



COMMUNITY
HEALTH CARE
ASSOCIATION
of New York State



CHCANYS NYS-HCCN presents

Navigating Data in Health Centers: Analytics, Visualization, and Quality

Introduction to Data Analytics

July 16, 2025

For more information, please email Anita Li at ali@CHCANYS.org



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Agenda

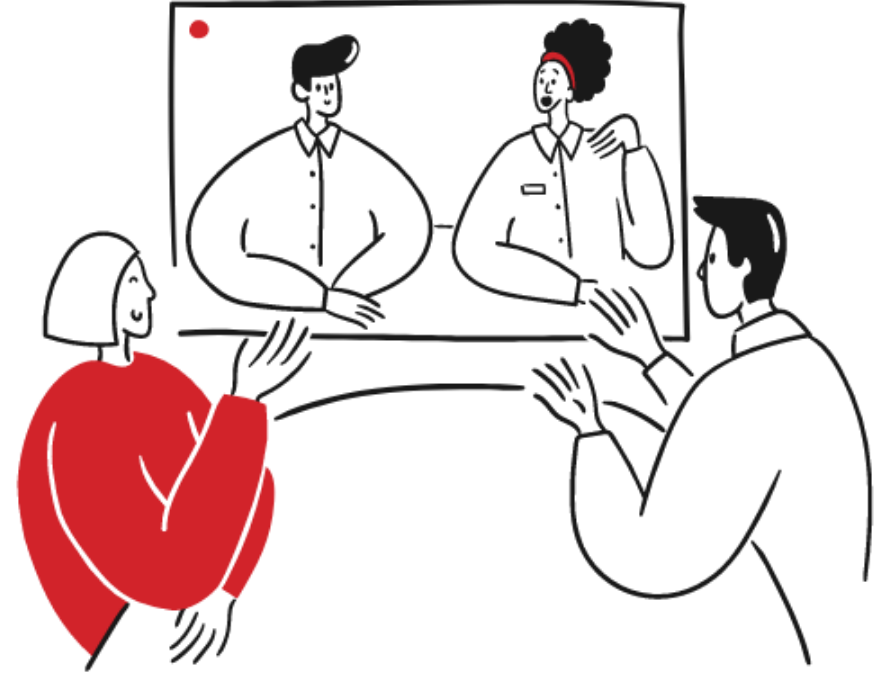
1. Welcome & Introductions
2. Introduction to Data Analytics
3. Q&A
4. Closing and Evaluations





Housekeeping

- You have been muted upon entry. Please respect our presenters and stay on mute if you are not speaking.
- Please share your questions in the chat. CHCANYS staff will raise your questions to our speakers and follow up as needed if there are unanswered questions.
- The webinar is being recorded and will be shared after the session along with the slide deck.
- A webinar evaluation will be shared with participants



New York State HCCN Objectives



Project Period 2022–2025

2022-2025 Project Period

1

Clinical Quality

2

Patient-Centered Care

3

Provider and Staff Wellbeing

- ✓ Patient Engagement
- ✓ Patient Privacy & Cybersecurity
- ✓ Social Risk Factor Intervention
- ✓ Disaggregated Patient-level Data (UDS+)
- ✓ Interoperable Data Exchange & Integration
- ✓ **Data Utilization**
- ✓ Leveraging Digital Health Tools
- ✓ Health IT Usability & Adoption
- ✓ Improving Digital Health Tools- Closed Loop Referrals*

* - Applicant Choice Objective
Bold- Objective Carried over into 2022-2025



Meet the Presenter



Jennifer Rankin, PhD

FOUNDER and CEO
Rankin Insights



Navigating Data in Health Centers: Analytics, Visualization, and Quality

SESSION 1: INTRODUCTION TO DATA ANALYTICS

Introduction

Long-time advocate of access to care and supporting health centers

She is currently the CEO of Rankin Insights, LLC, a consulting agency with clients including:

- Texas Association of Community Health Centers,
- Colorado Department of Public Health and the Environment (the Colorado PCO)
- Rhode Island Health Center Association

Project manager for the UDS Mapper under contract from the Bureau of Primary Health Care

Education:

- PhD in Public Health Informatics

Previous Employers:

- American Academy of Family Physicians,
- Association of State and Territorial Health Officials,
- Texas Association of Community Health Officials, and
- Health Resources and Services Administration



Agenda

Session 1

In this session, we will explore the fundamentals of data analytics and the differences between data analysis and visualization tools. This will provide an introduction to core concepts in data analytics and walk through key tools used in the field.

Learning Objectives

1. Identify commonly used data tools in FQHCs and their general functions.
2. Differentiate between data analytics tools and data visualization tools and use cases for each.
3. Understand the foundational concepts of data analytics and how they support decision-making in clinical and operational settings.

Before We Start

We will not be discussing in detail:

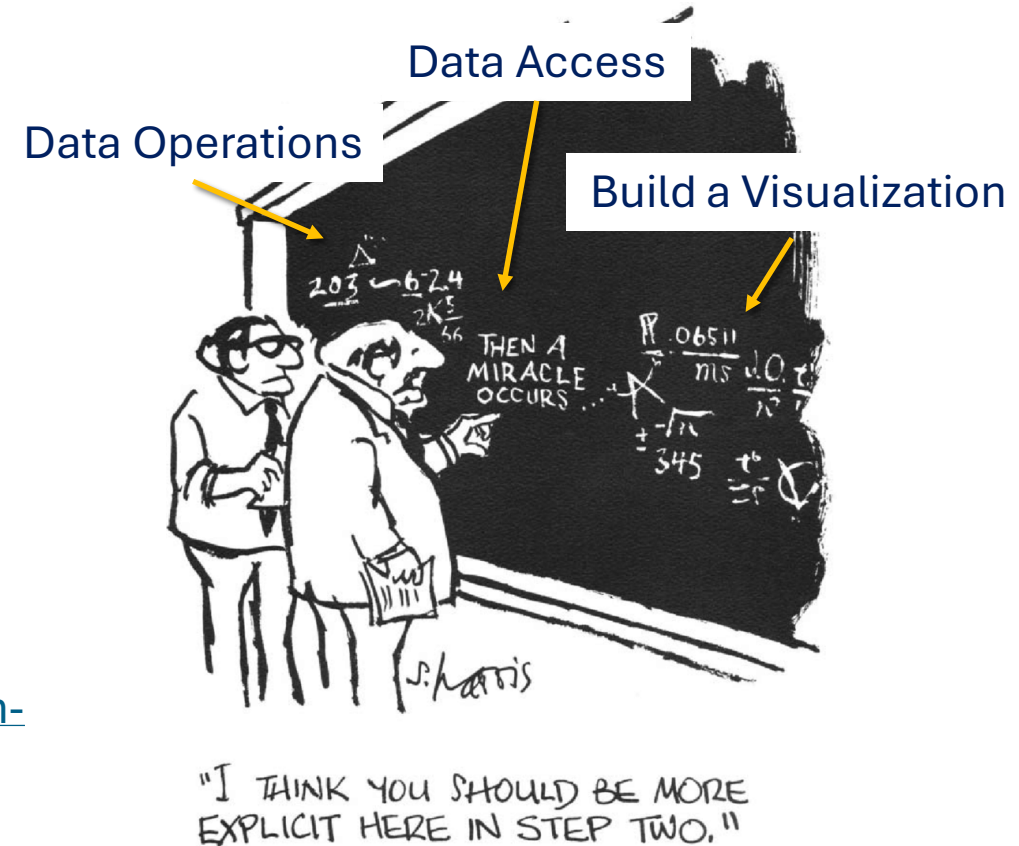
Data Strategy

Data Governance

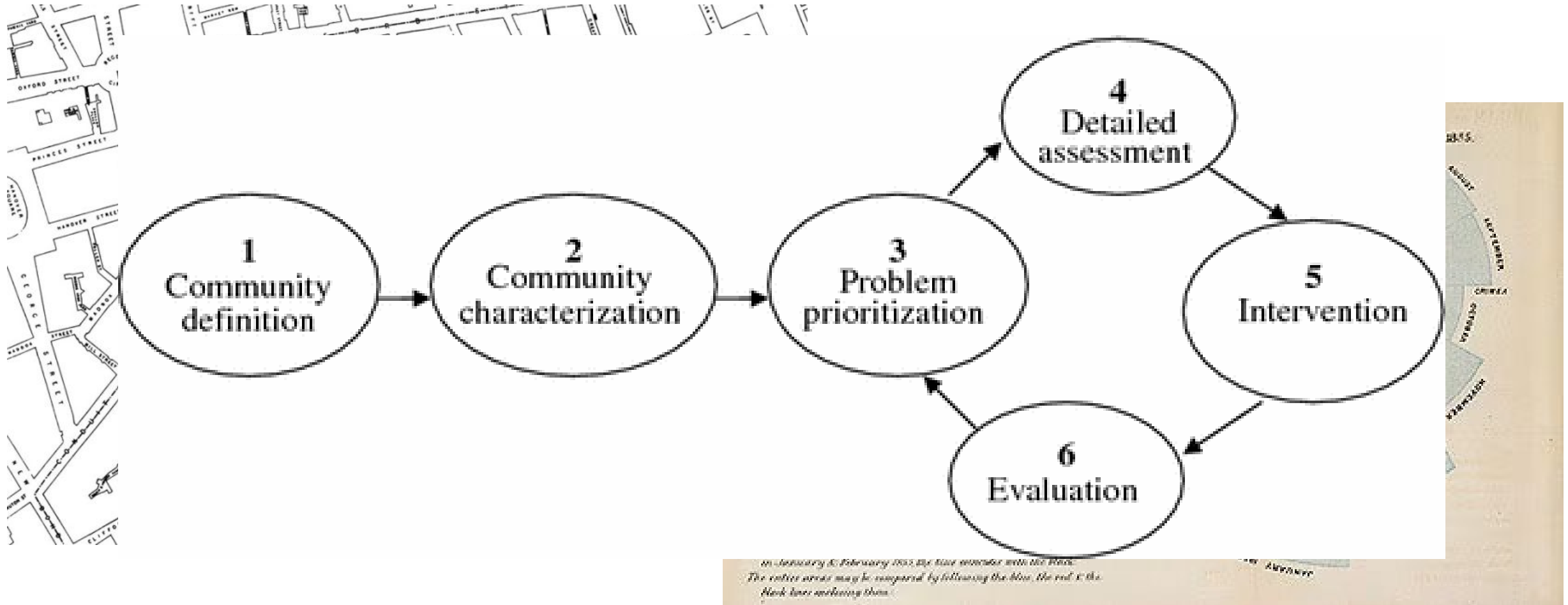
Data Operations

Good Sources for this information:

- <https://www.chcanys.org/chc-resources/clinical-technology-resources/health-it/data-management-analytics>
- <https://www.nachc.org/resource/building-clinical-informatics-learning-community-session-2-data-validation-building-a-playbook-for-data-quality/>



Health and Data: A Love Story



Health Data is Like Your Kitchen

There are specific things that go specific places

- Where do the plates and bowls go?
- Where do the pots and pans go?

There may be specific tools for specific items also:

- Refrigerator
 - Wine refrigerator
- Freezer
- Pantry
- Utensil drawer with an organizer
- Bread box

Then there is the junk drawer...



Health (Center) Data Analytics is About

Improving outcomes, reducing costs, expanding access

Understanding the standards

- Public health formulas and metrics, rates, etc.

Information reduction

- Big data has become normalized
 - Extraordinary volume, velocity, variety
- How do we combine data from the EHR, secondary data like data from health departments, CDC, Census Bureau, etc.?

Translation

- How do we make something meaningful for people who don't work with these data all day?

Creativity

- Do the existing metrics cover what I am interested in improving?
- Do the existing chart types portray what I want to show?

Public Health Statistics / Epidemiology



Data Analytics Tools Commonly Used by Health Centers

Microsoft Excel / Google Sheets

PowerBI / Tableau

SAS / SPSS / STATA / R

- SQL
- Python

ArcGIS / QGIS

GeoCare Navigator

Your EHR

Azara DRVS / i2i Population Health

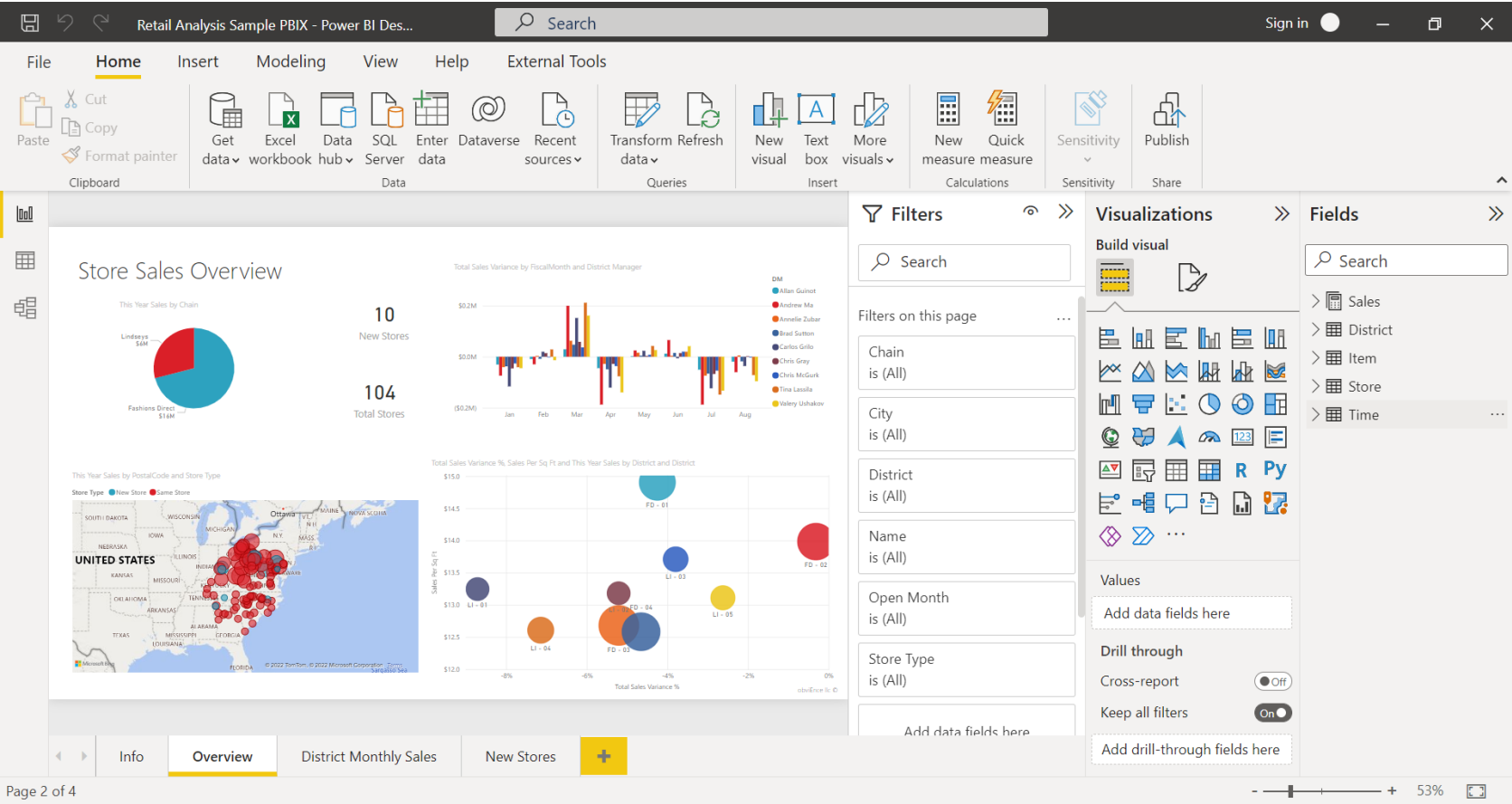
Excel Example



Power BI Example



Power BI Interface



Power BI Data Management

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply Close New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Properties Advanced Editor Manage Query

Manage Columns Reduce Rows Sort Split Column Group By Data Type: Whole Number Use First Row as Headers Replace Values Transform

Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [1] Best states for sunglas...

	A ^B _C State	1 ² ₃ Overall rank	1 ² ₃ Affordability	1 ² ₃ Weather
1	Hawaii	10	45	1
2	Florida	5	25	2
3	Louisiana	36	29	3
4	Texas	17	24	4
5	Georgia	28	19	5
6	Mississippi	19	6	6
7	Alabama	16	10	7
8	South Carolina	41	27	8
9	Arkansas	11	4	9
10	Arizona	38	33	10
11	Oklahoma	21	11	11
12	North Carolina	7	13	12
13	California	43	49	13
14	Tennessee	22	12	14
15	Kentucky	6	9	15
16	Delaware	32	30	16
17	Virginia	39	32	17
18	Maryland	50	47	18
19	Missouri	3	1	19
20	Kansas	7	7	20

4 COLUMNS, 40 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name

Best states for sunglass sales

All Properties

APPLIED STEPS

- Source
- Extracted Table From Html
- Changed Type
- Promoted Headers
- Changed Type1
- Removed Top Rows
- Changed Type2
- Sorted Rows
- Removed Bottom Rows
- Removed Columns

PREVIEW DOWNLOADED AT 12:22 PM

Tableau Example

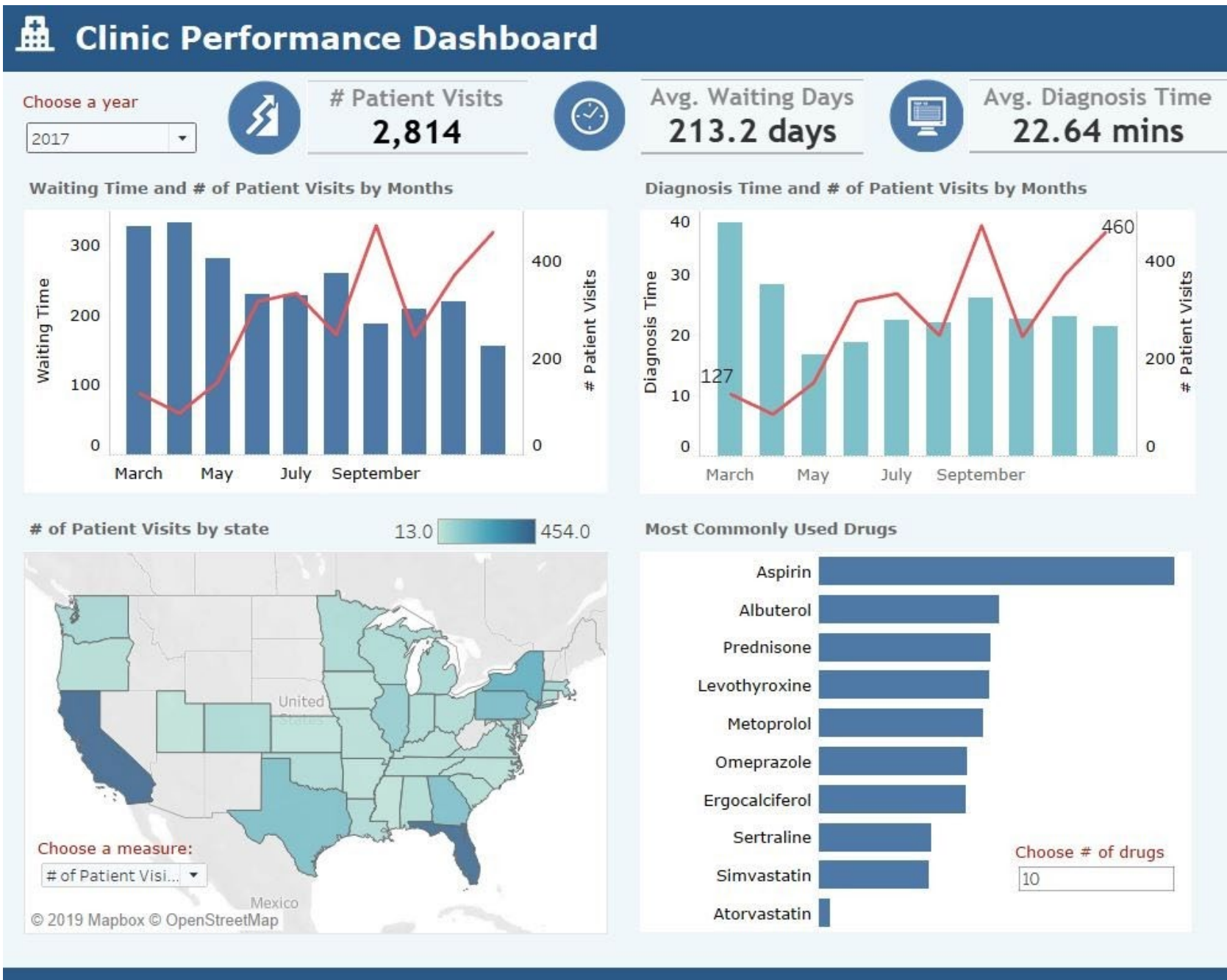


Tableau Interface

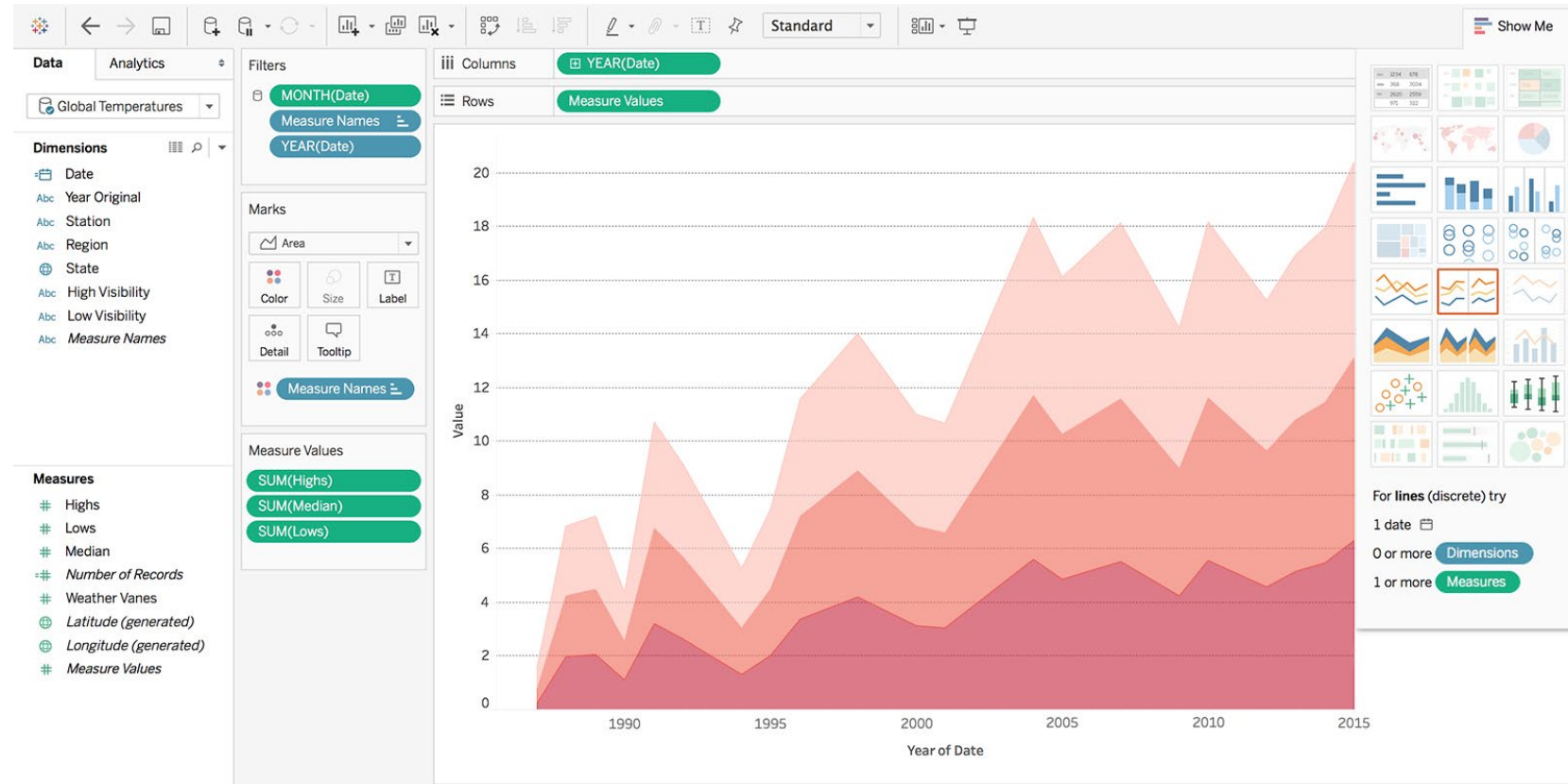


Tableau Data Management

Tableau - Book2

File Data Server Help

Orders (Sample - Superstore Subset (Excel))

Connected to Excel

Workbook

Sample - Superstore Subset (Excel).xlsx

Sheets

Enter sheet name

Orders

Returns

Users

Connection: Live Extract

Filters: 0 Add...

Orders

Copy

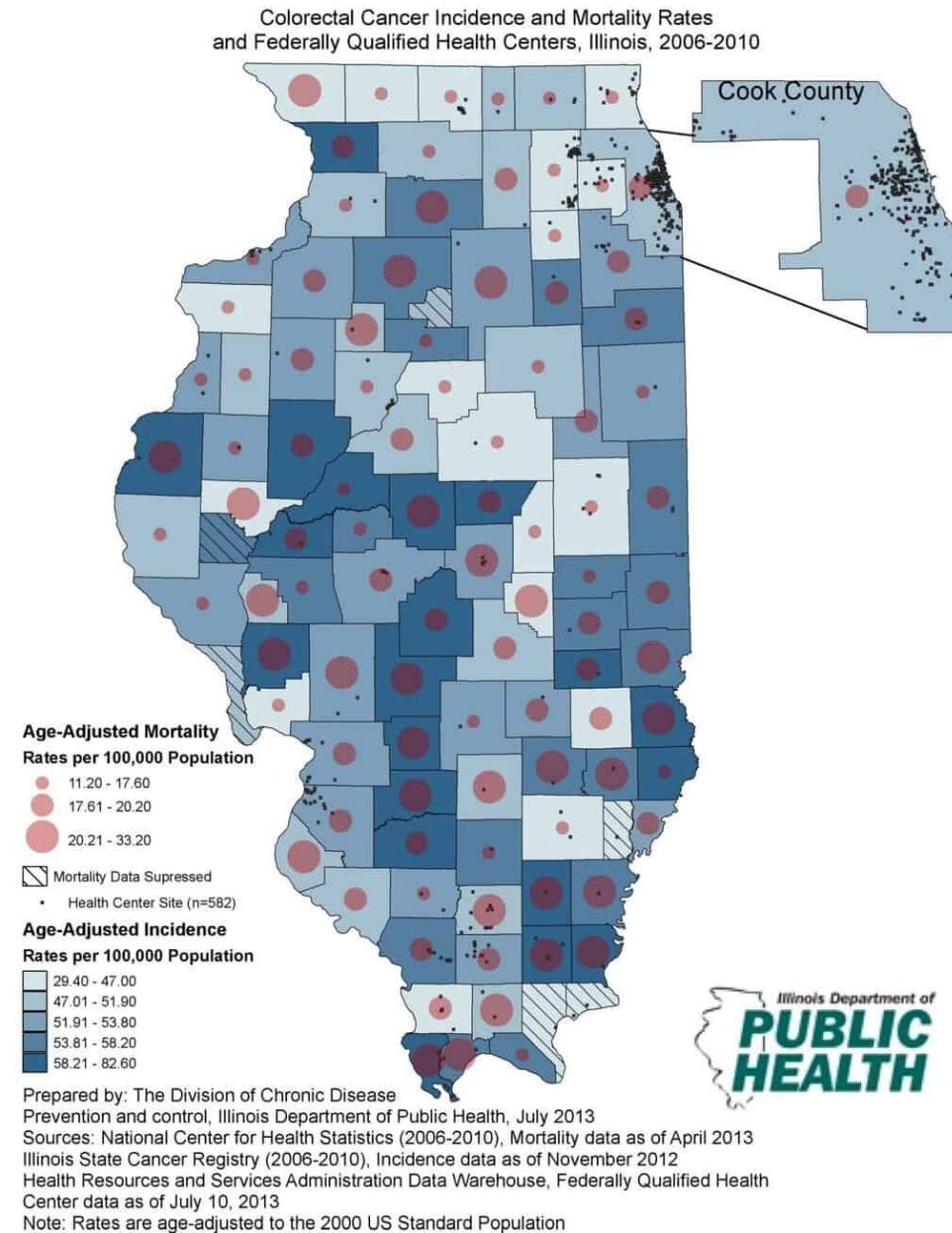
Go to Worksheet

Show hidden fields

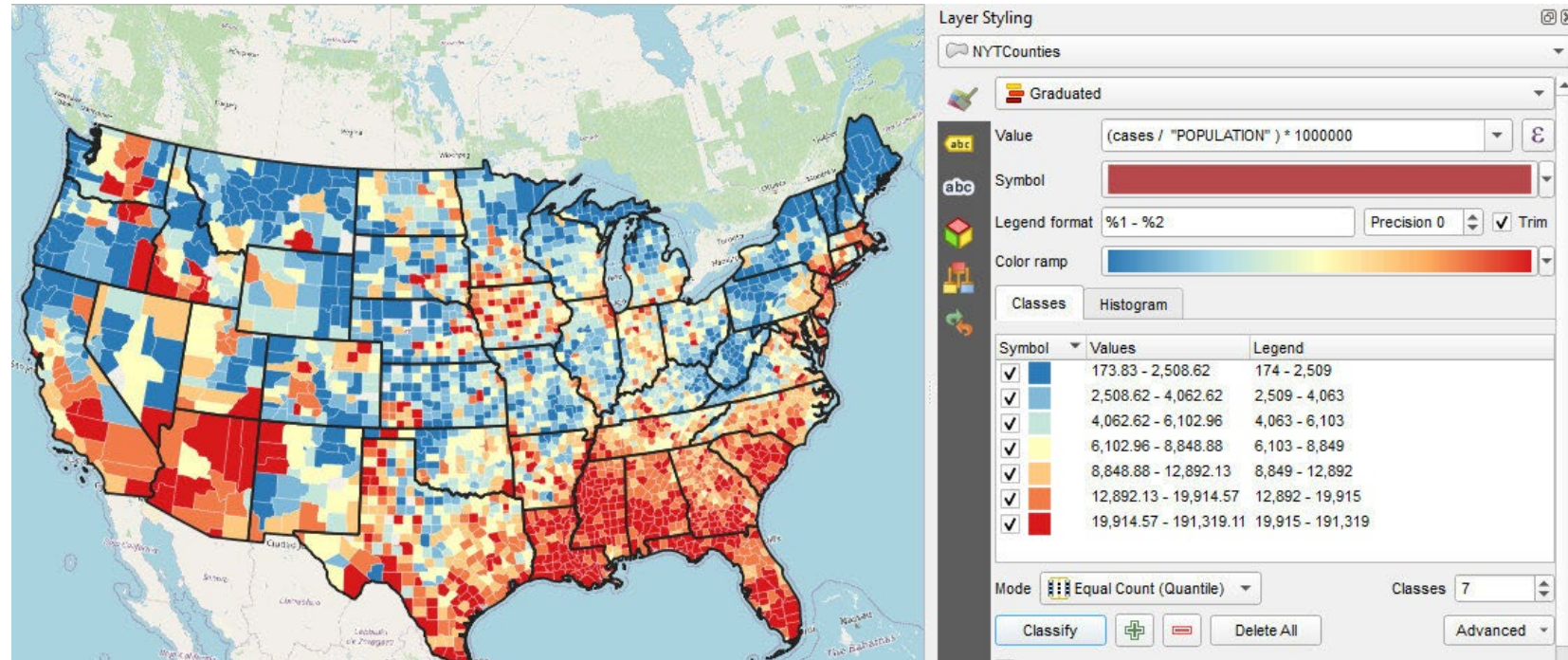
Rows: 9,426

Row ID	Order Priority	Discount	Unit Price	Shipping Cost	Customer ID	Customer Name	Ship Mode	
#	Abc	#	#	#	#	Abc	Abc	
18606	Not Specified	0.010000	Number (Decimal)	0.500	2	Janice Fletcher	Regular Air	
20847	High	0.010000	Number (Whole)	0.930	3	Bonnie Potter	Express Air	
23086	Not Specified	0.030000	Date & time	6.150	3	Bonnie Potter	Express Air	
23087	Not Specified	0.010000	Date	3.600	3	Bonnie Potter	Regular Air	
23088	Not Specified	0.000000	String	2.500	3	Bonnie Potter	Express Air	
23597	Medium	0.090000	Default	14.300	3	Bonnie Potter	Express Air	
25549	Low	0.080000	Geographic Role	120.97	3	Bonnie Potter	Delivery Truck	
20228	Not Specified	0.020000		500.98	26.000	5	Ronnie Proctor	Delivery Truck
19483	Low	0.080000		6.48	6.810	5	Ronnie Proctor	Regular Air
24782	High	0.010000		90.24	0.990	6	Dwight Hwang	Regular Air
24563	Critical	0.070000		6.48	6.600	6	Dwight Hwang	Regular Air
24564	Critical	0.010000		4.84	0.710	6	Dwight Hwang	Regular Air
24565	Critical	0.100000		85.99	0.990	6	Dwight Hwang	Regular Air

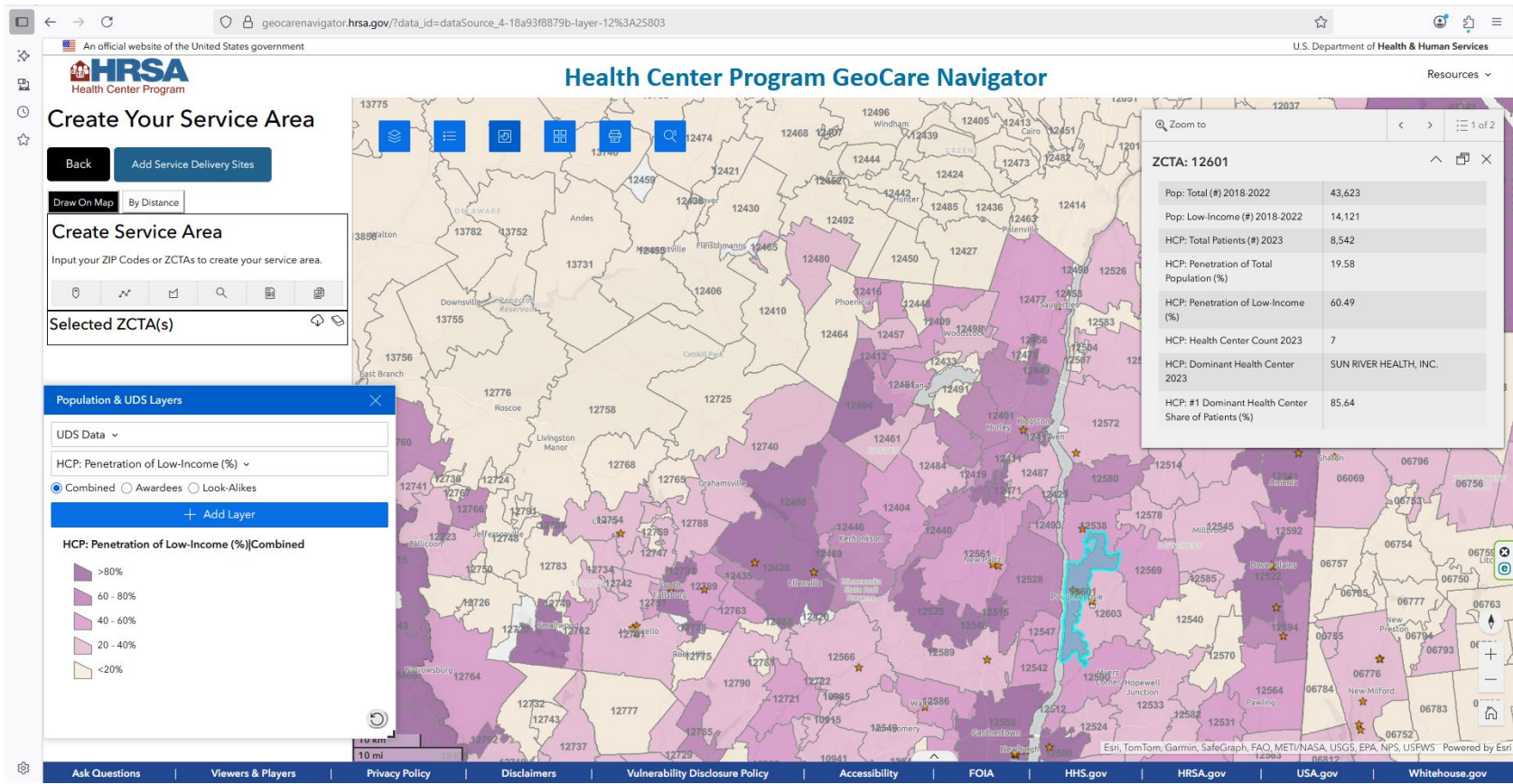
ArcGIS Example



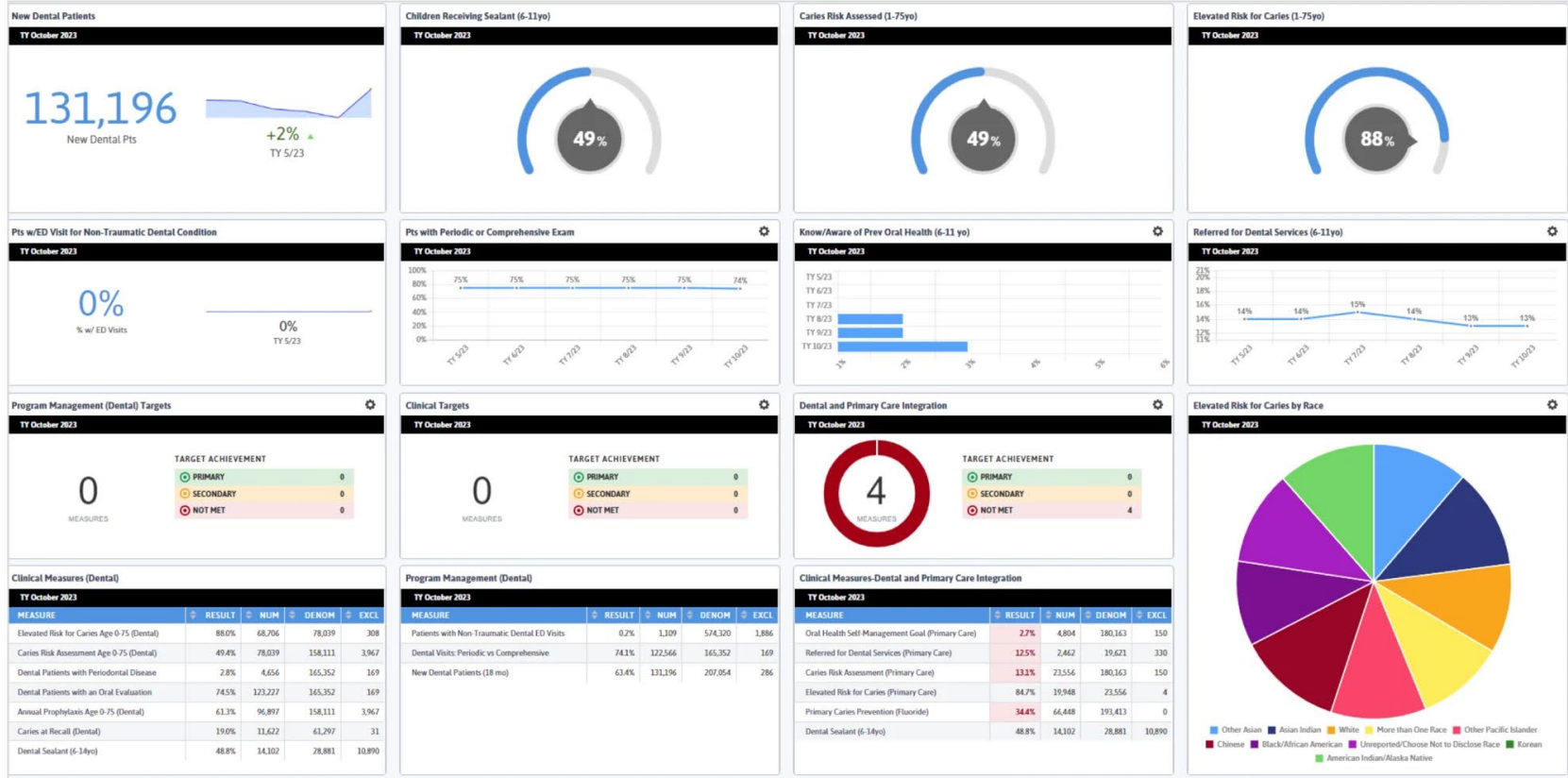
QGIS Interface



Health Center Program GeoCare Navigator



Azara DRVS Example



i2i Population Health Example





Thank you!

jrankin@rankininsights.com



Questions?





Continue the Conversation

Session 2, “Evaluating Tools, Building Dashboards, and Ensuring Data Quality” is taking place tomorrow **Thursday, July 17th from 12:00 – 1:00 pm**

We hope to see you then!



**Save
the
Date!**



Please fill out our survey!

Please share your feedback using the survey link in the chat, the QR code, or the link in the follow up email!

Completing the survey helps us to provide relevant and helpful information. Thank you in advance!

