# Epic Data Sources: SlicerDicer

Intro to Query Tools for Research

Spring 2021

Mount Sinai

# Epic at a glance

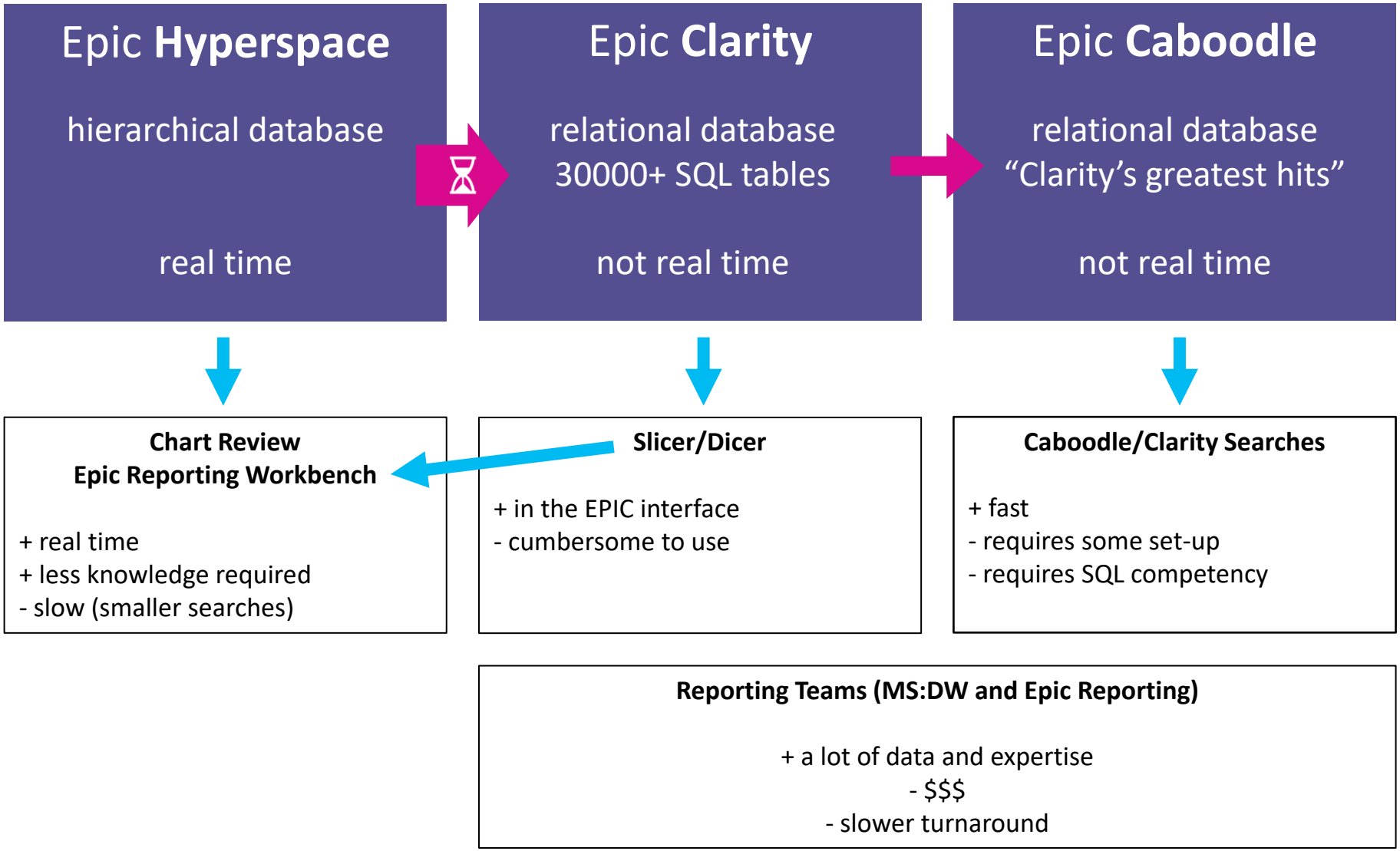
- In place at MSH since 2011, MSQ since 2013
- In clinics since 2008 (now hundreds)

- Documentation from providers, nurses
- Visit details, timestamped events
- Orders, “flowsheets”
- Pulls in data from ADT, Bed Mgmt, Labs, Rads, Muse, Echo, Cath, Path, financials & more

# Self Service Tools

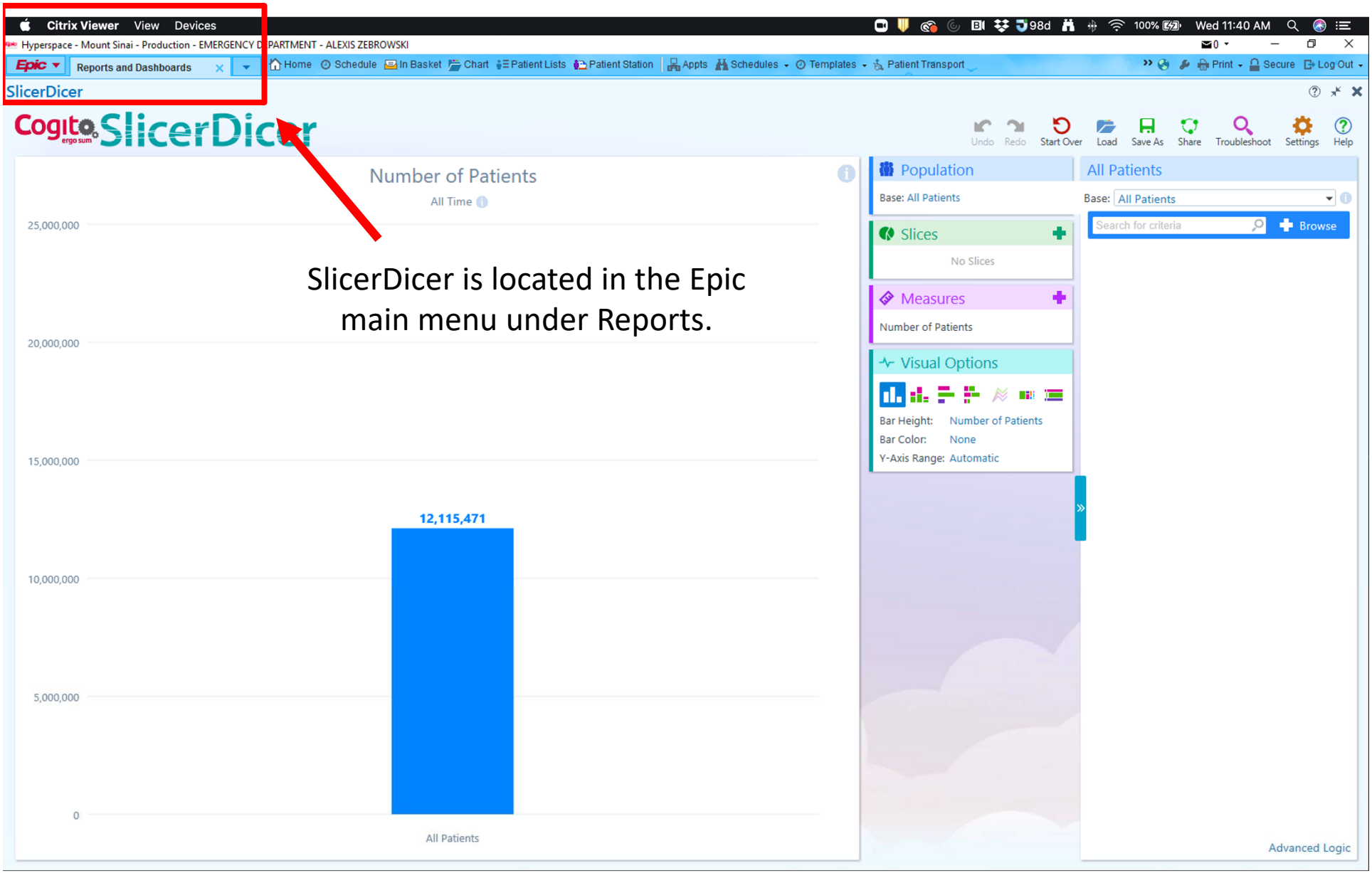
- Built in Epic Tools
  - Slicer Dicer
  - Reporting Workbench
- Need to Work with Data Team
  - Caboodle (not self-service)
- Other Sources
  - Mount Sinai Data Warehouse (MSDW)

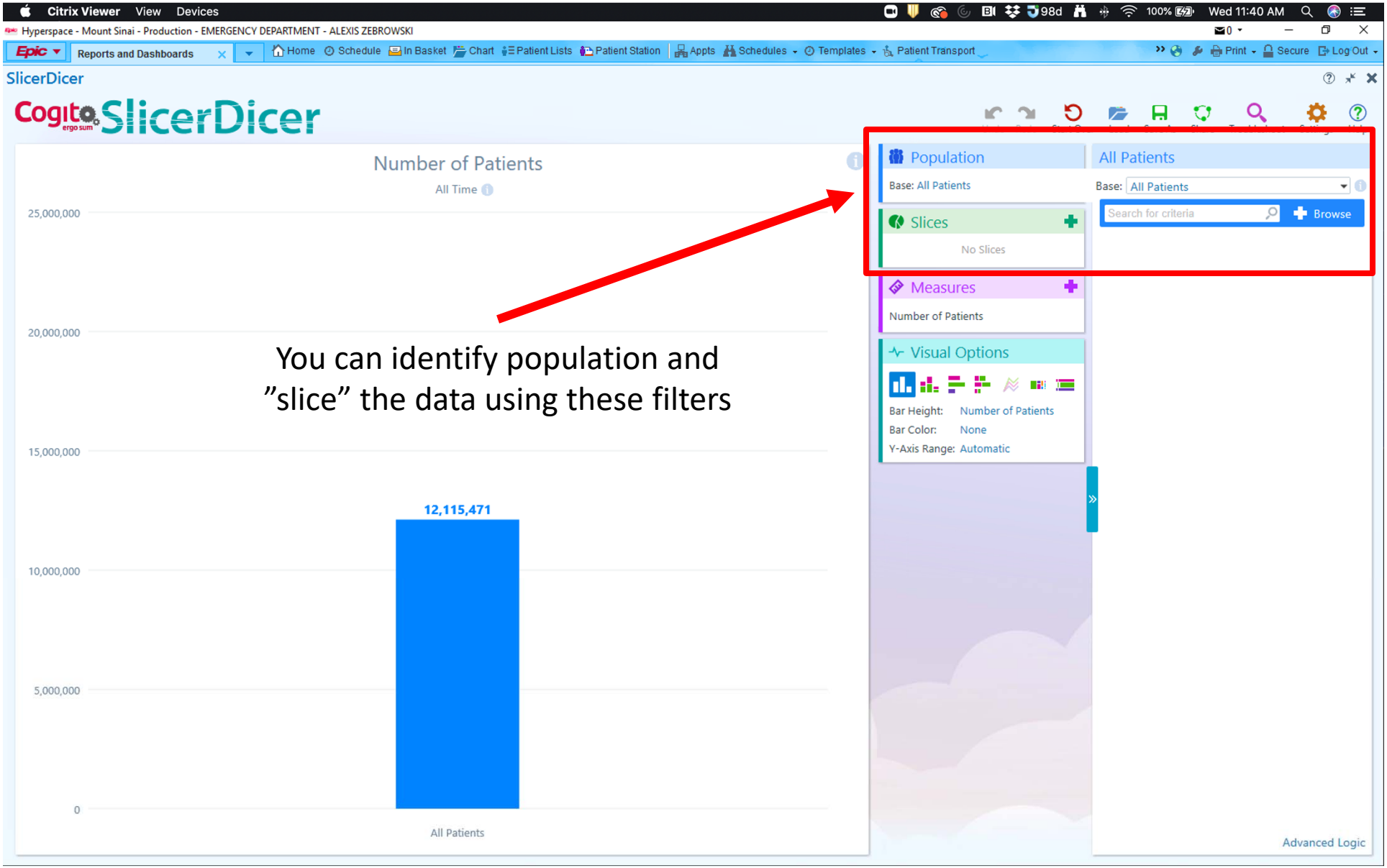
# Data in Epic


Epic **Hyperspace**
hierarchical database
real time
Epic **Clarity**
relational database
30000+ SQL tables
not real time
Epic **Caboodle**
relational database
"Clarity's greatest hits"
not real time
**Chart Review**
**Epic Reporting Workbench**
+ real time
+ less knowledge required
- slow (smaller searches)
**Slicer/Dicer**
+ in the EPIC interface
- cumbersome to use
**Caboodle/Clarity Searches**
+ fast
- requires some set-up
- requires SQL competency
**Reporting Teams (MS:DW and Epic Reporting)**
+ a lot of data and expertise
- $$$
- slower turnaround

# Epic SlicerDicer

- Visualization tool for quickly estimating patients meeting criteria
- Patient-level data
  - Diagnoses
  - Demographics
  - Medications
  - Tests
- Limited information
  - Facilities
  - Encounters
  - Procedures
- Uses SQL tables to pull data from Epic
- Can be aggregated and exported using additional Epic tools


Citrix Viewer View Devices
Hyperspace - Mount Sinai - Production - EMERGENCY DEPARTMENT - ALEXIS ZEBROWSKI
Epic
Reports and Dashboards
Home Schedule In Basket Chart Patient Lists Patient Station Appts Schedules Templates Patient Transport
Print Secure Log Out
SlicerDicer
Cogito SlicerDicer
Undo Redo Start Over Load Save As Share Troubleshoot Settings Help
Number of Patients
All Time
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
12,115,471
All Patients
Population
Base: All Patients
Slices
No Slices
Measures
Number of Patients
Visual Options
Bar Height: Number of Patients
Bar Color: None
Y-Axis Range: Automatic
All Patients
Base: All Patients
Search for criteria
Browse
Advanced Logic
SlicerDicer is located in the Epic main menu under Reports.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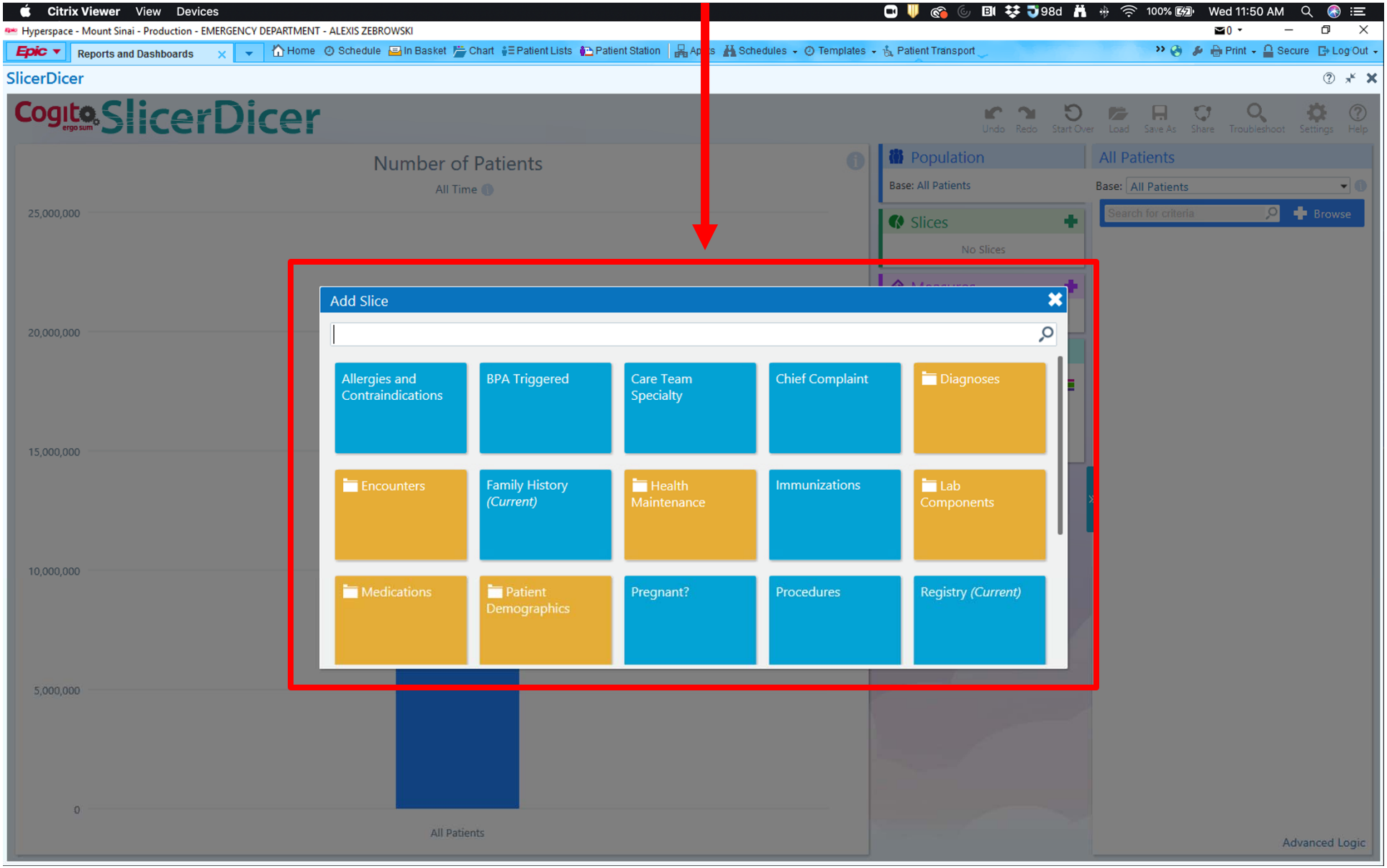
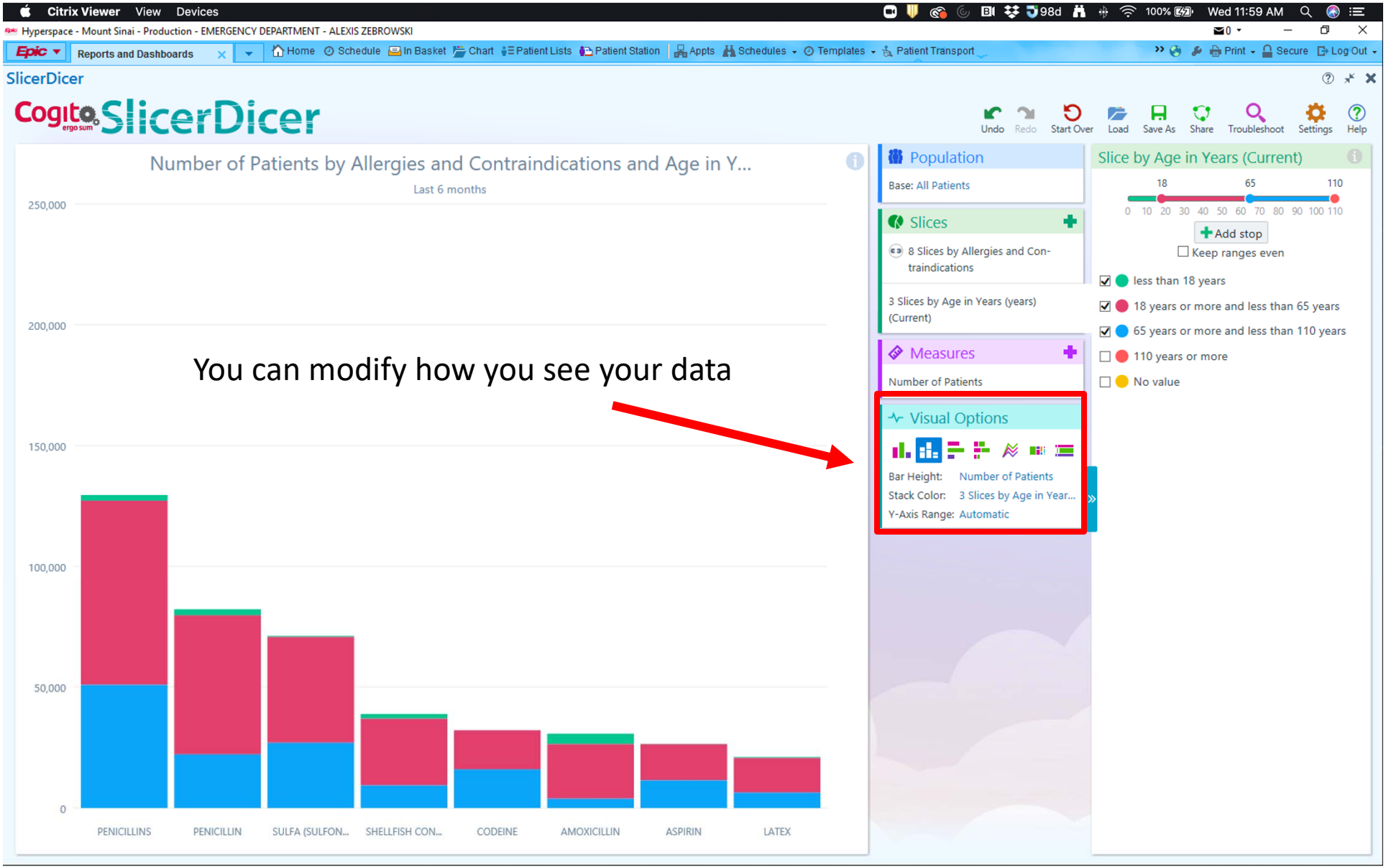
Number of Patients
All Time
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
12,115,471
All Patients
You can identify population and
”slice” the data using these filters
Population
Base: All Patients
Slices
No Slices
Measures
Number of Patients
Visual Options
Bar Height: Number of Patients
Bar Color: None
Y-Axis Range: Automatic
All Patients
Base: All Patients
Search for criteria
Browse
Advanced Logic

# Options for ”slicing” the data

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SlicerDicer
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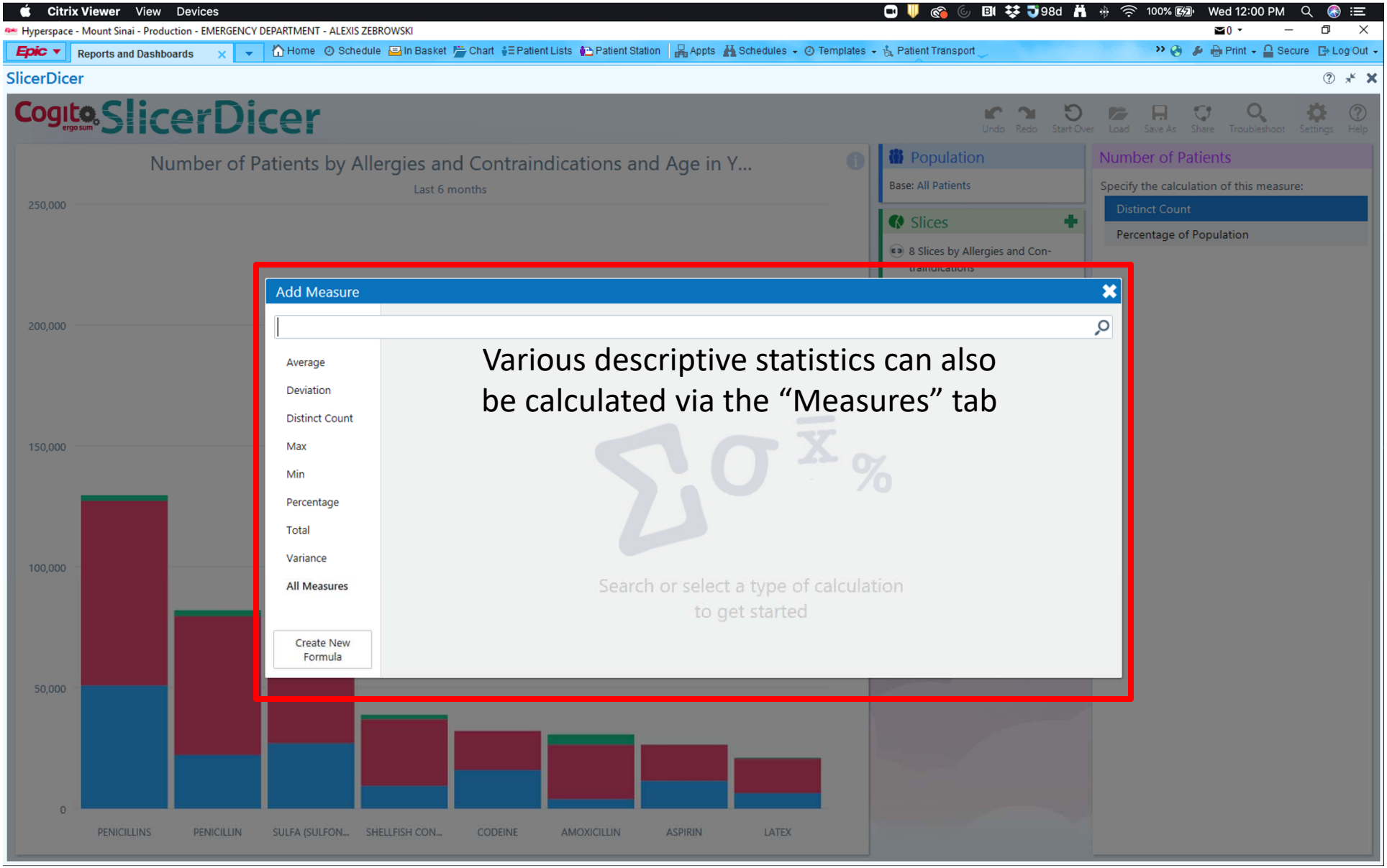
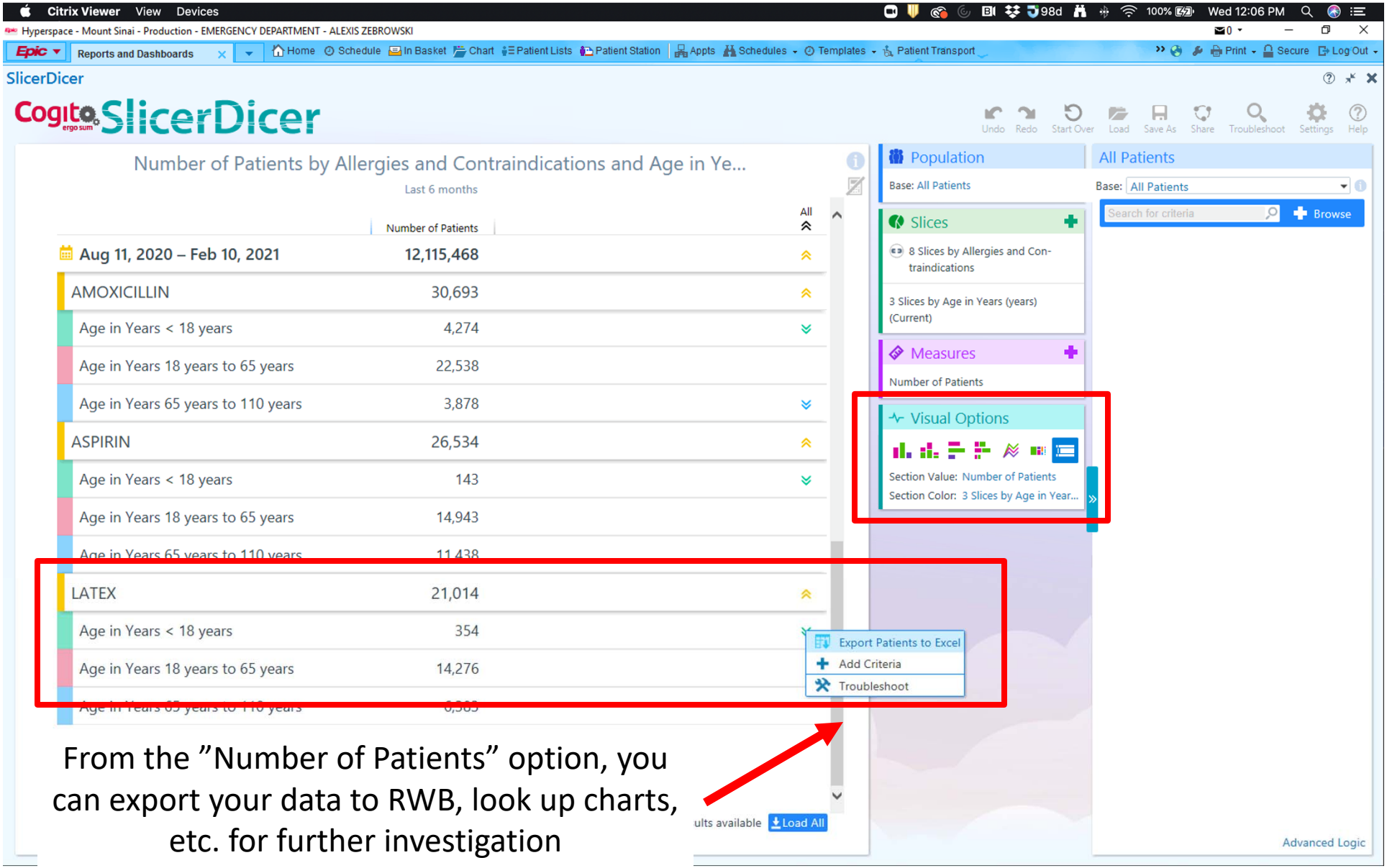
Undo Redo Start Over Load Save As Share Troubleshoot Settings Help
Number of Patients by Allergies and Contraindications and Age in Y...
Last 6 months
250,000
200,000
150,000
100,000
50,000
0
PENICILLINS
PENICILLIN
SULFA (SULFON...
SHELLFISH CON...
CODEINE
AMOXICILLIN
ASPIRIN
LATEX
You can modify how you see your data
Population
Base: All Patients
Slices
8 Slices by Allergies and Con-traindications
3 Slices by Age in Years (years) (Current)
Measures
Number of Patients
Visual Options
Bar Height: Number of Patients
Stack Color: 3 Slices by Age in Year...
Y-Axis Range: Automatic
Slice by Age in Years (Current)
18 65 110
0 10 20 30 40 50 60 70 80 90 100 110
Add stop
Keep ranges even
less than 18 years
18 years or more and less than 65 years
65 years or more and less than 110 years
110 years or more
No value




Various descriptive statistics can also be calculated via the “Measures” tab




From the ”Number of Patients” option, you can export your data to RWB, look up charts, etc. for further investigation

# Epic SlicerDicer

- Pros:
  - No external costs
  - Easy to use
  - Quick
  - Great for first pass/feasibility
  - Can easily see how changing criteria impacts numbers
- Cons:
  - Limited ways to “slice” data
  - Accuracy may be reduced depending on question
  - Requires Epic access (read only is fine)
  - Best for small number of “slices” with specific inclusion/exclusion criteria

# Important to Remember

- How are you using the data:
  - Research requires an IRB!!!
    - Speak with research faculty about requirements
    - IRB determines if study is exempt
- Start with least amount of PHI necessary
- You are responsible for your data
  - Keep data secure (computer, email, drives)
  - Reported data must be aggregated for research purposes

# Next Steps

- Read and complete the attestation
- If you are unsure of how to proceed:
  - Submit a request to the EM Analytic Core
  - Review the tutorials
  - Discuss your project with a research faculty member
- Check out the research trainings offered