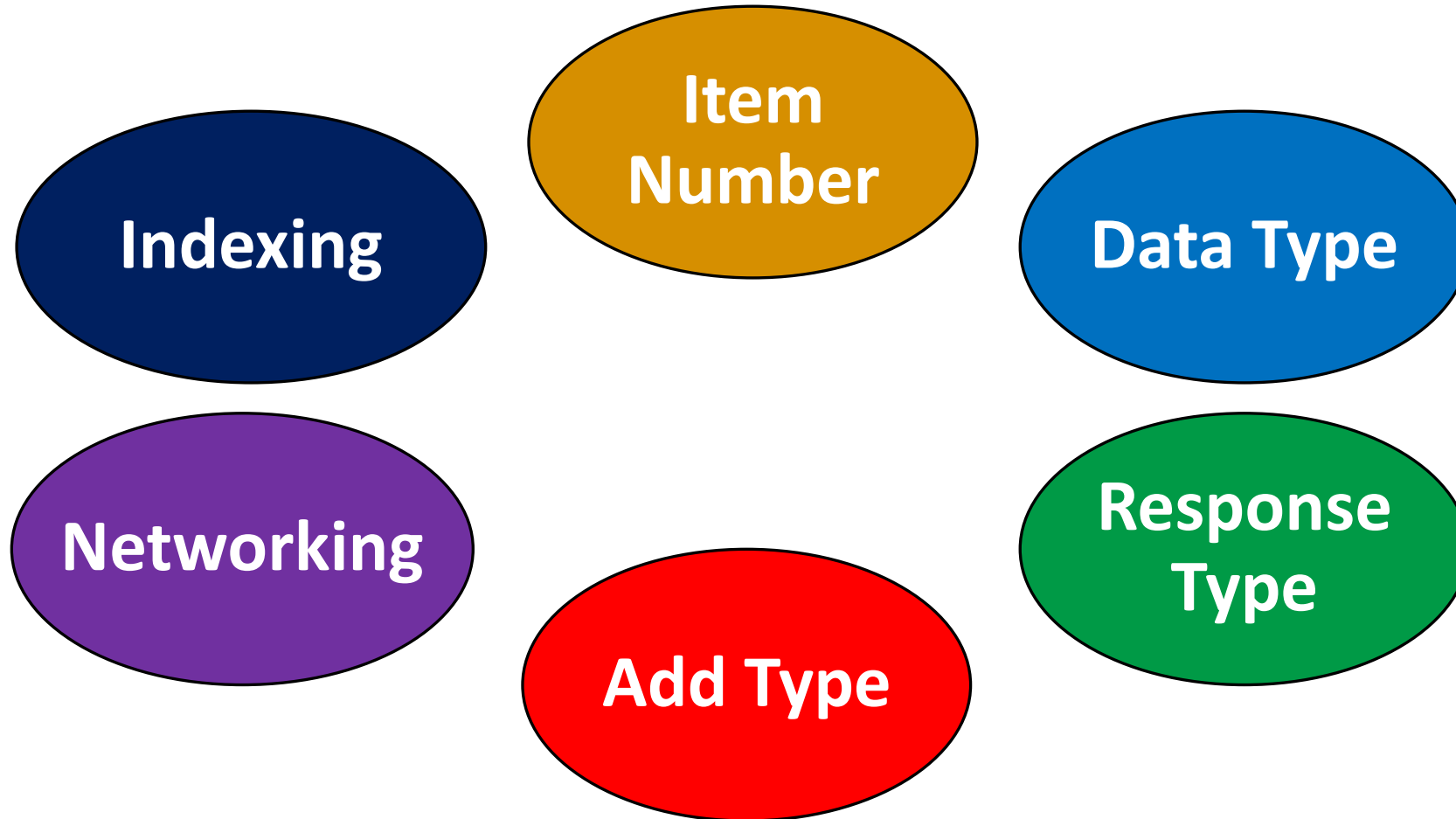
What department was Ruth's visit at?

EMC Family Medicine

Exercise 1: Investigate a Record in Chronicles

In this exercise, you will investigate a record in Chronicles using the Record Viewer activity.

Item Characteristics



Item Numbers

- Item numbers **do not** hold meaning across master files
 - For example, EPT 50 is the patient's address but SER 50 is provider subgroup
- There are two exceptions
 - Item .1 (read "Dot 1") stores the record's **unique ID**
 - Item .2 (read "Dot 2") stores the record's **name**
 - Not every master file has a .2 item

Data Types

String	Number	Date
Free-text	Integer or decimal	Number of days since 12/31/1840
Time	Instant	Category
Number of seconds since midnight	Number of seconds since midnight on 12/31/1840	Limited list of choices

Add Types

- No-Add
 - Data is valid across all contacts in a record
 - Example: SSN
- Response Each Time
 - Data must be entered for each contact
 - Example: Blood Pressure
- Lookback
 - If data isn't entered for a contact, the most recent value is recorded
 - Example: OB/GYN Status

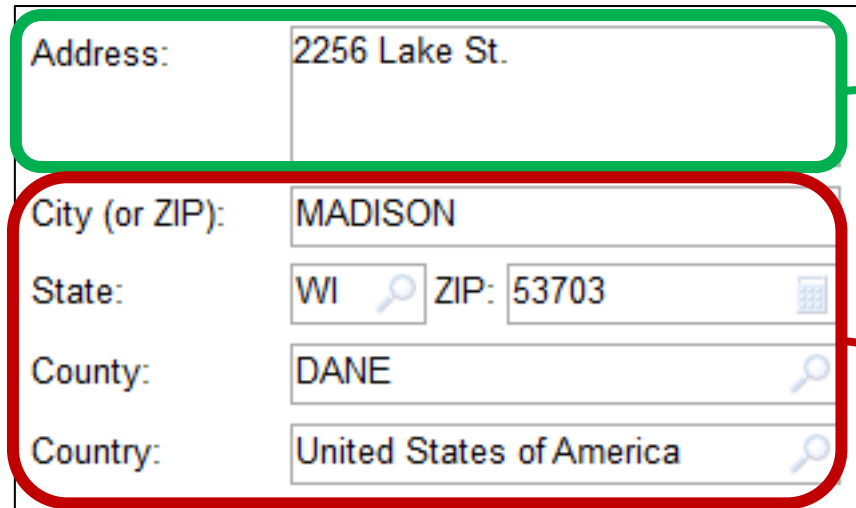


Overtime





Response Types

- Single
 - One line of data
- Multiple
 - More than one line of data
- Related
 - Two or more items linked together
 - More than one line of data

Response Types – Examples

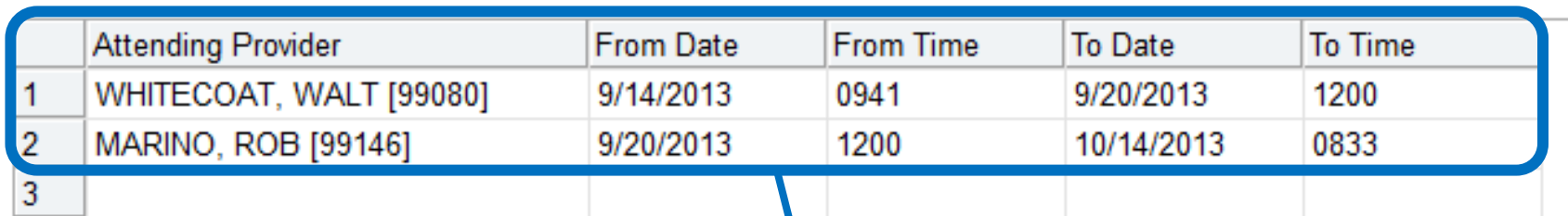


A form with five input fields. The first field, 'Address:', contains '2256 Lake St.' and is highlighted with a green rounded rectangle. The remaining four fields are grouped within a red rounded rectangle: 'City (or ZIP):' contains 'MADISON'; 'State:' contains 'WI' with a search icon; 'ZIP:' contains '53703' with a calendar icon; 'County:' contains 'DANE' with a search icon; and 'Country:' contains 'United States of America' with a search icon.

Address:	2256 Lake St.
City (or ZIP):	MADISON
State:	WI 
ZIP:	53703 
County:	DANE 
Country:	United States of America 

Multiple

Single

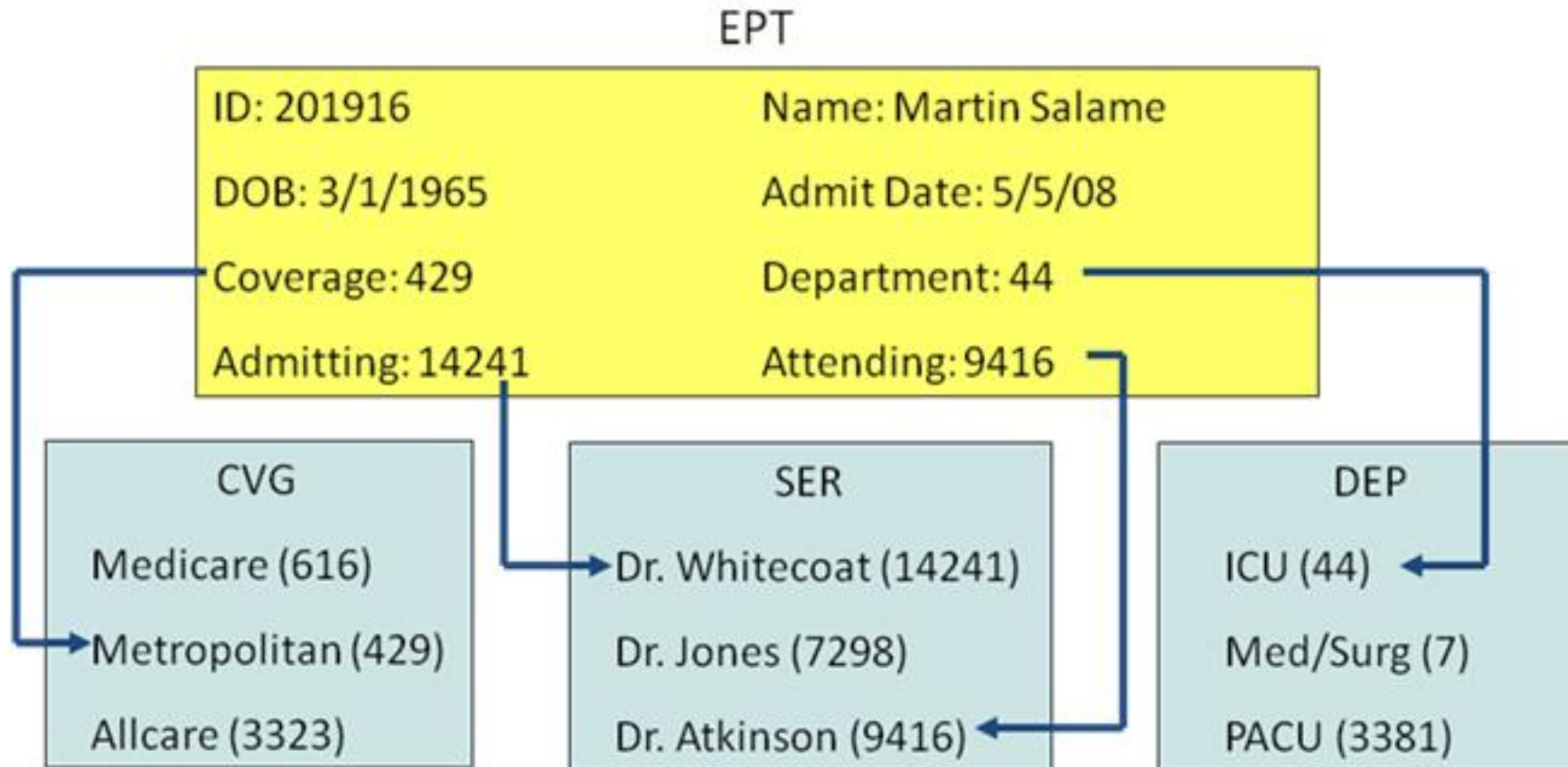


A table with 6 columns: an index column, 'Attending Provider', 'From Date', 'From Time', 'To Date', and 'To Time'. The first two rows are highlighted with a blue rounded rectangle. Row 1: 1, WHITECOAT, WALT [99080], 9/14/2013, 0941, 9/20/2013, 1200. Row 2: 2, MARINO, ROB [99146], 9/20/2013, 1200, 10/14/2013, 0833. Row 3 is partially visible with index 3.

	Attending Provider	From Date	From Time	To Date	To Time
1	WHITECOAT, WALT [99080]	9/14/2013	0941	9/20/2013	1200
2	MARINO, ROB [99146]	9/20/2013	1200	10/14/2013	0833
3					

Related

Networking



Indexing

Patient	Current General PCP
Amy Green	Dr. Whitecoat
Kristi Schuler	Dr. Silver
Martin Salame	Dr. Whitecoat
Adam Carey	Dr. Johnson
Melissa Ebhart	Dr. Chen
...	...

Current General PCP	Patient
Dr. Johnson	Adam Carey
Dr. Whitecoat	Amy Green
Dr. Whitecoat	Martin Salame
Dr. Silver	Kristi Schuler
Dr. Chen	Melissa Ebhart
...	...

Agenda: Day 1

- Introduction
- Radar Dashboards
- SlicerDicer Populations
- Data Lineage
- **Day 1 Lab: Chronicles & the Record Viewer**

Lab Time

Take this time to review the day's content, or complete the **Day 1 Lab**. In this lab, you will learn the structure of Chronicles and how to use the Record Viewer to investigate data in Chronicles.

If you do not yet feel completely confident in today's chapters, you should take this time to:

- Flag down a trainer for some 1-1 review
- Complete any exercises you did not have time for or still have questions on
- Read through the chapter review questions and Study Checklists to test your understanding

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We'll see you tomorrow at 8:30! Enjoy your evening!

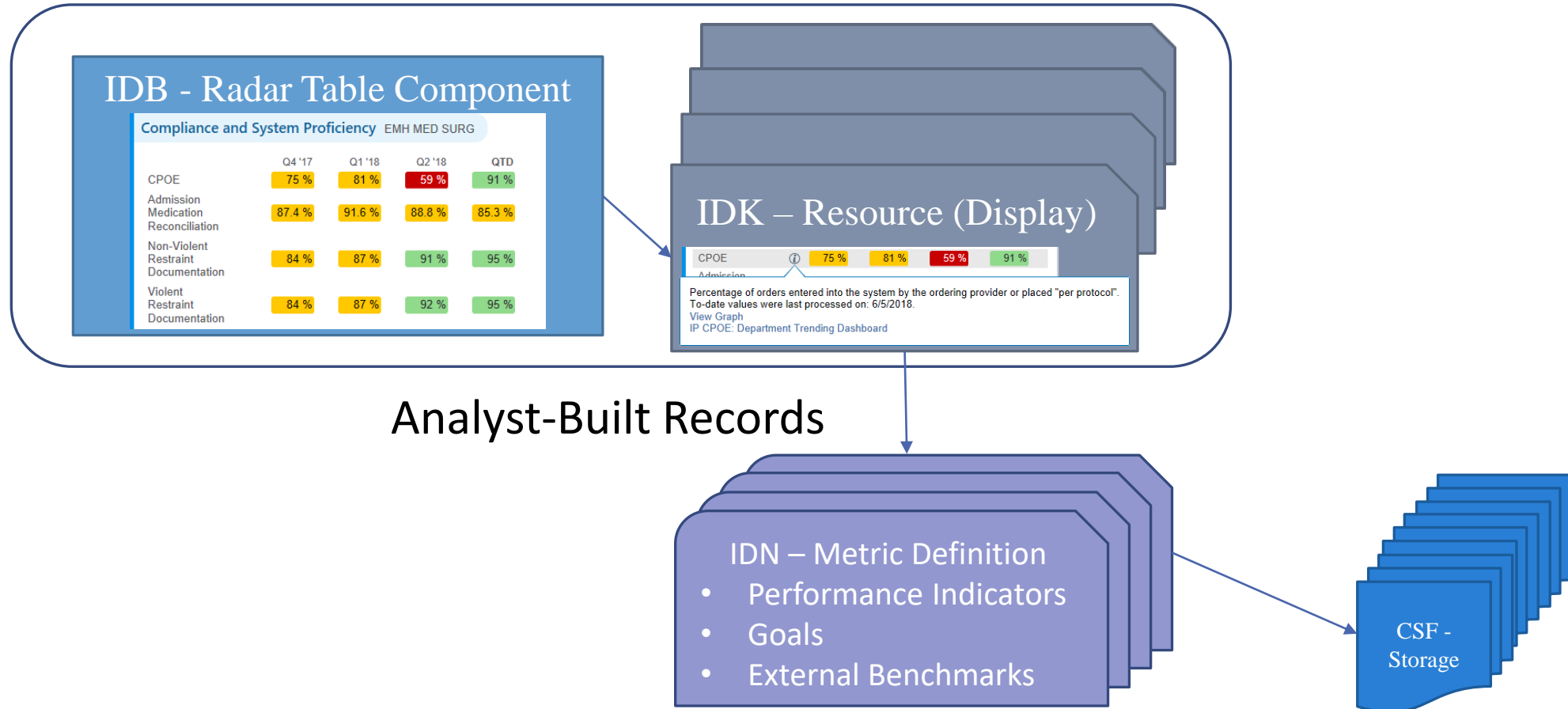
Agenda: Day 2

- **Dashboard Metrics**
- Workbench Reports
- Day 2 Lab: Epic-Released Content

Metrics Definitions

- IDM – Dashboards
- IDB – Components
- IDK – Dashboard Resources
- IDN – Metric Definitions
- CSF – Cogito Summarized Facts (The actual data)

Metrics Definitions



Exercise 1: Explore a Metrics Dashboard

In this exercise, you will explore how users can interact with metric-based dashboards.

Where do Metrics get their data?

- Chronicles
- Registries
- Clarity
- Caboodle
- Datalink
- Scheduled batch jobs
- Manual data import
- And much, much more...

Exercise 2: Build a Metric-Based Component

- Create an IP CPOE dashboard resource. This resource should use the COG170 00 IP CPOE metric (IDN record).
- Create a table component of a type of Historical Trending that allows multiple resources.

It should display data from your IP CPOE resource as well as the IP Clarity Admission Medication Reconciliation [11054] resource.

The component should display department-level data and should determine potential summary targets by login user and department.

Present the data as a table and display four months of data.

Add this component your Starter Dashboard.

Allow Multiple: Resources vs Targets

Resources

Compliance and System Proficiency EMC FAMILY MEDICINE				
	Q2 '17	Q3 '17	Q4 '17	QTD
CPOE	85 %	75 %	84 %	89 %
Admission Medication Reconciliation	89.5 %	94.0 %	92.7 %	93.5 %
Non-Violent Restraint Documentation	59 %	72 %	84 %	92 %
Violent Restraint Documentation	85 %	80 %	100 %	100 %

Targets

CPOE Compliance by Department					
	Dec 17	Jan	Feb	Mar	MTD
EMH MED SURG	76 %	78 %	79 %	81 %	84 %
EMH MAIN OR	77 %	78 %	81 %	83 %	83 %
EMH CARDIAC ICU	76 %	78 %	81 %	83 %	85 %
EMH EMERGENCY	74 %	80 %	76 %	80 %	86 %

Write in Workbook

When you allow multiple summary locations in a metric-based component, how many resources (IDK) can be added to the component? How can you tell from the Data Source form in Component Editor?

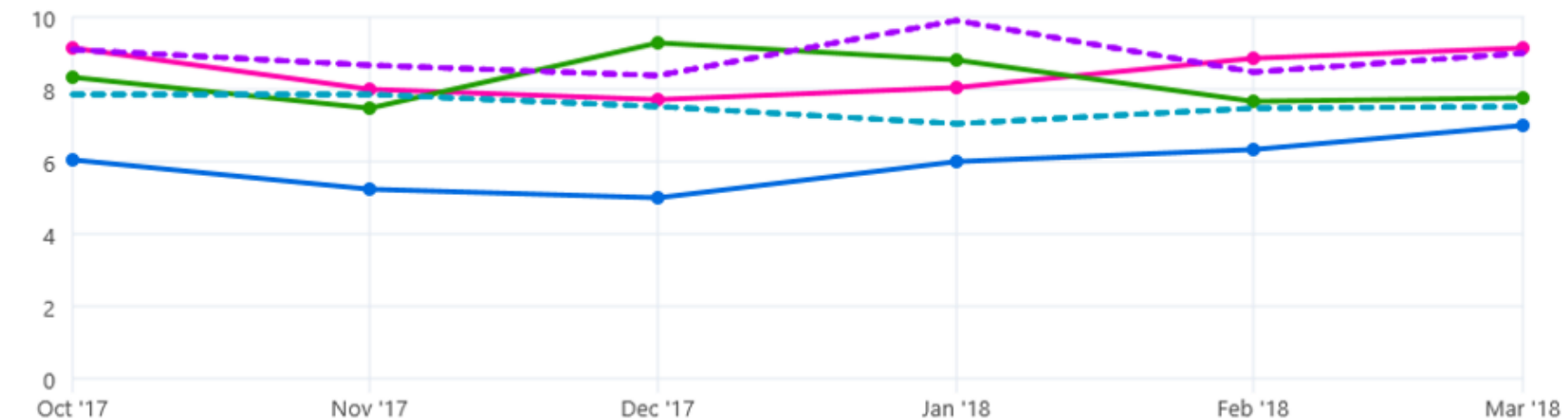
One, the resource field becomes single response.

How could you add more summary targets to the component? What did this button control before?

Clicking the Add button. This used to be how you added multiple resources to the component.

Benchmarking

Median Ready to Go to Discharge Time



Primary Y Axis ☒ METROPOLITAN MEDICAL SYSTEMS ☒ RIS COMMUNITY HOSPITAL ☒ WI HARBOR BLUFF HOSPITAL
☒ Comparisons ☒ Epic-Mean ☒ Epic-90th Percentile

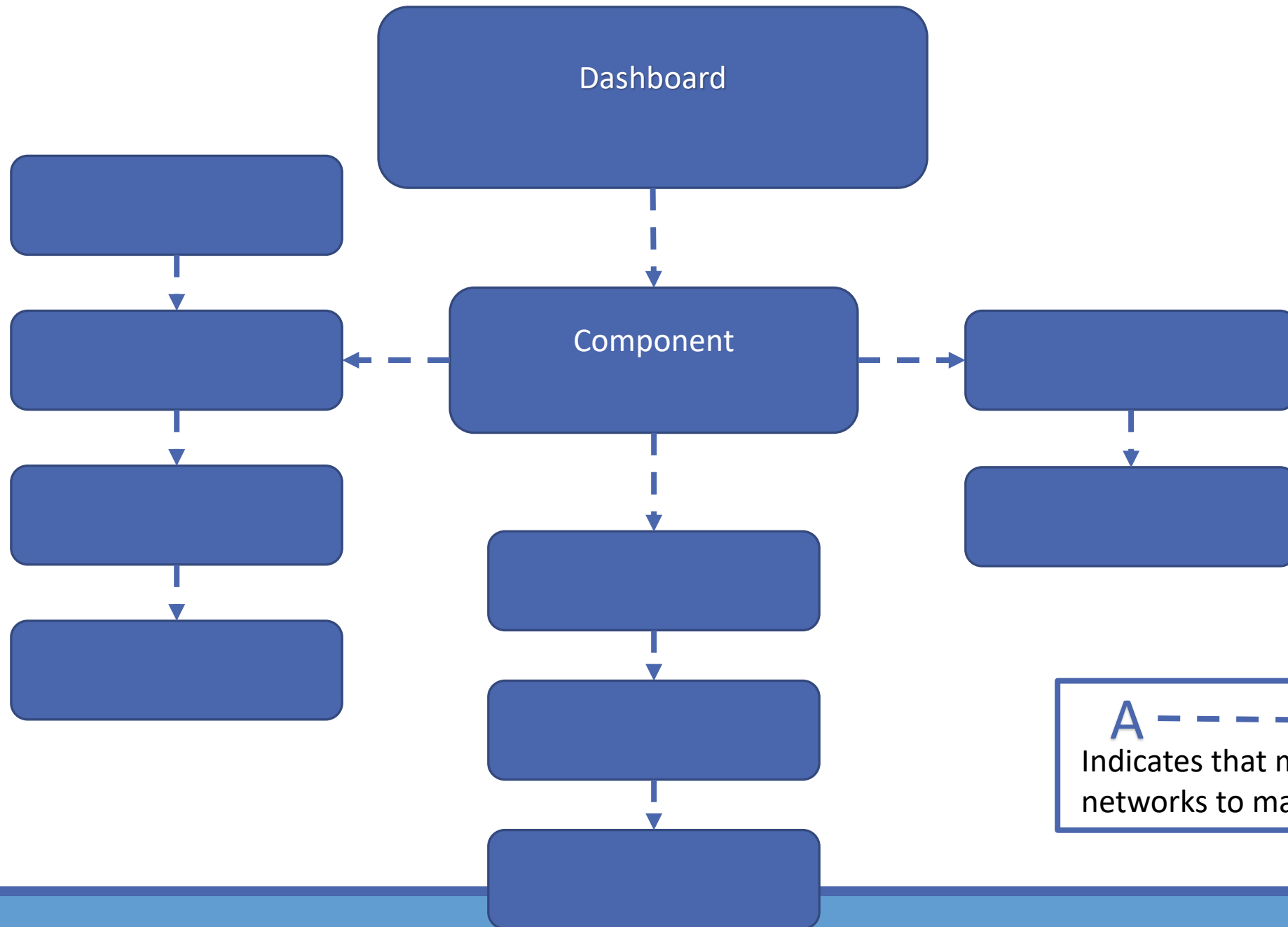
	Oct 17	Nov 17	Dec 17	Jan	Feb	Mar	Epic Mean	Epic 90th %
METROPOLITAN MEDICAL SYSTEMS	6m	5m	5m	6m	6m	7m	9m	7m
RIS COMMUNITY HOSPITAL	9m	8m	7m	8m	8m	9m	9m	7m
WI HARBOR BLUFF HOSPITAL	8m	7m	9m	8m	7m	7m	9m	7m

Exercise 3: Build a Resource-Based Component on Multiple Summary Targets

In this exercise, you will build a component in which each row represents a different summary target's data for a given resource.

If You Have Time – Exercise 4: Define Report Links on a Resource

In this exercise, you will incorporate SlicerDicer and Report links into your COG170 ## IP CPOE resource.



A - - - - -> B

Indicates that master file A
networks to master file B

Agenda: Day 2

- Dashboard Metrics
- **Workbench Reports**
- Day 2 Lab: Epic-Released Content

Resources

- [Reporting Workbench Setup and Support Guide](#)
- [Reporting Workbench Report Design Specification](#)
- [Report Testing Forms](#)
- [Cogito Strategy Handbook](#)

Workbench Framework

A template is a record in:

HGR

A report is a record in:

HRX

A set of results is a record in:

HRN

Exercise 1: Viewing and Sorting a Report

In this exercise, you will practice working with report results as a point-and-click user.

Write in Workbook

A patient, Jackson Shehulk, has had 5 office visits in the last year. Three of these office visits were with Dr. Marino, and two were with Dr. Whitecoat.

A user builds the following report:

Find all patients with an office visit in the last year where the visit provider was Dr. Marino.

How many rows would Jackson have in the results if this report were record-based?

1

How many if it were contact-based?

3

Report Sharing

PUBLIC REPORT

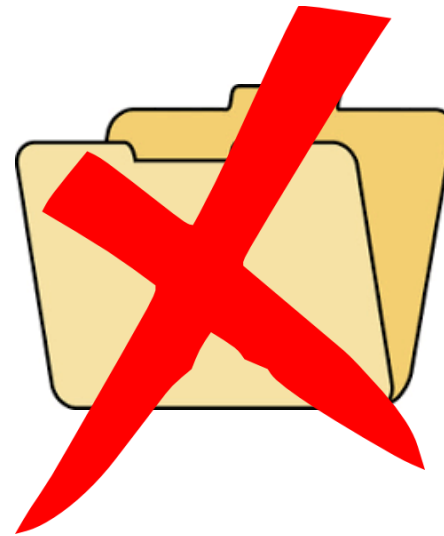
Share Results			
With Groups		Notify	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

PRIVATE REPORT

Share Report	
With Users	
<input type="text"/>	

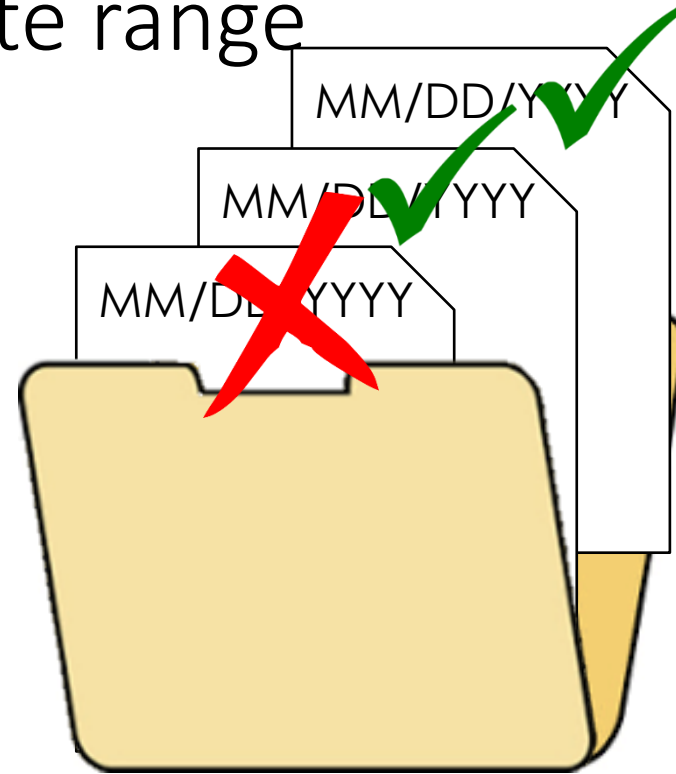
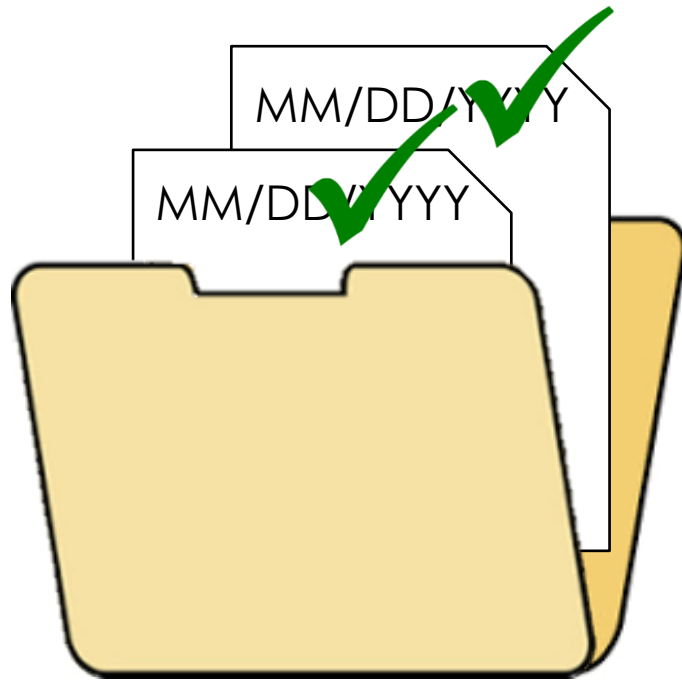
Date Range: Step 1

Filter on record-level items



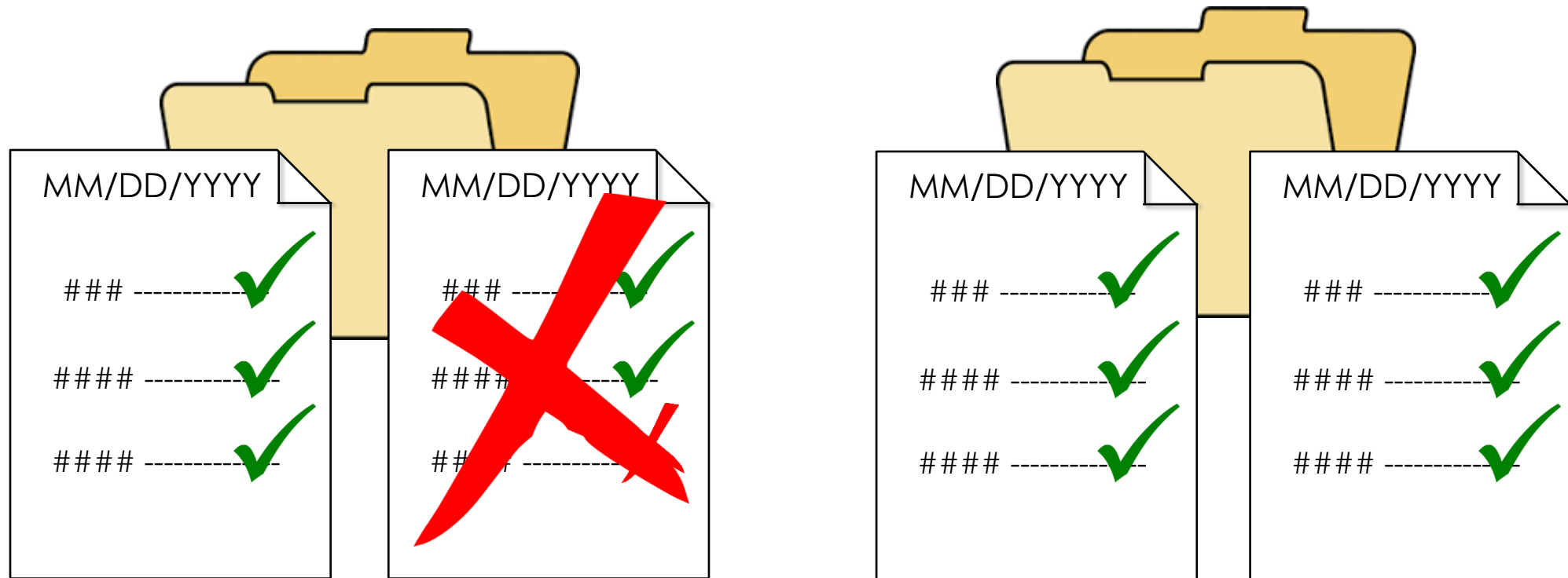
Date Range: Step 2

Select contacts within the date range



Date Range: Step 3

Filter on contact-level items



Exercise 2: Date Range in Workbench Reports

In this exercise, you will investigate when the date range in the Report Settings window applies to criteria.

Exercise 3: Build and Modify a Report

In this exercise you will create a report from an existing template in the Analytics Catalog.

Physicians at your clinic want to keep track of patients with a high BMI. You have a request to build a report that displays all patients in the city of Madison who have had a high BMI recorded at a recent visit.

Write in Workbook

What would be a good reason to build a summary in Reporting Workbench instead of using SlicerDicer?

The summary must include data from today

The data you're reporting on is not extracted to Caboodle

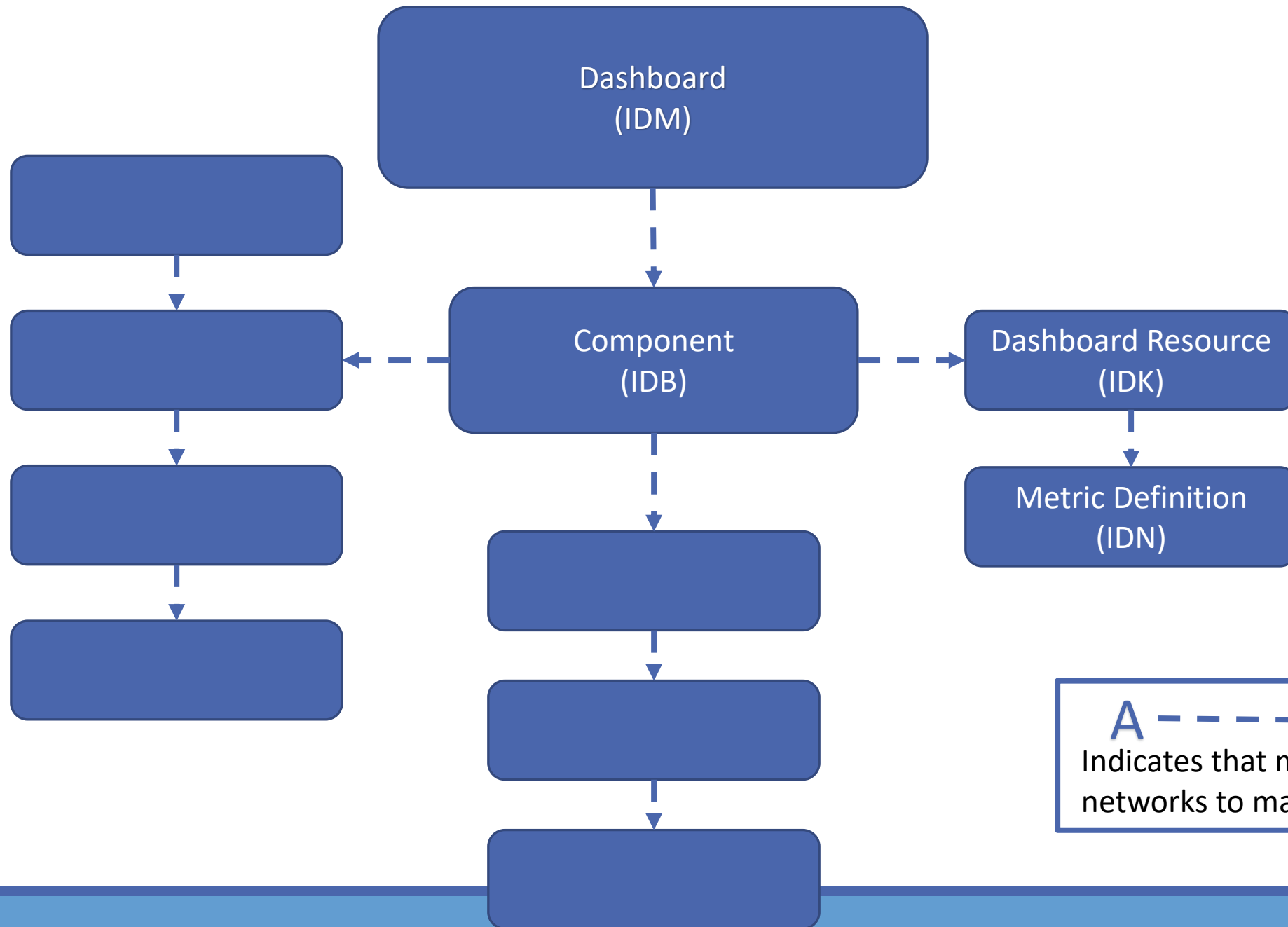
Write in Workbook

In which master file is each report model a record?

HSQ

Exercise 4: Distributing Reports on a Dashboard

- Build a link and report listing component



Agenda: Day 2

- Dashboard Metrics
- Workbench Reports
- **Day 2 Lab: Epic-Released Content**

Lab Time

Take this time to review the day's content, or complete the **Day 2 Lab**. In this lab, you will learn how to use Epic's online documentation to research what content is available, how to leverage the content, and how to tweak it to suit your needs.

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- Report Requests
- Troubleshooting
- Analytics Catalog
- Cogito Roles
- Day 3 Lab: Building Reports

Grouping

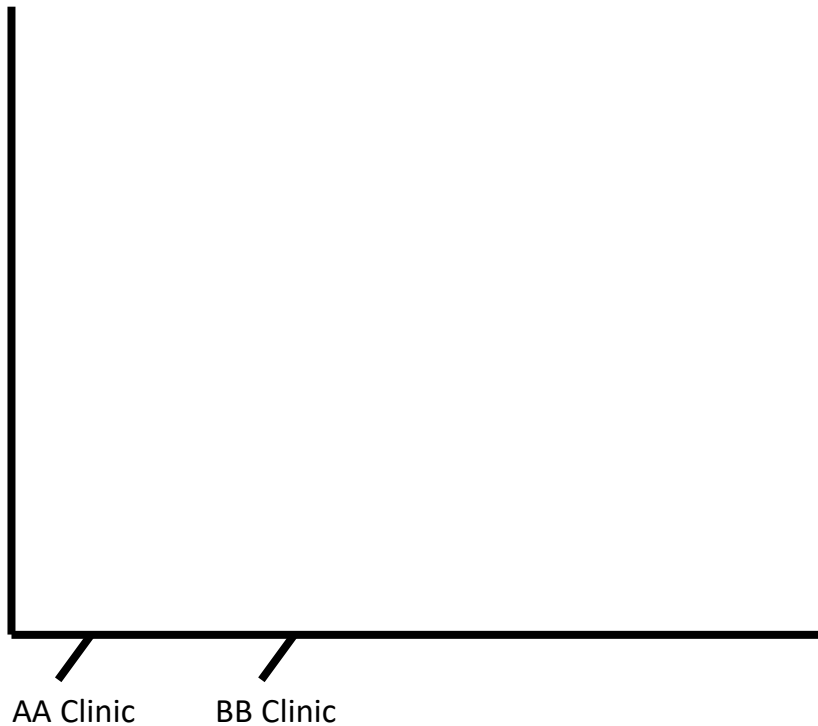
Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
Denise Drake	444	2/2/2011	CC Clinic	\$300
Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Grouping (by Department)

Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
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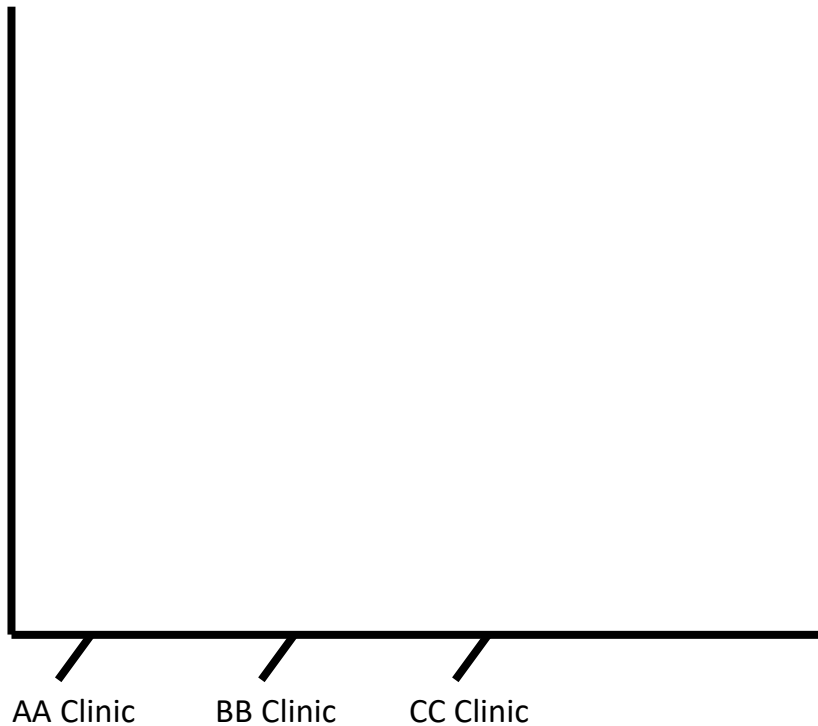
AA Clinic

Grouping (by Department)



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
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Denise Drake	444	2/2/2011	CC Clinic	\$300
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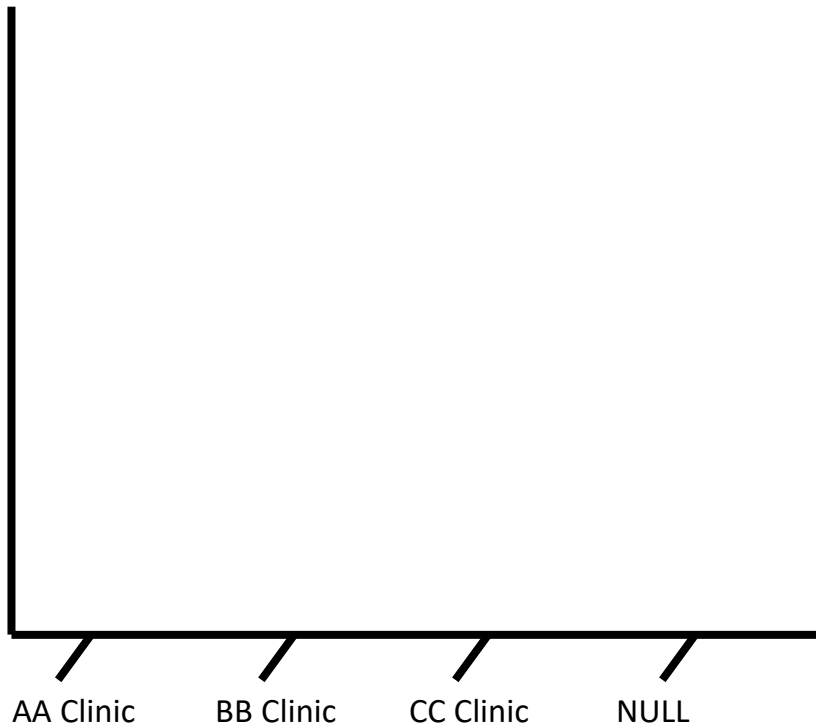
Grouping (by Department)



Patient Name	Patient MRN	Encounter Date	Department	Total charges
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Barry Brown	222	1/1/2011	BB Clinic	\$100
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Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
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Grouping (by Department)

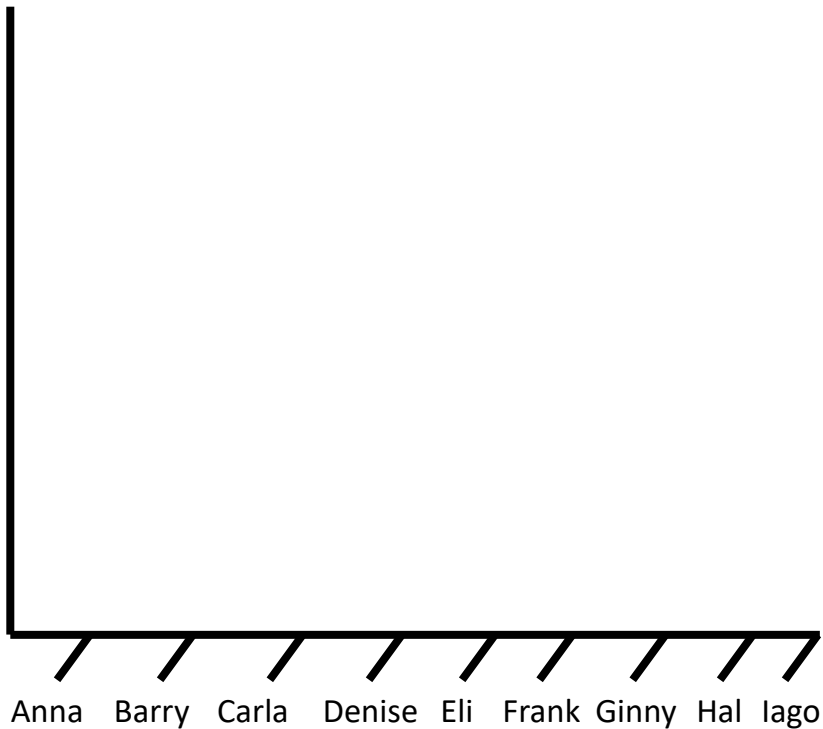
Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
Denise Drake	444	2/2/2011	CC Clinic	\$300
Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100



Grouping (Patient Name)

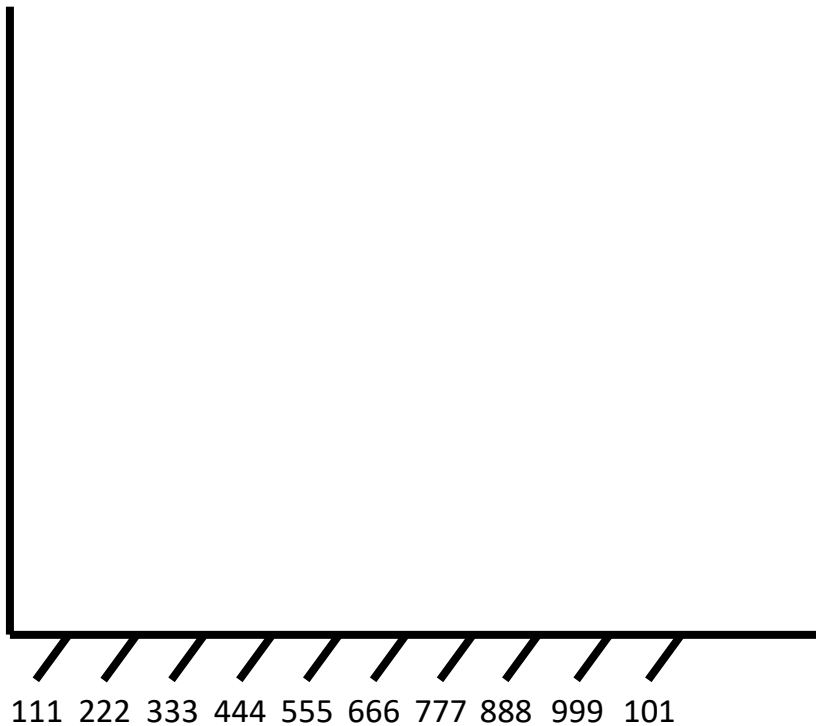
Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
Denise Drake	444	2/2/2011	CC Clinic	\$300
Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Grouping (Patient Name)



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
Denise Drake	444	2/2/2011	CC Clinic	\$300
Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Grouping (Patient MRN)



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
Denise Drake	444	2/2/2011	CC Clinic	\$300
Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Write in Workbook

How many groups would the summary have if it was grouped by Patient Name?

9

How many if it was grouped by Patient MRN?

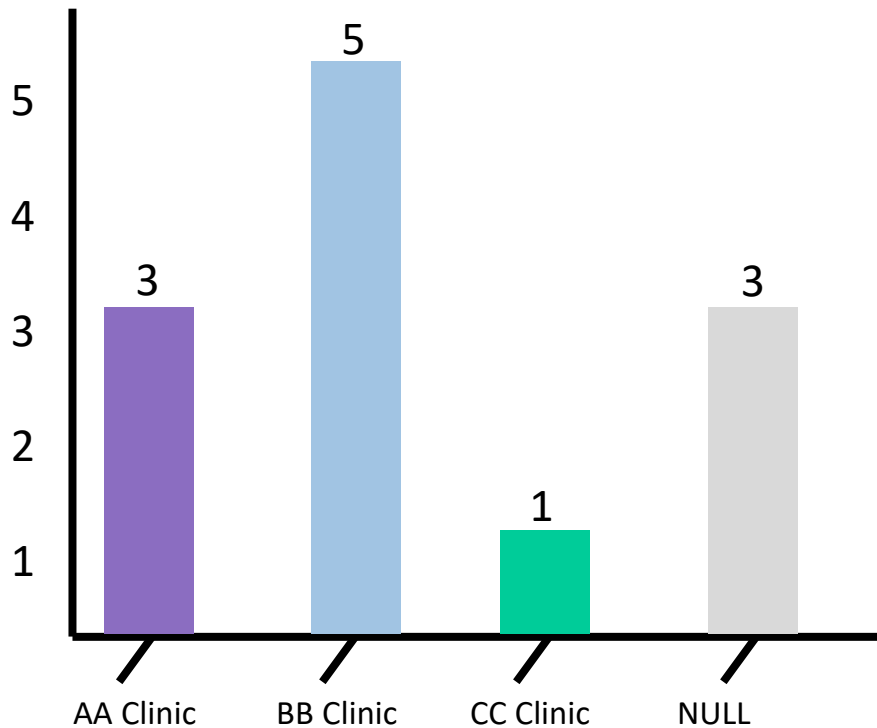
10

Summarization Functions

- Count
- Count Unique
- Sum
- Average
- Percentage

Count (by Department)

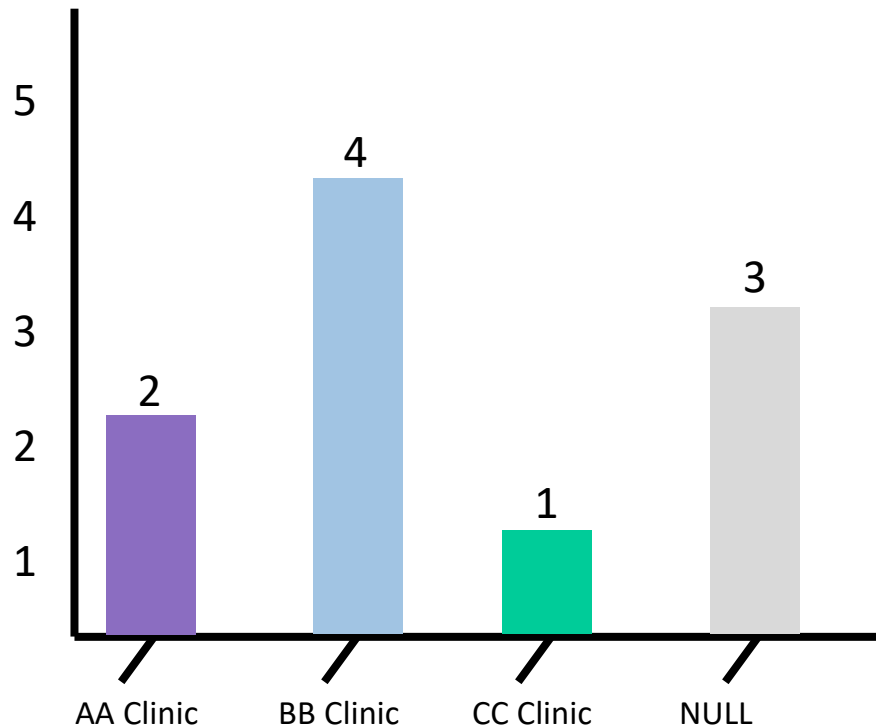
Count of
Patient Name



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
Denise Drake	444	2/2/2011	CC Clinic	\$300
Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
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Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Count Unique (by Department)

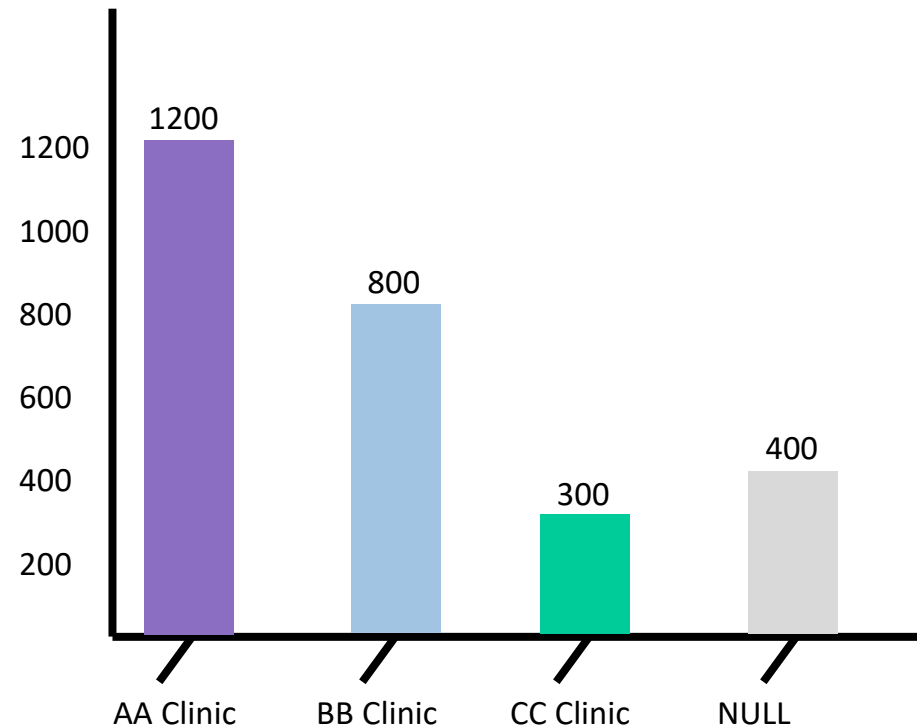
Count Unique of
Patient MRN



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
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Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Sum (by Department)

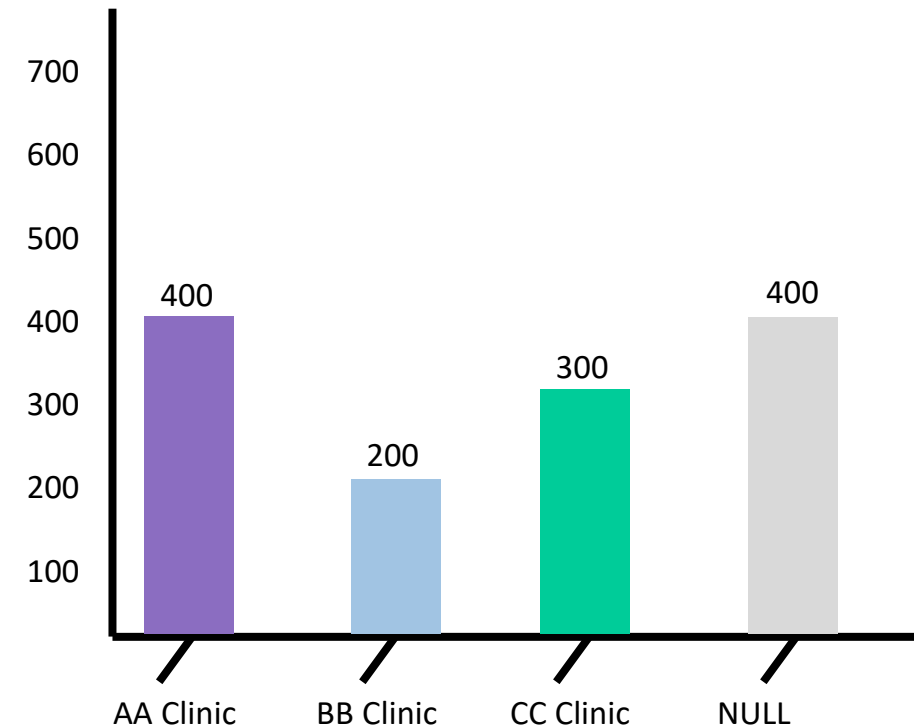
Sum of Total Charges



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
Denise Drake	444	2/2/2011	CC Clinic	\$300
Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Average (by Department)

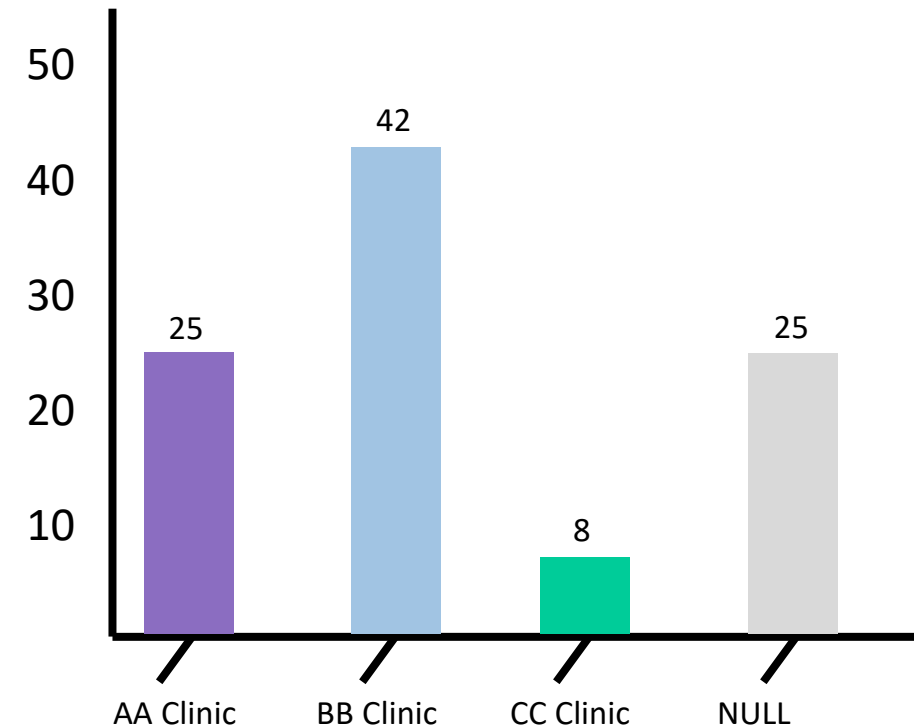
Average of Total Charges



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
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Eli Emery	555	3/3/2011	BB Clinic	\$0
Frank Ford	666	4/4/2011	NULL	\$400
Anna Allen	777	5/5/2011	AA Clinic	\$1000
Ginny Gale	888	NULL	NULL	NULL
Haleem Hadi	999	NULL	NULL	NULL
Iago Ingersoll	101	1/10/2012	BB Clinic	\$700
Anna Allen	111	2/10/2012	AA Clinic	\$100

Percentage (by Department)

Percentage of Visits by
Department (Count MRN)



Patient Name	Patient MRN	Encounter Date	Department	Total charges
Anna Allen	111	1/1/2011	AA Clinic	\$100
Barry Brown	222	1/1/2011	BB Clinic	\$100
Barry Brown	222	1/14/2011	BB Clinic	NULL
Carla Collins	333	1/5/2011	BB Clinic	\$0
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Anna Allen	111	2/10/2012	AA Clinic	\$100

Exercise 1: Which Function?

For each example, choose the correct summarization function(s) you might need.

Exercise 1: Which Function?

For each example, choose the correct summarization function(s) you might need.

1. How much money did we charge in 2011?

Sum

2. How many patients were seen in each clinic?

Count Unique

3. How much money do we usually receive from Medicare for each knee replacement procedure?

Average

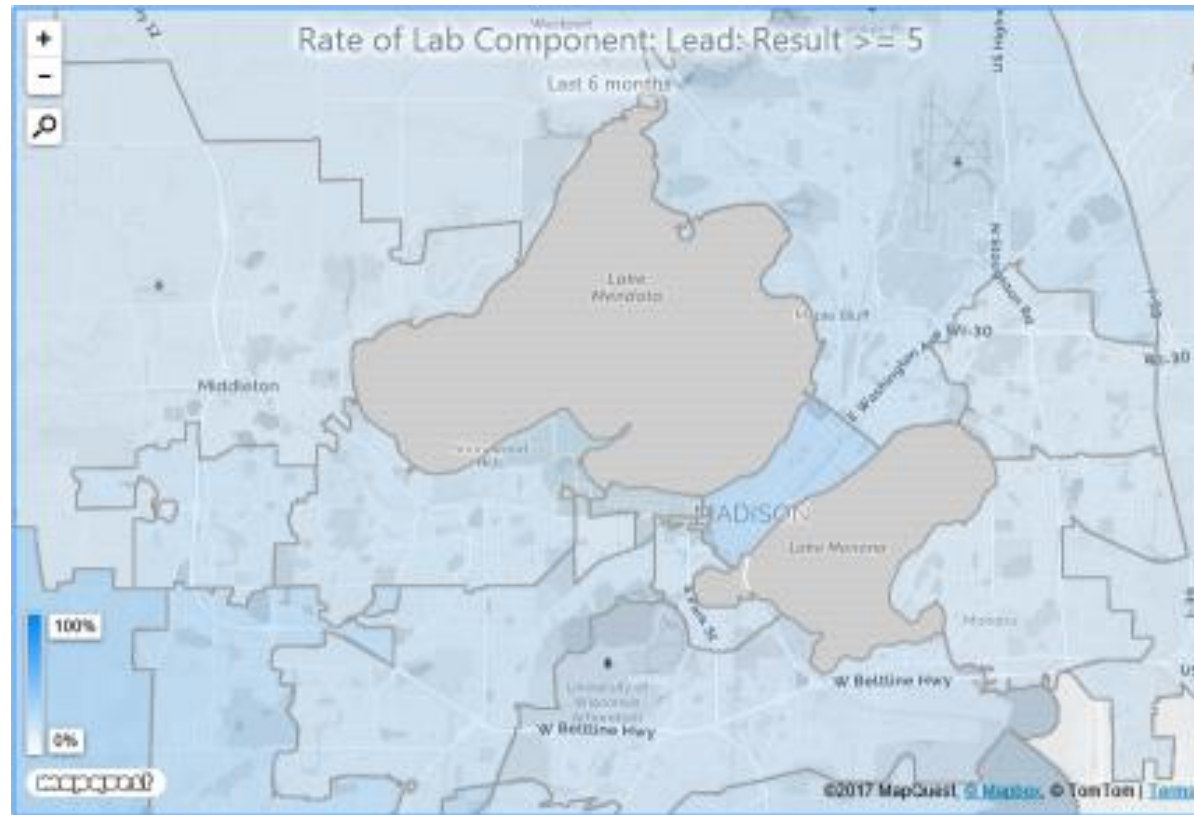
4. For each provider, how often are they prescribing drugs from the Statins grouper?

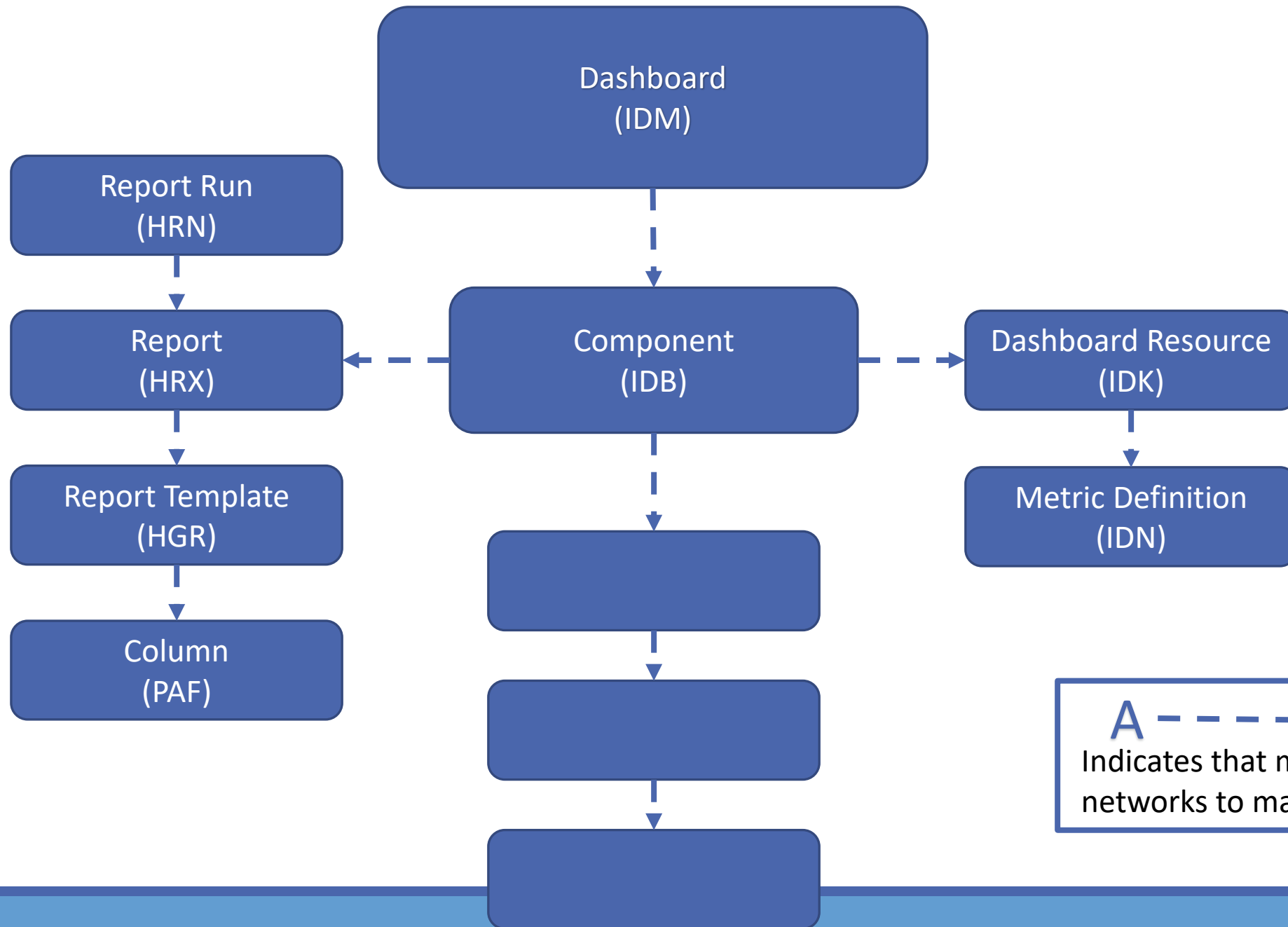
Count

5. How many different procedures have each of our clinics performed this month?

Count Unique

SlicerDicer: Map Visualization



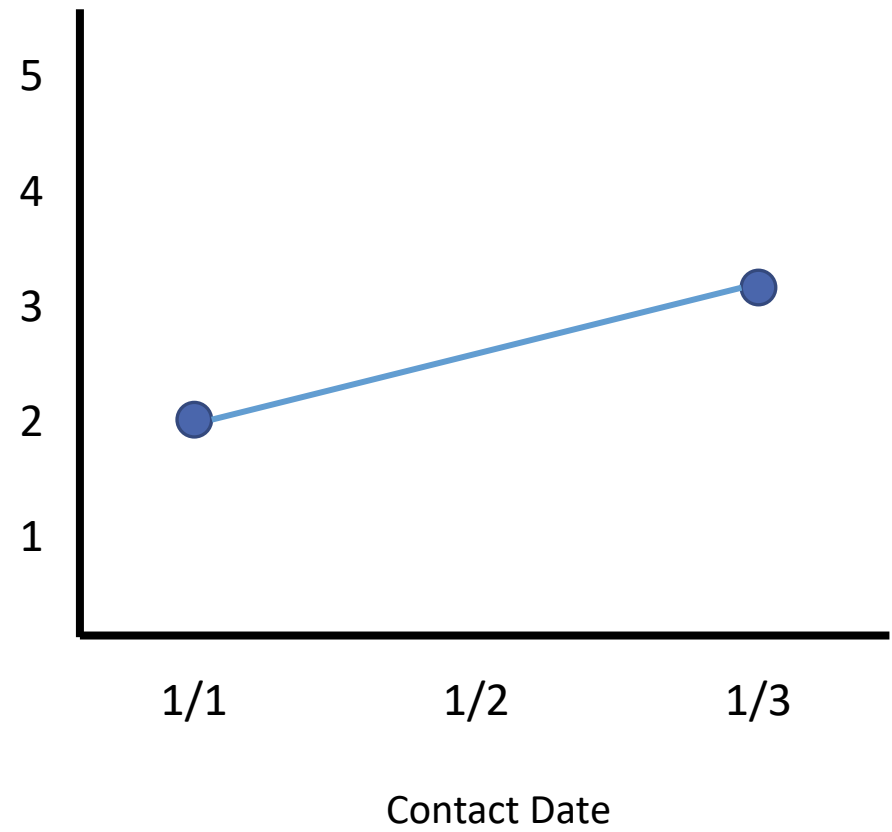


A - - - - -> B

Indicates that master file A
networks to master file B

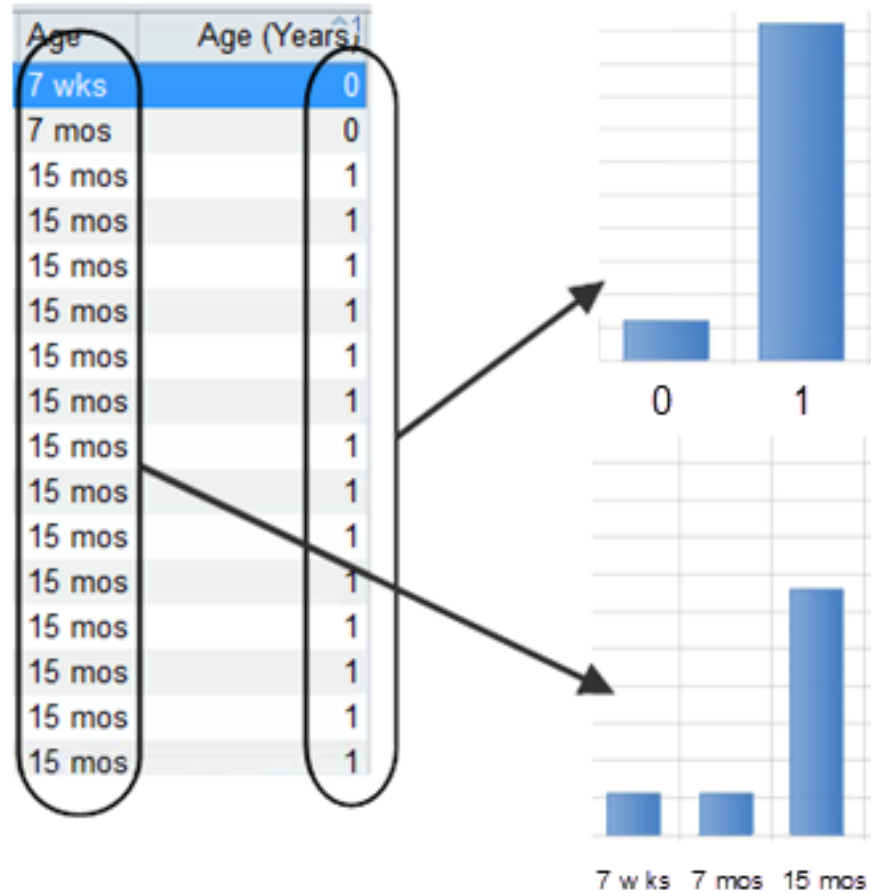
Workbench Summaries: Line Graph

Count of Patient MRN



Patient Name	Patient MRN	Contact Date
Anna Allen	111	1/1/2018
Barry Brown	222	1/1/2018
Anna Allen	111	1/3/2018
Anna Allen	111	1/3/2018
Barry Brown	222	1/3/2018

Workbench Summaries: PAF



Exercise 2: Build a Workbench Summary

In this exercise you will create a report that finds a list visits across different locations in your organization. You will add a bar graph to the report that shows the number of visits for each location.

Thresholds

MyChart Table Component · Just now
⌚ Report completed: Thu 2/4 04:20 PM

Pt. Portal Status	Patient Count	Percentage
!! Activated	1,534	35.69%
✓ Inactivated	108	2.51%
!! Not Used	1,631	37.95%
!! Mstd Myc Sta	619	14.40%
! Pt Declined	406	9.45%
Count unique values	4,298	-

Cell level indicators →

Row level indicators →

Exercise 3: Put a Summary on a Dashboard

In this exercise, you will create a table component based off the Workbench report you built in **Exercise 2: Build a Workbench Summary** and add that component to your dashboard.

Exercise 4: Which Tool Can Do It?

Fill in the table with a check mark for each tool that can summarize data in the proposed way.

SlicerDicer on a Dashboard

- Administrators can create a SlicerDicer component for a user
 - Creates a **Graph** type component
 - Data Source of **SlicerDicer**
- Users can add SlicerDicer components to their own view as well
 - Dashboard Options > Create Component

Exercise 4: Creating a new SlicerDicer component

Add the **Exercise 2: Build a Session** SlicerDicer session to your dashboard and answer a number of questions about it.

Agenda: Day 3

- Summaries
- **Report Requests**
- Troubleshooting
- Analytics Catalog
- Cogito Roles
- Day 3 Lab: Building Reports

Steve and Mona's meeting

Resources

- [Clarity Report Design Specification](#)
- [Workbench Report Design Specification](#)
- [Radar Dashboard Design Specification](#)

Questions to ask

What should one row in the results represent?

What will you do with these results?

What do you expect to see in the results?

Exercise 1: Discuss the Report Request Process

Every organization has a different request process, and it can be helpful to compare your processes with other organizations' processes to hear about new ways to innovate or solutions to old problems.

Share your report request process with those around you. If you do not have a process yet, or do not know what it is, you can use the following questions to guide the discussion.

Agenda: Day 3

- Summaries
- Report Requests
- **Troubleshooting**
- Analytics Catalog
- Cogito Roles
- Day 3 Lab: Building Reports

Troubleshooting Workbench Reports

“Why is this report returning these results?”

- Issue with report search criteria
- False positives
- False negatives

Solution:

Run a trace

Interpreting Error Messages

All Orders [429481] as of Wed 4/18/2018 6:24 PM

Filters

Options ▾

Medications

+ Add to List

Hospital Chart

MAR

Enter/Edit Results

✓ Review Result

Medication Management ▾

Report Message
This report might be missing results because it reached the limit of records to return. Contact your administrator if the current limit is insufficient.

Order ID	Patient Name (MRN)	Ordering Provider	Order Date	Age of Order
----------	--------------------	-------------------	------------	--------------

Agenda: Day 3

- Summaries
- Report Requests
- Troubleshooting
- **Analytics Catalog**
- Cogito Roles
- Day 3 Lab: Building Reports

Analytics Catalog: Content



Dashboards



Components



Workbench Templates/Reports



Crystal and
WebI Reports



SlicerDicer Data
Models



Links
(to external or 3rd party content)

Exercise 1: Tags and Descriptions

In previous lessons, you built a number of reports and dashboard components.

Try to find them in the Analytics Catalog!

Agenda: Day 3

- Summaries
- Report Requests
- Troubleshooting
- Analytics Catalog
- **Cogito Roles**
- Day 3 Lab: Building Reports

Database Administrator

Chronicles Administrator

- Oversees daily functioning and troubleshooting of Chronicles

Clarity Administrator

- Oversees and troubleshoots nightly and ad-hoc Clarity ETL executions that move data from Chronicles to Clarity

Caboodle Administrator

- Oversees and troubleshoots nightly and ad-hoc Caboodle ETL executions that move data from Clarity to Caboodle

BOE Administrator

- Oversees the BOE server and its communication with Epic's databases



Cogito Project Manager

- Responsible for the success of the Cogito team
- Oversees processes and policies that govern the reporting and analytics goals of the organization



Business Intelligence Developer

- Broadest set of day-to-day responsibilities. Build, maintain, troubleshoot reports in Chronicles, Clarity, and Caboodle.
- Some may specialize in certain tools, all get training in Workbench, Radar, SlicerDicer, and SQL.



Application Analyst

- Responsibilities depend on which application they specialize in
- Work with the Cogito team as Subject Matter Experts (SMEs)



Caboodle Developer

- Responsible for building the packages to bring data into Caboodle from Clarity and other non-Epic data sources.



Other Roles

COGITO TOOLS ADMINISTRATOR

- Responsible for building and maintaining Workbench and Epic-Crystal templates, as well as overseeing distribution of dashboards for the Cogito team



COGITO PRINCIPAL TRAINER

- Responsible for customizing and delivering reporting training to end users at each organization



Agenda: Day 3

- Summaries
- Report Requests
- Analytics Catalog
- Cogito Roles
- **Day 3 Lab: Building Reports**

Lab Time

Take this time to review the day's content, or complete the **Day 3 Lab**. In this lab, take some time to practice building workbench reports, summaries, and dashboard components to distribute them. The following report request contains some contextual information that would usually be provided by application subject matter experts (SMEs) to help understand the data being retrieved.

If you do not yet feel completely confident in today's chapters, you should take this time to:

- Flag down a trainer for some 1-1 review
- Complete any exercises you did not have time for or still have questions on
- Read through the chapter review questions and Study Checklists to test your understanding

Trainers will be available to help and answer questions until 5pm.

We'll see you tomorrow at 8:30! Enjoy your evening!

Agenda: Day 4

- **Security**
- Cogito Build



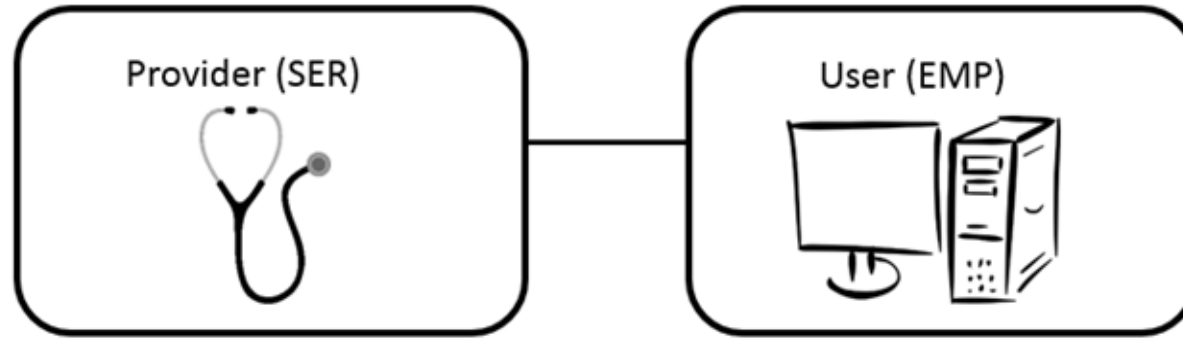
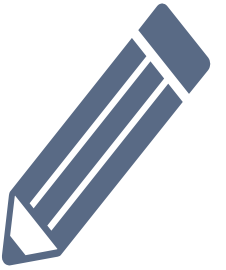
Who needs a Provider (SER) record?

C – Has **C**redentials

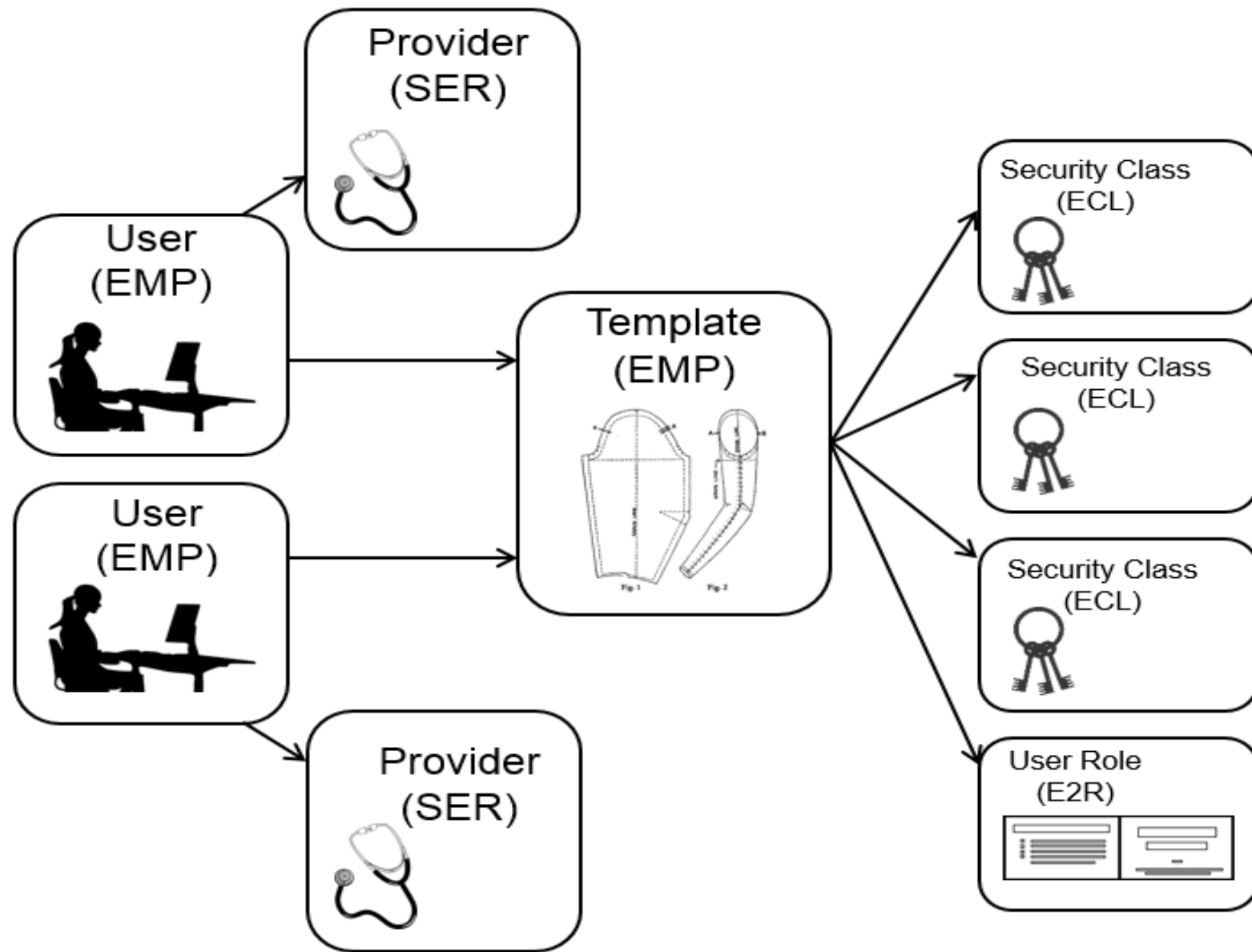
A – **A**uthorizes orders

R – Can be **R**eferred to or send referrals

S – Can be **S**cheduled



Dr. Walt Whitecoat <i>(Employed family practitioner)</i>	✓	✓
Deb Gurney, RN <i>(ED nurse)</i>	✓	✓
Elma Yorkstein <i>(Unit clerk)</i>		✓
Dr. Ila Nevalogin <i>(Referring cardiologist)</i>	✓	
Open MRI Machine <i>(a specific imaging device)</i>	✓	



Security Class

A security class is made up of security points.

Security **Points** = Access to functionality



Run
Reports



Edit
Criteria



Create
Public
Report
Columns



Edit Query
Template

Actions

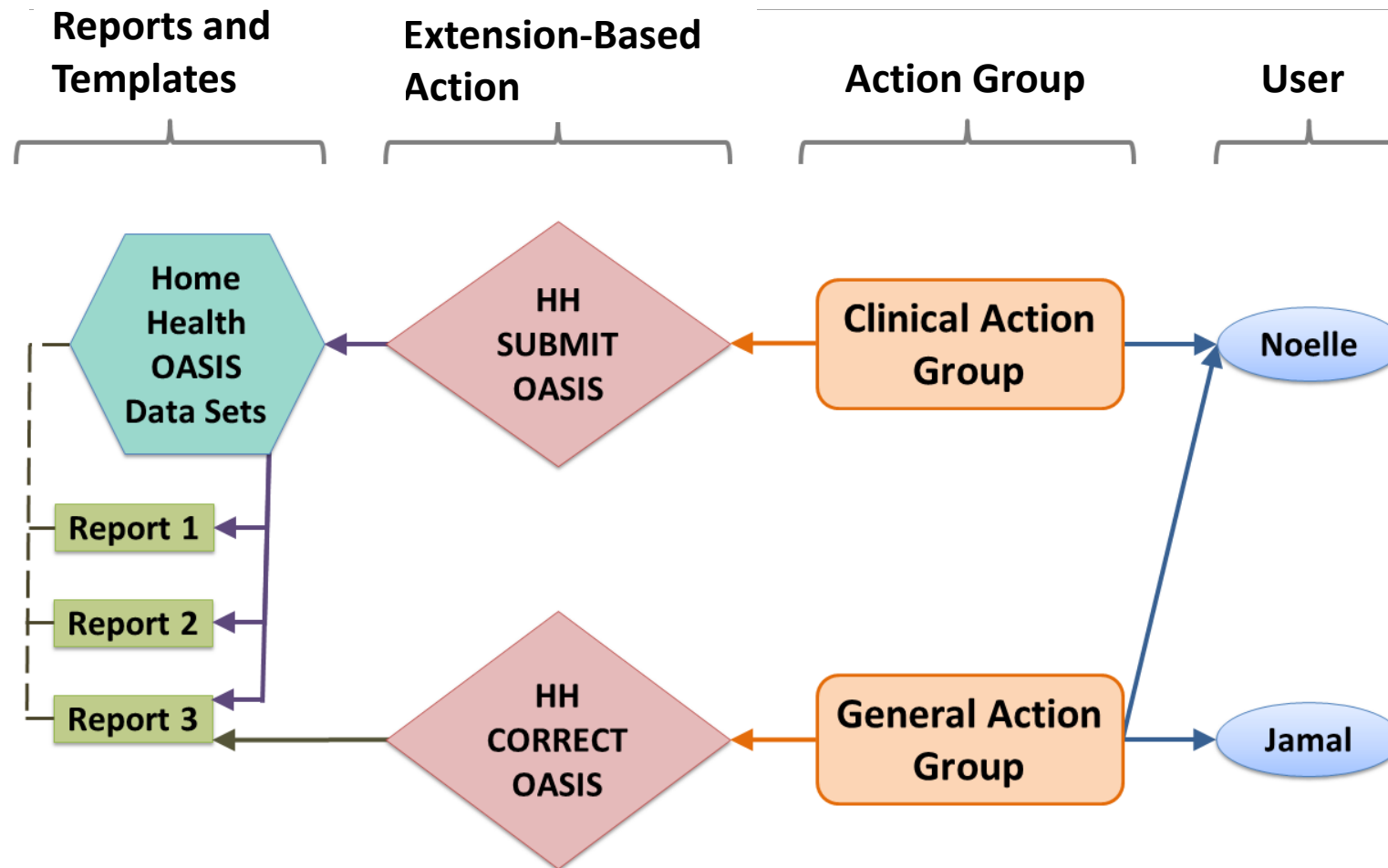
EXTENSION-BASED ACTION

- Button that executes M code

ACTION GROUP

- Controls what extension-based actions users can use
- Standard action groups:
 - General
 - Clinical
 - Financial
 - And more...

Report Action Security



Exercise 1: What a User Can Do

In this exercise, you will explore how the security class assigned to a user affects what functionality the user has available. You will observe how a user acquires the ability to do certain things in Reporting Workbench that they couldn't do before when their Reporting Workbench security class changes.

When you are done with Exercise 1:

Report Group / User Type

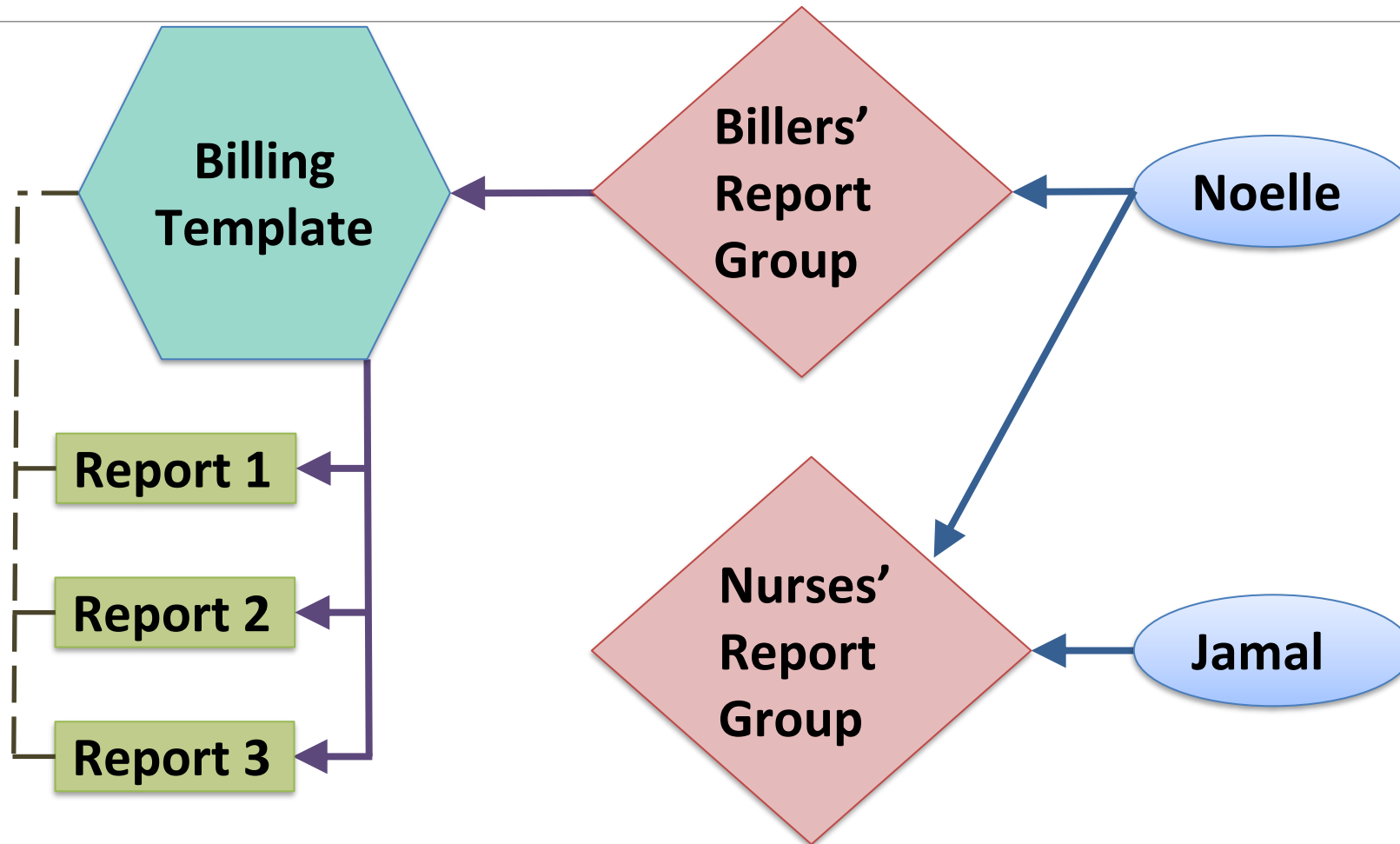
REPORT GROUP

- The primary means of distributing Cogito content
- A user is granted access to content if the user and the content share at least one report group

USER TYPE

- Epic automatically assigns user types to user records when a user logs in
- If a user and a dashboard or SlicerDicer data model share a user type, the user can access the dashboard or SlicerDicer data model

Report Access



Exercise 2: Report Groups

In this exercise, you will explore how report groups assigned to a user, template, report and component affect what reports and templates a user can see and what components a user can add to a dashboard through personalization.

Exercise 2: Report Groups

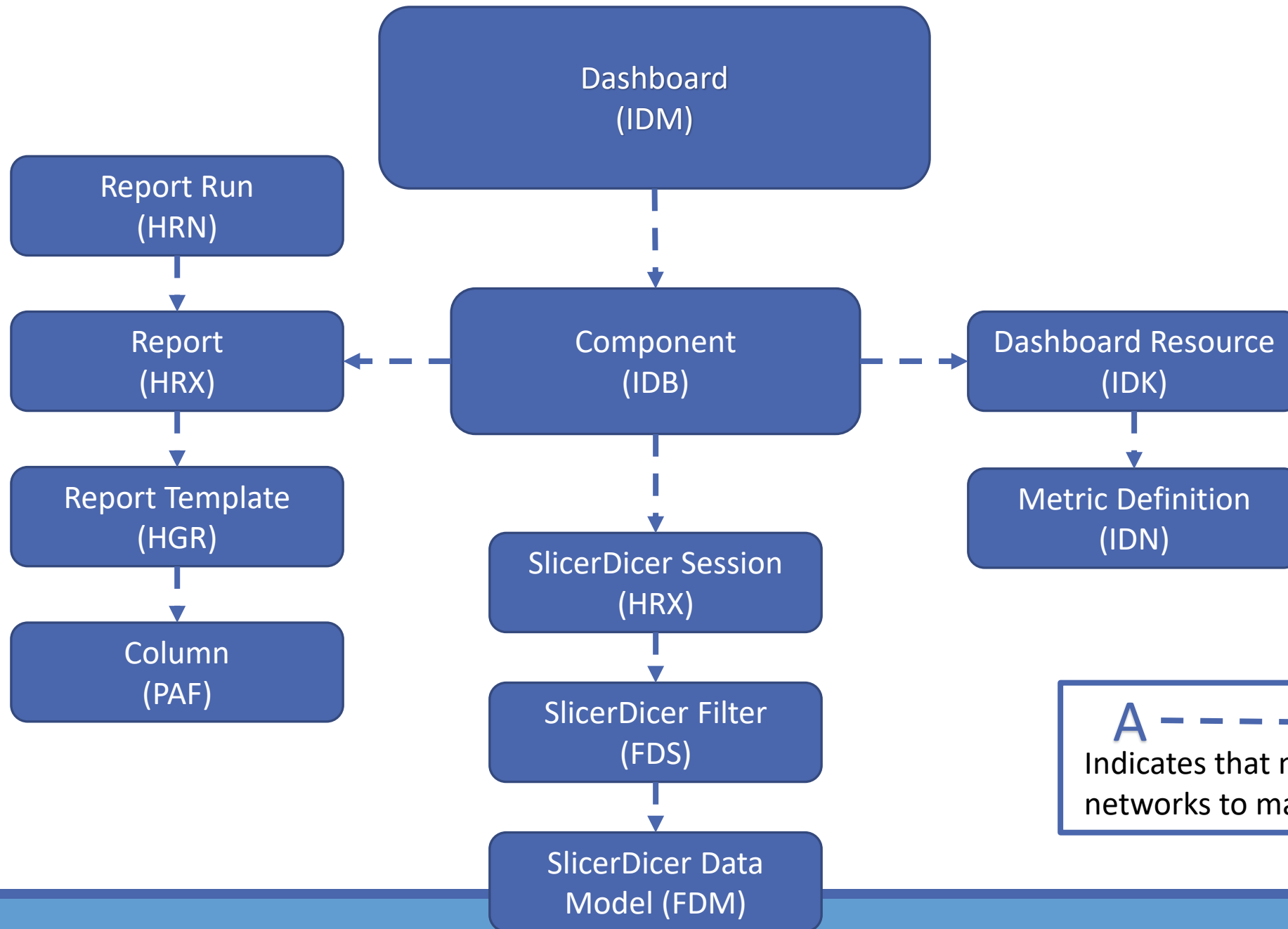
Template	In Clinician's Library?
OR Case Report	✓
Guarantor Account Search	✗
OR RW Turnovers	✓

Report	In Clinician's Library?
Anesthesia Professional Billing	✓
HIM Idle Deficiencies	✓

Component	Clinician Can Add (through personalization)?
COG170 ## Sample Links and Reports	✓
TRN HP Care Gap Maintenance Report Links	✓
MR NSR RW Upcoming Cases – Next 3 Days	✗

Agenda: Day 4

- Security
- **Cogito Build**



Write in Workbook

If you want to build a dashboard containing a metric-based component, what records do you need, and in what order should they be built?

IDN, then IDK, then IDB, then IDM

Dashboards

IDM

Dashboards

Points to a list of components

IDB

Components

Can reference many other records including:

- Dashboard resources
- Workbench reports

Dashboards: Metric Framework

IDK

Dashboard Resources

Points to metric definition

Can also link to Workbench reports

IDN

Metric Definitions

Workbench

HRN

Report Runs

Set of results can reference:

- Report which generated it
- Template used to build the report
- Columns displayed in the results

HRX

Reports

Reports reference the templates from which they were built and the columns to be displayed in the results

PAF

Columns

HGR

Report Templates

Points to all of the available and default columns

Does not contain a list of all the reports or runs generated from it

SlicerDicer

HRX

SlicerDicer Sessions

Lists all the filters used in generating the population

FDS

SlicerDicer Filters

Lists the different SlicerDicer data models in which they can be used

FDM

SlicerDicer Data Models

Does not list available filters

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