

Alternate Data Sources for Public Health Collaboration

Julie Lench, DVM, MPH
HSIP Fellow

Office of Health Informatics
Wisconsin Department of Health Services



Strengthening Health Systems through Interprofessional Education



Health Systems Integration Program

Roadmap

- Wisconsin Data Access
 - What's collected at Department Health Services
 - Collaboration #1- WHIO
 - Collaboration #2- WPHCA
- Integration and *Moving Forward*





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- Department of Health Services
 - Division of Public Health
 - Office of Health Informatics

- Information Architecture
- Vital Records
- Analytics
 - Collect
 - Analyze
 - Report



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Data collected within DHS-OHI

- Vital Records
 - Birth Records (SVRIS- 2011)
 - Fetal Death (SVRIS-2011)
 - Death Records (SVRIS- 2013)
 - Marriage / Domestic Partnership (* Summer 2015)
 - Divorce
 - Adoption
 - VTOP

Data collected within DHS-OHI

- WI National Violent Death Reporting
- WI Cancer Registry
- Pregnancy Risk Assessment Monitoring (PRAMS)
- Family Health Survey
- Behavioral Risk Factor Surveillance System (BRFSS)

Collaborative data projects with OHI

- State Laboratory of Hygiene
- Environmental Public Health Tracking
- Dept. of Transportation
- Medicaid (BadgerCare)
- Wisconsin Youth Tobacco Survey
- Prescription Drug Monitoring Program **

Collaborative data projects with OHI

- Birth defect registry
- Emergency Department Visits
- Hospital discharge data
- Wisconsin Immunization Registry (WIR)
- Women, Infant, Children (WIC)
- Electronic Disease Surveillance (WEDDS)

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Collaboration #1

WHIO

Wisconsin Health Information Organization

- Claims Data
- 6 month delay
- 16 Insurance companies feed information to WHIO: Match, consolidate, de-identify



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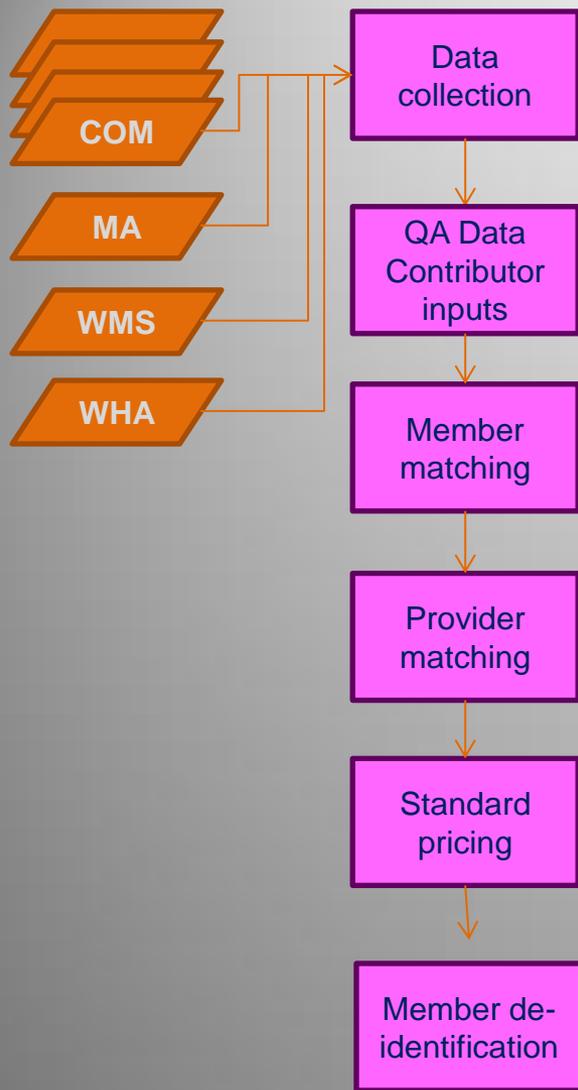


Health Systems Integration Program

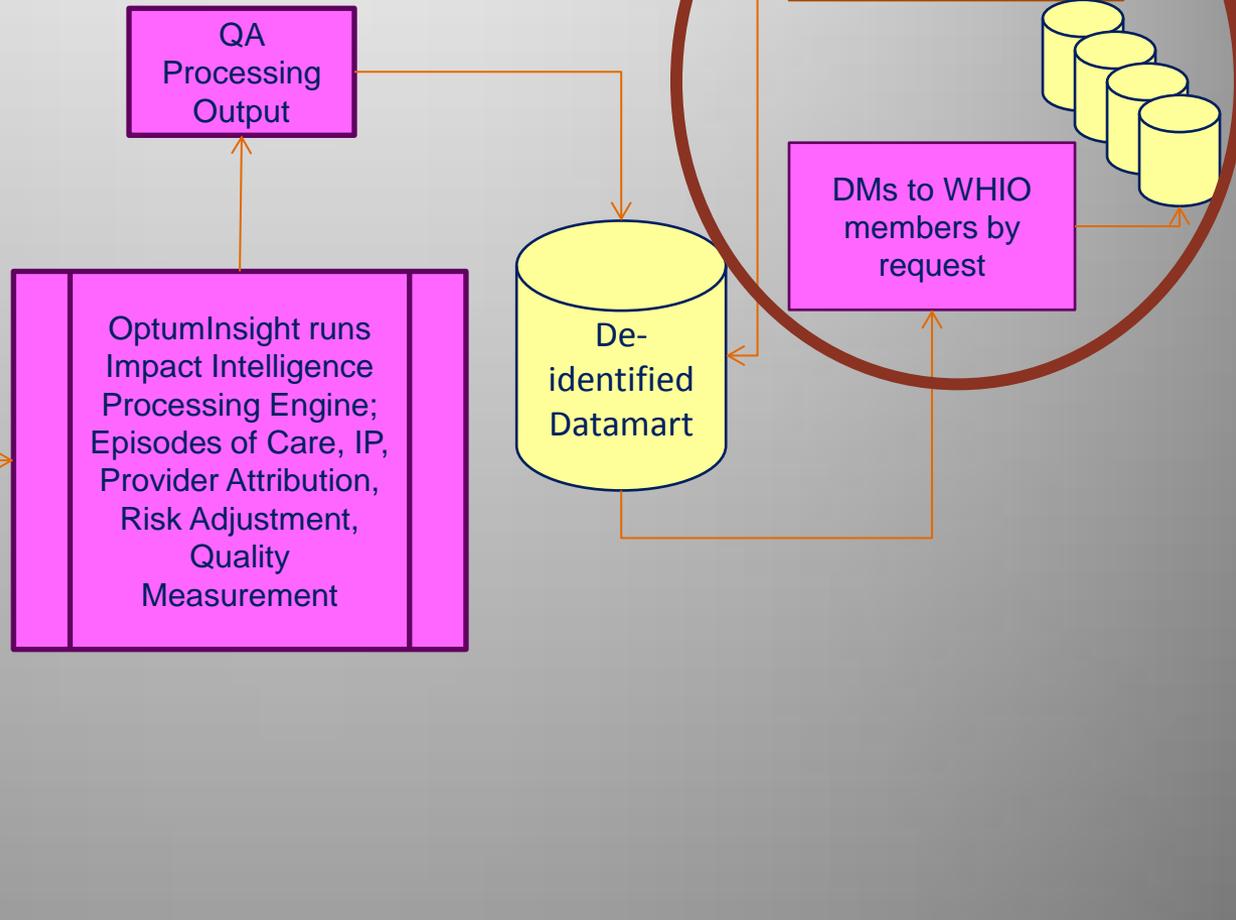
WHIO

Health Statistics

- 4 Million patient members
- >70% of state of WI Population
- Commercial and Medicaid claims



WHIO Data Model



WHIO data uses

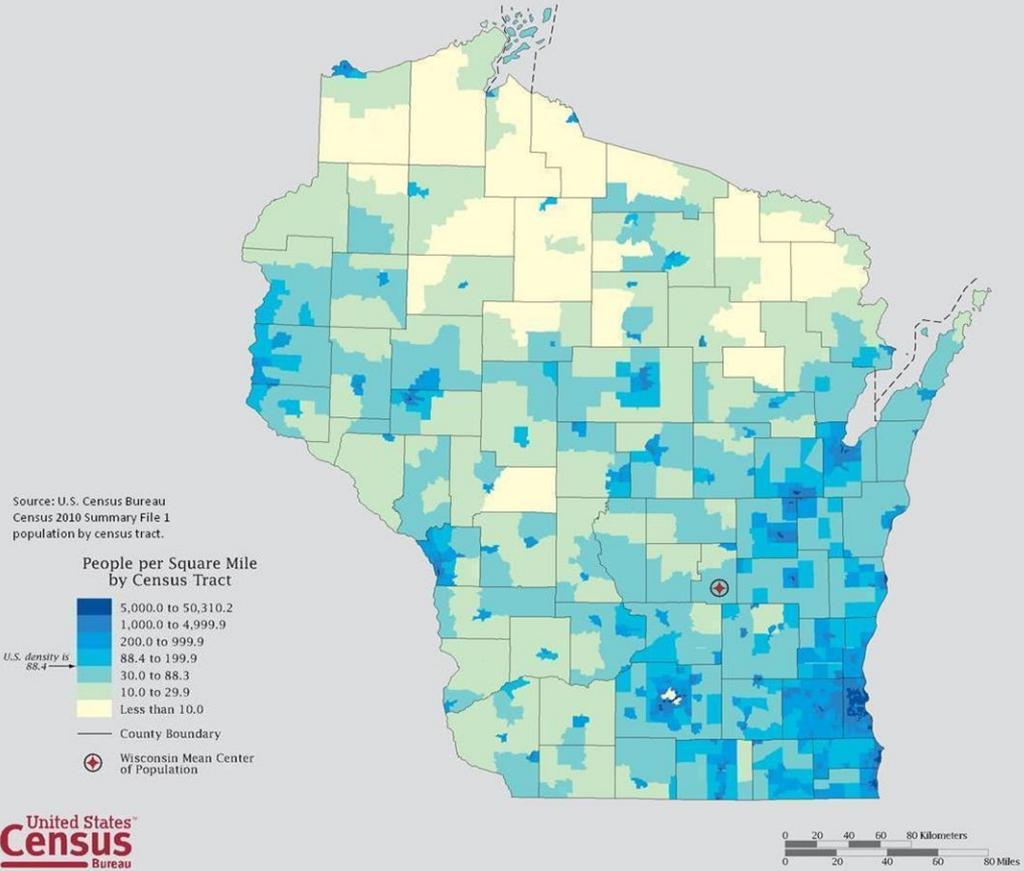
- Specific code searches to get provider trends
- Compare claims to reported data (example: Cancer registry)
- Detect rare disease/ infections (TB)
- Allow coordinated public health efforts

WHIO data limitations

- Missing up to 30% of patient members (uninsured, self-pay, self-funded employer)
- Medicare data are missing *
- Geographic de-identification
- No longitudinal data (complete replace)
- Capitation, bundled fees
- Member matching (provider or name change)

2010 Census: Wisconsin Profile

Population Density by Census Tract



U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU

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Collaboration #2

WPHCA

Wisconsin Primary Health Care Association

- EHR data repository
- 17 Community Health Centers (CHCs)
- High need/ high risk populations



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WPHCA- data repository

EPIC

GE Centricity

Greenway
(Success EHS)

Paper

Vitera Energy

Cattails

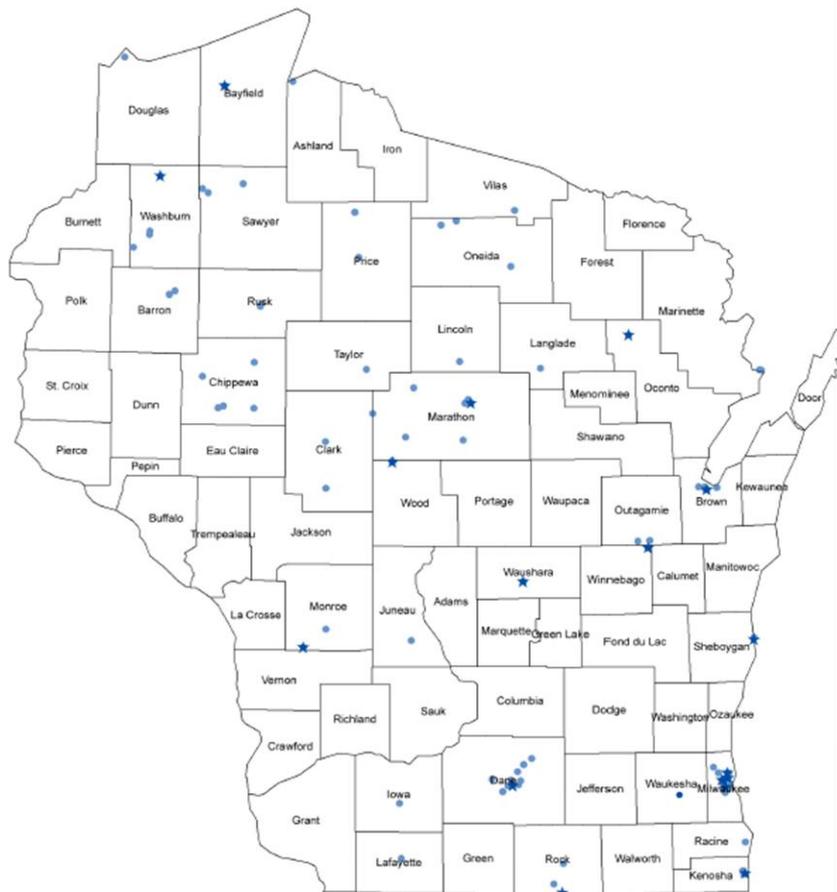


WPHCA

EHR use cases: (selected uses)

- Controlled diabetes
- Prenatal care
- Low birth weight
- Breast Cancer Screening rate
- Tobacco Use/ intervention
- Adult Weight screening

Wisconsin Community Health Centers 2013



- ★ Community Health Center
- Community Health Center Delivery Site



SHiNE

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Partnership Benefits

WPHCA

- Analytic capability
- Compare to State trends
- Population management
- Direct reporting
- Identification of “hotspots”

DHS-OHI

- Data validation
- Missing cases
- Integrate Clinical Data
- Incorporate EHR
- More timely reporting

- WEDDS- EHR gateway

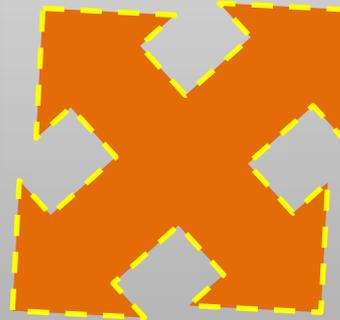
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Data Linkage

Immunization registry
Cancer Registry
Infectious Disease
Reporting

WPHCA
Medical
Records



WHIO
Insurance
claims

Vital Records
Birth
Death

QUESTIONS?

Julie Lench, DVM, MPH

HSIP Fellow

Office of Health Informatics

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Julianna.lench@dhs.wisconsin.gov

To learn more about Project SHINE, check out our website:

<http://shinefellows.org>

This presentation was supported in part by an appointment to the Health Systems Integration Program Fellowship administered by CSTE and funded by the Centers for Disease Control and Prevention (CDC) Cooperative Agreement 3U38-OT000143-01S1.



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Health Systems Integration Program

STRENGTHENING HEALTH SYSTEMS THROUGH INTERPROFESSIONAL EDUCATION

A collaboration between the Association of State and Territorial Health Officials, Centers for Disease Control and Prevention, the Council of State and Territorial Epidemiologists, the National Association of County and City Health Officials, and the Public Health Informatics Institute.

Vision Statement: *Illuminate pathways for professionals, organizations, and communities to achieve a collective, transformative, and sustainable impact on population health.*



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