



# Leveling Up Public Health Data: Co-Creation and Innovation to Re-Modernize Data Modernization Efforts

BY PHIG PARTNERS



SHAPING TOMORROW'S PUBLIC HEALTH TODAY.

# No Money, No Problem

Re-Modernizing Data Modernization from the City of El Paso Department of Public Health

PHIG 2025

By: Yumira Dorame and Jennifer Williams



# Funding

- What happens when traditional funding for enterprise EMRs and tools isn't available?

# Re-modernize

- Re-modernizing = Re-introduce, Repurpose, Re-produce
- Focus: sustainability through innovation
- Leveraging internal and partner tools



# Strengthening the team

- Workforce Acceleration Initiative (WAI)
- DMI team grew from 2 to 4 members:
  - Data Coordinator
  - Data Analyst
  - Business Analyst
  - Data Engineer



Angel Luna Flores

# Training and Capacity Building

- Participation in SLIDE program
- Gained DMI techniques to:
  - Break large projects into manageable parts
  - Develop sustainable processes and SOPs
  - Maintain implementation momentum

# Leveraging Existing Tools

- REDCap (via PHIX):
  - Backup EMR system
  - Projects: Notifiable Conditions, Contact Tracing
- Qualtrics (via DoITS):
  - Internal data collection and digitization
- Microsoft Forms:
  - Low-barrier digitization for standardized workflows



# Learning Objectives

1. Inventory available hardware/software
2. Identify department's tech needs
3. Match existing tools to current needs
4. Find sustainable, low-cost solutions
5. Develop standard procedures and policies



# Outcomes

- Improved data workflows using available tools
- Stronger partnerships (IT, PHIX, CDC Foundation)
- Greater team capacity for DMI
- Boosted workforce trust in tech-based solutions

# Key Takeaways

- Rethink before replacing
- Repurpose what you have
- Partner smartly
- Standardize for sustainability
- Always keep momentum going

# Thank You!

- Contact Info:
  - Yumira Dorame, Data Analyst:  
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  - Jennifer Williams, Data Modernization Coordinator:  
[williamsje@elpasotexas.gov](mailto:williamsje@elpasotexas.gov)



# Fostering a Culture of Co-creation and Innovation through DMI Infrastructure Efforts

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**Afshan Kamrudin, MPH, Ph.D.**

Performance Improvement

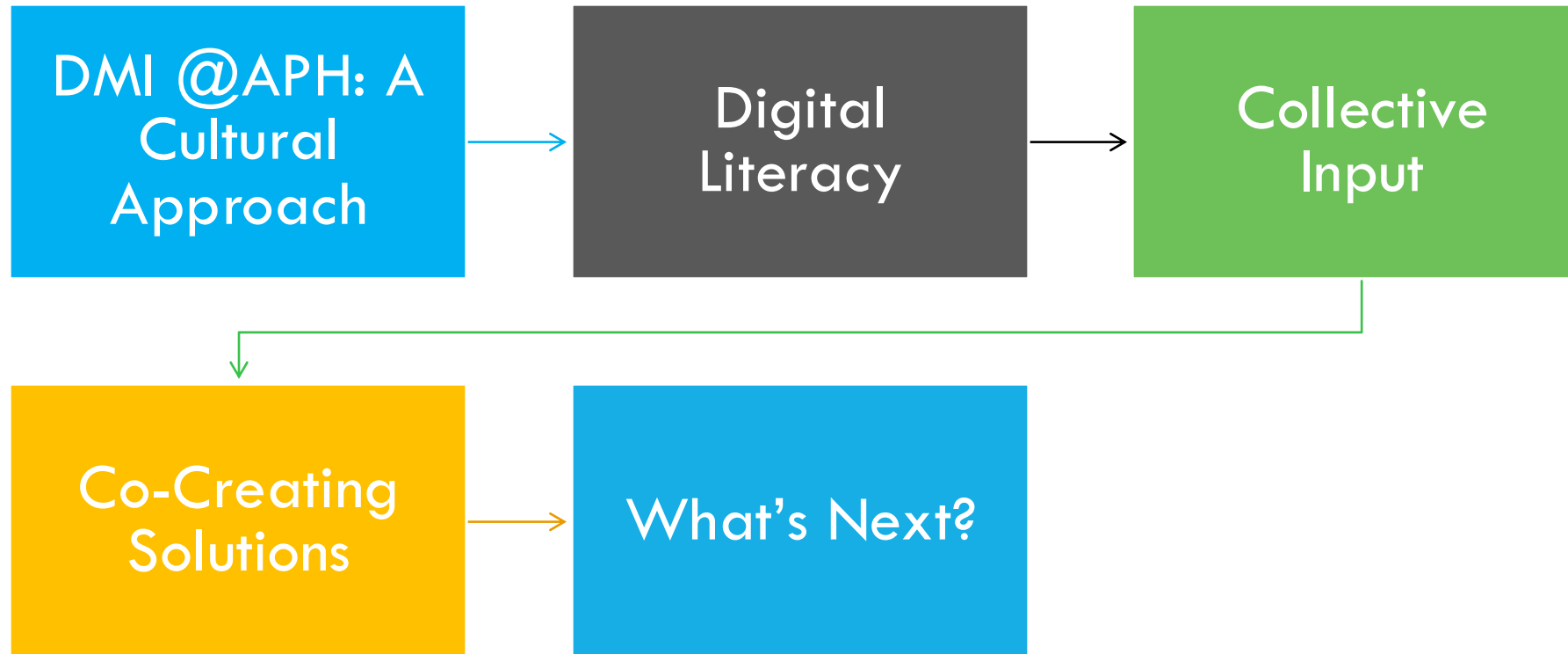
**Lauren Marsh**

Workforce Development





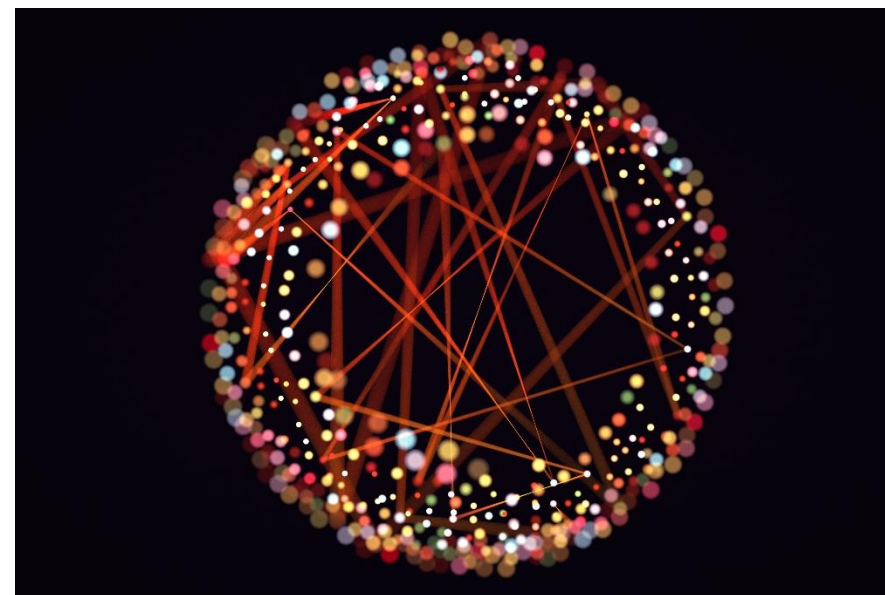
# Overview



# DMI @ APH: A Cultural Approach

## Current Challenges

- Departmental silos limiting information sharing
- Uneven data skills and confidence across divisions
- Different levels of engagement with data-driven decision making
- Inconsistent processes for collecting, storing, and using data



## Why a Cultural Approach

- Building shared values and trust around data use
- Encourage collaboration across teams before reorganizing structures
- Reduce resistance to new systems and processes
- Ensure buy-in for performance measurement and improvement
- Aligns data practices with APH's mission and community priorities



# APH Workforce Development – Digital Literacy Initiative

## IT Technical Proficiency

- A Tiered Workforce Training Program built for all skill levels.

## Fundamental Data Analytics

- Equips staff with data analysis skills to support informed, data-driven decisions

## Digital Communications

- Assist's Staff Strengthens engagement and communication using digital platforms.

## Security, Cybersecurity Awareness & Compliance

- Promotes awareness, data privacy, and best practices to ensure compliance across the organization.

## Advanced IT Skills Development

- Builds advanced technical skills to support complex IT projects and systems.

## Artificial Intelligence

- Introduces AI concepts and tools to help staff understand and apply AI in day-to-day work

## Ongoing Professional Development

- Focuses on continued learning and leadership development to stay ahead of evolving technologies.



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# APH Workforce Development – Digital Literacy Initiative

## Features

Tiered Learning

Focus on 14 Day-to-Day apps

Prioritize Access and Support all learning styles

Foundational "The Basics" Level      Intermediate Level      Advanced "Expert" Level

### Learning Roadmap for Microsoft Excel

Multiple Skill Levels. Fundamental Basic Skills. Intermediate Skills. Advanced "Expert" Skills

For LinkedIn Learning courses, please use your City of Austin (COA) email address for the registration

**Visual, Auditory,**

Microsoft Excel ■ Foundational "The Basics" Skills

**Visual, Auditory, Kinesthetic**

**Visual, Auditory,**

#### Courses

- Build Excel Foundation MS365 | LinkedIn (1+ hrs)
- Excel Essentials Training MS3650 | LinkedIn (2+ hrs)
- Learning Office 2024: Word, Excel, etc | LinkedIn

#### Related Basic Courses

- ArcGIS for Excel: An Overview
- Excel Dashboards for Beginners 2022 | LinkedIn. (45 min)
- Excel Charts and Graphs Introduction | LinkedIn
- GPT with Excel | LinkedIn
- Excel Modeling for Beginners | LinkedIn.
- Excel Pivot Tables for Beginners | LinkedIn

#### Videos

- Excel's NEW Checkboxes Feature (2024) | YouTube

#### Guides

- MS Excel Learning Pathway Guide | Microsoft
- Office 365 Excel Skills Checklist

**Read/Write**

APH Austin Public Health  
Health Information Technology (HIT)

Microsoft SharePoint  
Microsoft PowerPoint  
IT Training  
Home Foundational  
Microsoft Power Platform  
Miro

Publication developed by Health IT Training. Human created. AI was not used in the development of this guide. 8/1/25

# APH Workforce Development — Digital Literacy Initiative

## Key Takeaways

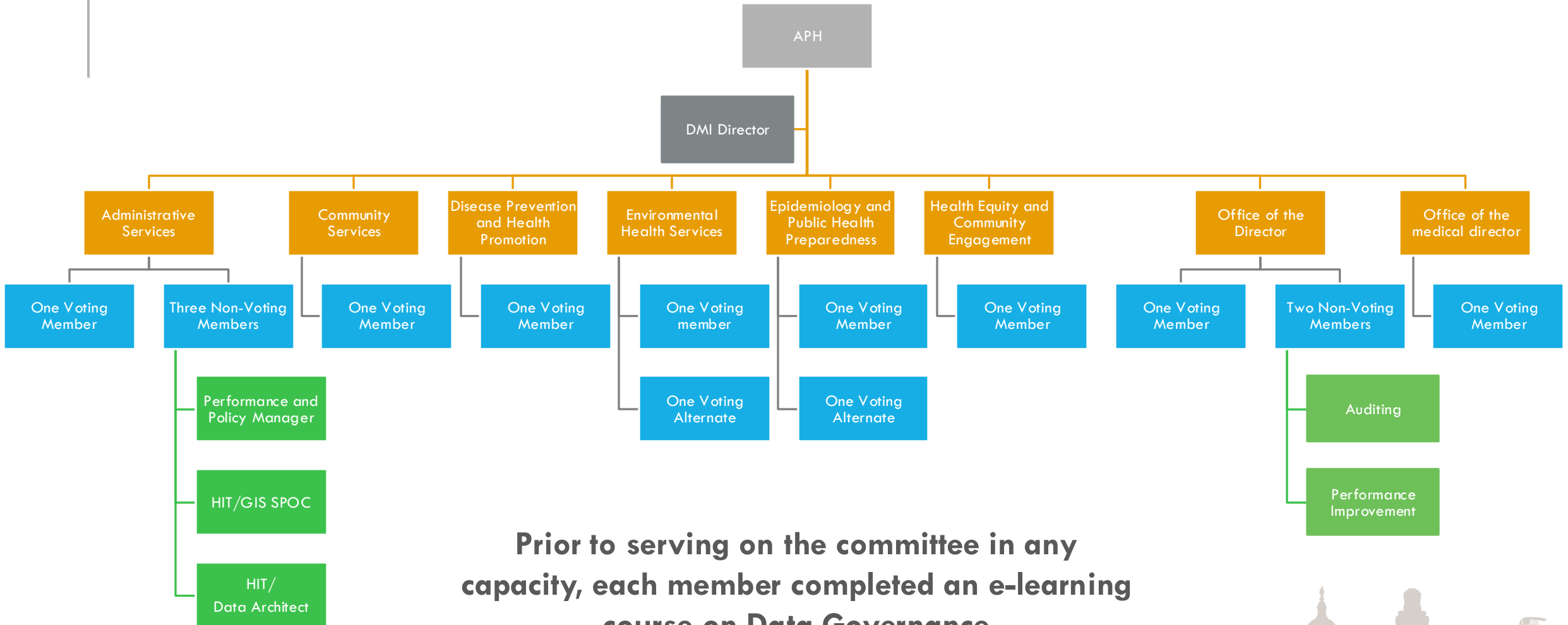
- Don't re-invent the wheel
- Uniformity is key
- Metadata is your friend
- Tiered learning allows people to decide where to start

## Future Directions

- Incorporate learning plans into performance reviews
- Build performance measures around workforce capacity



# APH Data Governance Committee



**Prior to serving on the committee in any capacity, each member completed an e-learning course on Data Governance**



# APH Data Governance Committee



## The Tasks

- The committee split into 3 subgroups.
- Each subgroup completed 2 rounds of procedure development resulting in 7 procedures
- Members serve as champions for socializing data governance within their divisions





# APH Data Governance Committee

## Key Takeaways

- Having a governance structure empowers employees to understand it's pertinence to siloed data.
- Creating parameters for data in APH creates a baseline understanding across departments.

## Future Directions

- New DMI Director who will work to socialize data governance across APH
- Support the development of metrics for these procedures
- Have regular monthly convenings



# APH AI Office Hours – “Ask about AI”



## An Overview

- **March 2025** - COA Policy for AI which was also adopted for APH and approved in the same month
- **April 2025** – Passing of Austin City Council Resolution Resolution 55;
  - Position Austin to lead in responsible AI innovation and adoption
  - Calls for strategies to reduce energy burden on utilities
  - Promotes digital equity and literacy
  - Worker protections from misuses of AI by the city
- **April 2025** – AI Office Hours launches
  - Does not presume any skill level
  - Invite was shared with all of APH
  - Then to Citywide ChatGPT Pilot Program Participants
  - The office hours have been shared across all City departments



# ETHICAL AI IN DMI - APH AI ETHICS POLICY

## Core Purpose

- ❖ Enhance service delivery and operational efficiency while maintaining fairness and transparency.
- ❖ Support data-driven decision-making without introducing or reinforcing unintended biases.
- ❖ Uphold human oversight and accountability in AI-driven processes.
- ❖ Comply with legal and regulatory standards related to data privacy, security, and ethical AI use.

## Connections to Data Modernization

- ❖ **Stakeholder Engagement** – Public-facing AI built with community input.
- ❖ **Improved Decision-Making** – Bias-aware AI supports accurate, data-driven public health strategies.
- ❖ **Interoperability & Compliance** – Aligns with legal standards (i.e. protection and security), IT governance, and modernization frameworks.
- ❖ **Continuous Improvement** – Regular risk assessments keep systems adaptive to evolving laws and best practices.

**For now, applies to Generative AI (Gen AI)**



# APH AI Office Hours – “Ask about AI”

Date	Topic	Attendees
April 17, 2025	Introduction to COA and APH AI Policy	135
May 1, 2025	AI Prompts for Productivity + Guided Demo	101
May 29, 2025	Meta Prompting	86
June 12, 2025	A Guide to Custom GPT's	61
June 26, 2025	Reasoning Models and Deep Research: AI as your Strategic Partner	65
June 10, 2025*	AI Agents: From Tool to Teammate	60
August 7, 2025	ChatGPT 5 Watch Party	68

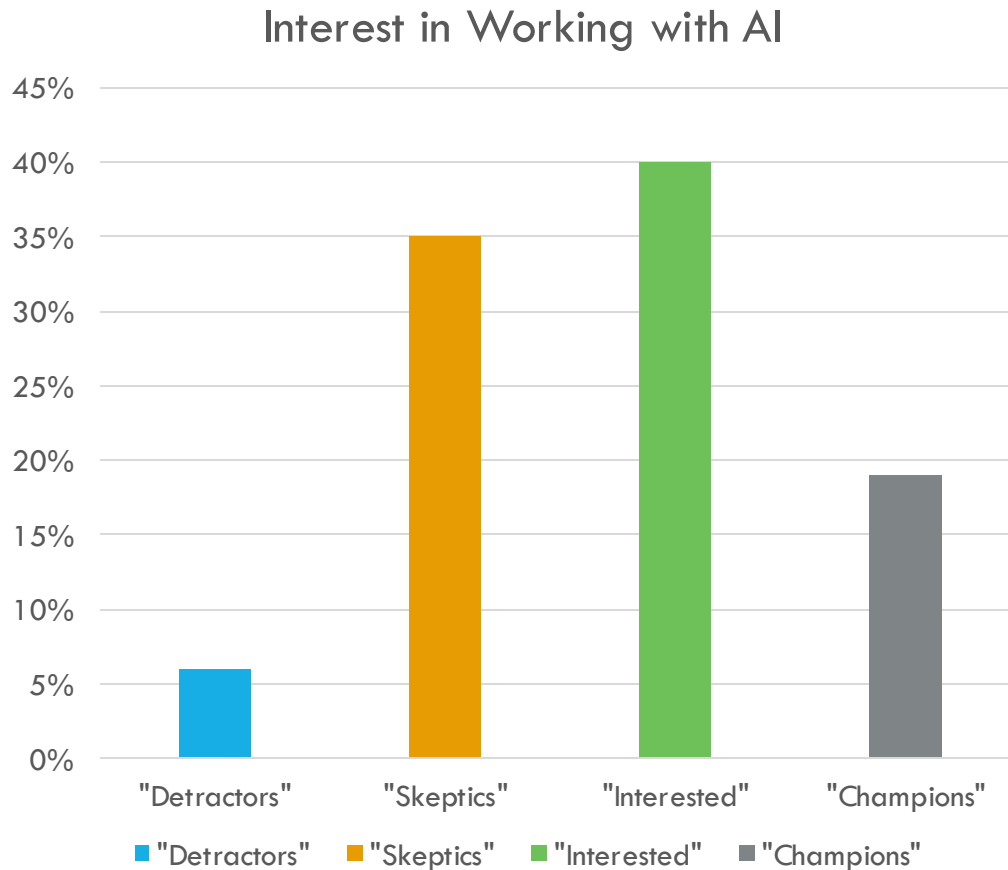
**Average attendee time spent in the session is 50 minutes**





# APH AI Office Hours – “Ask about AI”

## Survey Results



27%

Are task specific users

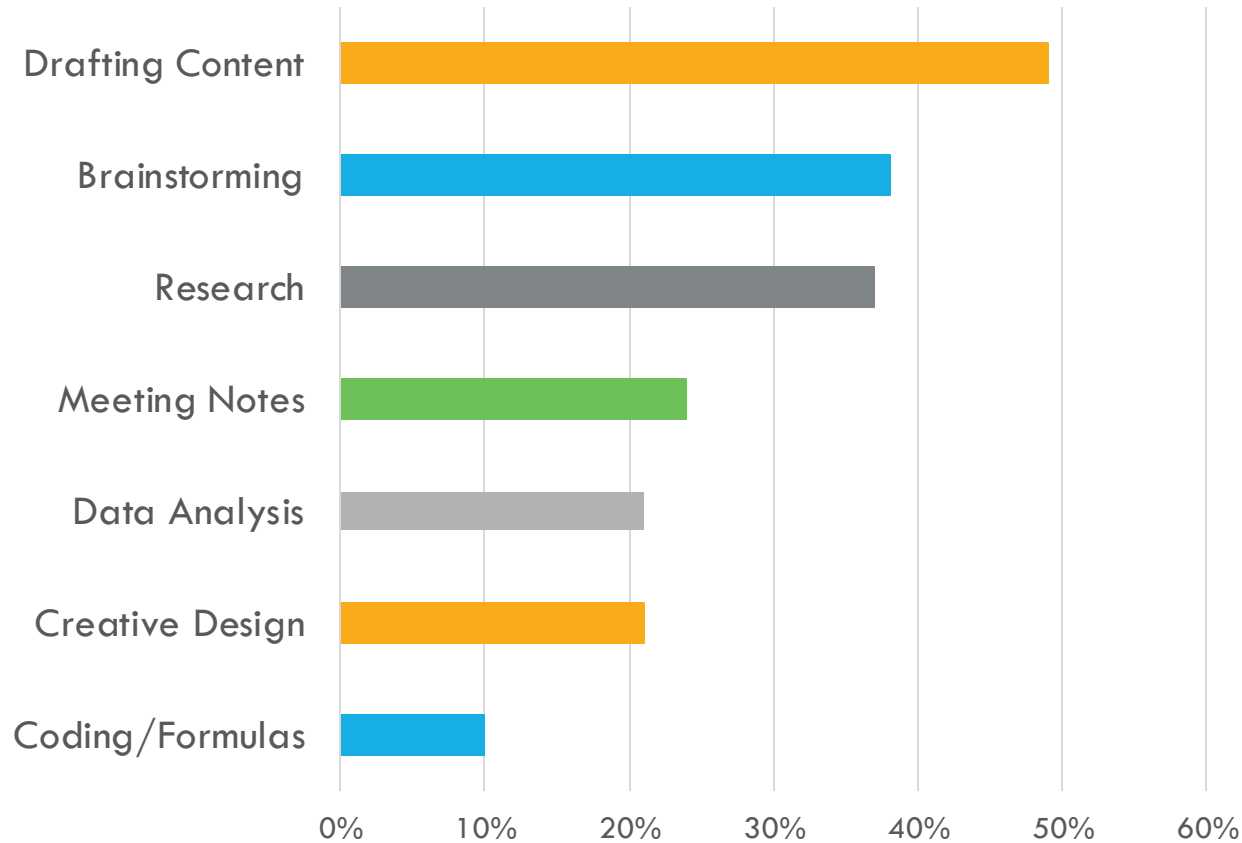
21%

Use AI in their daily workflow

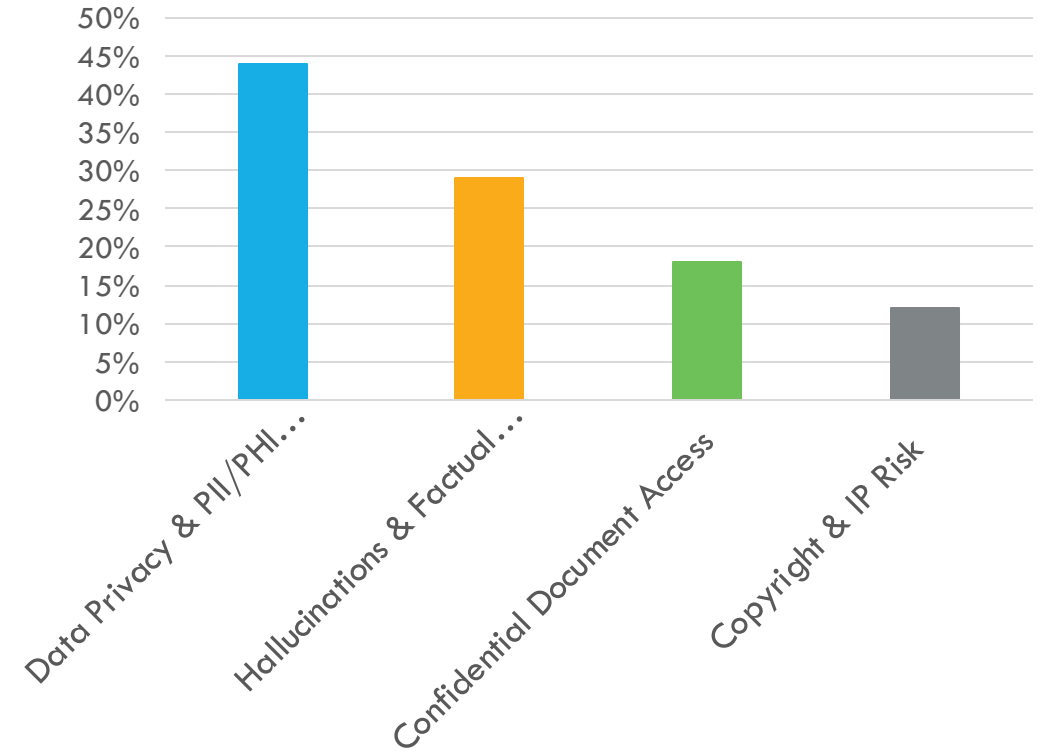


# APH AI Office Hours – “Ask about AI”

## Tasks AI is Used For



## Top Concerns



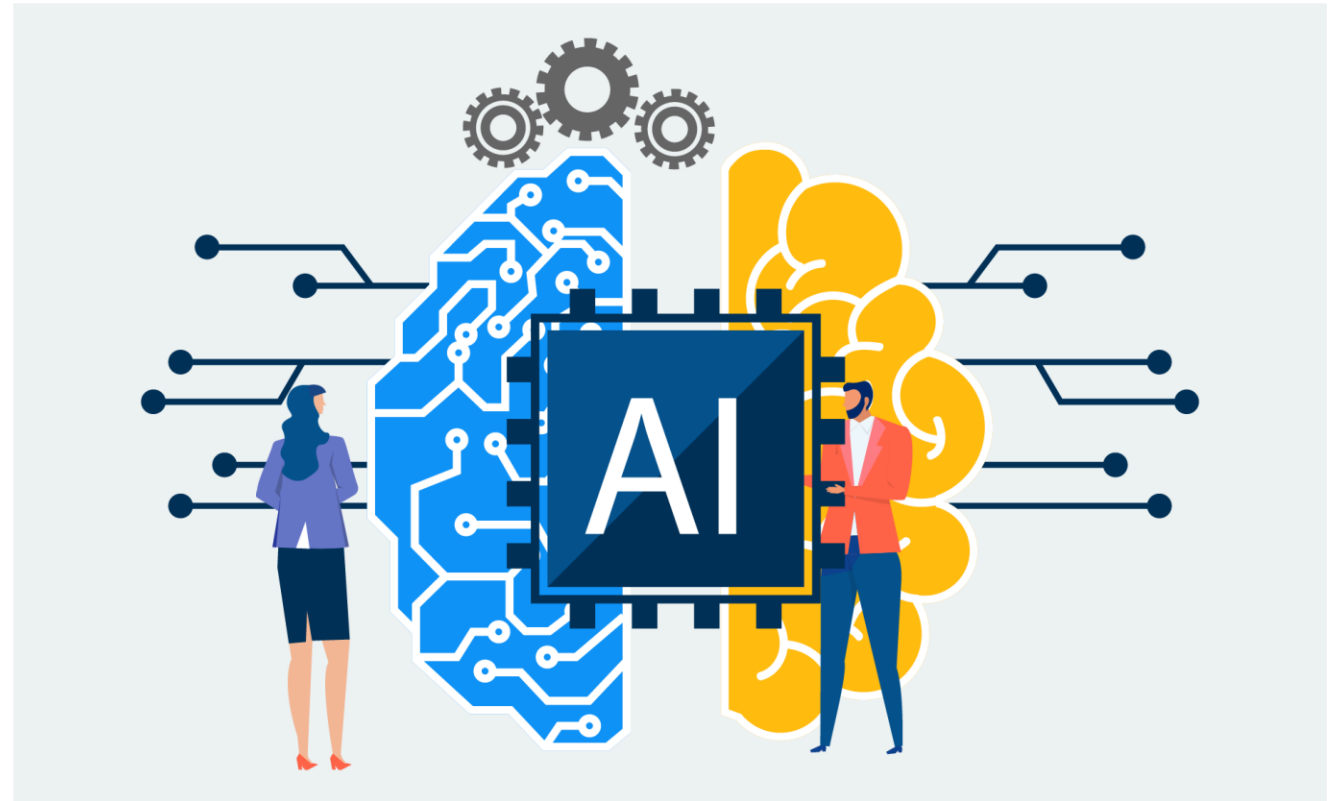
# APH AI Office Hours – “Ask about AI”

## Key Takeaways

- Office Hours serve business needs by providing space for use cases and learning
- The space does not assume any prior knowledge, therefore is a great space to explore/have questions/share
- Develop a repository (recordings) so people can reference

## Future Directions

- Move towards use-cases that are more interactive to help solve some problems in a collaborative way.
- Shape data culture by how to think about problems, collectively



# WHAT'S NEXT?

## 1. Expand Digital Literacy Workforce Development

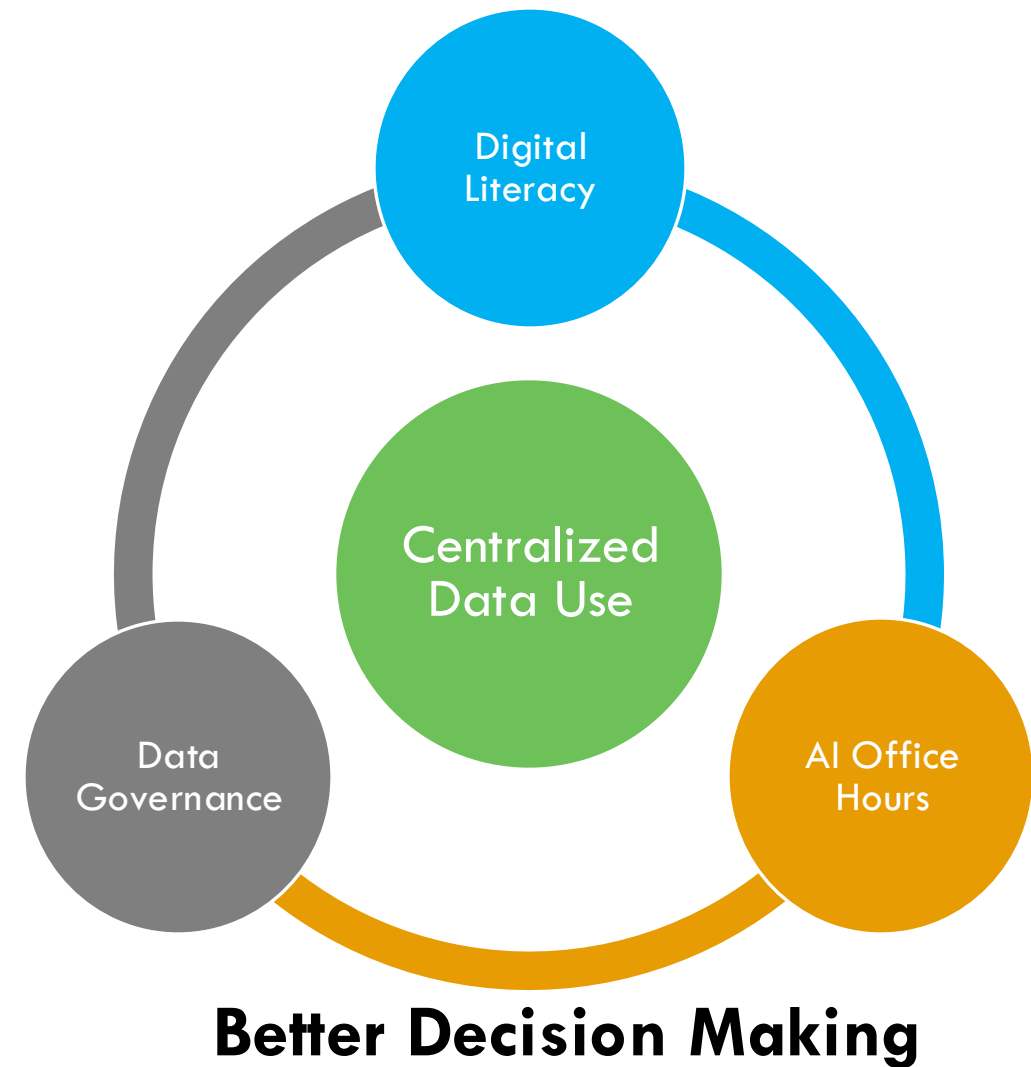
- Incorporate data skills into onboarding and annual learning plans.
- Use pre- and post-training assessments to track competency growth.

## 2. Strengthen the Data Governance Committee (DGC)

- Formalize roles of data owners and stewards for each data asset.
- Promote department-wide data standards and metadata taxonomy.
- Serve as central forum for addressing data silos and enhance interoperability.

## 3. Grow AI Office Hours and Emerging Tech Engagement

- Expand participation across divisions to foster diversity in use cases.
- Document and share AI use cases and lessons learned.
- Promote and educate on responsible and ethical AI use at APH.



**Overall Goal:** Foster a data culture at APH to support future data interoperability and structure of data assets, leading to better data-driven decisions that support community priorities.



# ACKNOWLEDGEMENTS

## Special Thanks To:

- **Irshad James**, *Former DMI Director*
- **Laura Lysaght**, *Current DMI Director*
- **Michel Hobson**, *Digital Literacy Initiative*
- **Holly Jones**, *Data Governance Committee*
- **Nicole Kelly-Krzywonski**, *Data Governance Committee*
- **Christopher Collins**, *AI Office Hours*
- **Phillip Bays**, *Senior IT Manager*
- **APH Data Governance Committee**
- **CDC Workforce Acceleration Initiative**
  - **Kiara Carr**, *CDC Foundation Business Analyst*
  - **Elizabeth Banas**, *CDC Foundation Business Analyst*







THANK YOU |

Leveling Up Public Health Data:

# How We Launched a Data Revolution

**Josh Watters**

Public Health Strategic Advisor  
Director of Data Modernization



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**Mission:** Protecting Health, Improving Lives

**Workforce:** 550 FTE/PTE

**Programs:** 50+

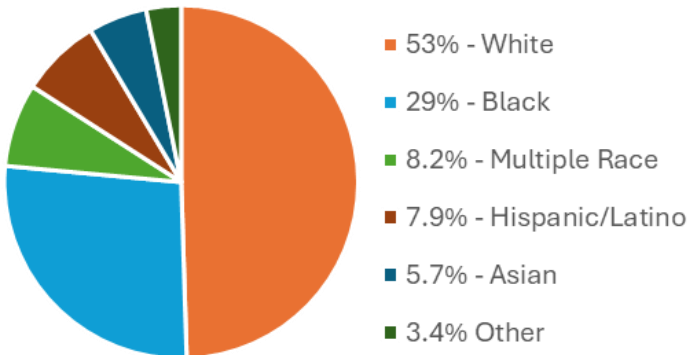
**2024 NACCHO Champion  
of Local Governmental Public Health**

**Population:** Estimated 917,679 (14<sup>th</sup> largest)

**Metro Area:** Estimated 1.7M

**Setting:** Urban, Suburban

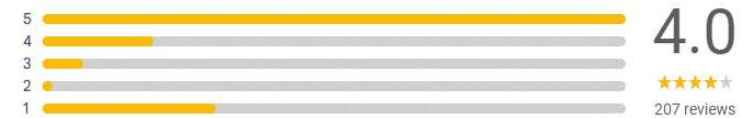
### Racial and Ethnic Makeup



Ohio ranks 47th in the nation for state investment in public health  
Ohio's infant mortality rate ranks 43rd nationally (7.4 per 1,000 in Franklin County)



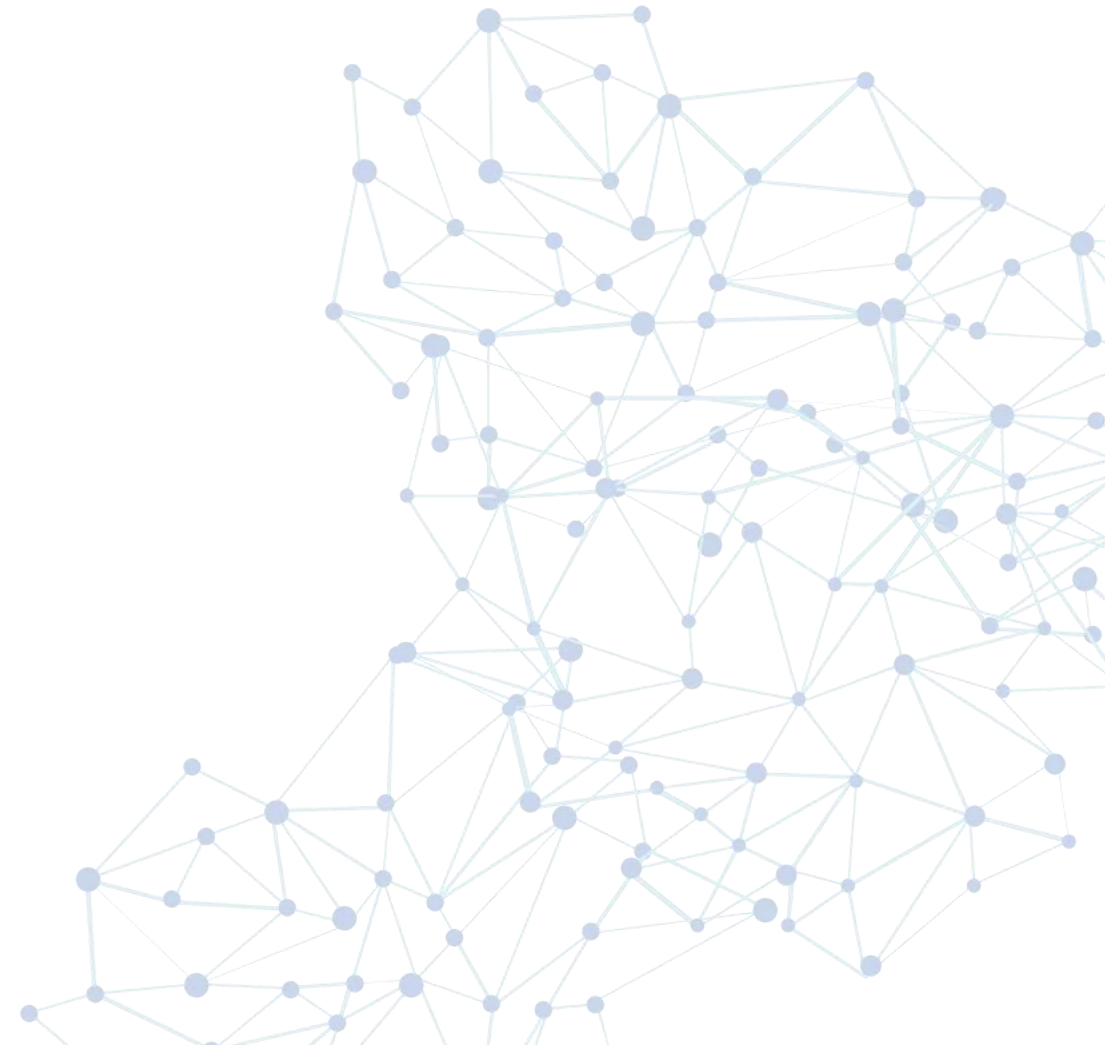
### Google review summary





# How we launched a data revolution

- By building a data dream team
- Making time for innovation
- Jumpstarting our journey



First up:

# Building a data dream team



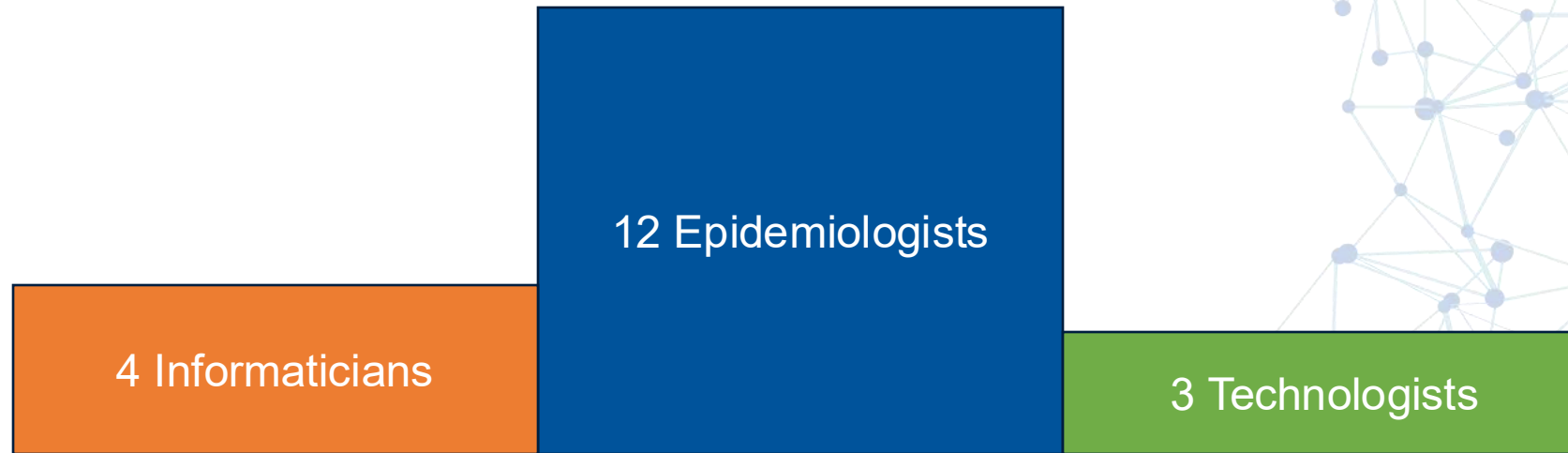
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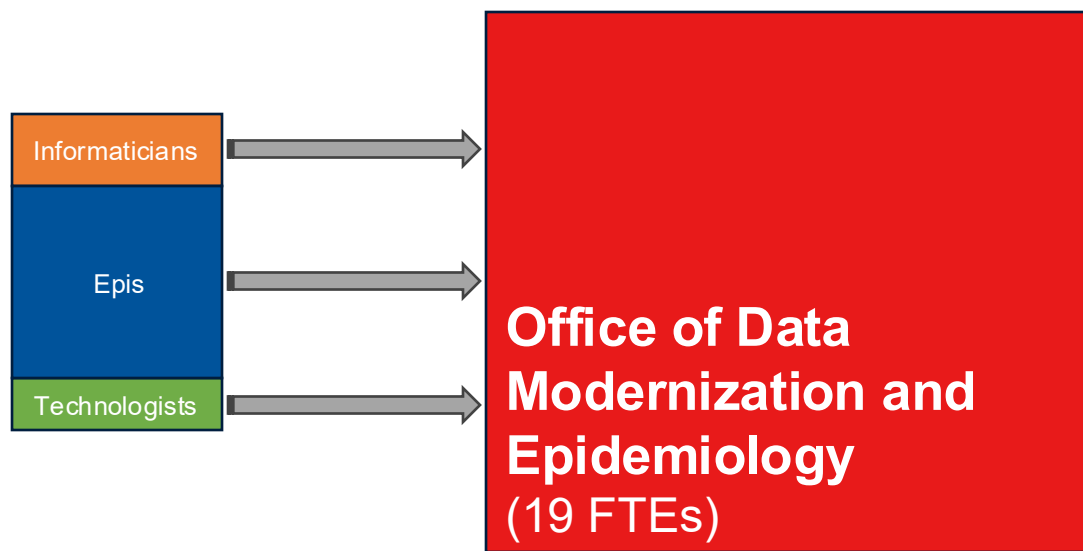
# Building a data dream team

- Siloed, disconnected teams
- Resulted in independent, rarely coordinated efforts

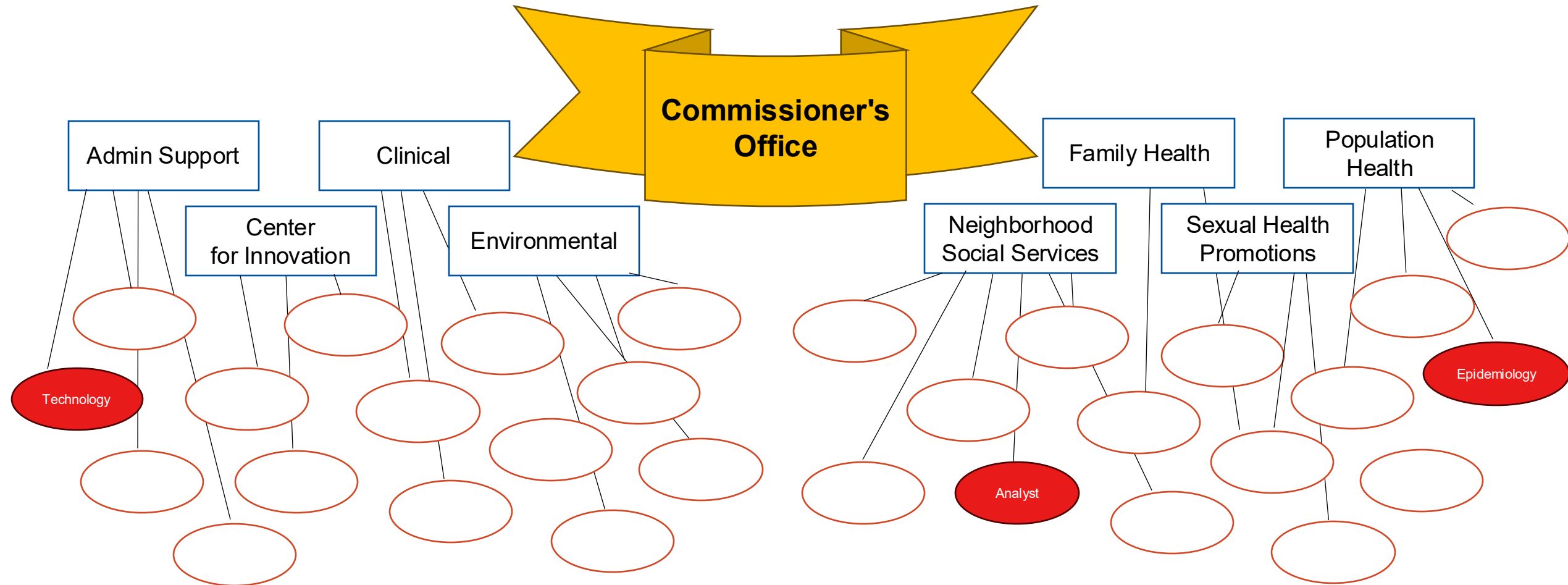


# Building a data dream team

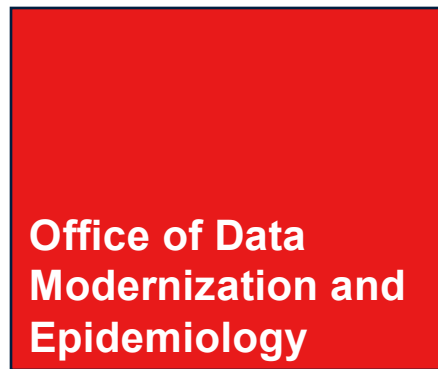
- Leadership decided to reorganize
- We now are the Office of Data Modernization and Epidemiology (DME)



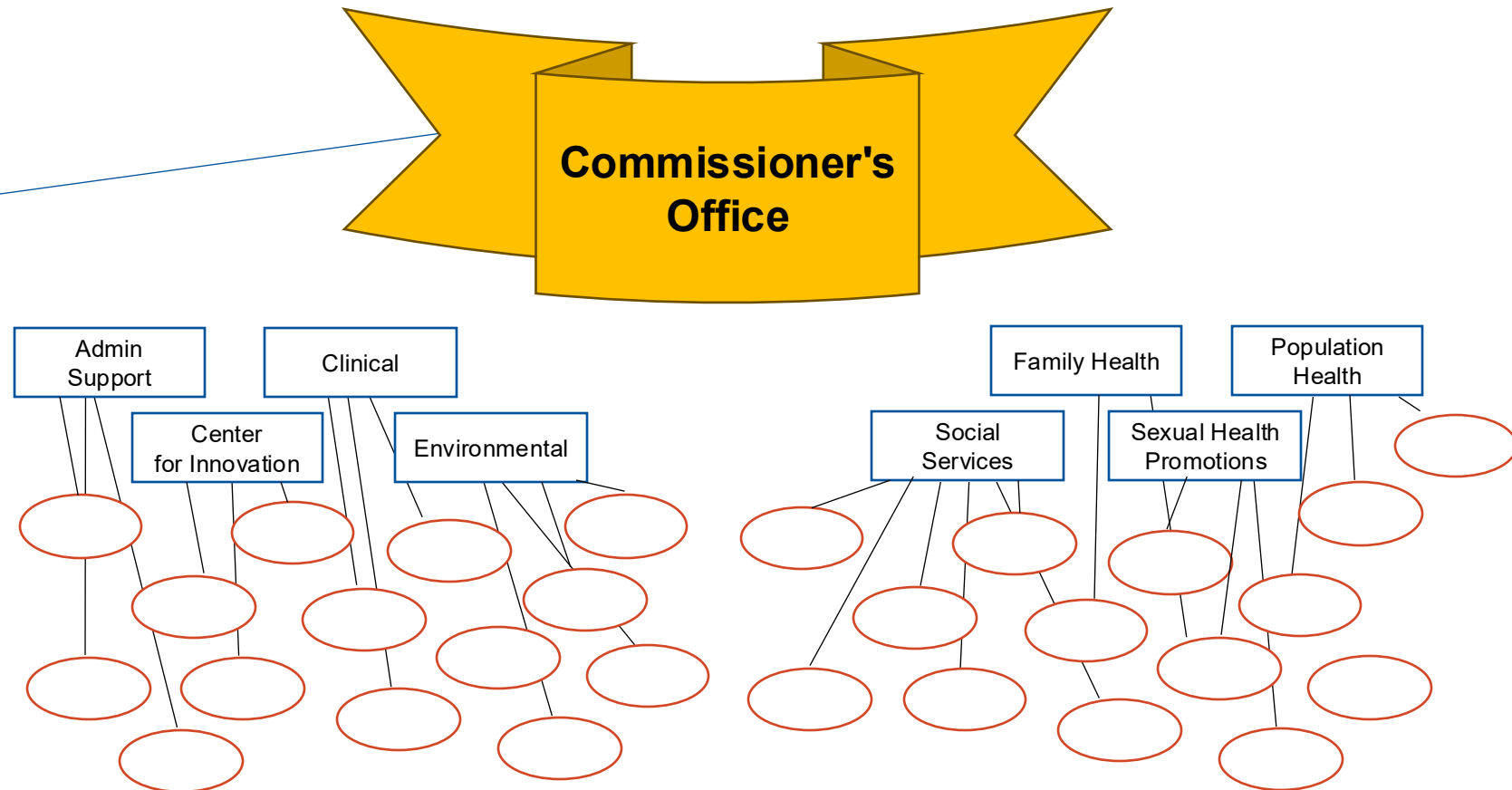
# Org chart before forming DME



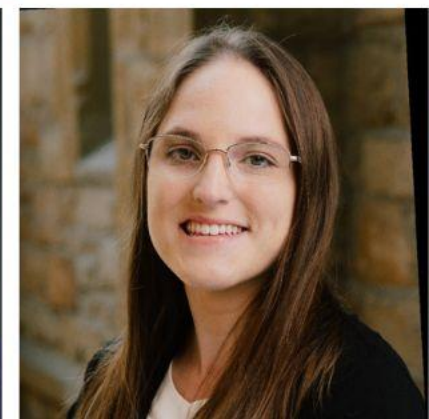
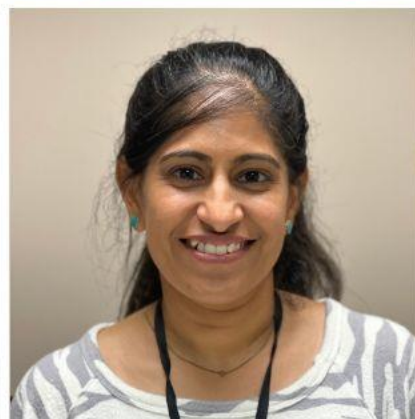
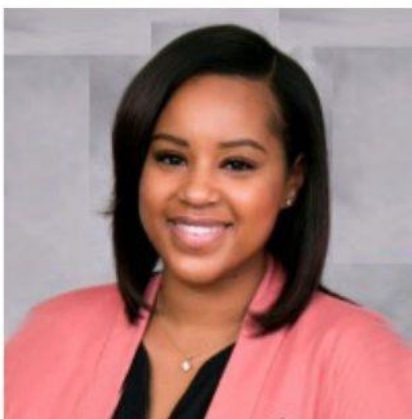
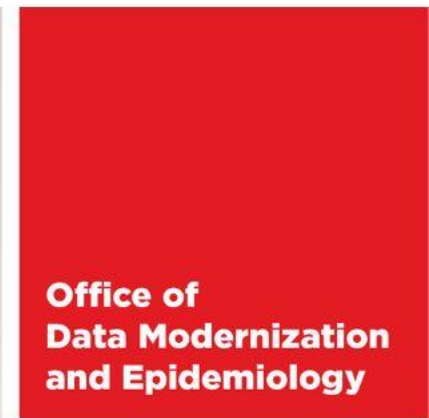
# Org chart after forming DME



- Unified
- Elevated
- Influential









Next:

# Making time for innovation



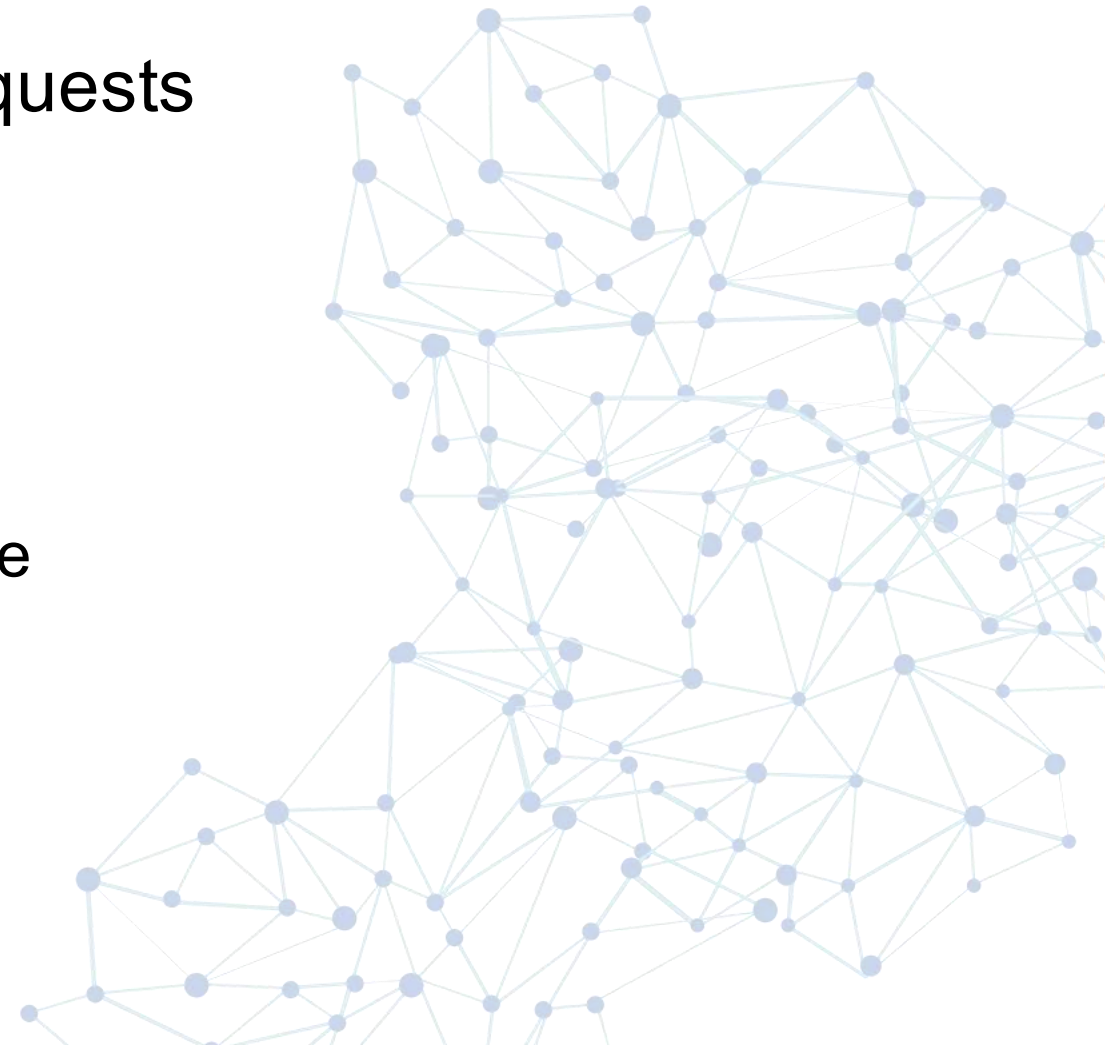
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# Making time for innovation

We were drowning in the day-to-day requests

- Constant reactive work, urgent requests – leaving no time for strategic, foundational projects
- 80-85% of staff time was being spent on advising, consultation, data requests, routine tasks/updates
- Little-to-no automation
- No formal governance



# Making time for innovation

We proposed a "Summer of Innovation"

- Three months break to reset expectations, processes, and goals of our new office
- Focused on building a foundation for data modernization and governance
- Only accepted approved, critical requests
- Leadership understood and supported the vision!



Jumpstarting our journey with a

# Summer of Innovation



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# Jumpstarting the journey

## So many DMI priorities



(CDC Data Modernization Initiative five key priorities)



# Jumpstarting the journey

So much "data debt"

- Data standardization
- Data quality
- Data inventories
- Data access
- Data for health equity
- Data interoperability
- Data sharing
- Data automation
- Data sharing
- Data storytelling



# Summer of Innovation

## Project selection and management

- 15 unique projects centered around data modernization and governance
- Each team member led a project
- Each team member assisted on another project



# Summer of Innovation projects

## Modernization



Data lake for core  
data sources



Gap analysis



Unified data portal



Qualtrics  
implementation



Data archiving

# Summer of Innovation projects

## Governance



Data source  
encyclopedia



SOP Library



Data system discovery  
and inventory



Tracking and access  
(licenses, systems, dua/dsa)

# Summer of Innovation projects

## Innovation and efficiency



Strategic workplan



Grant review process



Data storytelling guide



Data literacy plan and curriculum



Branding guidelines



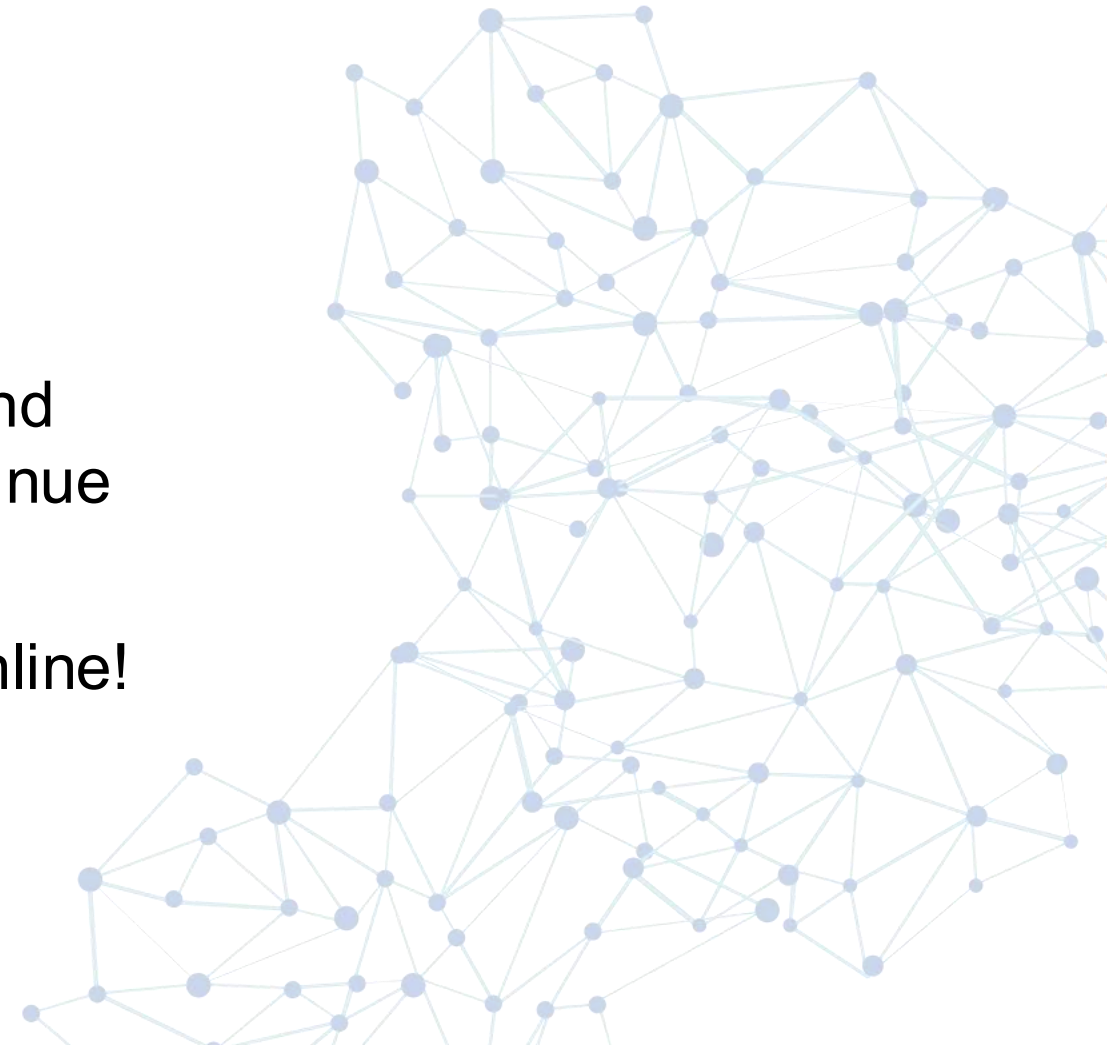
Data workflow and process review



# Summer of Innovation

## Project delivery

- PMs will deliver their plans and progress September 9th, 2025
- Many projects are related to governance, and will become the foundation for how we continue to use and manage data
- Our final plan and projects will be shared online!



# Next steps



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# Next Steps: Data Infrastructure and Impact

## Governance

### Smartsheet for Tracking

data access,  
contracts, dua/dsa/mou

### Data Sharing/Security

partnerships

### Steering Committee

policy development,  
strategy, compliance

## Modernization

### Epic EMR

quality, standardization,  
interoperability, FHIR

### Accela EH

inspections and permitting

### Data Lake

for core PH data sources

## Literacy

### Training

basic and advanced

### Data Storytelling

marketing, changing the narrative

### Data into Action

forecasting and response

Summer of Innovation

# Questions?

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Follow our  
Summer of Innovation

