

Whole Person Index: CL2.0 leads mitigation of clinical and financial risk, resulting in improved outcomes at a lower cost- FOR ALL!

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fact

health inequity is both a humanitarian and an economic crisis

- health inequity costs \$320 billion today and if we do nothing, it will cost us \$1 trillion by 2040
- more than 45% of consumers across all coverage types have some unmet basic need
- 90% of the nation's \$3.8 trillion per year healthcare costs is attributed to people with chronic diseases and mental health conditions
- **>90% of type 2 diabetes, 80% of CAD, 70% of stroke, and 70% of colon cancer** are potentially preventable by (nonsmoking, healthy weight, moderate physical activity, healthy diet, and moderate alcohol consumption)

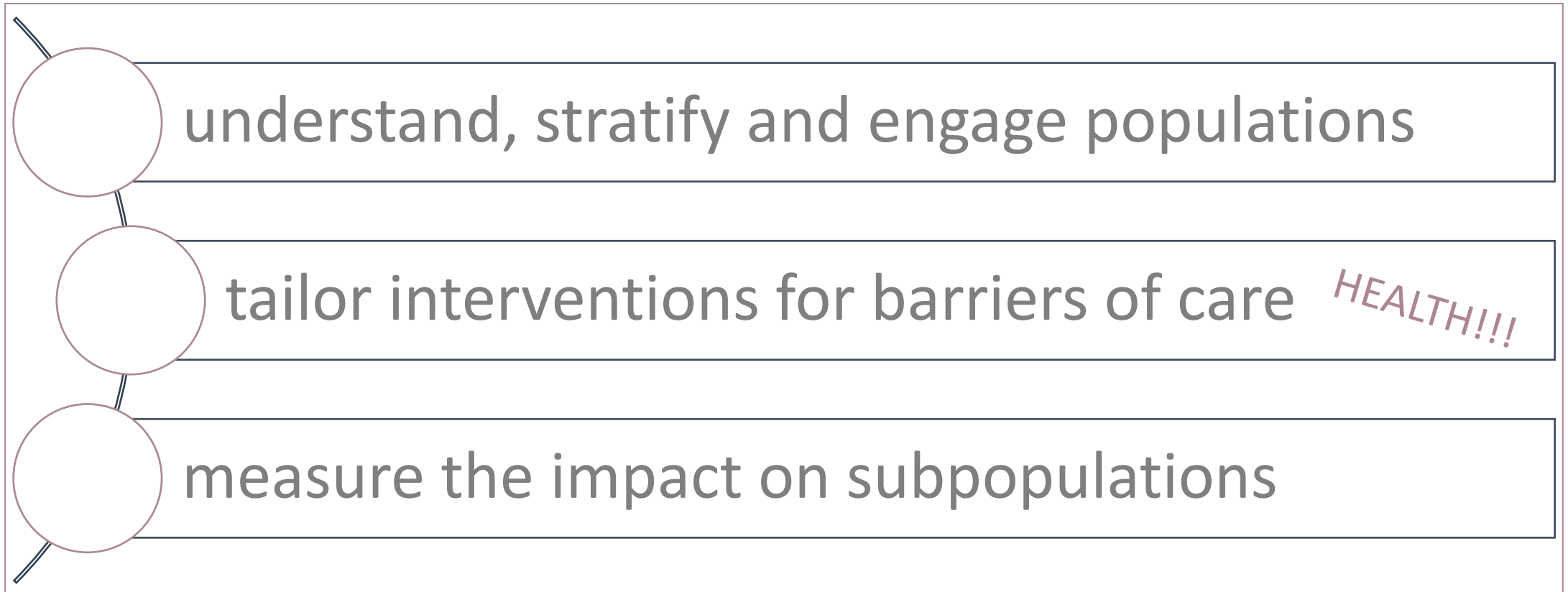
chronic disease is a health equity problem

Better Health is Good Business

building the business model in 3 steps

Veeneta Lakhani

<https://www.medicaleconomics.com/view/beyond-social-responsibility-the-missing-business-case-for-health-equity>

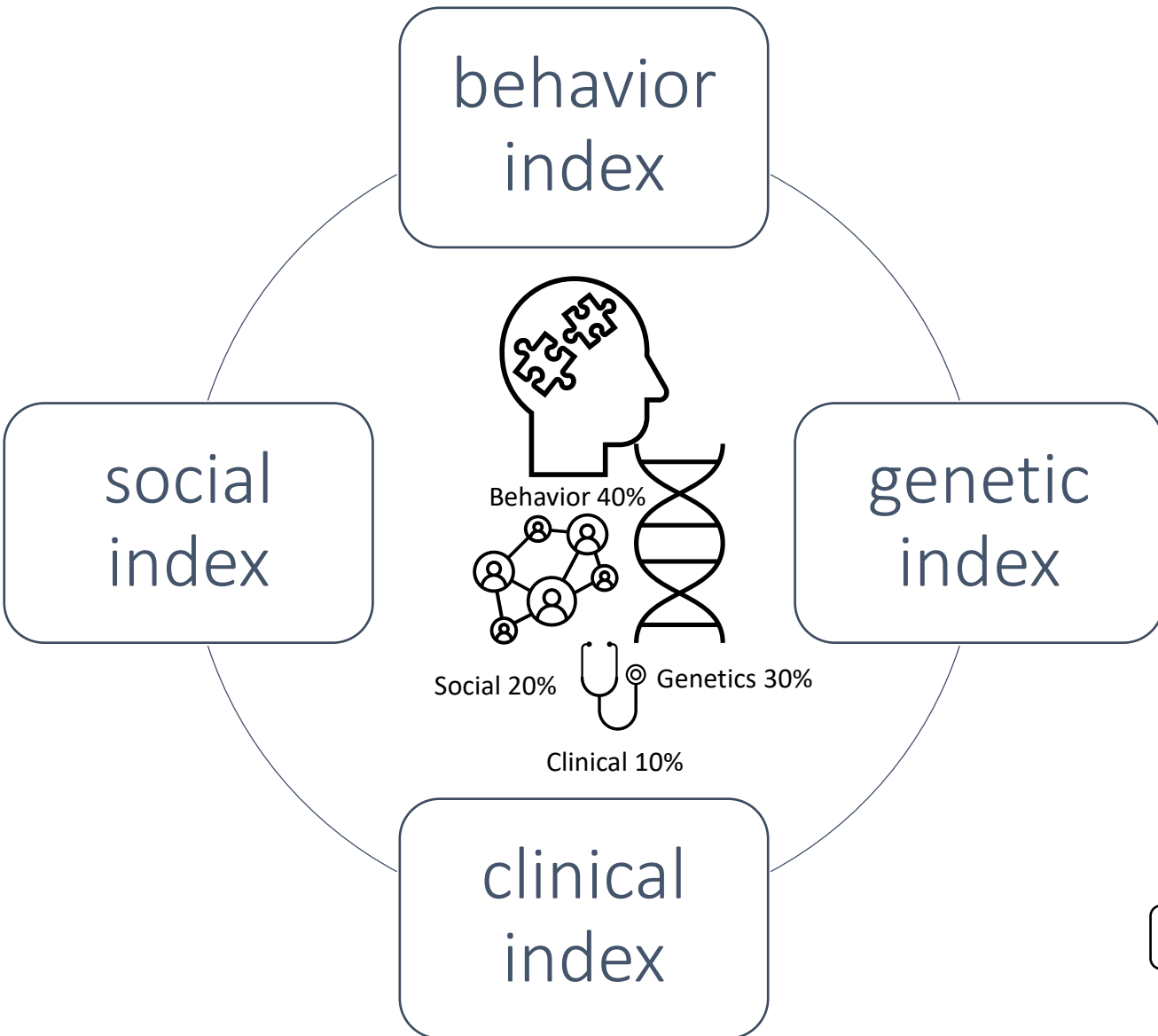


Opportunity: Better Health, Lower Cost, For All

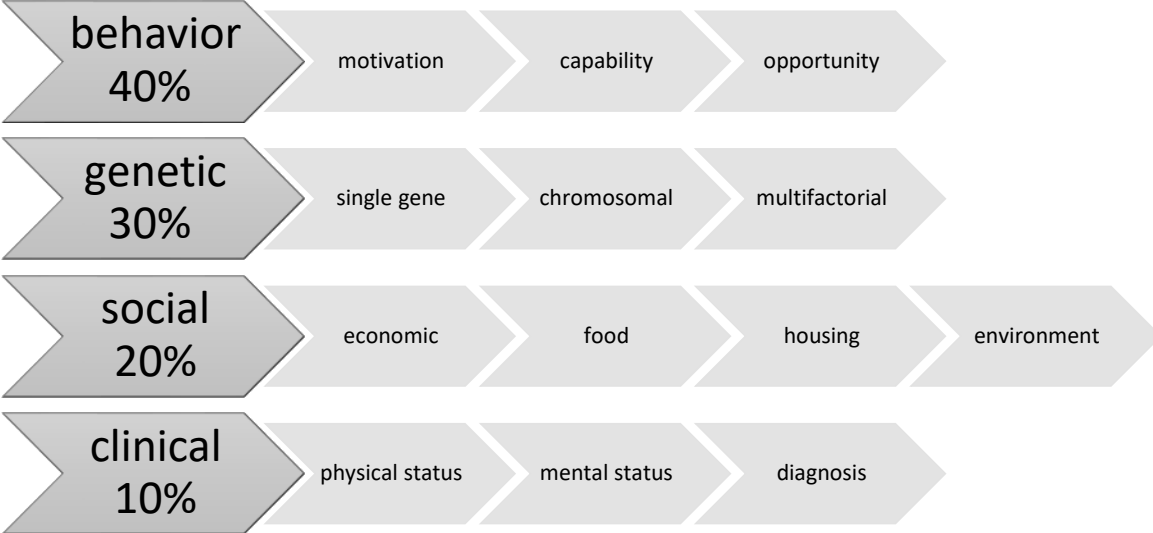
- Health is driven by **four (4) factors***:
 - clinical (10%)
 - social (20%)
 - genetics (30%)
 - behavior (40%)
- Over **80%** of health spend is on clinical services**
- The current health/care system produces **gaps in care**, creating **health inequity**
- Health will only be improved if all drivers of health are **scientifically** understood, **paid for** and treated in a **balanced** approach



Whole Person Index (WPI) = Clinical + Social + Genetic + Behavior

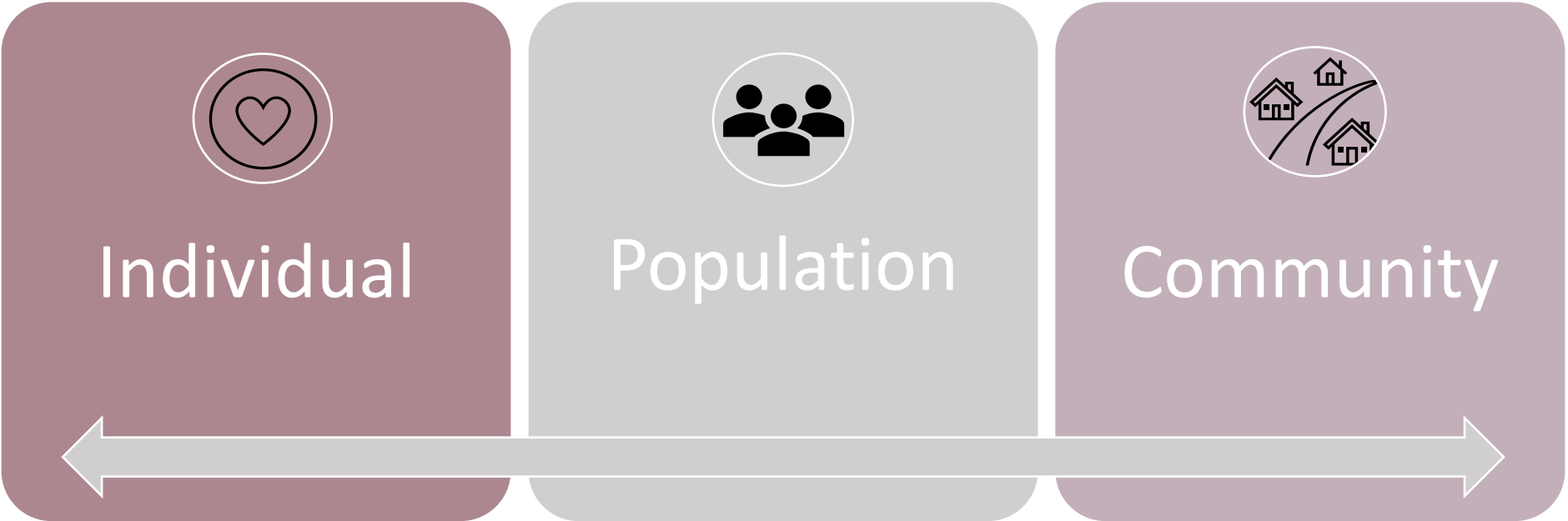


Whole Person Index
Standardized, evidence-based risk assessment across all health drivers; prioritizing action for individual, population and community



Data set: curated from research; binary; populate by survey or existing data

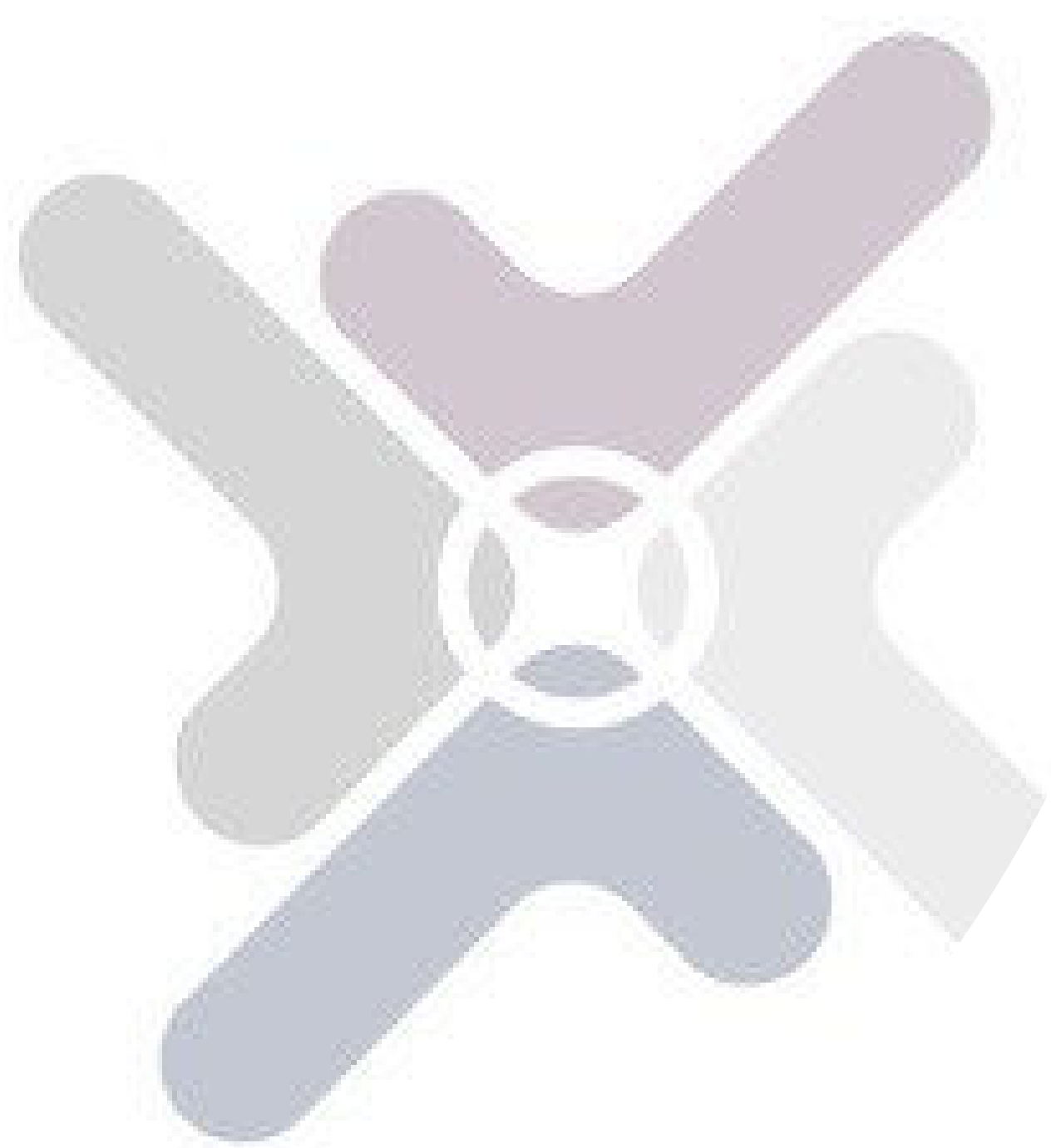
Whole Person Index (WPI): Individual + Population + Community



Return on Investment (ROI): Better Health, Lower Cost, For All		
utilization, incidence, habits, cost	utilization, incidence, premiums, cost	policy, private/ public partners, cost

Whole Person Index (WPI): Change the Scoreboard, Change the Game

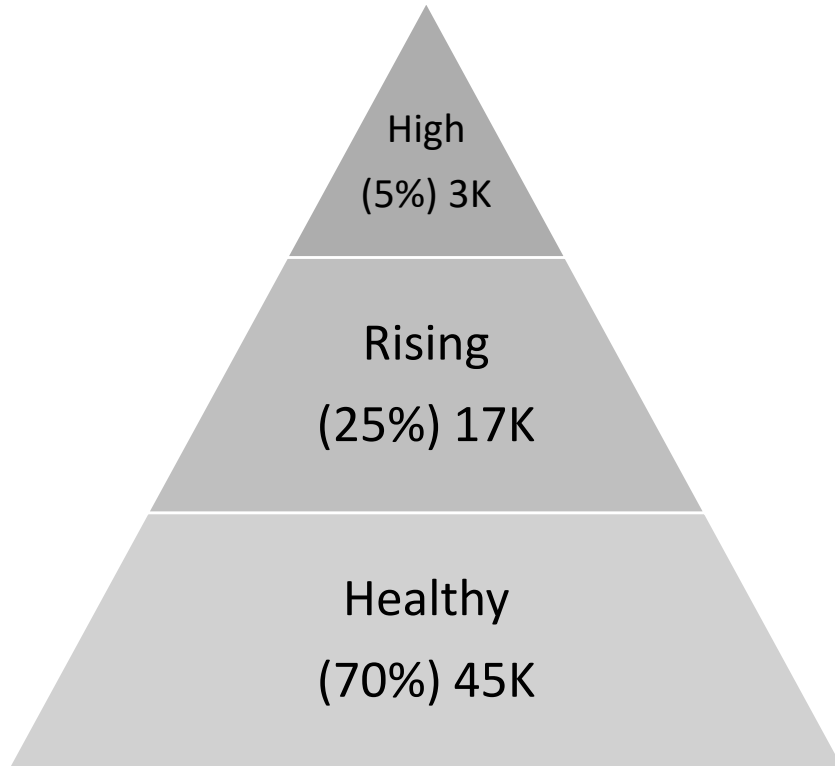
- Health definition
- Health acuity
- Democratize the data: individual, population and community
- Re-align current spend to highest, best use based upon impact and outcome



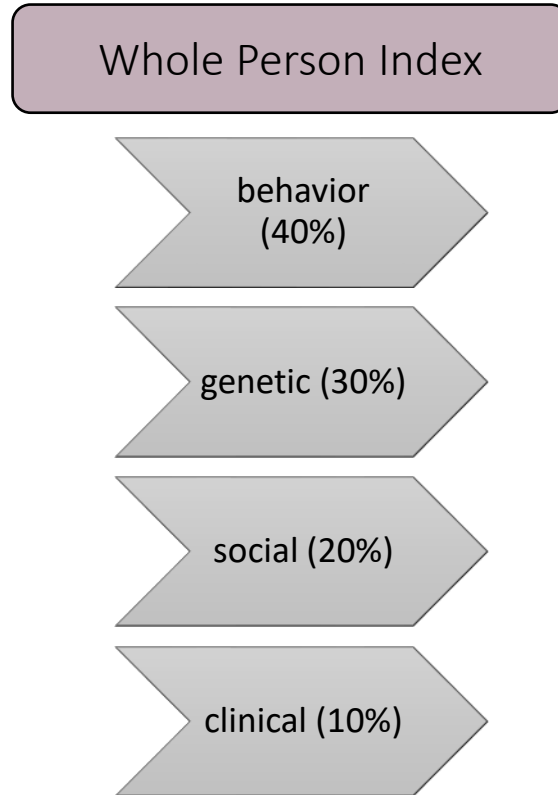
Whole Person Index: In Action

Creating a Better System of Health: 4 Key Steps

1. Identify Population(s)



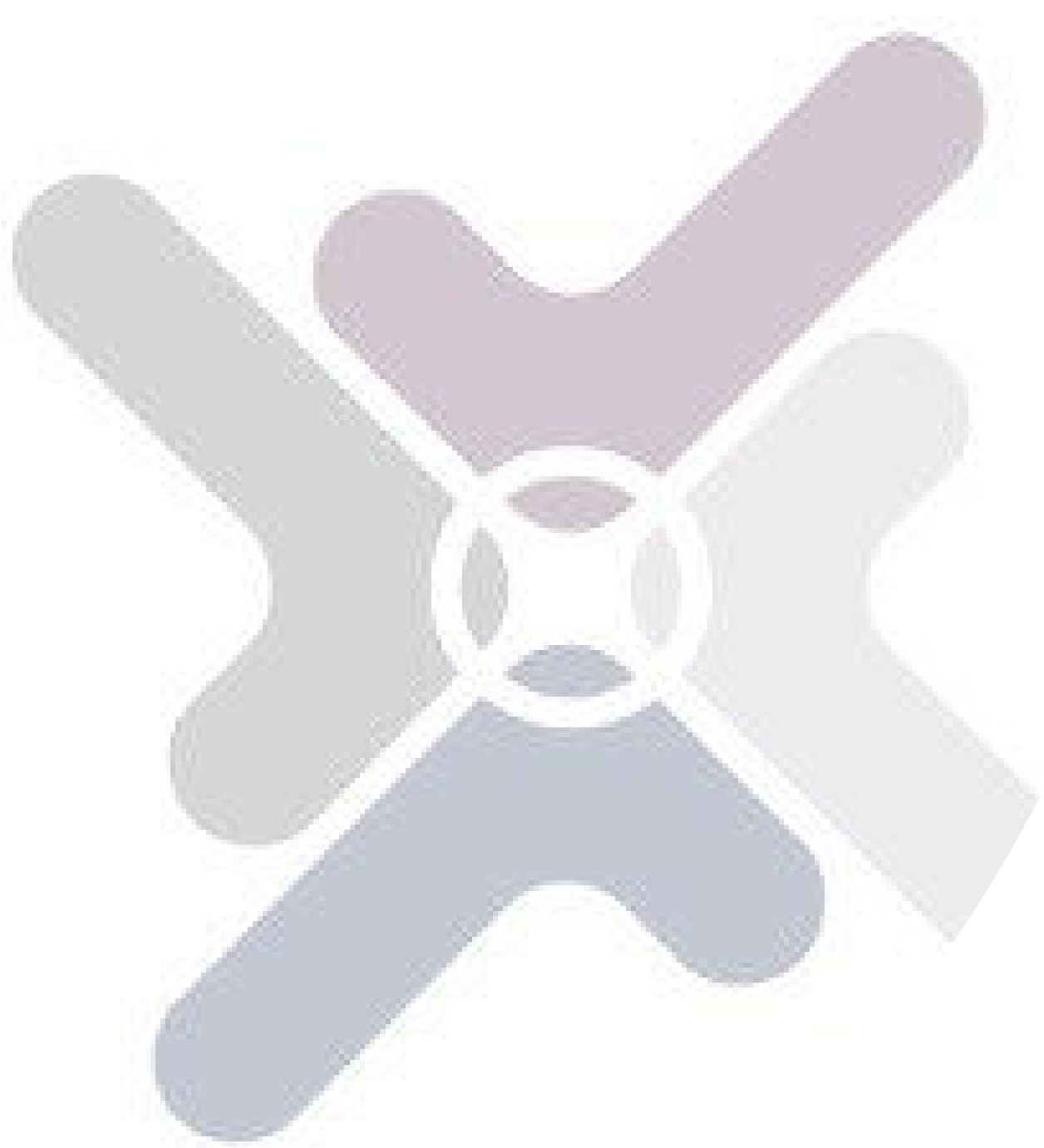
2. Understand what is impacting health across all drivers- apply WPI



3. Create a marketplace of solutions across health/care (sustainable business model)



4. Scale to improve outcomes at a lower cost, for ALL



WPI: Case Study #1 Employer

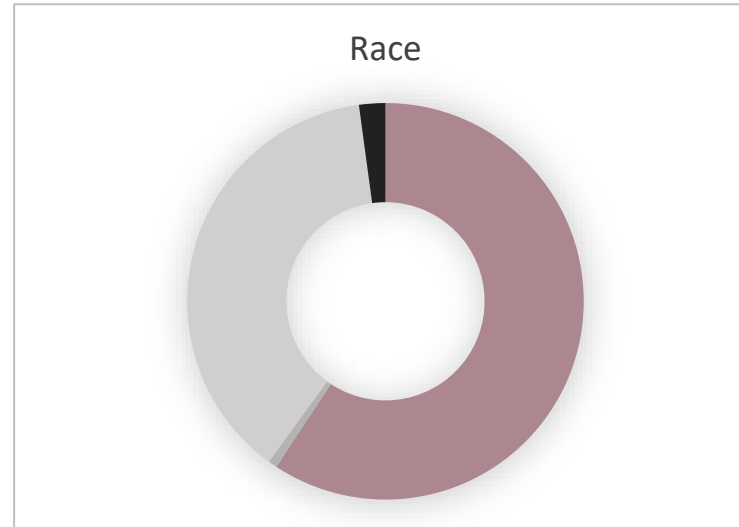
Whole Person Index: Population (n=2500)

Total Participants:
90%
2250/2500

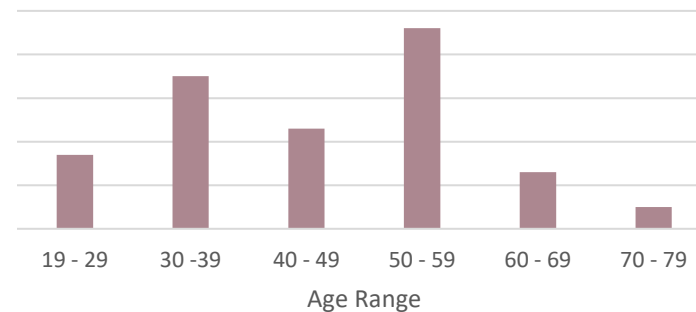
Female: 62%
Male: 38%

State Counties: 2

Employed: 100%;
> 1 job: 20%



Patients Per Age Range



Primary Care Provider (PCP):
Yes: 86%

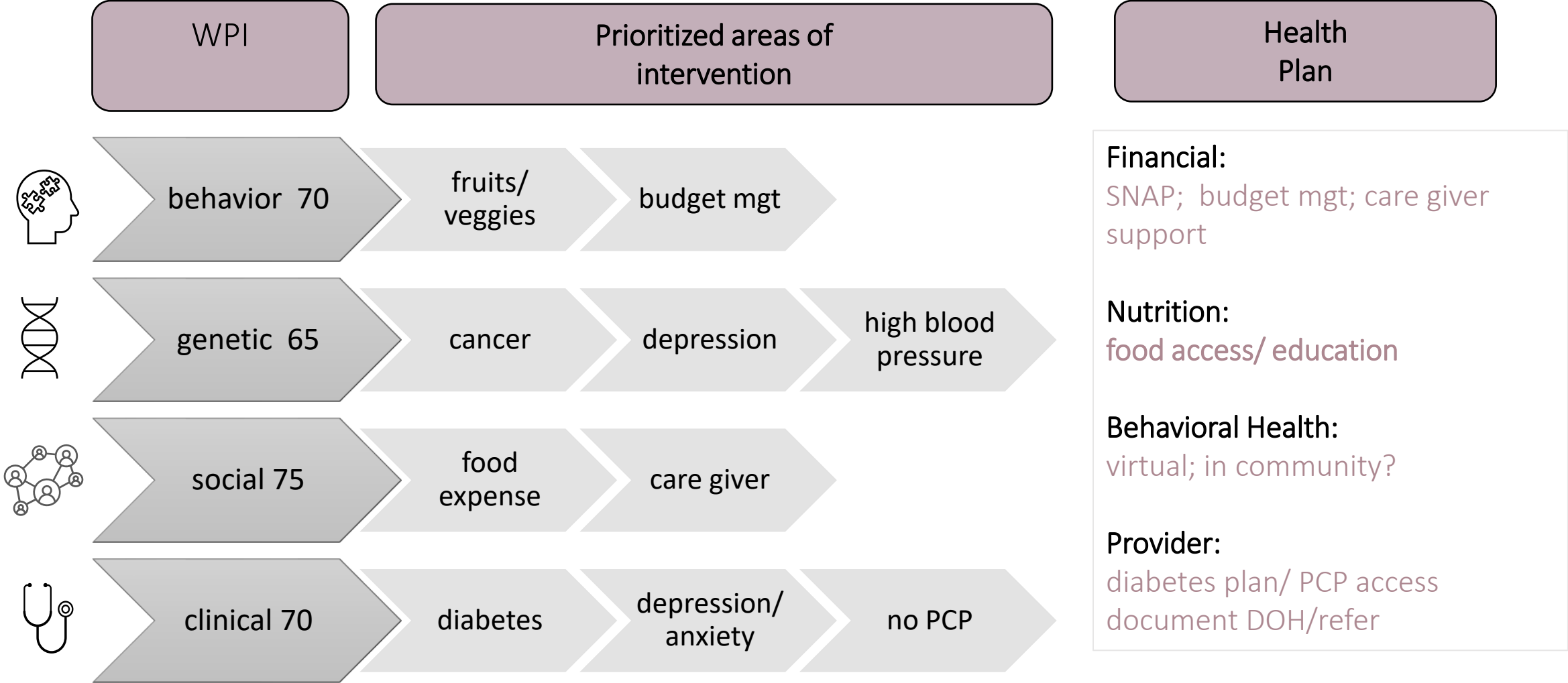
Dentist in last year:
Yes: 64%

ED Utilization: 31%

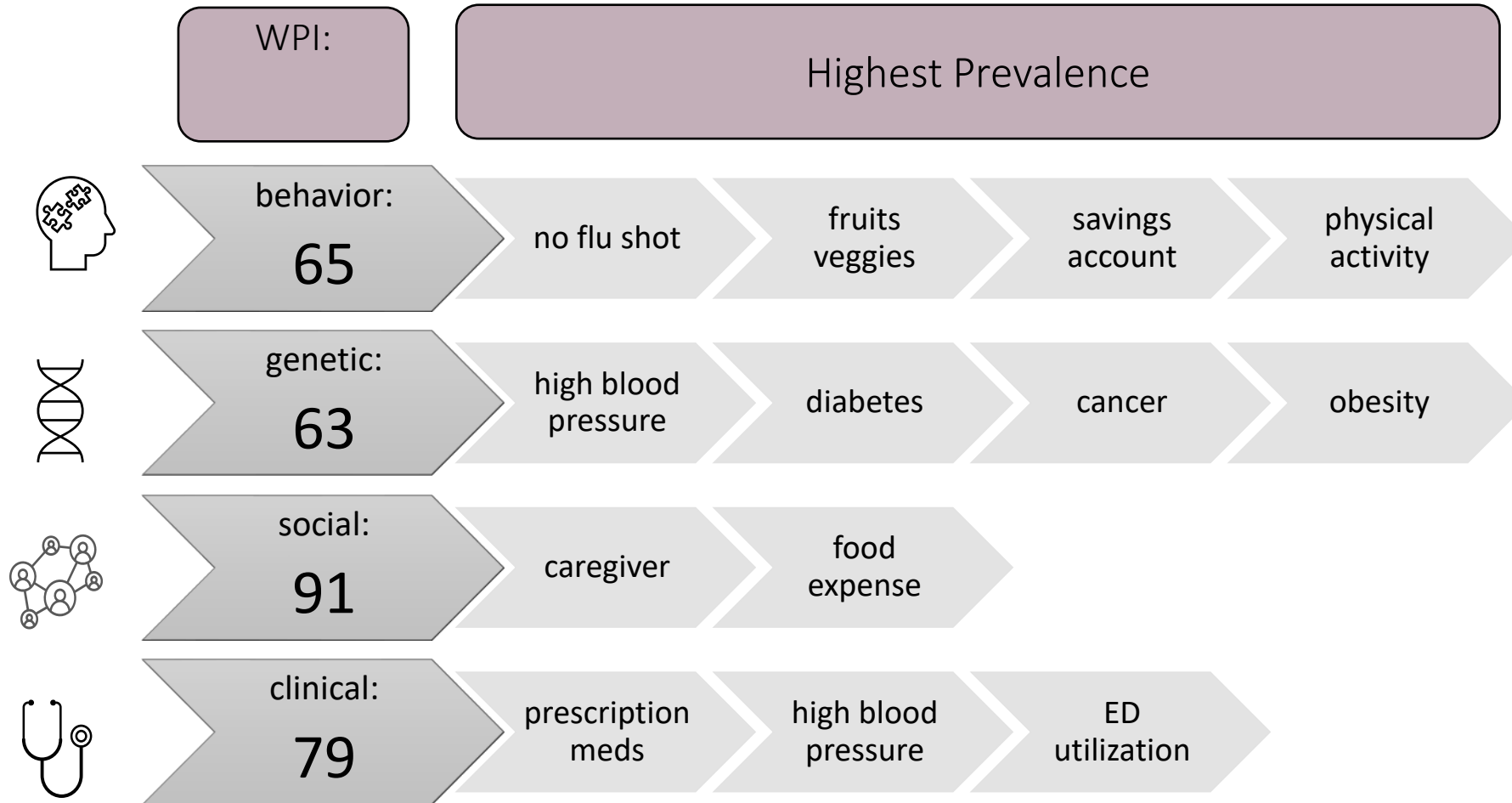
Area Deprivation Index (ADI)*
Census Blocks: 69

Average ADI Rank: 8
(scale 1-10; high = more vulnerable)

Whole Person Index: Individual



Whole Person Index: Population (N=2250)



A-HA Moments

- diabetes
family history: 64%
diagnosed: 10%
- cancer
family history: 54%
diagnosed: 6%
- high blood pressure
family history: 70%
diagnosed: 20%
- womens health
High % female; over 40%
of employees age 19-39

Index: 0-100; higher = increase health stability

Confidential TM Patent Pending

Whole Person Index: Community

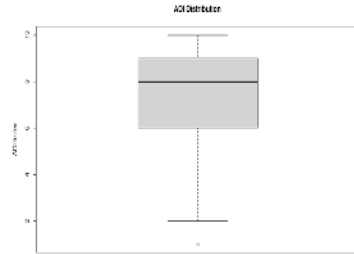
Definition: Area Deprivation Index (ADI): A ranking of neighborhoods by socioeconomic disadvantages in a region of interest. Informs **Health Equity Benchmark Adjustment (HEBA)**

ADI Range by Census Block:

Min: 1

Median: 8

Max: 10



Definition: Community Health Needs Assessment (CHNA): health assessment that identifies key health needs and issues through systematic, comprehensive data collection and analysis

County Top Priorities

- X Co: Substance Misuse; Healthy Living; Mental Health
- X Co: Physical Activity and Nutrition; Substance Abuse and Mental Health

Definition: Healthcare Effectiveness Information Data Set (HEDIS): Standardized measures to provide consumers information needed to assess health plan performance

Relevant Benchmarks

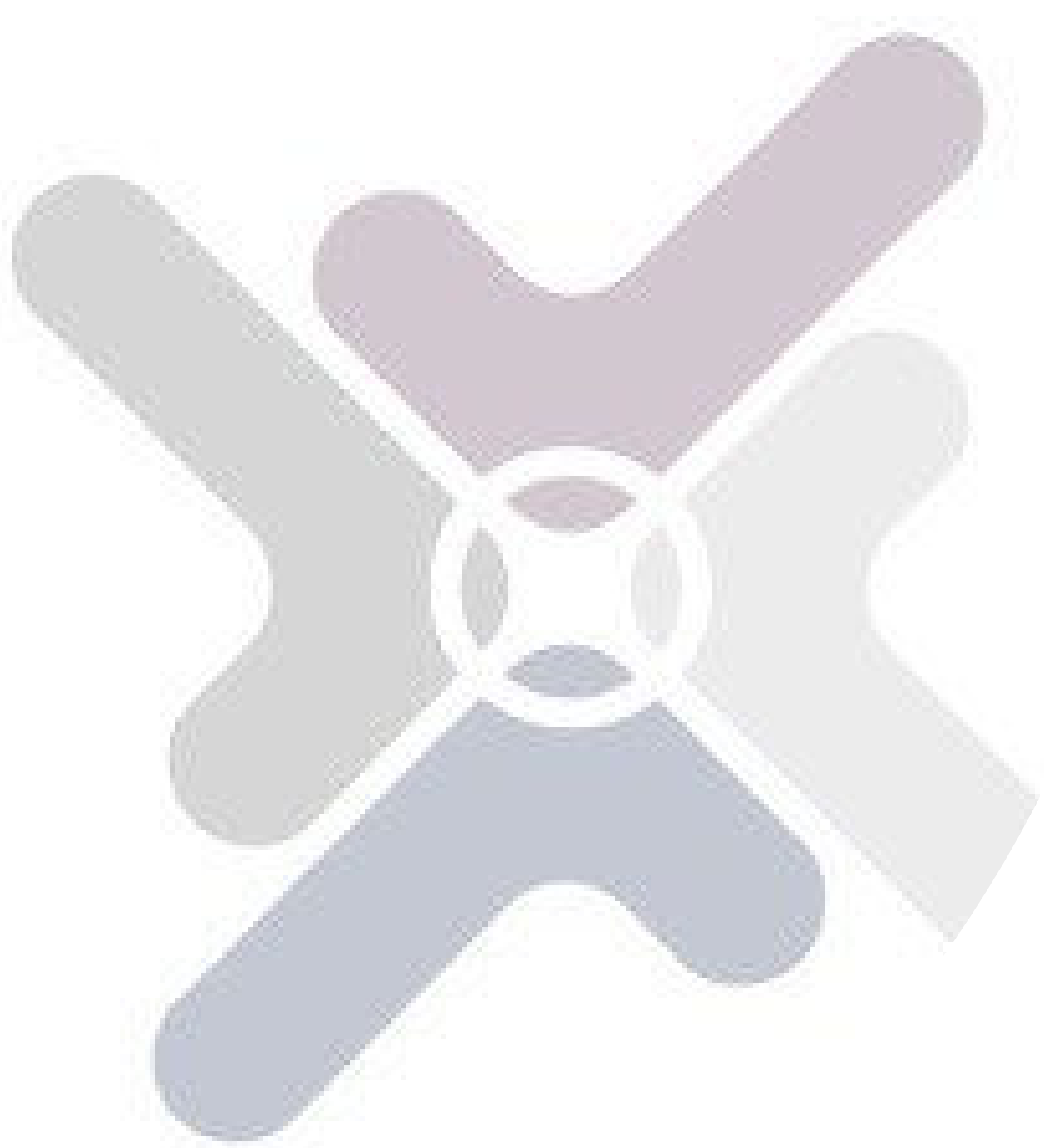
- Cancer Screening (Breast, Colorectal, Cervical)
- Depression Screening
- Diabetes Screening
- High Blood Pressure Management

Utilization Opportunities

- Prescription Drug Expense
- ED Utilization

WPI: Action Plan for Better Health

Opportunity (Gap)	WPI Metric	baseline	Return on Investment	Action/ Accountable
HEDIS- quality benchmarks (cl)	diagnosed pop prescription meds	payer data	HEDIS compliance HEBA Utilization	payer
access to care (cl)	PCP/ dentist ED utilization	86%/64% 31%	shift utilization	payer; health system; provider
vaccine/ preventive screenings (c,b,g)	flu shot genetic history	68% (no)	prevent utilization preventive screen/ behavior	employee education/ adherence
nutrition (s, b)	food affordability & access eat fruits/ veggies	28% 47%	absenteeism; turnover claims	community partnership/ access/ education
mental health(cl)	PHQ2/9	20%	absenteeism; turnover claims	payer; health system; provider
caregiver support	TBD	28%	absenteeism; turnover	new space for innovation



WPI: Case Study #2 Payer

Whole Person Index: Case Study

A New Mexico Medicaid retrospective cohort evaluating hemoglobin A1C attainment and associations with drivers of health

Goal: Utilize existing laboratory data to understand:

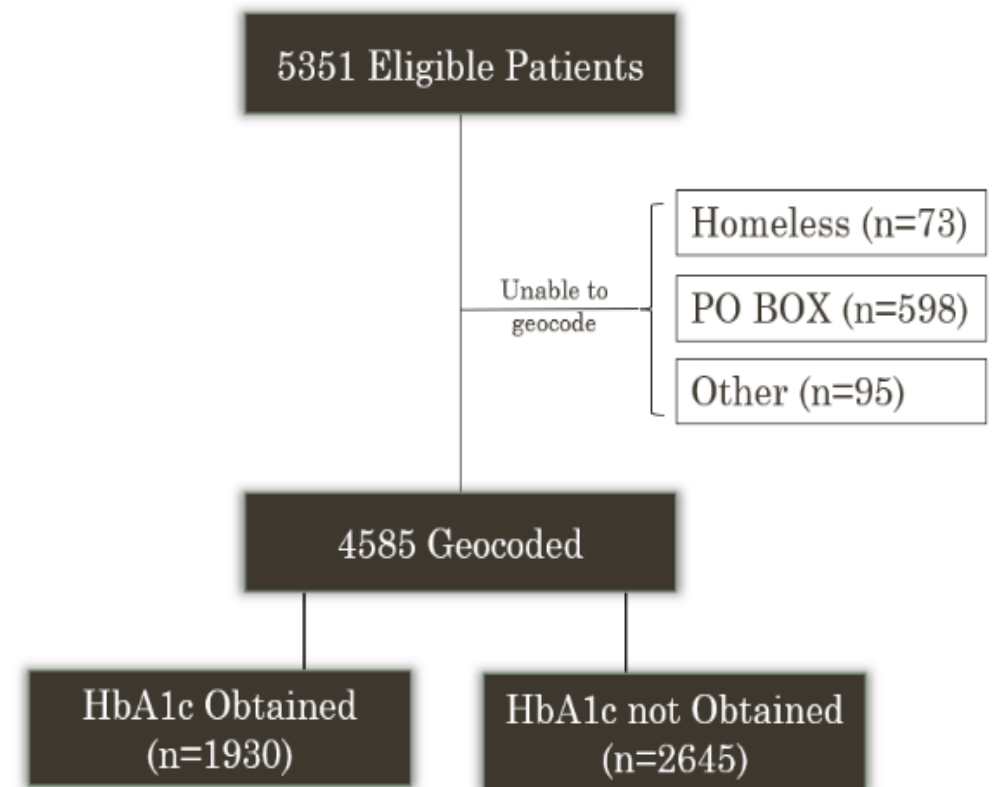
- Drivers of compliance with guidelines for care care
- Determine actions to close gaps to improve compliance
- Realize shared savings goals (\$3M)

Population:

- Schizophrenia and bipolar disorders; prevalence of diabetes is 2-3 x higher than general pop
- Diabetes presence or severity can be screened for with a hemoglobin A1c (HbA1c) lab test.

Inclusion Criteria:

- All Medicaid with a schizophrenia, schizoaffective disorder, or bipolar disorder ICD-10 code
- Full Year 2022
- Ages 18 and 64 years



Whole Person Index: Case Study

A New Mexico Medicaid retrospective cohort evaluating hemoglobin A1C attainment and associations with drivers of health

Key Findings for risk of missing HbA1c:

- Food stamp use rate between 27% and 62% = 1.54 times greater risk
- Unemployment rates between 11% and 44% = 1.29 times greater risk

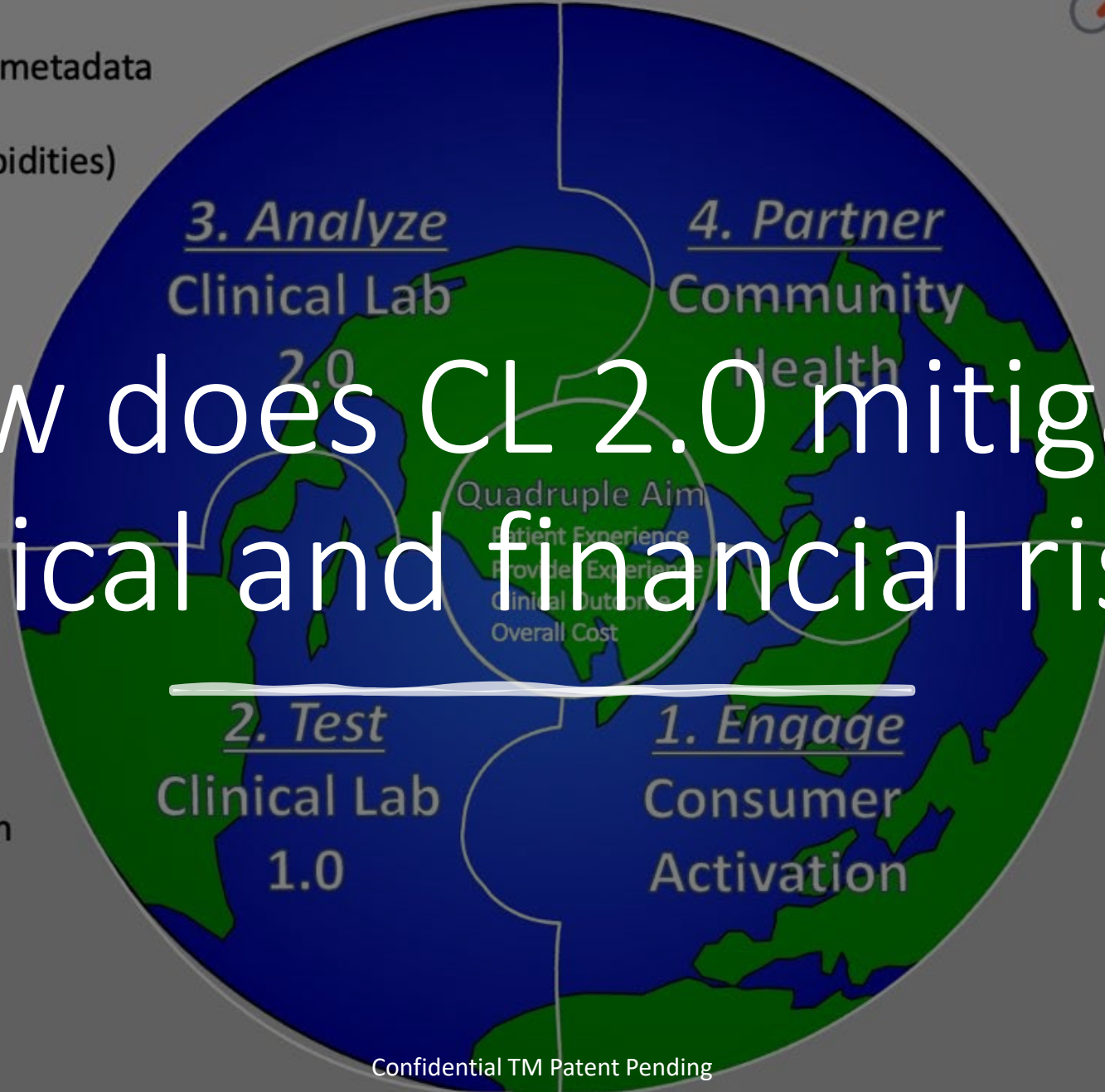
Value:

- Comprehensive care pathways to include A1c- decrease disease incidence
- Focus efforts for adherence on hot spot areas
 - partners to address drivers of health- SDoH (food/ employment)
- Meet shared savings goal



- Longitudinal lab results + metadata
- Clinical surveillance
- Risk stratification (comorbidities)
- Care gap identification
- High risk identification
- Facilitated intervention
 - Prevention
 - Cost avoidance
- Improved outcome
- Cost/population

- Pathology domain knowledge
- Accuracy
- TAT (turn around time)
- Test menu & test selection
- Test utilization
- Supply chain - cost/unit
- Robust POCT
- BMI - vitals
- Uber Phlebotomy



- Population Health
 - Chronic Care Management
 - Quality & Safety
 - Public Health
 - Health Policies
- Private/Public Partnerships
 - Public Health
 - Healthcare Providers
 - Payer/ ACO
 - HIE
 - Policy makers

- Social determinants
- New models of care
 - Improved access
- Consumer engagement
 - Patient portal
 - c-MPI (community master patient index)
 - Shared decision-making
 - Confidential, specific education
 - Self-efficiency
- Facilitated care
- Facilitated intervention

How does CL 2.0 mitigate clinical and financial risk?

Lab
Leadership:
CL 2.0
mitigates
clinical and
financial risk



- Understand all drivers and be the gateway for the person/ community health
 - Design a standard set of labs to run depending on WPI results- focused on surveillance and early detection to prevent disease
 - individual
 - population
 - community
 - Design new comprehensive care pathways
 - Proactively identify high risk patient populations (moms, pre diabetic, flu/ Covid)
-
- Engage with payers on at-risk contracts to understand what tests to bundle and how to engage patients for compliance
 - Provide longitudinal, trended data to support outcomes mgt and continuous improvement
 - Take advantage of new revenue opportunities to provide clinical support + other drivers (i.e. SDoH)
 - Access to appropriate genetic testing/ education



Discussion

References

<https://health.gov/healthypeople/priority-areas/health-equity-healthy-people-2030>

[Kaiser Family Foundation, Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity, 5/18](#)

<https://catalyst.nejm.org/doi/full/10.1056/CAT.23.0331>

<https://bipartisanpolicy.org/report/what-makes-us-healthy-vs-what-we-spend-on-being-healthy/>

<https://www.medicaleconomics.com/view/beyond-social-responsibility-the-missing-business-case-for-health-equity>

[https://www.ncbi.nlm.nih.gov/books/NBK11795/#:~:text=Among%20U.S.%20adults%2C%20more%20than,alcohol%20consumption%20\(Willett%202002\)](https://www.ncbi.nlm.nih.gov/books/NBK11795/#:~:text=Among%20U.S.%20adults%2C%20more%20than,alcohol%20consumption%20(Willett%202002))

<https://hbr.org/2023/10/the-business-case-for-love>