Building Healthier Communities: The Importance of Social Drivers of Health

Waukesha County Community Health

Partner Summit

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Learning Objectives

- Review the current health status of our communities in Southeastern Wisconsin, with a focus on life expectancy.
- Describe our approach to understanding disparities in the region and how we have used larger population-based datasets (Area Deprivation Index and Vizient Vulnerability Index) to better understand the local populations that we treat.
- Explain the steps that we have taken to engage communities in co-design of strategies aimed at eliminating health disparities.
- Discuss some of the successes and lessons that we've learned as we endeavored to put these strategies into action.

Our Organizational Commitments

Our Commitments

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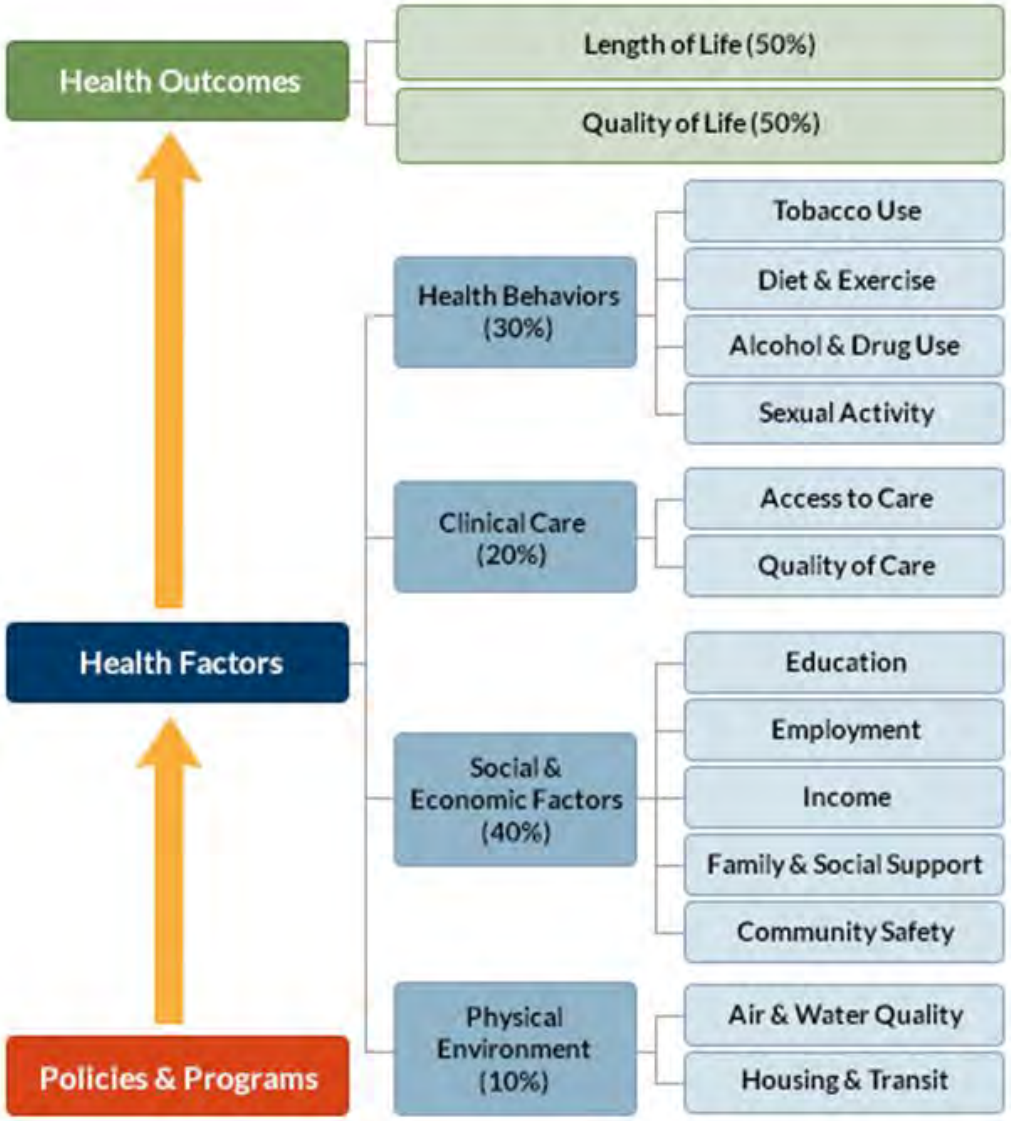
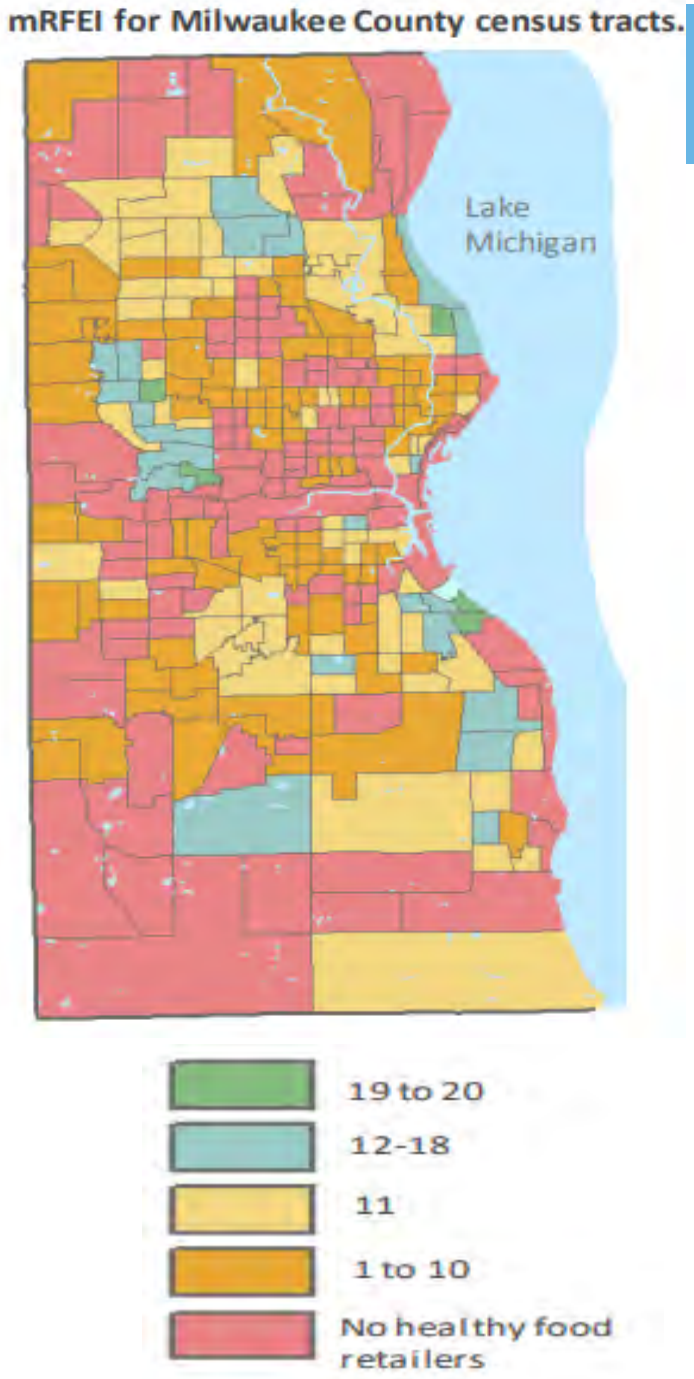
Determinants of Health Outcomes

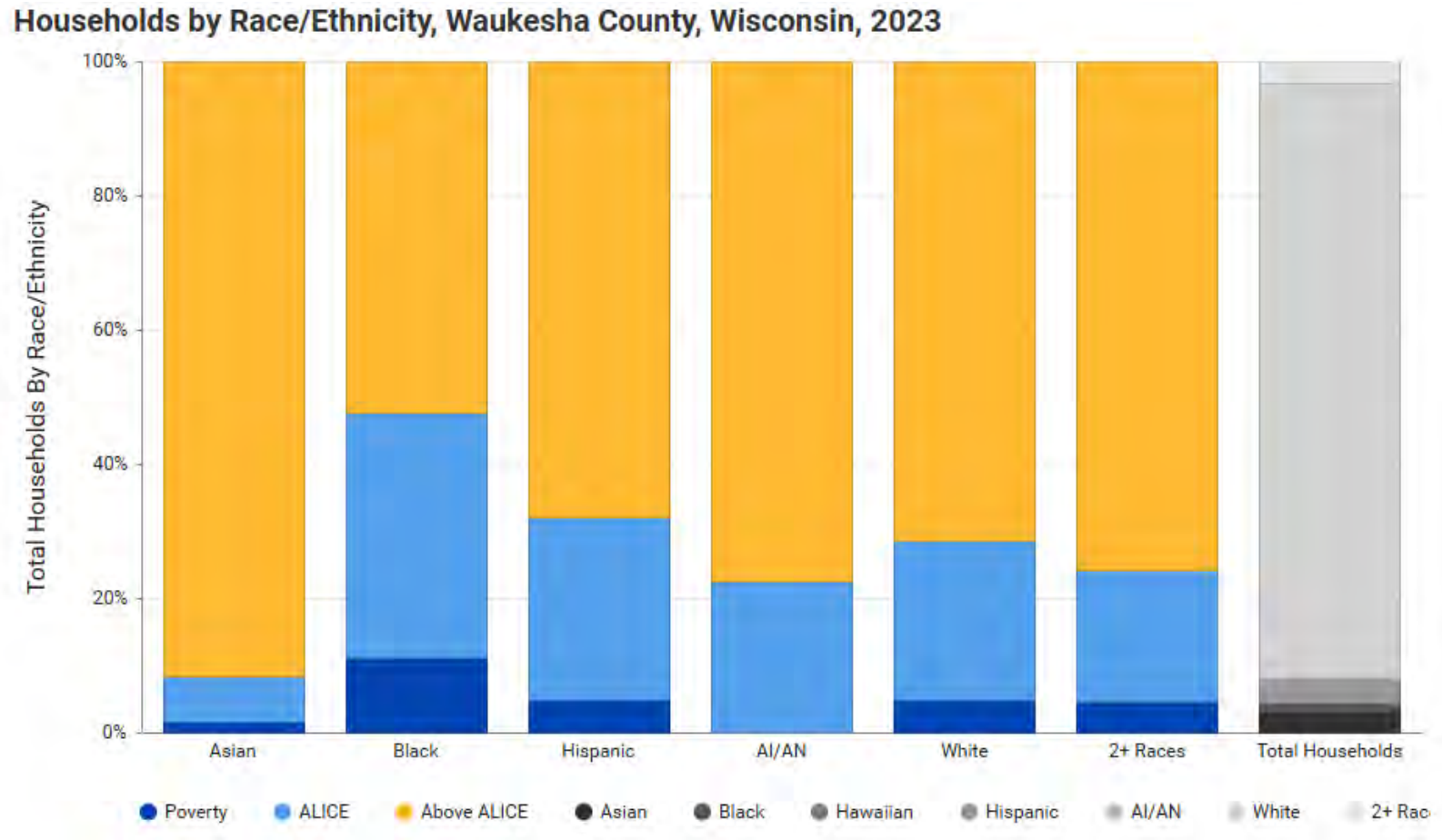


- City of Milwaukee 577,000 residents 2020 Census. 222k Black, 116k Latino residents.
- 23.8% of City of Milwaukee Residents are living at or below the poverty level.
- 32% ALICE households (asset limited, income constrained and Employed).
- Home ownership rate 41.3% vs.68.1% Statewide.
- Milwaukee residents are 12% more likely to be disabled.



Waukesha County Impact

- Population 2023: 412,591
- # Households: 168,150
- Households in Poverty: 7%
- ALICE Households: 21%



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Social Drivers of Health

- 80% of population-based health outcomes directly attributed to Social Drivers other than Healthcare Delivery.
- Two complimentary ways to assess prevalence of SDoH in a population.
  - Direct questionnaires and surveys.
  - Large geospatial data models – assumption that conditions in communities are generalizable at census tract / block level.
- Speed to insights favor large data model approach for planning and deployment of scaled solutions to impacted communities.
- Individualized questionnaires and surveys favor personalized care and attention to family-specific understandings and solutions.

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Challenges and Opportunities

- Collection of SDoH data is challenging to scale across a clinical population.
  - How often and when to screen? How best to drive engagement / completion?
  - Standards for data collection – all questions or computer adaptive design?
  - How best to creat efficiencies for care teams and focus the right people on this work?

- Referral to community based resources requires local partnership and knowledge.
  - Closed loop electronic referral remain a challenge for all put the largest/most resourced CBOs.

- Interoperability of SDoH data is lacking.
  - Questions used to screen vary from organization to organization.
  - Electronic medical record systems and HIEs are lagging in adaptations to facilitate sharing of insights across care platforms.

Understanding Population Health – Dimensions of Diversity

- Significant disparities in health outcomes amongst ethnic, racial, and socioeconomic class is prevalent in our F&MCW population.
- The disparity in outcomes experienced by our attributed population is consistent with regional and national population health data.
- Historic efforts to address these gaps have had variable results in attainment of health improvement.
- Our approach starts with our most tightly aligned populations / primary care attributed.

		Cervical Cancer Screening			Breast Cancer Screening			Colorectal Cancer Screening		
Ethnicity/Race	**Population**	**Num**	**Den**	**%**	**Num**	**Den**	**%**	**Num**	**Den**	**%**
White or Caucasian (PCP Pats)	148,106	15,925	23,413	68.0%	14,863	19,010	78.2%	28,964	36,828	78.6%
Black or African American (PCP Pats)	21,769	3,043	4,593	66.3%	1,915	2,813	68.1%	3,435	4,876	70.4%
Hispanic (PCP Pats)	7,382	832	1,255	66.3%	323	469	68.9%	660	901	73.3%
White/Black/Hispanic Total	**177,257**	**19,800**	**29,261**	**67.7%**	**17,101**	**22,292**	**76.7%**	**33,059**	**42,605**	**77.6%**
Asian/Indian/Hawaiian (PCP Pats)	--------	905	1,395	64.9%	352	532	66.2%	704	1,029	68.4%
Non PCP Patients	--------	8,102	25,634	31.6%	4,192	16,652	25.2%	7,516	32,640	23.0%
Asian/Indian/Hawaiian/Non PCP Total	--------	**9,007**	**27,029**	**33.3%**	**4,544**	**17,184**	**26.4%**	**8,220**	**33,669**	**24.4%**
Grand Total	--------	**28,807**	**56,290**	**51.2%**	**21,645**	**39,476**	**54.8%**	**41,279**	**76,274**	**54.1%**

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Multivariate Regression Analysis of Gaps

Quality data extracted for

- Breast Cancer Screening
- Colorectal Cancer Screening
- Pneumococcal Vaccination

Inclusion and Exclusion Criteria

- Patients must have an Internal Primary Care Physician and a visit within the last 36 months

Variables

- Patient Demographics – Race, Age, Gender, County of Residence, Insurer.
- Epic Health Risk Score [1-13]
- Health Status – BMI, Smoking Status, Elixhauser Comorbidities (Congestive heart failure; Cardiac Arrhythmias; Valvular Disease; Pulmonary Circulation Disorders; Peripheral Vascular Disorders; Hypertension; Paralysis; Other Neuro Disorders; Chronic Pulmonary Disease; Diabetes; Hypothyroidism, Renal Failure; Liver Disease; Peptic Ulcer; AIDS HIV; Cancer; Rheumatoid Arthritis; Coagulopathy; Obesity, Weight Loss; Fluid Electrolyte Disorders; Anemia; Alcohol Abuse; Drug Abuse; Psychoses; Depression).

Multivariate Analysis of Findings

Characteristics of those patients with a gap in care include:

Mammogram

Hispanic

Asian/Hawaiian

Younger Age

Washington County

Medicare

Medicaid

3+ Comorbidities

Colonoscopy

Asian/Hawaiian

Younger age

City of Milwaukee

Medicare

Medicaid

Pneumococcal Vaccine

Black/African-American

Hispanic/Latinx

Asian/Hawaiian

Younger age

Implementation Planning

Sources: Diversity of Ideas and Input

- Business Resource Groups (Black/African-American, LatinX, LGBTQ+, Military/Veterans, Women in Leadership)
- Diversity Action Teams
- Community Conversations
- Milwaukee Healthcare Partnership
- Hospital and Community Advisory Committees
- Community Engagement Network
- Kern Institute at MCW
- Resident and Student Advocacy Action Groups

Brainstorming Activity: Interventions

Gap -->	Breast Cancer Screening							Colorectal Cancer Screening					Pneumococcal Vaccine			
Factors associated with care gap -->	Hispanic	Asian/Hawaiian	Younger age	Washington Co.	Medicare	Medicaid	3+ comorbidities	Asian/Hawaiian	Younger age	City of MKE	Medicare	Medicaid	Black/AA	Hispanic/Latino	Asian/Hawaiian	Younger age
Potential Intervention	Check factors potentially impacted							Check factors potentially impacted					Check factors potentially impacted			
Transportation voucher, Uber, etc.						x						x				
Weekend appointments w/ child care option	x	x	x			x										
Evening appointments w/ child care option																
Home care visit													x	x	x	x
ESL education	x	x						x					x	x	x	
Casa Guadalupe (health navigator is bilingual; associated with St. Mary's Catholic Church)	x			x												
After hours screening event at West Bend HC	x		x	x												
Mailing and/or MyChart message to pt that provides options to receive needed care; call # to schedule																
Community Health Navigators - build into workflow																
Automate reminder when pts age into a screening need			x						x							x
Partnerships with trusted community orgs - engaging leaders and brainstorming with them on how to best target interventions	x													x		
Education on benefits/convenience of colonoscopy vs Cologuard (time, prep, good for x years); seek pt preference								x	x	x	x	x				
Bobbie Nick Voss - current grant and potential for additional funding																

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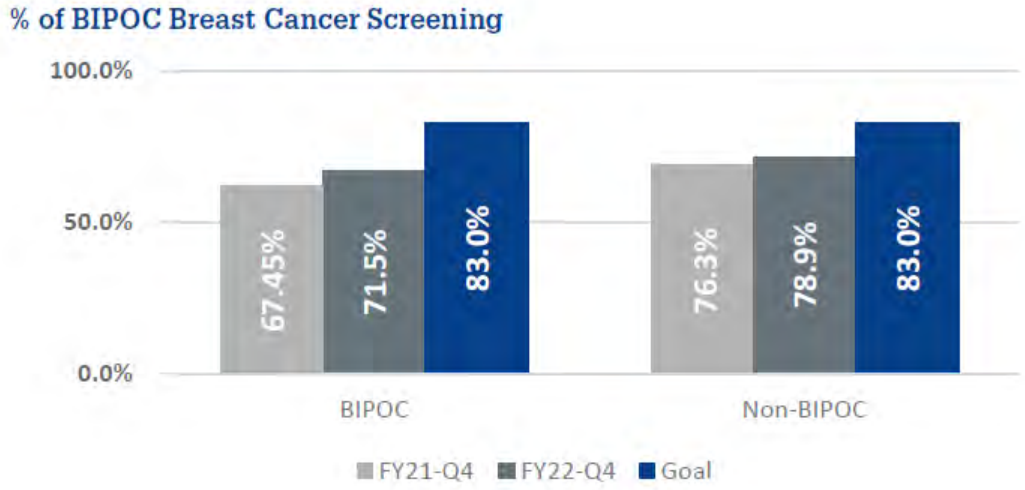
Breast Cancer Screening Implementation: Results

- Lessons Learned – Community Events – partnership with trusted CBOs to activate their membership was a game-changer.
- Co-sponsored events w/ community groups, religious institutions, local society chapters, etc.
- 12M grant through Wisconsin BioHealth Hub / Economic Development Association – will result in mobile capabilities across region.



The HEI Breast Cancer Screening FY22 goal for both BIPOC and non-BIPOC primary care patients was 83.0%. At the end of the fourth quarter of FY22, we reached 71.5% among BIPOC populations and 78.9% among non-BIPOC.

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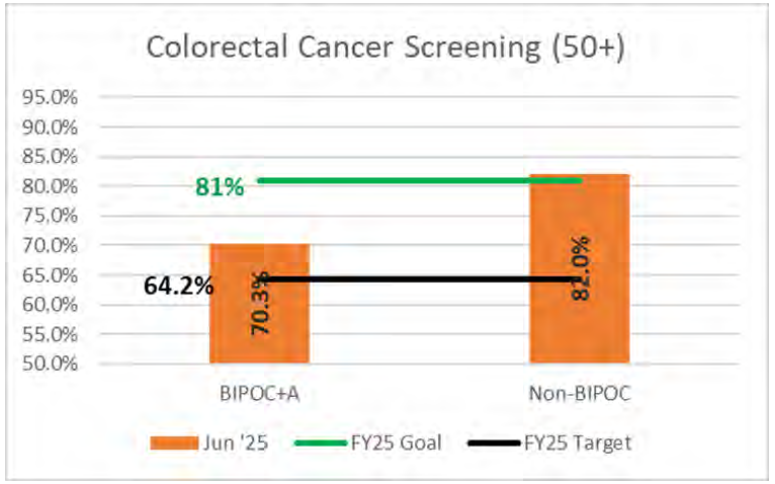
Colorectal Cancer Screening: Learnings from the Field

FIT Kit Program

- Designed to address gaps in colorectal cancer screening (i.e. colonoscopies) between more affluent and vulnerable regions.
- >20k FIT Kits mailed in total
- Return Rates / Outcomes
  - Round 1 FY22 = 23%
  - Round 2 FY24 = 40%
  - Over 400 positive tests
  - 182 patients with polyps identified
  - 62 with higher grade lesions
  - 11 with cancerous lesions



BIPOC+A includes race/ethnicity categories of 1) Black or African American, 2) American Indian or Alaska Native, 3) Native Hawaiian or Other Pacific Islander, 4) Hispanic, and 5) Asian

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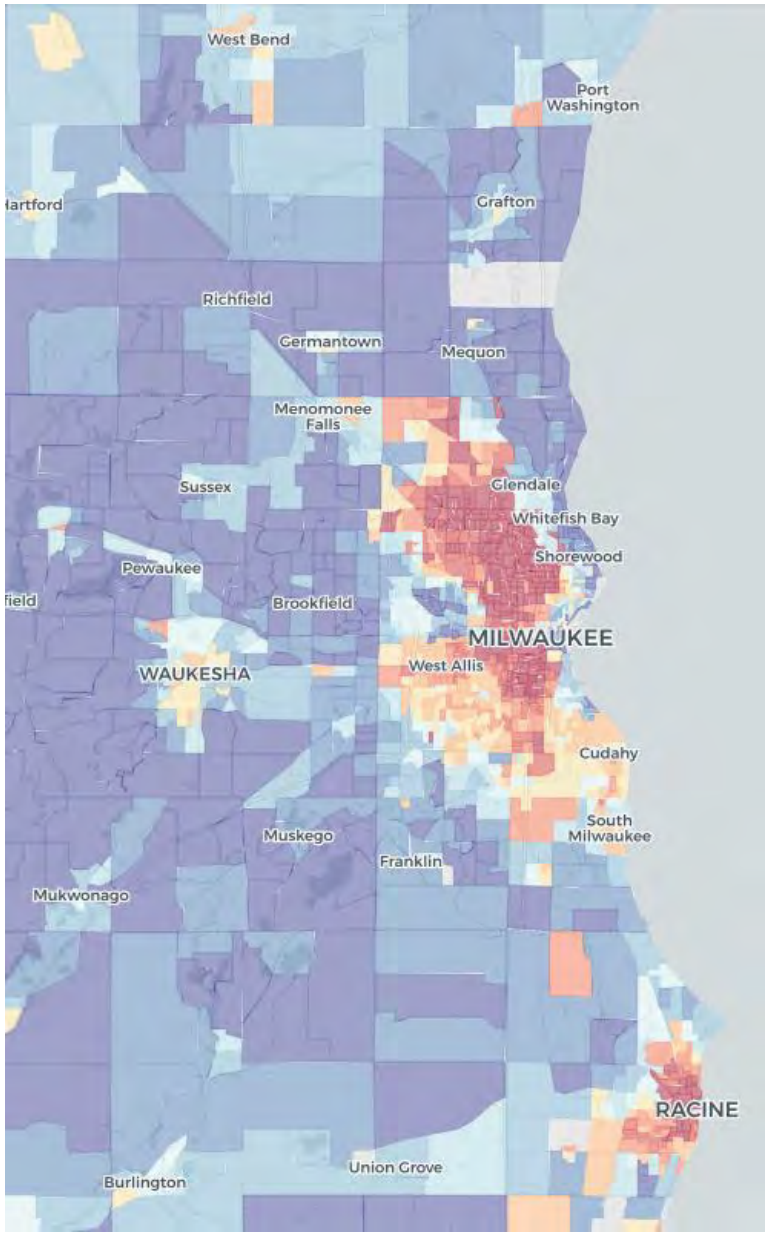
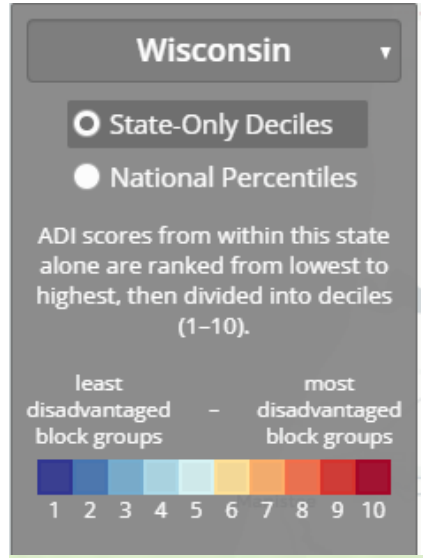
New Directions: Area Deprivation Index – SE Wisconsin

- Developed by UW Madison School of Public Health
- Incorporates census factors / variables associated with increased vulnerability and social risk.
- Closely tracks with Vizient Vulnerability Index and CDC Social Vulnerability Index.
- Single composite score and most useful at census tract (neighborhood) level.
- CDC and Vizient indexes can be viewed in composite or subsets of the composite scores. SVI is particularly useful for larger geographic comparisons.

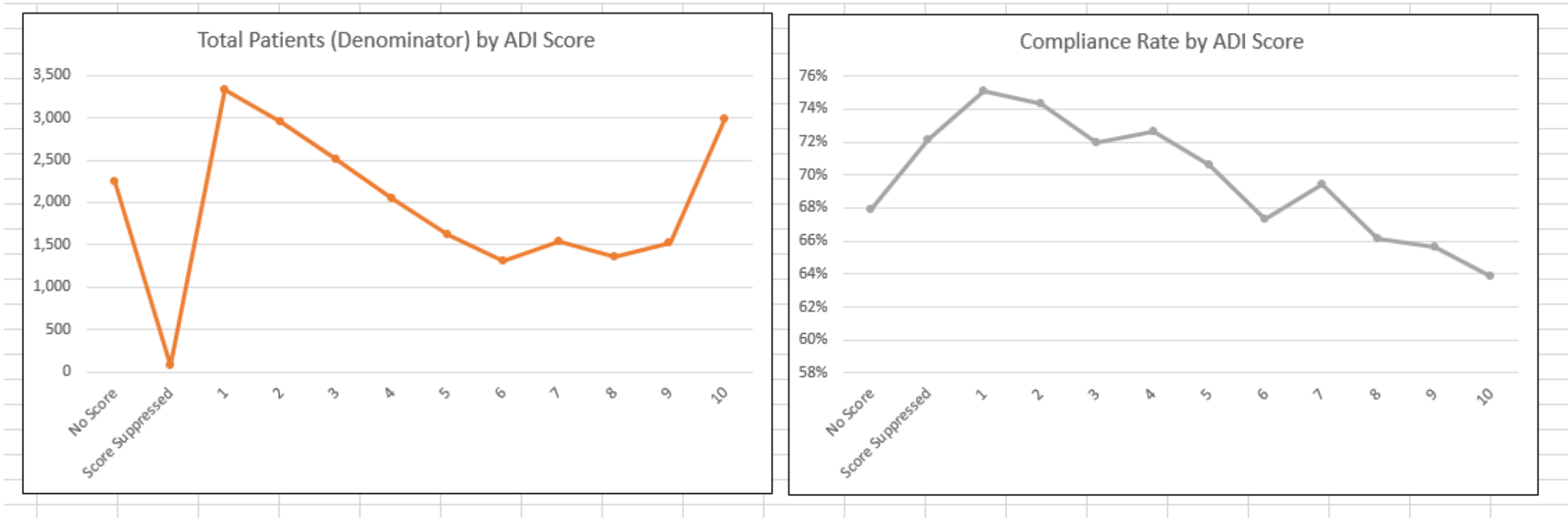




Domain	Variable
Education	% Population aged 25 years or older with less than 9 years of education
	% Population aged 25 years or older with at least a high school diploma
	% Employed population aged 16 years or older in white-collar occupations
Income/employment	Median family income in US dollars
	Income disparity
	% Families below federal poverty level
	% Population below 150% of federal poverty level
	% Civilian labor force population aged 16 years and older who are unemployed
Housing	Median home value in US dollars
	Median gross rent in US dollars
	Median monthly mortgage in US dollars
	% Owner-occupied housing units
	% Occupied housing units without complete plumbing
Household characteristics	% Single-parent households with children younger than 18
	% Households without a motor vehicle
	% Households without a telephone
	% Households with more than 1 person per room

New Directions: Viewing Clinical Data through ADI

Diabetes Good Control (A1c<8)



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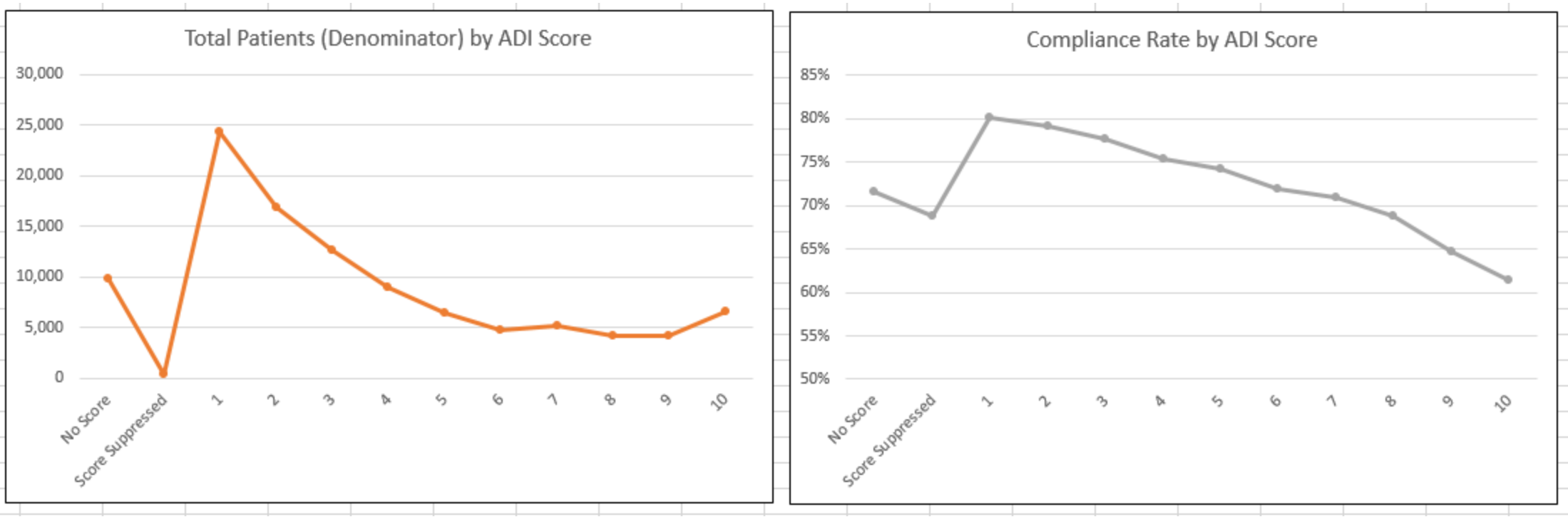
New Directions: Viewing Clinical Data through ADI

Colon Cancer Screening Rates



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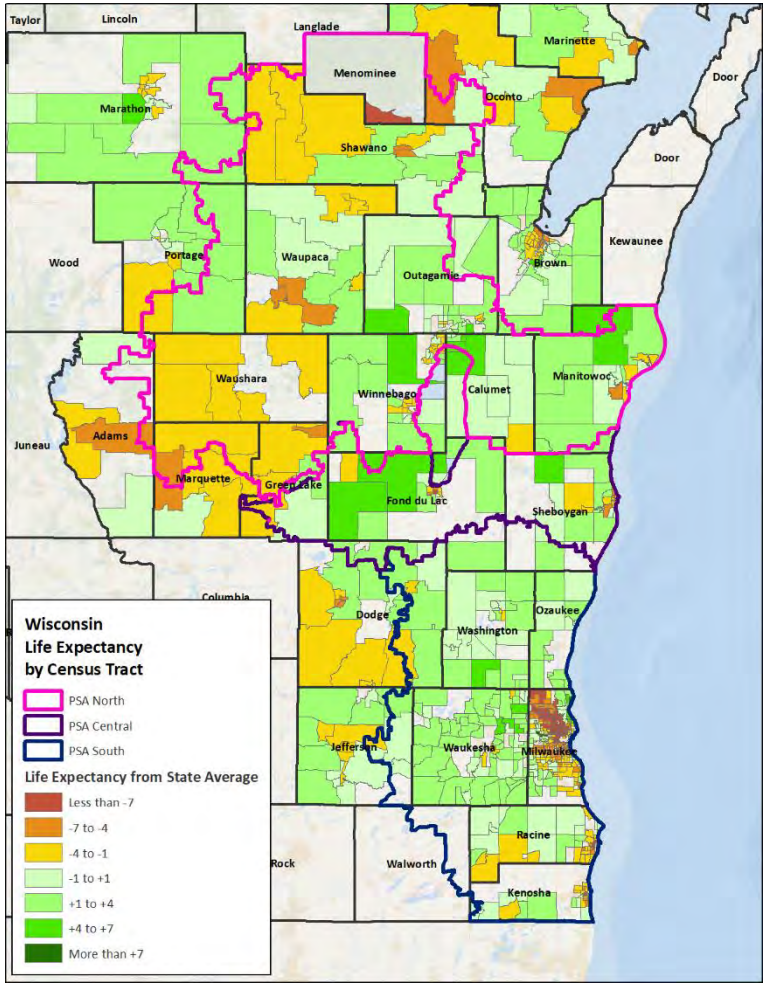
Population Health: Disparities in Life Expectancy

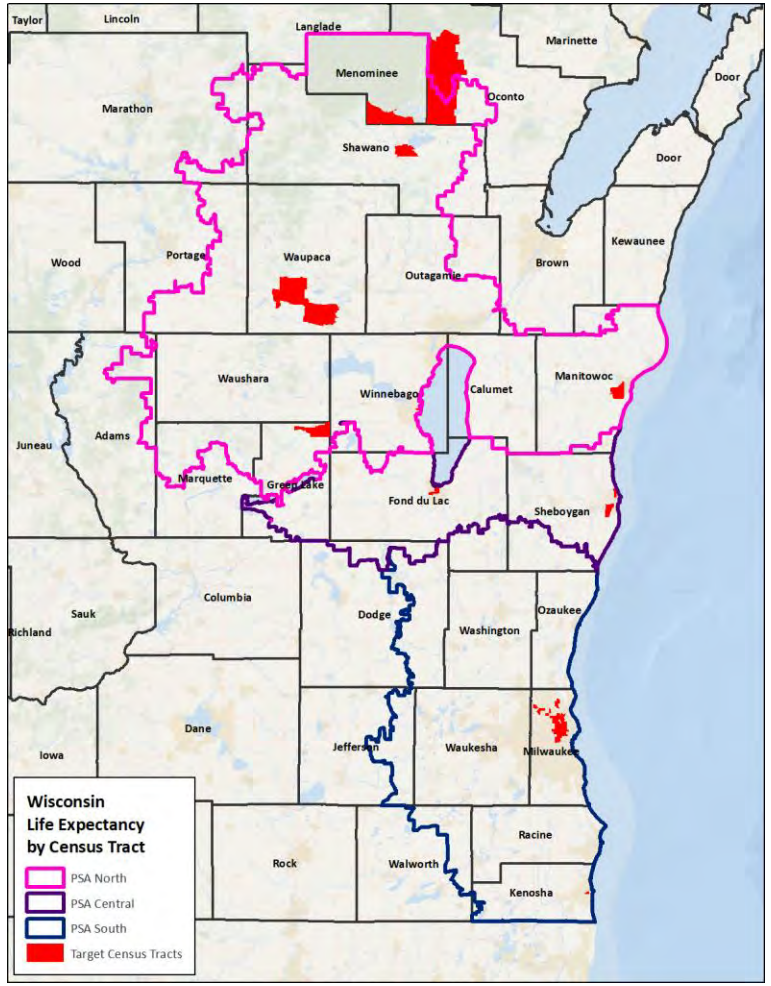
Identifying Target Populations

- Life Expectancy by Census Tract.
- Significant disparities, range 65-88 years.
- Mean Life Expectancy for the State of WI is 78.2 years.
- Census tracts were stratified to identify largest negative variance from the state mean.
  - In the South Region, this represents census tracts with -9 years variance or greater
  - In the North/Central it represents a variance of -4 years or greater.
- Target census tracts are distributed across the regions in alignment with the overall population.
  - In all, this encompasses 194K people which accounts for 9% of the total population the North/Central and 8% of the population in the South Region.

Stratified Census Tracts



Target Census Tracts



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Population Health: Medical Insights – Life Expectancy Gap

- Data gathered from our Community Health Needs Assessment and direct patient care clinical data specific to the targeted Census Tracts.

- Primary target areas for reduction in health disparities:
  - Mental health including substance use and dependency.
  - Obstetrical maternal / fetal morbidity and mortality.
  - Cardio-metabolic disease (hypertension, diabetes, CV risk).
  - Cancer detection and risk reduction.
  - Trauma / violence.

- Existing work streams: Health Impact, mobile care teams, remote patient monitoring, Community Engaged Screenings.

- New work streams: Mobile maternity/fetal van, dedicated Obstetrical ED, WIN grant.

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Life Expectancy: Vizient Vulnerability Index Insights

- South Region Census Tracts (Top 2 Factors)
  - 86% Social Factors – single parent families, incarceration rates, and civic engagement.
  - 37% Transportation – household with no access to automobiles or public transportation.
  - 22% Housing – lower rates of adequate affordable housing.
  - 20% Economic – unemployment, under 200% poverty level.
  - 20% Neighborhood resources – Food deserts, no parks, alcohol sales, broadband access.
  - 13% Public Safety – Violent Crime and Gun Violence.

- North Region Census Tracts (Top 2 Factors)
  - 67% Education – HS completion rates, enrollment, preschool enrollment.
  - 34% Health Care Access - % uninsured, provider shortages, distance to care.
  - 27% - Clean Environment – Air and water pollution, hazardous waste.
  - 27% Economic – unemployment, under 200% poverty level.
  - 20% Public Safety – Violent Crime and Gun Violence.

Contemporary Approaches

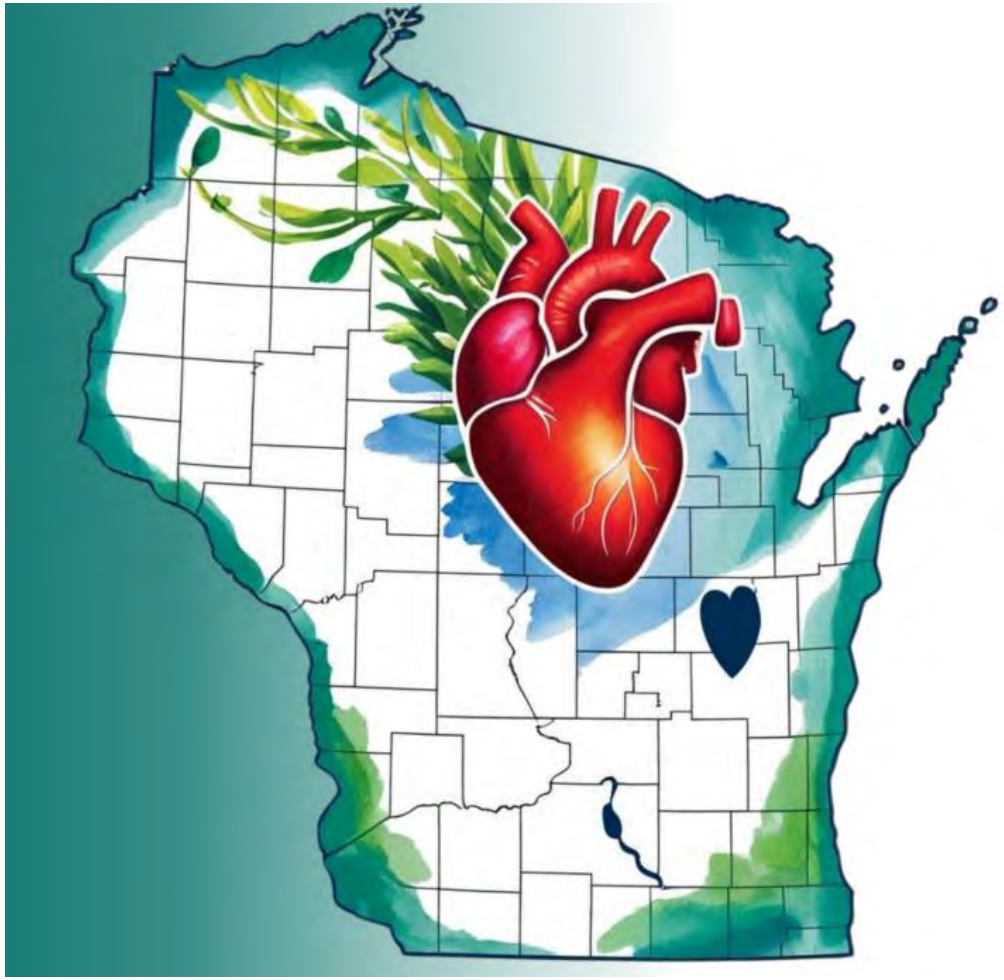
- Medical interventions aimed at clinical factors impacting our communities.
- Community-based interventions aimed at impacting social drivers.
- Approaching these problems from a lens of abundance as opposed to scarcity.
- Identifying scalable solutions agnostic to parochial structures and aimed at improving health.

Opportunities for Community-Based Organizations

- Opportunities for greater alignment between health system social workers / care coordinators and CBOs.
- Two-way communication on referrals, assessments to drive closed loop care processes.
- Gaps in care / screening at level of CBOs with referral into our medical care systems and community screening events to drive health improvements.
- Efforts to create greater IT-based interoperability.

Wisconsin Now

- 5 year grant through AHW and ARPA-H.
- Aim to reduce burden of uncontrolled HTN and dyslipidemia in Wisconsin.
- $4.2M in grant funds for SE Wisconsin. FTCH will be primary community partner and administer the grant funds.
- RPM for blood pressure measurement, pharmacist-directed medication interventions, Education and engagement options tailored to patient preferences.



Wisconsin Now (WIN) Participants

Outcome Buyers
- Molina Healthcare
- Chorus Community Health Plans

Policy Execution
- Wisconsin State Medicaid
- Pharmacy Society of Wisconsin

Actionable, Transparent Data
- WCHQ
- WHIO
- Forward Health Group
- WISHIN

Investors
- Advancing a Healthier Wisconsin
- Milwaukee Bucks NBA Organization
- Milwaukee D.E.E.R Accelerator
- Gener8tor

Executive Advisors
- The Honorable Tommy Thompson
- Greg Wesley, JD, CEO – Greater Milwaukee Foundation
- Jackie Gerhart, MD – CMO, Epic

- Froedtert ThedaCare Health
- Sixteenth Street Community Health Centers
- Ascension
- Advocate Aurora Health
- MetaStar and By Design
- Milwaukee Bucks NBA Organization
- WebMD
- Food for Health
- Area Health Education Centers (AHEC)
- YMCAs
- Wisconsin Women's Health Foundation (WWHF)
- Network of Faith-Based Organizations (CTSI)

Wisconsin Now “TAG” Care Model

“TAG” – *T*eam-based, *A*synchronous, *G*uideline-directed Care Model
Attaining BP Goal is the “Default,” TAG is the *Standard of Care*
General Pathway

Recruitment (Phase 1):

- Provider Identifies Candidate (office visit, registry, etc.)
- Stage 1 or 2 HTN on ≥1 Rx
- Age >18
- Absence of Exclusion Criteria

Initiation:

- “TAG” is the *Standard of Care!*
- Cuff Sizing
- At-home BP Protocol
- Costs to patient
- “Graduation” Requirements

Education and Engagement:

Enrollee Selects Preferred Option(s)
For Education & Support:

- YMCA Heart Health Ambassador
- Faith-based Health Navigator
- WWHF Health Navigator
- HCO Community Health Worker
- Food for Health BP Check Point

Closing Thoughts

- Understanding the health factors and social drivers of health impacting a population is essential to planning and deployment of health improvement strategies.
- Individualized collection of patient reported SDoH and the utilization of population-level big data (ADI, VVI, etc.) are complementary approaches to understanding social drivers of health.
- Engaging local communities in co-designing improvement approaches has resulted in a particular richness of insights and has enhanced our engagement and effectiveness.
- This is hard work – tenacity, fortitude, and resilience are some of the character traits required.