

# From Assessment to Implementation

## Michigan's Data Driven Strategy to Advance Digital Public Health Transformation

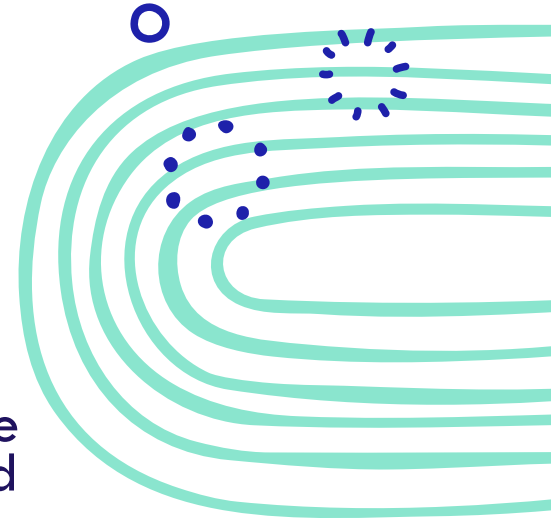
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- Source content - both the HIMSS DHI Tool Recommendations Report and the Michigan Public Health Institute (MPHI) Synthesis of Findings - can be found on MPHI's website under the Publications tab.

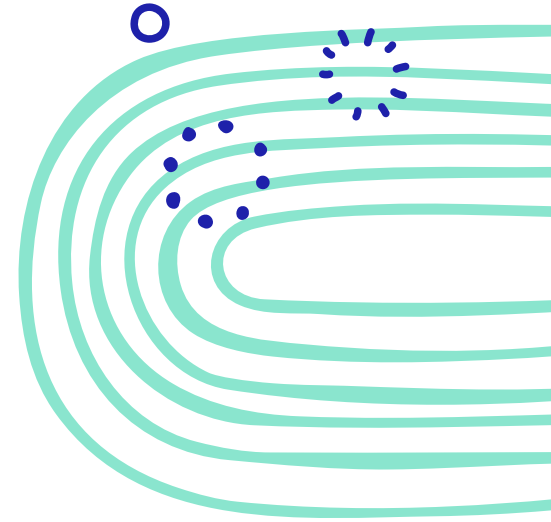


# Partner Thank You



# Agenda

- Relationship to Public Health Data Strategy
- Why the DHI
- Summary of Findings and Recommendations
- How We're Responding to Recommendations
- What's Next



# Background



# MDHHS Public Health Data Strategy



# Selection of MI Digital Health Indicator Assessment

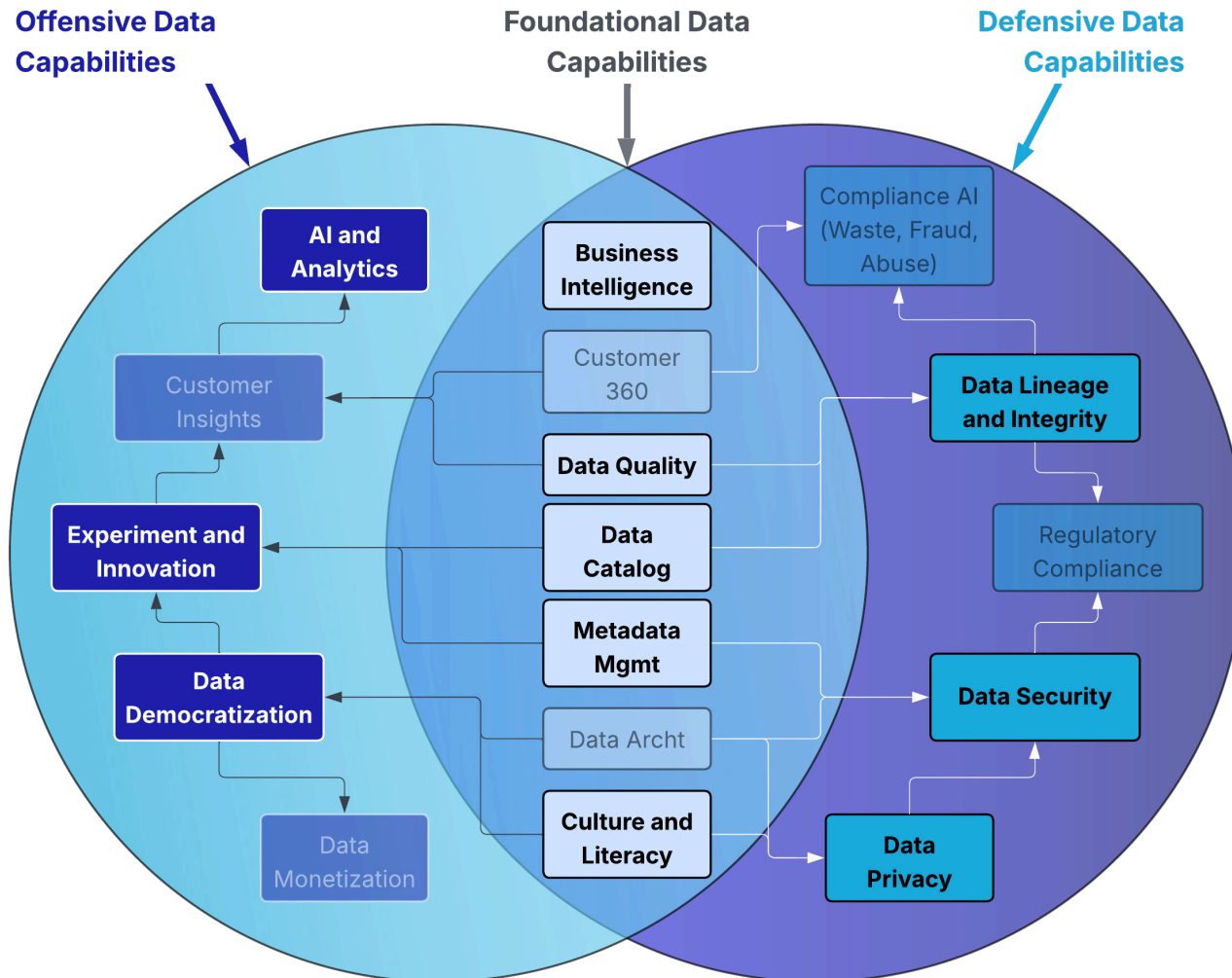
## Data modernization objectives:

- Improved community health equity by targeting upstream determinants of health
- Improved data democratization within a 'foundational' and 'offensive' data capability paradigm
- Shifting to a 'Data-as-an-Asset' culture

## Needs

- Broad, objective assessment of internal and external partner data use, needs and change readiness
- Shared data modernization stewardship
- Impartial recommendations for improvement opportunities
- Contextualization of recommendations to jurisdictional experience

# Philosophical Drivers of Data Modernization



Shifting away from defensive data capabilities and toward offensive data capabilities requires a shift to thinking of data as an asset.

# Why the HIMSS DHI Tool?

## Validity

- Tested in multiple health settings, in multiple countries

## Replicability

- Modified Public Health instance of tool created by Missouri in 2024/2025

## Comparability/Maturity Measurability

- While CDC wants states to assess data environments (PHIG requirement), each state establishes its own approach
- Leveraging the same approach enables benchmarking across jurisdictions and over time

## Scalability

- MO and MI efforts both demonstrate application of the DHI tool in various health settings, including state departments, local health institutions and with tribal partners (horizontal and vertical implementations, respectively)

## Traceability

- Rigorousness of tool enables auditability of observations and findings

## Generalizability

- Tool can be customized for public health need and findings can be contextualized to jurisdictional experience (MPHI sense-making sessions)

## Quantitative and Qualitative

- A mixed methods approach enables quantitative analysis with qualitative and anecdotal data capture – i.e., storytelling that underscores the observations and findings.

# DHI Tool Fielding and Results



# Application of DHI Tool

## Local Public Health

- 38/45 Local Public Health Departments interviewed by HIMSS (~84%)
  - Standalone county, multi-county districts, and one city health dept
  - Broad range of resource access and rural/urban experiences
- 3 validation/sense-making sessions with MPHl

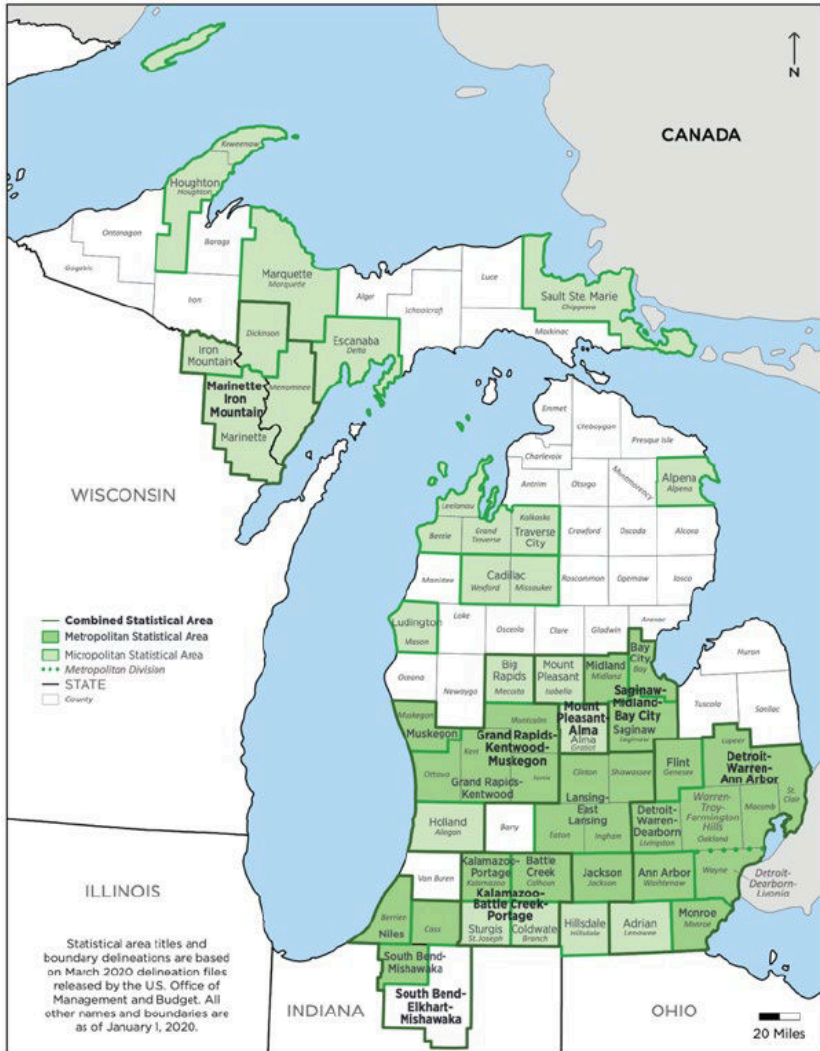
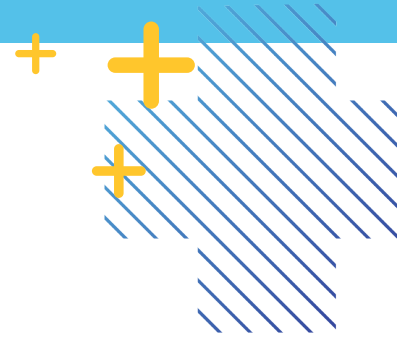
## Tribal Partners

- 9/12 Federally recognized tribes (75%)
- Tribal membership on tribal lands and in the state diaspora
- 2 validation/sense-making sessions with MPHl

## MDHHS

- Decentralized public health state where MDHHS is charged with responsibility of convening shared, consistent public health solutions across independent local public health jurisdictions
- 1 interview with 16 key informants

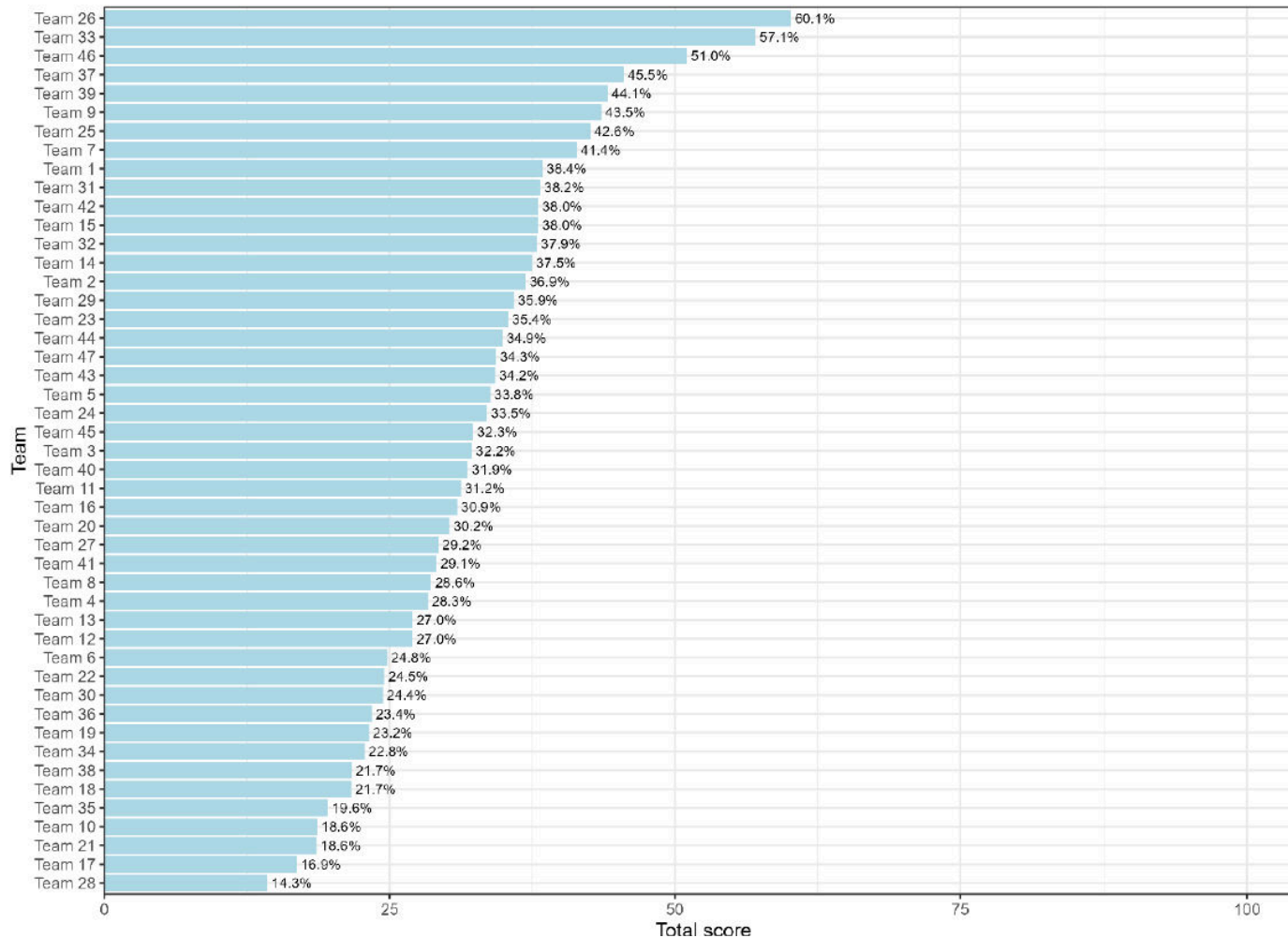
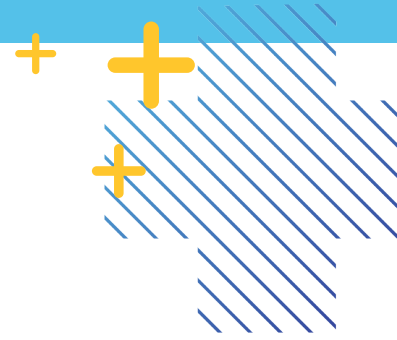
# Diversity across the Michigan Landscape



- Geographic
- Rural/Urban
- Social and Economic
- Broadband Internet Access
- Local Health Department Organization
- Local Health Department Resource Availability

U.S. Census Bureau, Population Division, Michigan: 2020 Core Based Statistical Areas and Counties

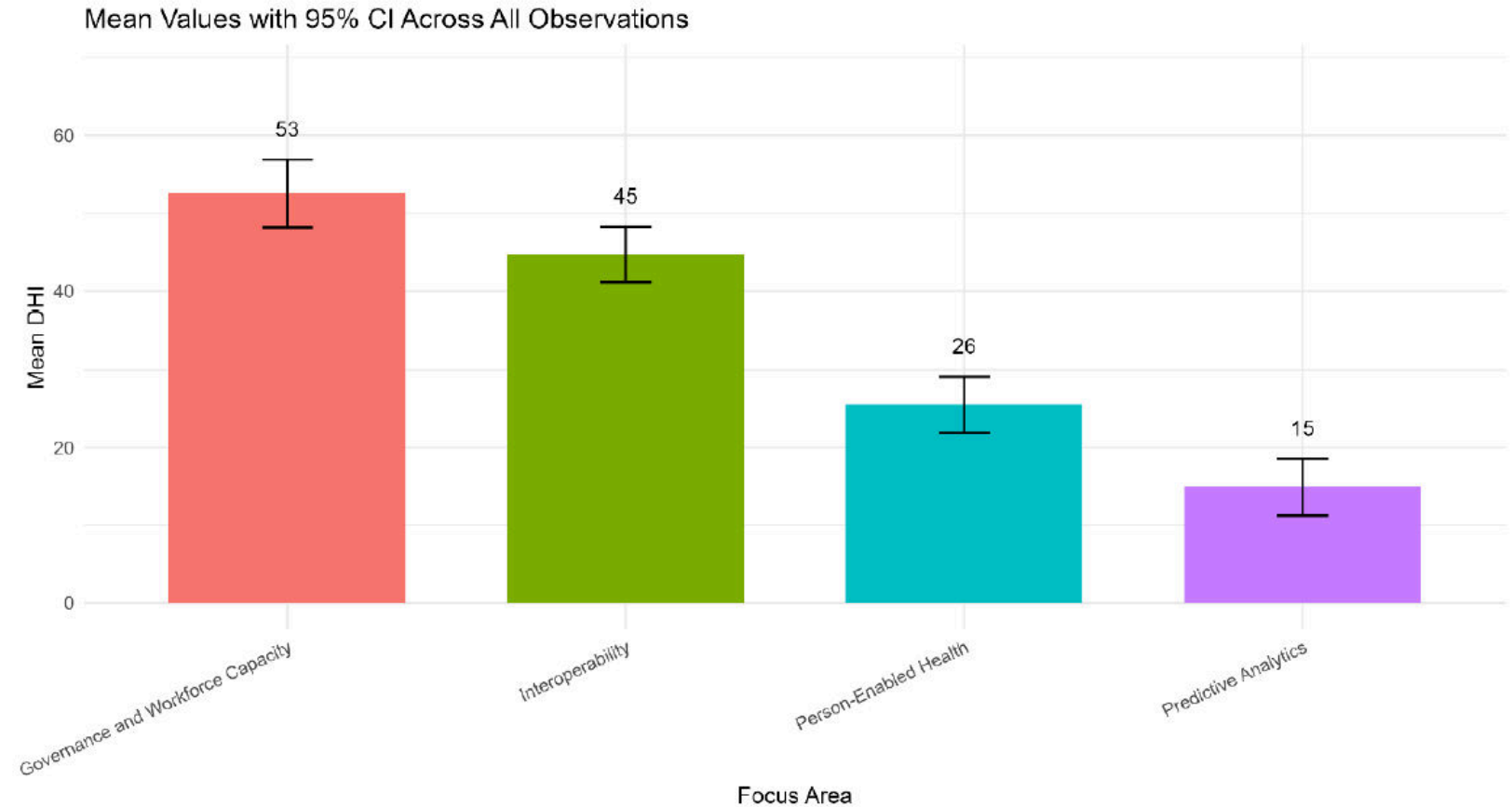
# Assessment Results Reflect Similar Diversity in Digital Readiness



Local Health Department  
DHI Tool Respondent  
Results Rankings

# Results by DHI Dimension

- strengths seen in **Governance and Workforce**
- **person-Enabled Health and Predictive Analytics** align to trends in other DHI assessment findings



HIMSS, Digital Health Assessment of the Michigan Department of Health and Human Services, Figure 6, “Overall Mean DHI Values (with Confidence Intervals)”

# Qualitative Snapshots

*"We're pulling reports from three different systems and trying to stitch them together."*  
(LPHD team 5)

*"We have to spend significant resources collecting and pulling data constantly to help inform our decision-making, and it's never easy. Even for one program, we have to pull from multiple sources sometimes to get a clear picture of really what's happening."* (LPHD team 13)

*"We're at the mercy of the systems the State tells us to use."* (LPHD team 3)

*"We have in our electronic health record system; we keep track of how many doses of everything we have. Then we also have to tell MCIR what we have, and we have to reconcile once in a while... somebody just has to make sure that they both reconcile to be the same."* (LPHD team 12)

*"They don't share in-between systems. You would have to actually log into each of the systems [individually]."* (LPHD team 16)

*"We need help to nudge our administrations to shift the thinking of 'what is possible.' It is happening from the bottom up... but we need to get that buy-in from the top."* (LPHD team 12)

*"When it comes to technology, we create a lot of software and technical systems. They are very biased for a variety of reasons, but we don't think of the human behaviour and the person using the system. Our staff members. How are they using the system? What makes it the most useful for them? How is it easier for them?"* (LPHD team 12)

*"It's thousands of dollars to set up and configure [an interface], and then hundreds of dollars a month. We have to pay a nurse to physically go through and type them all in... we just can't afford it."* (LPHD team 9)

# Unique Tribal Insights



## Theme 1: Limited Digital Interoperability and Connectivity

- Reliant on manually intensive processes. Lack connections to healthcare reporters and state/local public health jurisdictions.

## Theme 2: Need to Safeguard Tribal Sovereignty

- Unique values, roles and responsibilities that must be accounted for and respected through rigorous data governance and sharing practices.

## Theme 3: Population Disparities and Geographic Inequities in Digital Access

- Tribal health organizations experience disparities in accessing relevant disaggregated data and disparities in the digital infrastructure needed to effectively use data and health information systems.

## Theme 4: Participatory Governance and Personalized Care Delivery

- Exemplars of community engagement and participatory governance, policy development, program design and health decision-making.
- Participatory frameworks are a reflection of tribal values for shared decision-making to ensure that health services remain responsive to community needs and preferences.

# Recommendations and Action



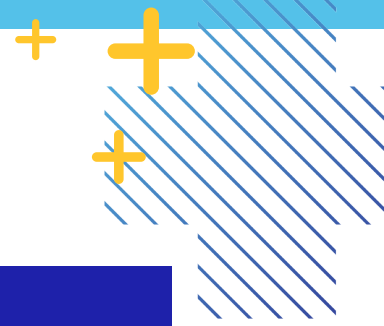


# Recommendations (from MPHI Contextualization)

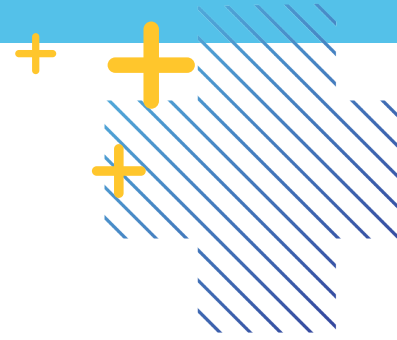


1. Advance a statewide digital public health governance strategy, incorporating coordinated learning and feedback mechanisms.
2. Develop a sovereignty-based tribal public health data governance strategy in collaboration with Michigan's 12 federally recognized Tribal nations.
3. Strengthen interoperability of digital public health infrastructure.
4. Implement an advanced analytics strategy to enable predictive and operational analytics for faster, evidence-based decision-making.
5. Advance equity-focused, person-enabled digital health services through ongoing collaboration with state, local and Tribal partners.

# DHI Recommendations-to-PHDS Matrix



DHI Recommendations	Public Health Data Strategy (PHDS) Goals		
	Modernize sharing and use of public health data	Robust Public Health Infrastructure	Intentional Inclusion of Public Health Partners and Communities
Advance Digital Health Governance Strategy	✓	✓	✓
Develop Sovereignty Based Tribal Public Health Data Governance	✓	✓	✓
Strengthen Interoperability	✓	✓	
Implement Advanced Analytics	✓	✓	
Advance Equity-Focused, person-enabled digital health services	✓	✓	✓

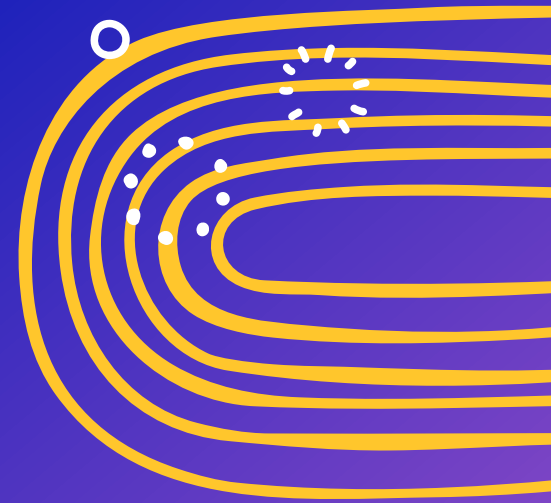


# Planned Actions

- 1. Public Health Enterprise Data Platform (EDP): Proof of Concept**
  - Building, testing and validating modern, data-lake-based schema-on-read data aggregation and reporting products and services against real-world use cases
  - Use cases to be developed and prioritized in collaboration with public health partners
  - Lessons learned from the field will inform implementation of shared solutions in state of Michigan (SOM)
- 2. Public Health Enterprise Data Platform (EDP): Upskilling SOM Capacity**
  - Proof of concept will inform data engineering and organizational change management methodologies necessary for long-term adoption of SOM-house shared solutions
- 3. Organizational Change Management (OCM) to Enable Data Democratization**
  - Workforce development, data democratization promotion and operations optimization necessary to enable adoption of EDP products and services
- 4. Multi-Lateral Stewardship of Tools and Services**
  - Shared decision-making that represents the broad, vertical integration of public health partners, steering the direction of the shared services and products hosted by SOM
  - Additional, standalone governance bodies for unique instances when needed – e.g., governance and technology solutions to enable deeper data sharing with sovereign Tribal nations

# Questions

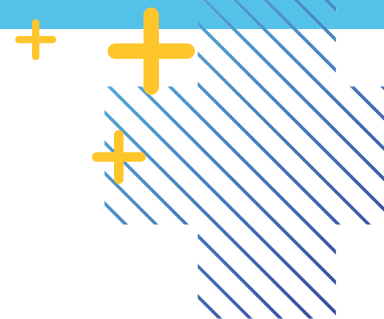
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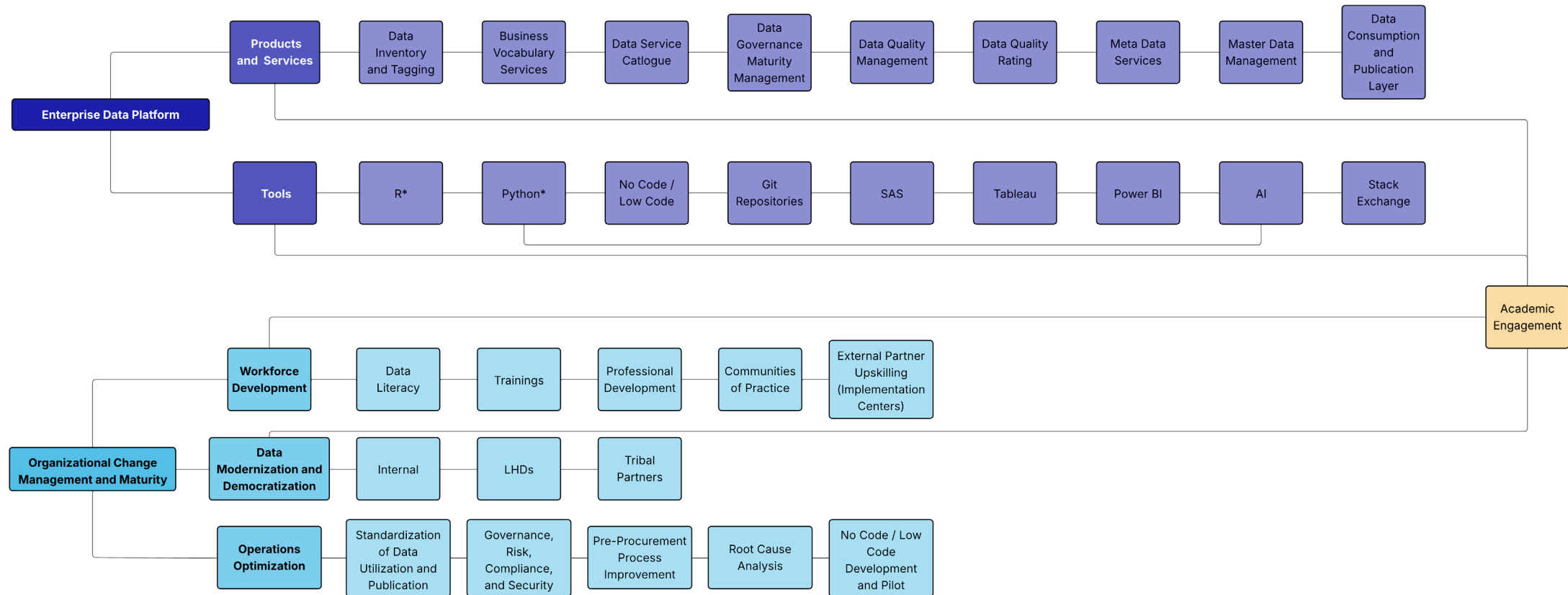
# Appendix



# Implementation Plans – EDP and OCM



Data Modernization Implementation - Key Activity Relationship Diagram



\*Co-promoted as highest level priorities (i.e., Python becomes Lingua Franca to access AI capabilities)

# Implementation Plans – EDP Models

MDHHS Enterprise Data Platform (EDP): Concept and Logical Models, v4 - 02/02/2026

