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Incorporating Social Determinants of Health for KP Population Health Projects

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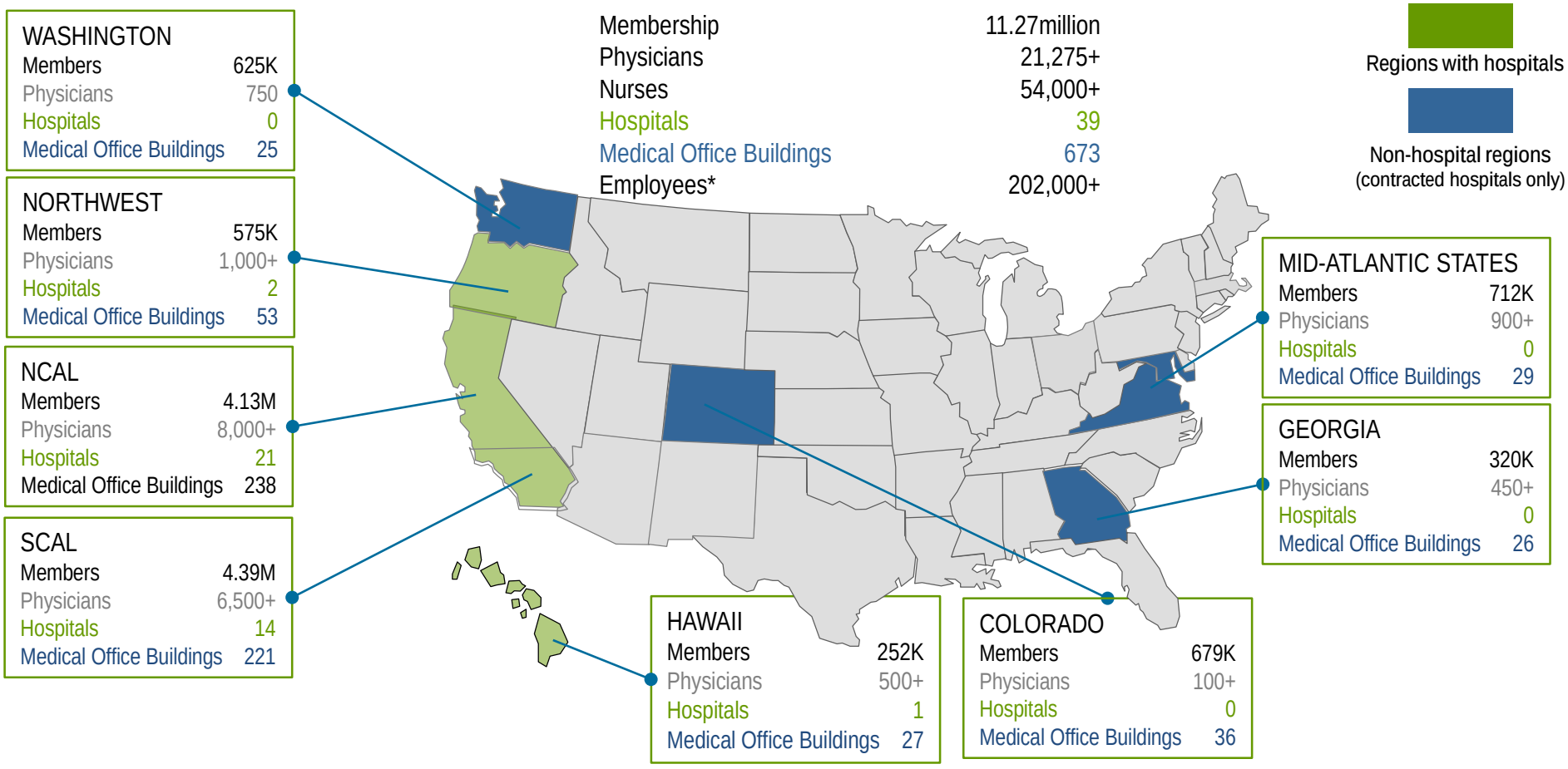
Objectives

- Review social determinants of health (SDOH) connections for planning and strategy development in an integrated care delivery system
- Describe tools used to help plan benefit programs for addressing SDOH
- Highlight two program approaches
- Explore future developments around SDOH

A complex environment



Technology-enabled health care

70 years of providing care

$64 billion in assets

11.2 million members

39 hospitals (#39 Q1 2017)

600+ medical offices

433,413 hospital admissions

225,000 inpatient surgeries

98,000 births

40.2M doctor office visits

188M visits to [redacted].org My Health Manager

22M secure messages sent to providers

150M lab orders per year

78M prescription orders per year

4.8M appointments booked online

Perspectives

American Consumers

- When asked how they would pay for a $400 emergency, 47% of respondents said that they could only cover the expense by borrowing or selling something or that they would not be able to come up with $400 at all.

Federal Reserve Board Report on the Economic Well-Being of US Households

JAMA Viewpoint

- Screening for patients' health-related social circumstances is fundamentally different from screening for traditional medical problems for which …tools…and interventions are accessed within the health services sector. Screening for any condition in isolation without the capacity to ensure referral and linkage to appropriate treatment is ineffective and, arguably, unethical.

JAMA August 2016

Physicians

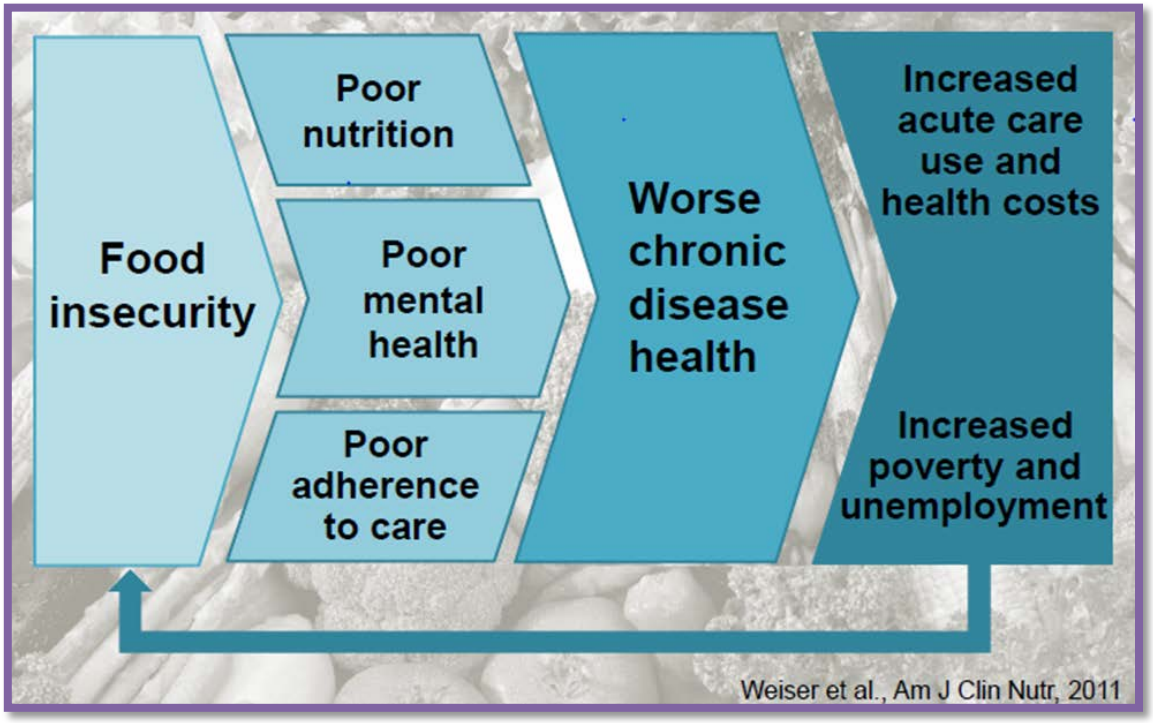
- 76% of physicians surveyed wish the healthcare system would pay for costs associated with connecting patients to services that address their social needs.
- 85% of physicians surveyed say unmet social needs are directly leading to worse health.

RWJF Health Care's Blind Side 2011

Spotlight: Food Insecurity and Health

The Facts

- One third of U.S. adults with chronic illness cannot afford food, medicine or both.
- In 2016, the American Academy of Pediatrics recommended education for providers and systematic screening for food security.



(1) Source: Berkowitz: The American Journal of Medicine (2014) 127, 303-310

(2) http://pediatrics.aappublications.org/content/pediatrics/136/5/e1431.full.pdf

Total Health as Strategic Foundation

How do we deepen total health?

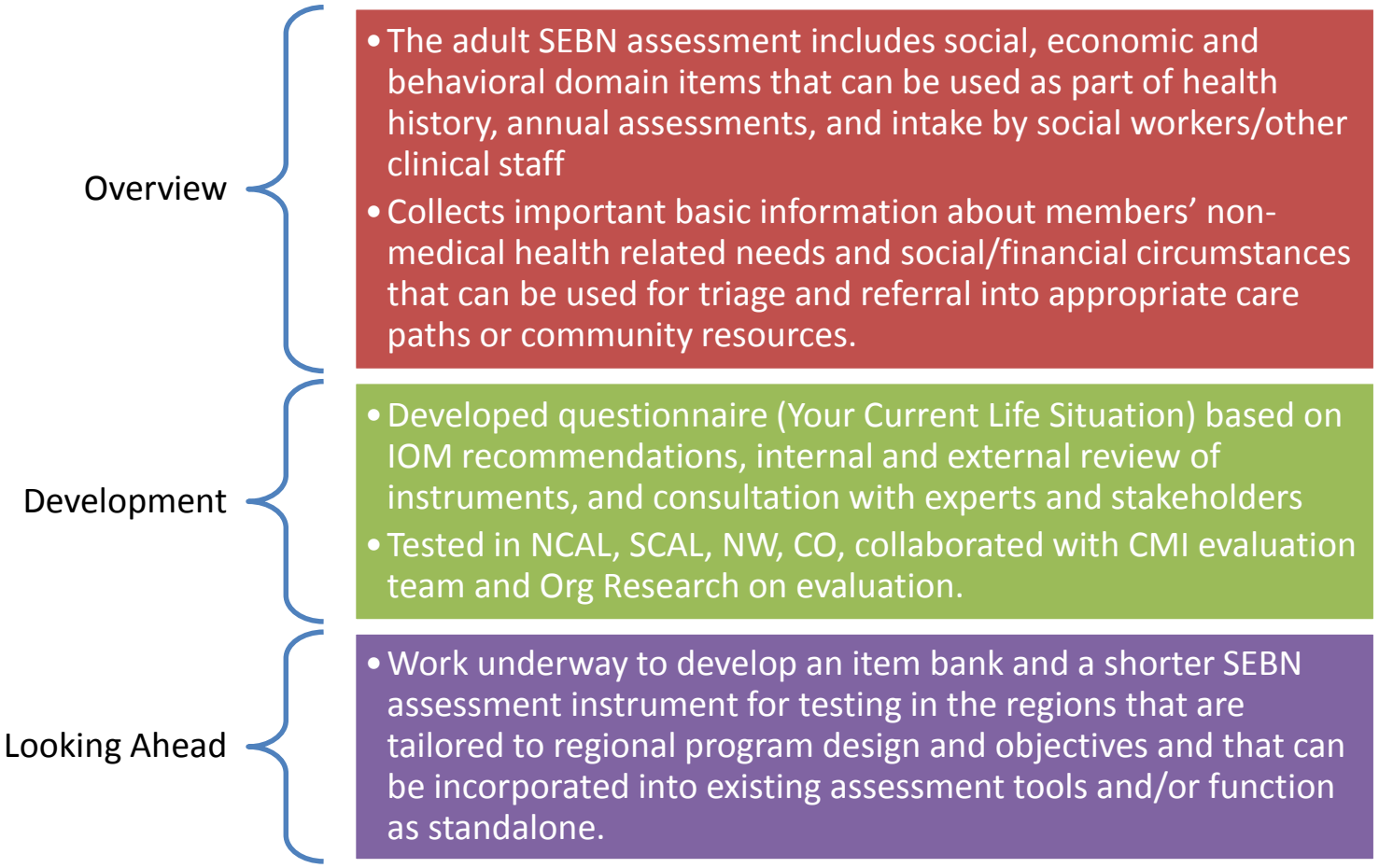
Our Mission

Our mission is to provide high-quality, affordable health care services and to improve the health of our members and the communities we serve.

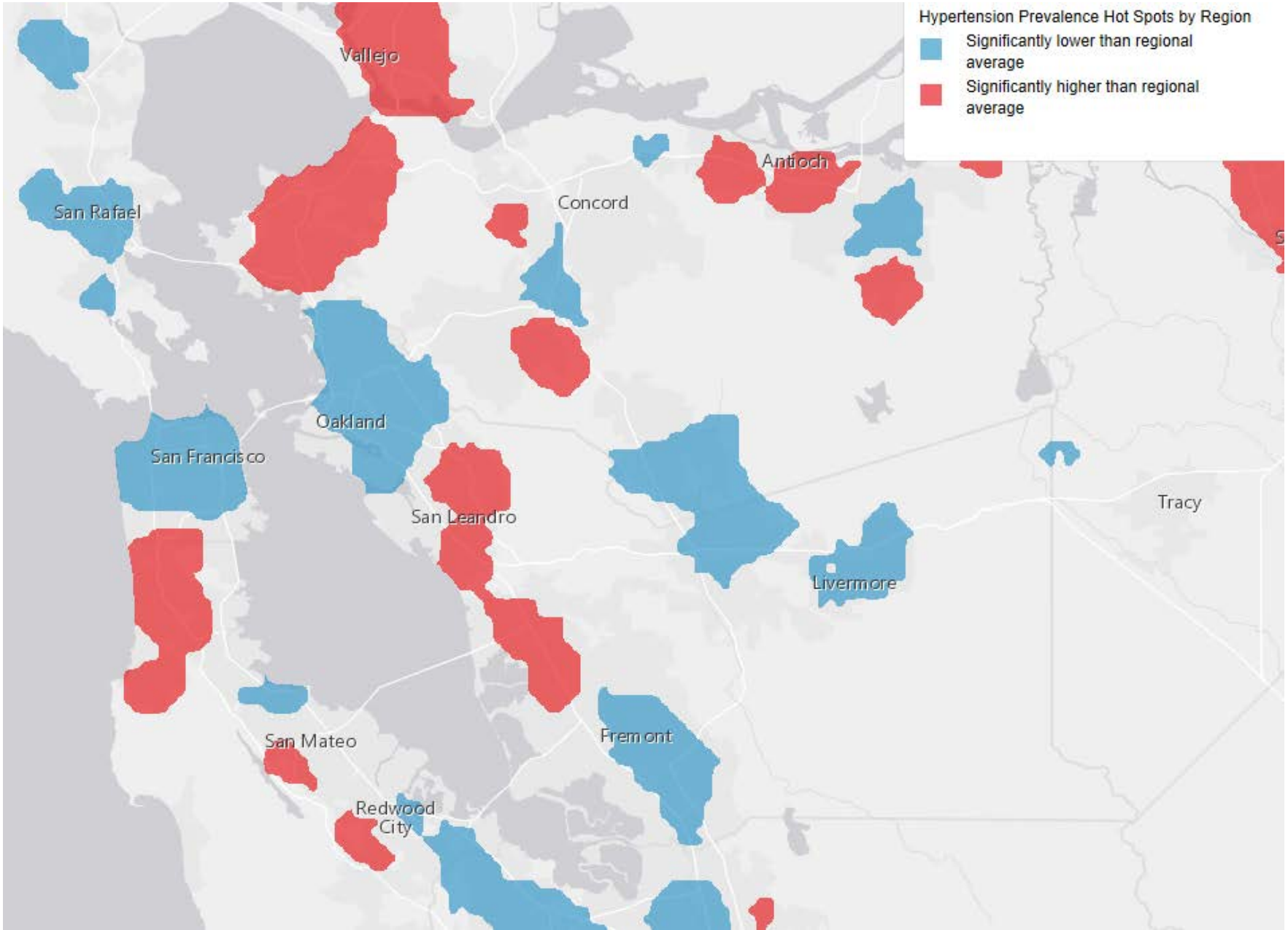
Vision 2025

We are **trusted partners in total health**, collaborating with people to help them thrive and creating communities that are among the healthiest in the nation.

Adult Social Needs and Determinants Assessment

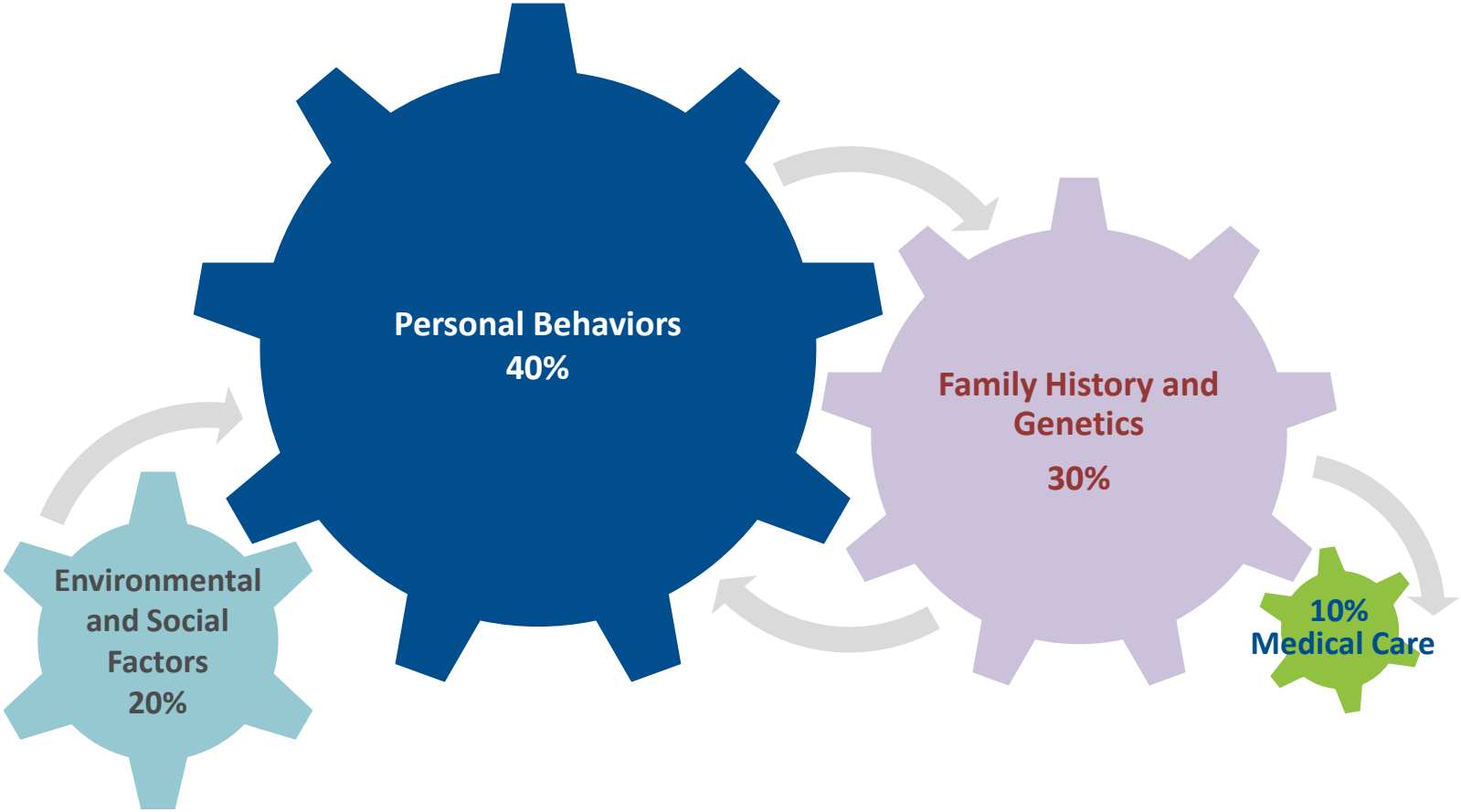


Is health equitable across all our communities?



Why Total Health: Many Factors Shape Health

…of which medical care is one component.



Key strategic determination:

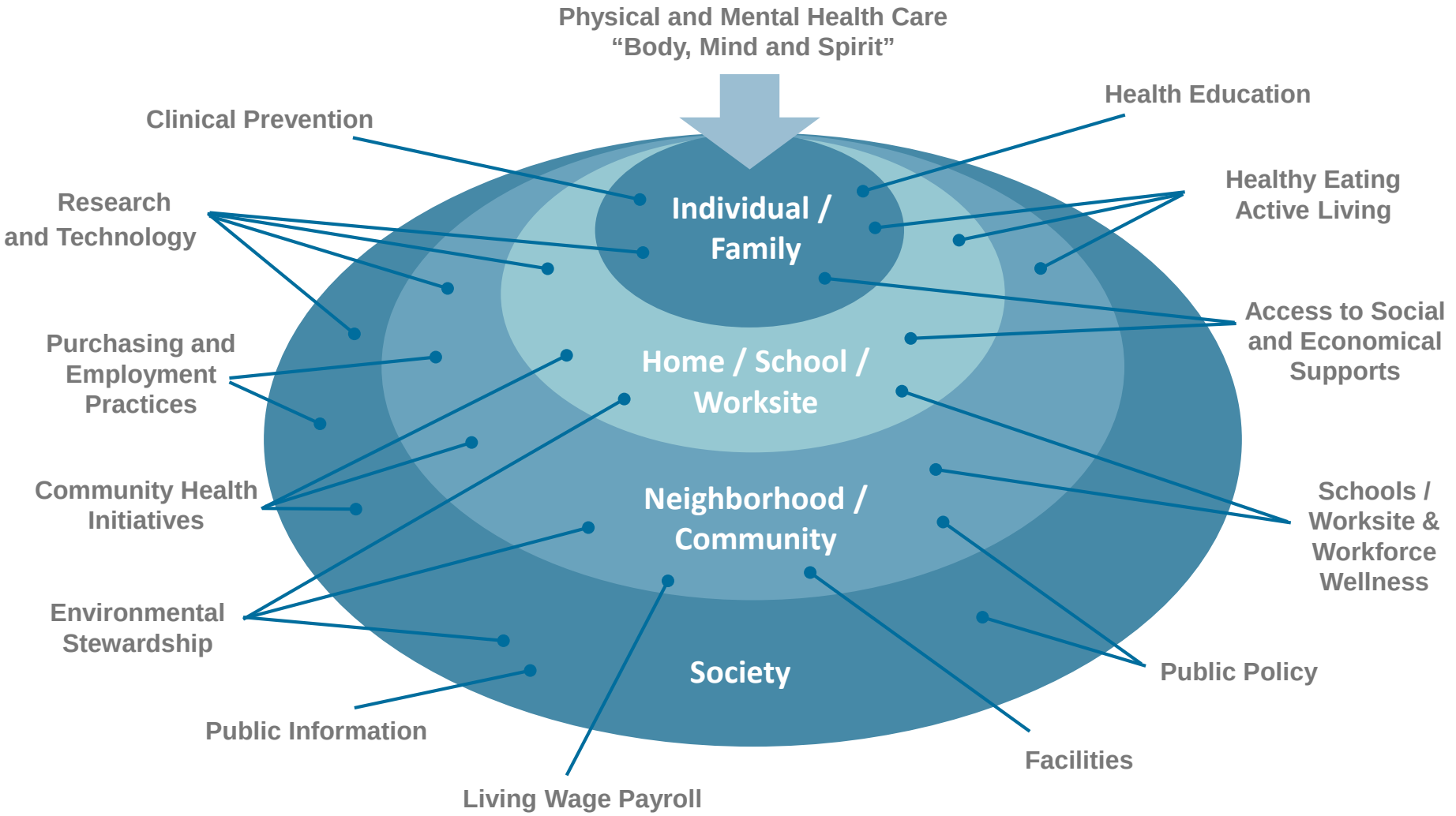
What roles can we play in addressing all the non 'medical care' factors?

Source: McGinnis et al, Health Affairs, 2002

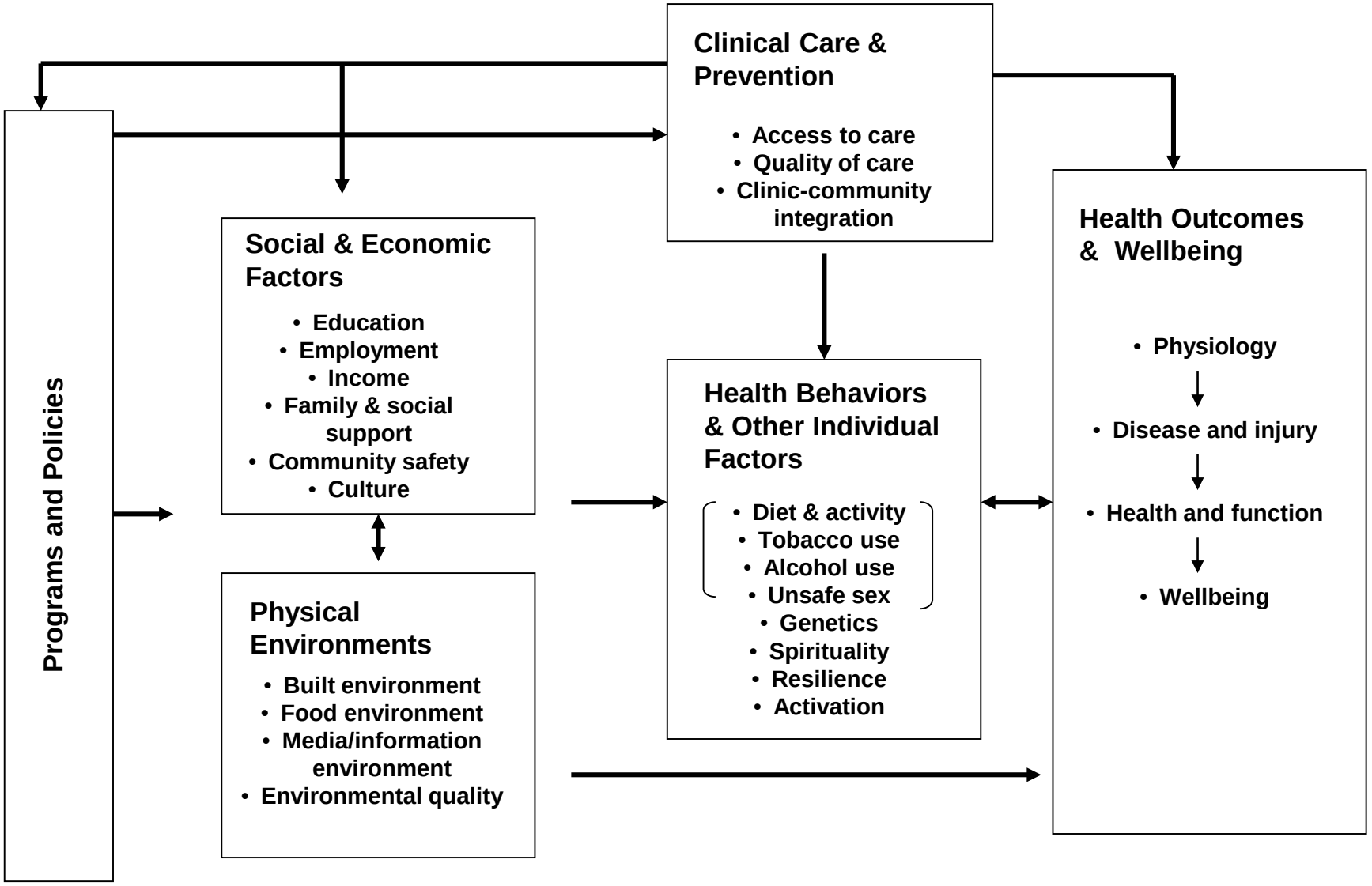
Strategic Decision: Connect and Deploy All Assets

Deploying Full Scope Organizational Assets for Total Health

Bringing together our mission, brand, knowledge and capabilities.

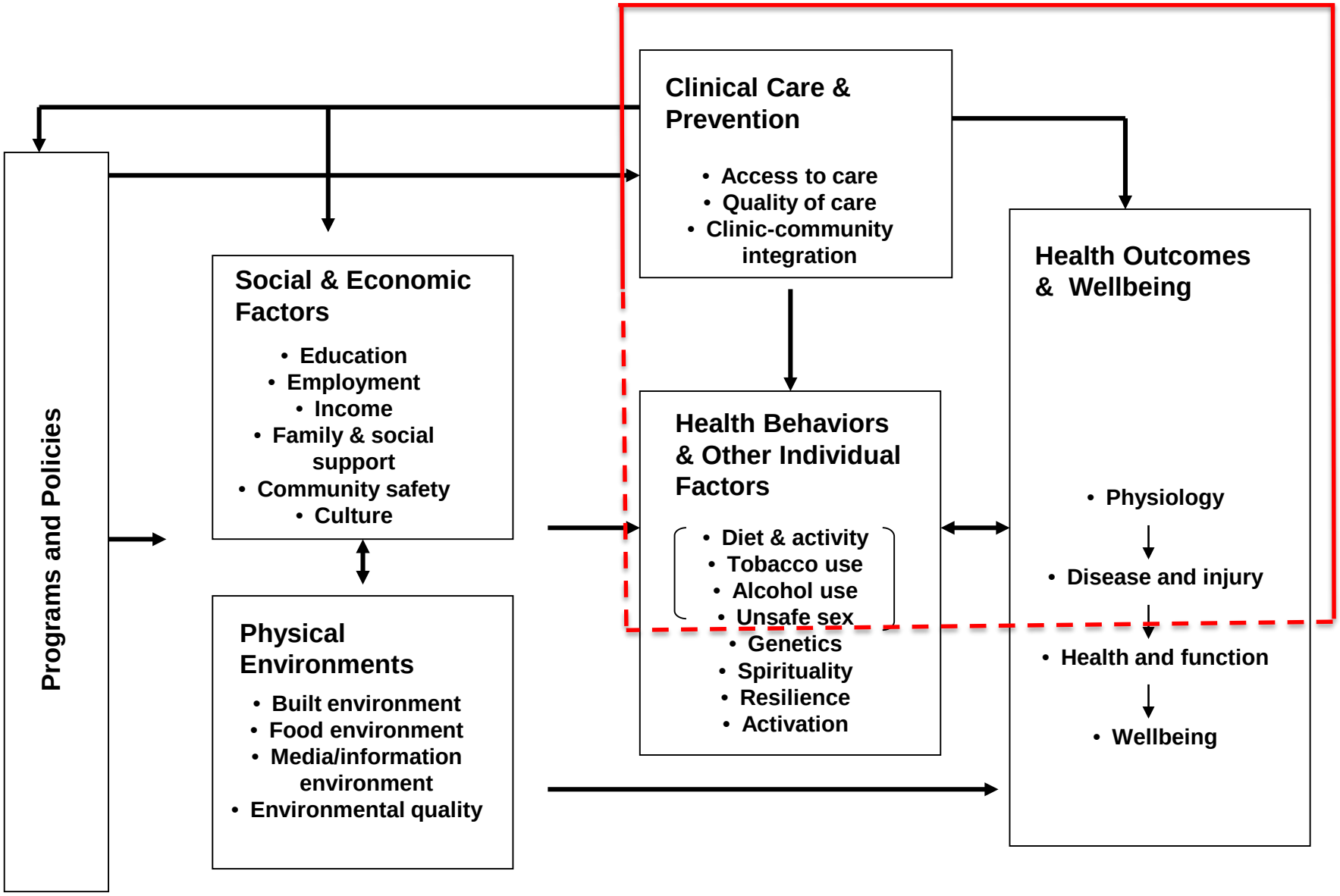


An Analytical View for Total Health



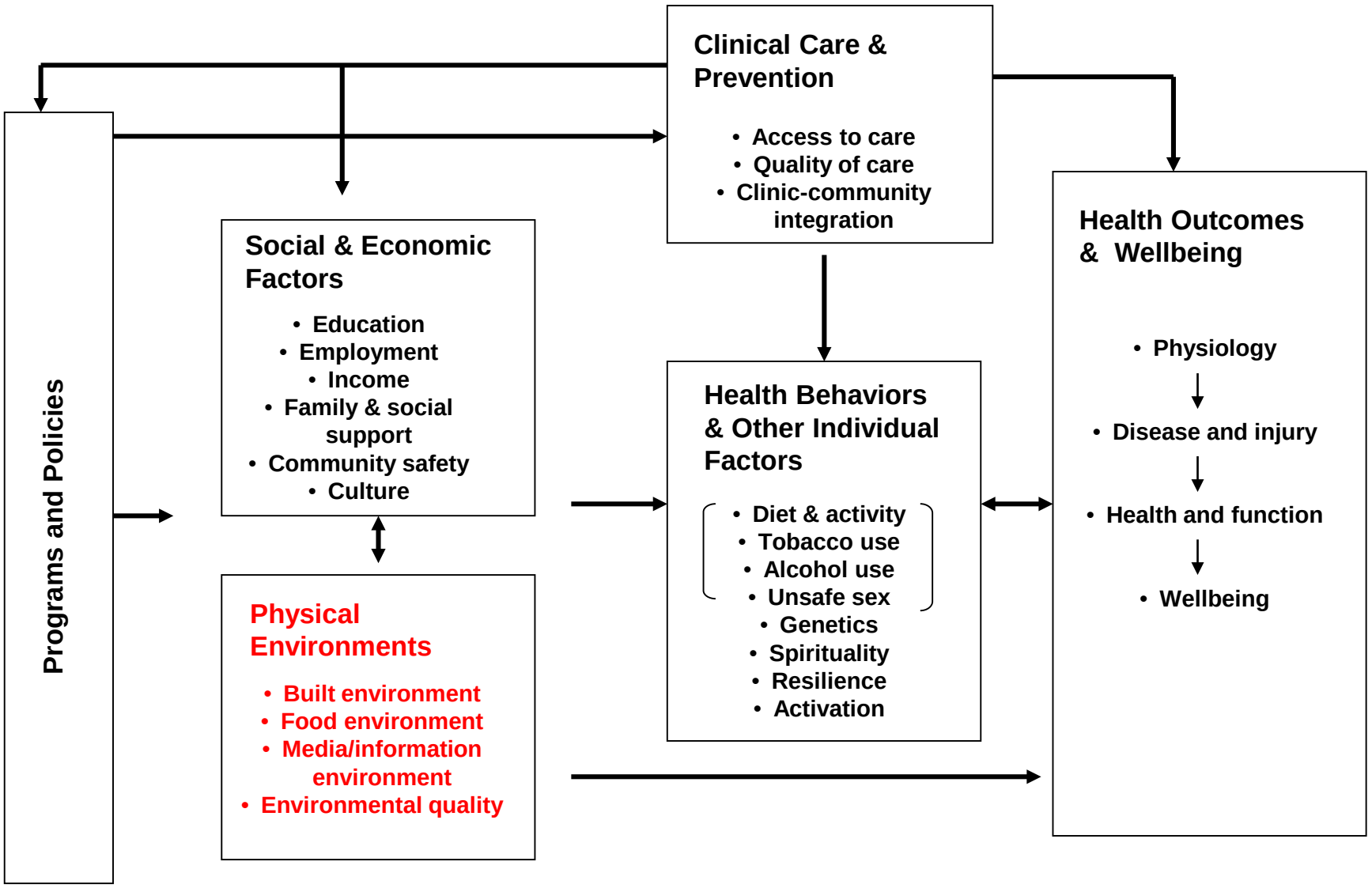
Settings: Home Workplace School Neighborhood Clinic Virtual

The “EHR box”



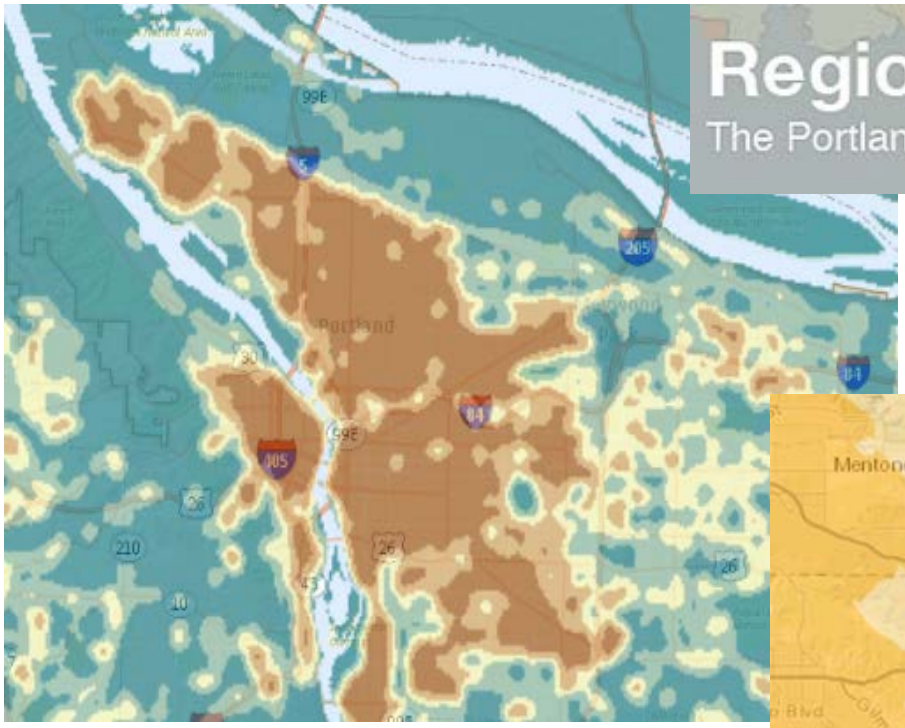
Settings: Home Workplace School Neighborhood Clinic Virtual

The physical environment

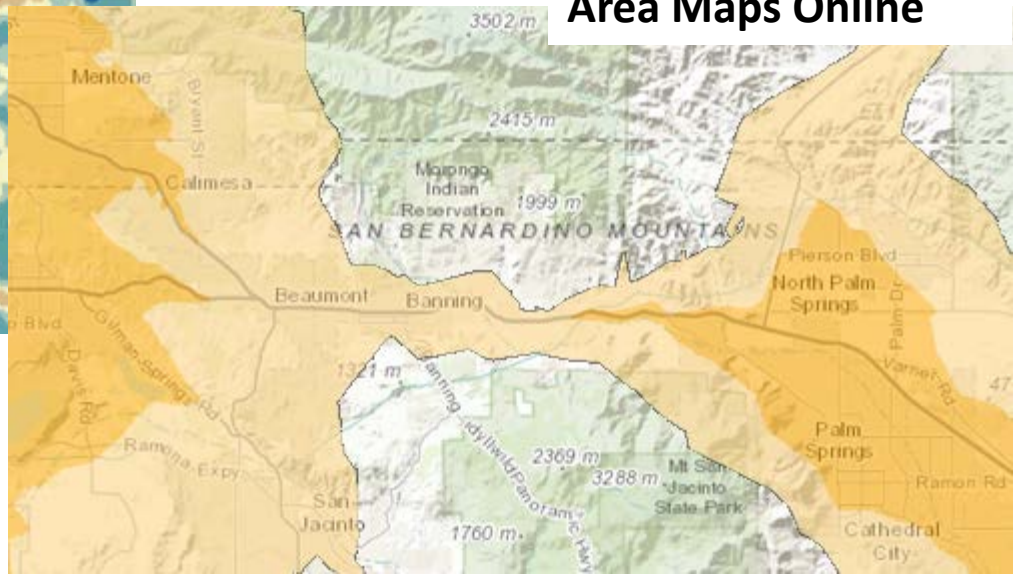


Settings: Home Workplace School Neighborhood Clinic Virtual

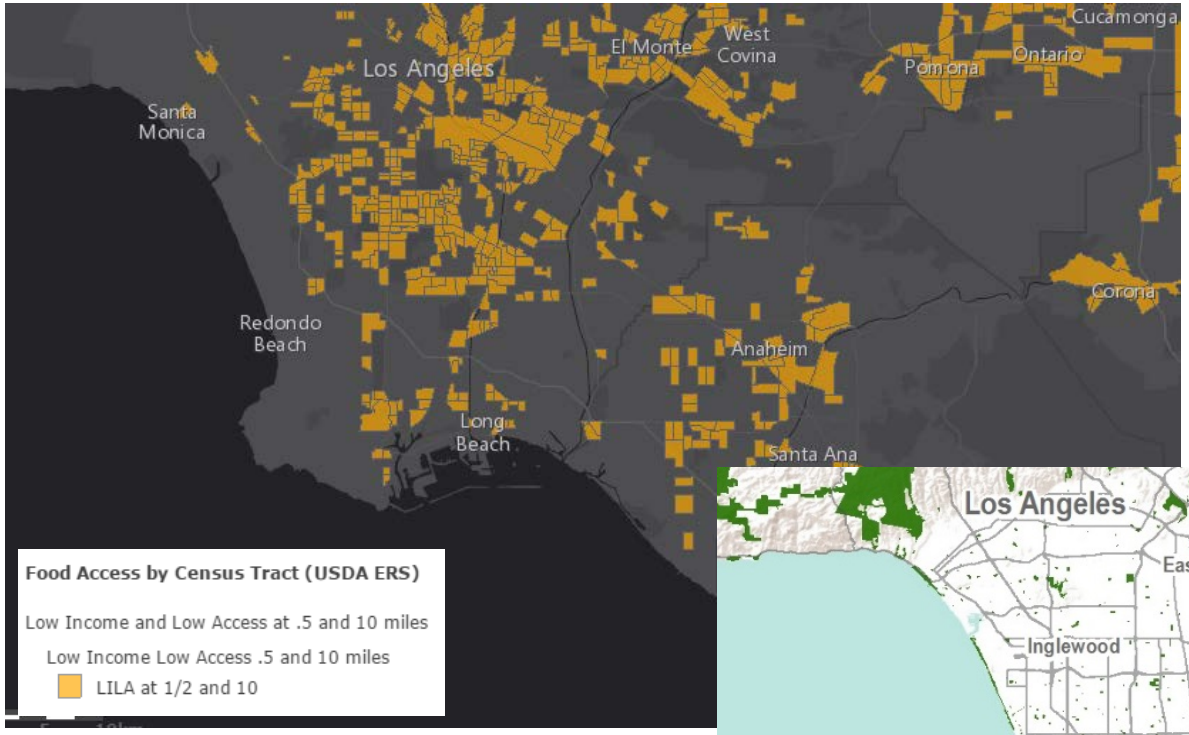
Geography as context – physical environment



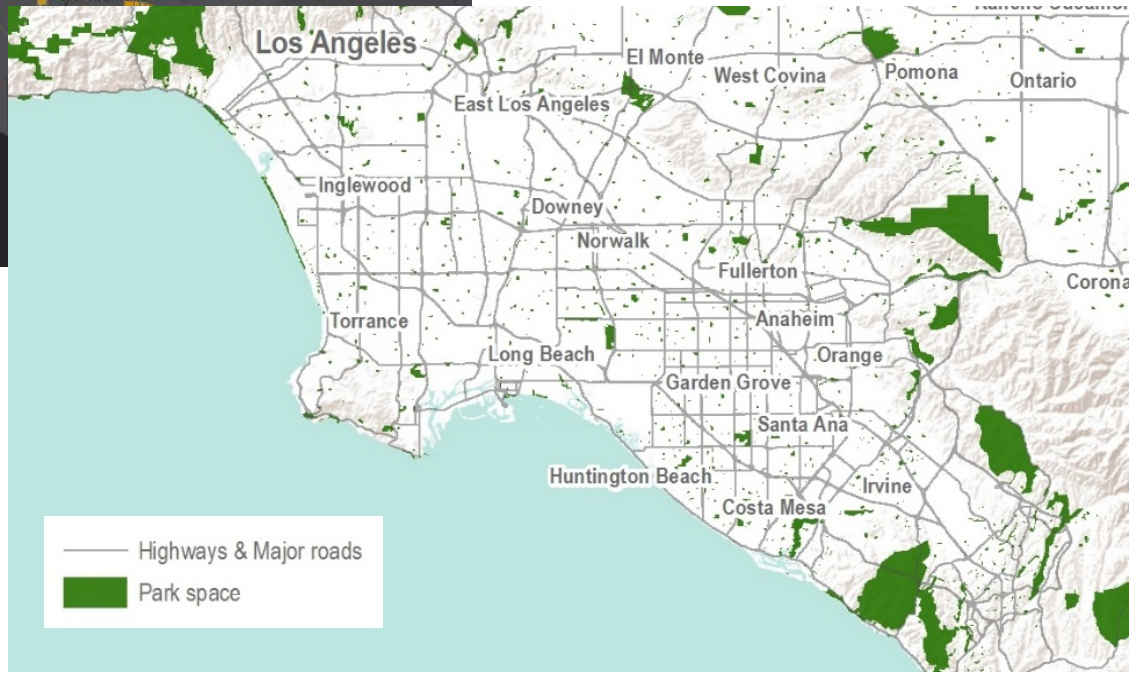
Area Maps Online



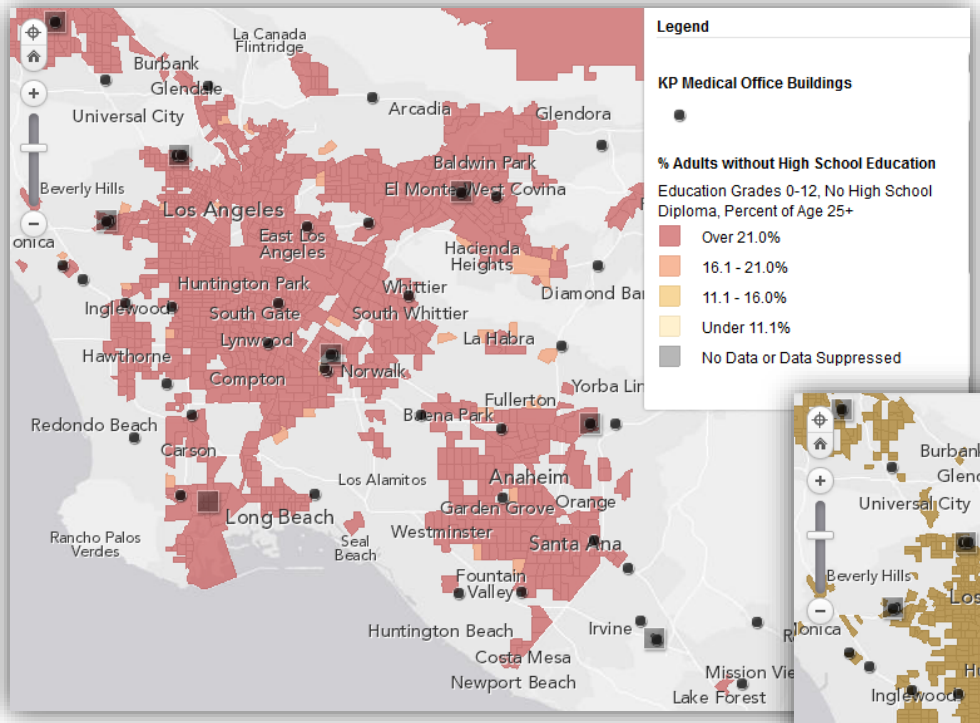
Geography as context – physical environment



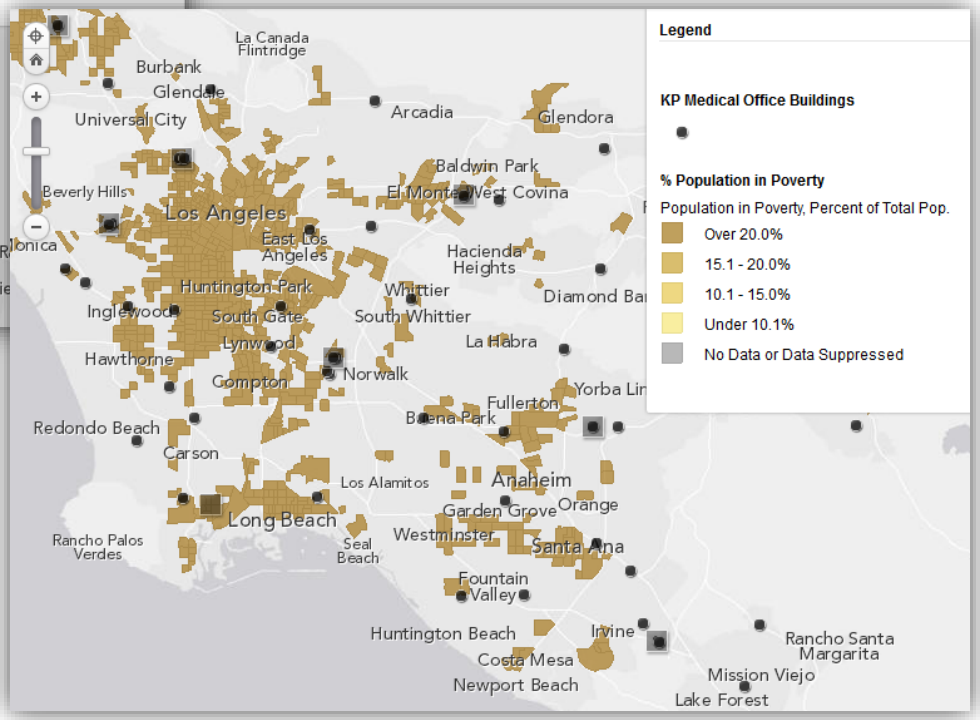
Maps Online



Geography as destiny (or at least predisposition)

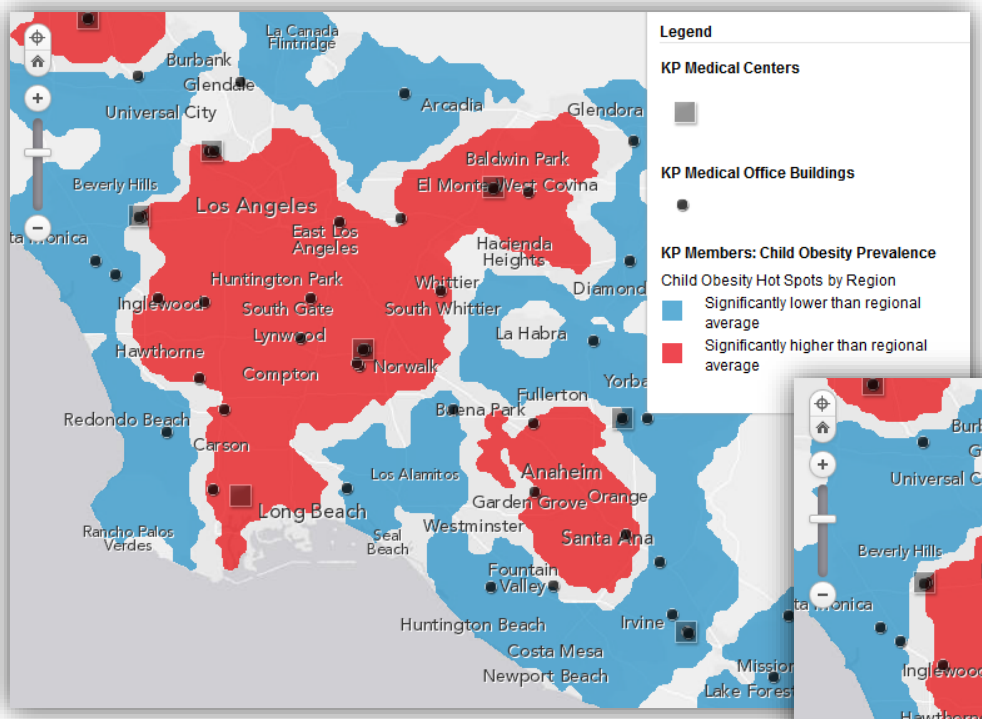


Education

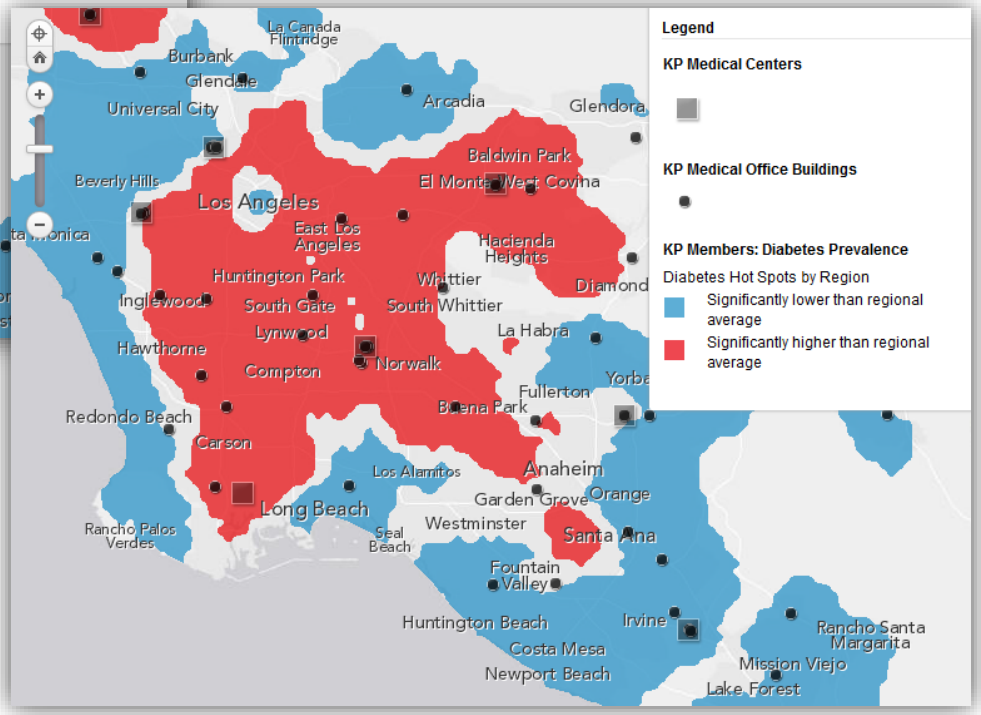


Poverty

The geography of health



Child obesity



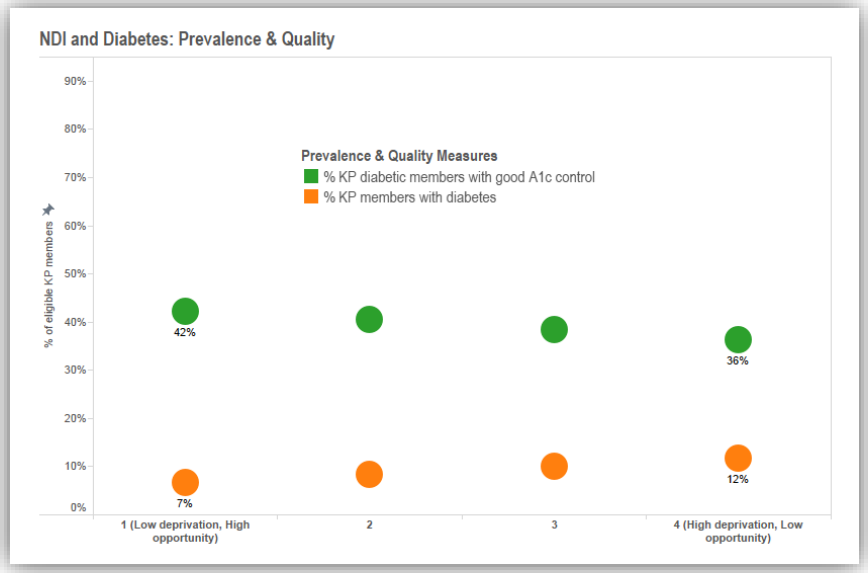
Diabetes

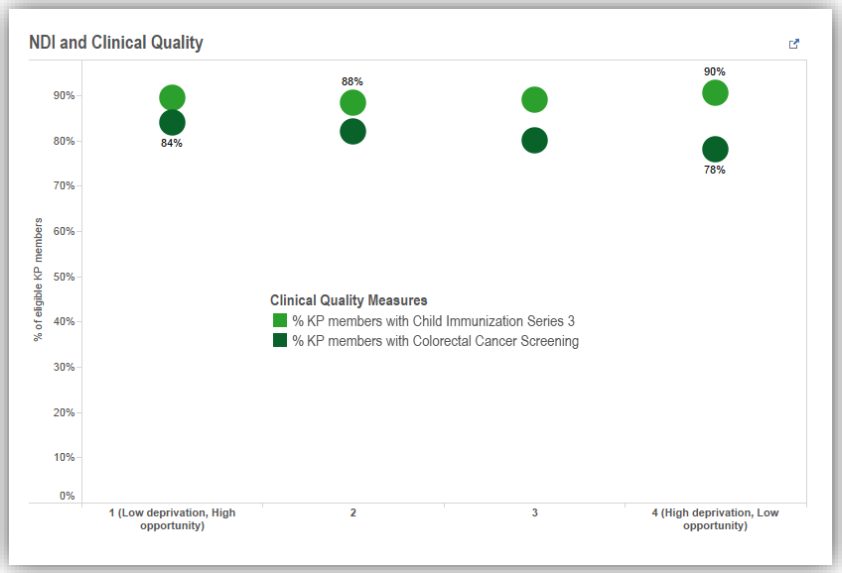
How “healthy” is a neighborhood?

“Can we risk-adjust by social determinants of health?”
– Physician, Jan 2014

Neighborhood Deprivation Index

- DOR implemented from Census 2000 for NCAL region
  - *The Diabetes & Aging Study, Diabetes Study of Northern California (DISTANCE)*
  - DM, DM complications, geriatric conditions, cardio-metabolic risk factors
- Used by other researchers:
  - Lower NDI* associated with heavy alcohol consumption (?!), but more outlets in high deprivation neighborhoods – *International Journal of Epidemiology (2005)*
  - Weigh gain when moving to higher NDI, Dallas Heart Study – *Preventive Medicine (2014)*
  - Neighborhood poverty history & preterm birth – *American Journal of Public Health (2015)*

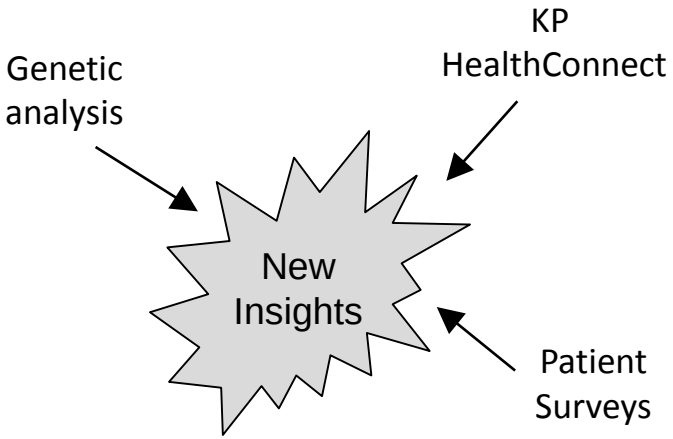




Genetic medicine

"As of late 2013 we had a little over 200,000 participants in RPGEH with blood or saliva biospecimens in the RPGEH Biorepository, and we have genome-wide single-nucleotide polymorphism data — over 675,000 genetic markers, using custom designed arrays — on 110,000 of those participants. We also have completed health surveys from 430,000 Health Plan members, including those who provided a biospecimen.

- RPGEH Executive Director Catherine Schaefer, PhD

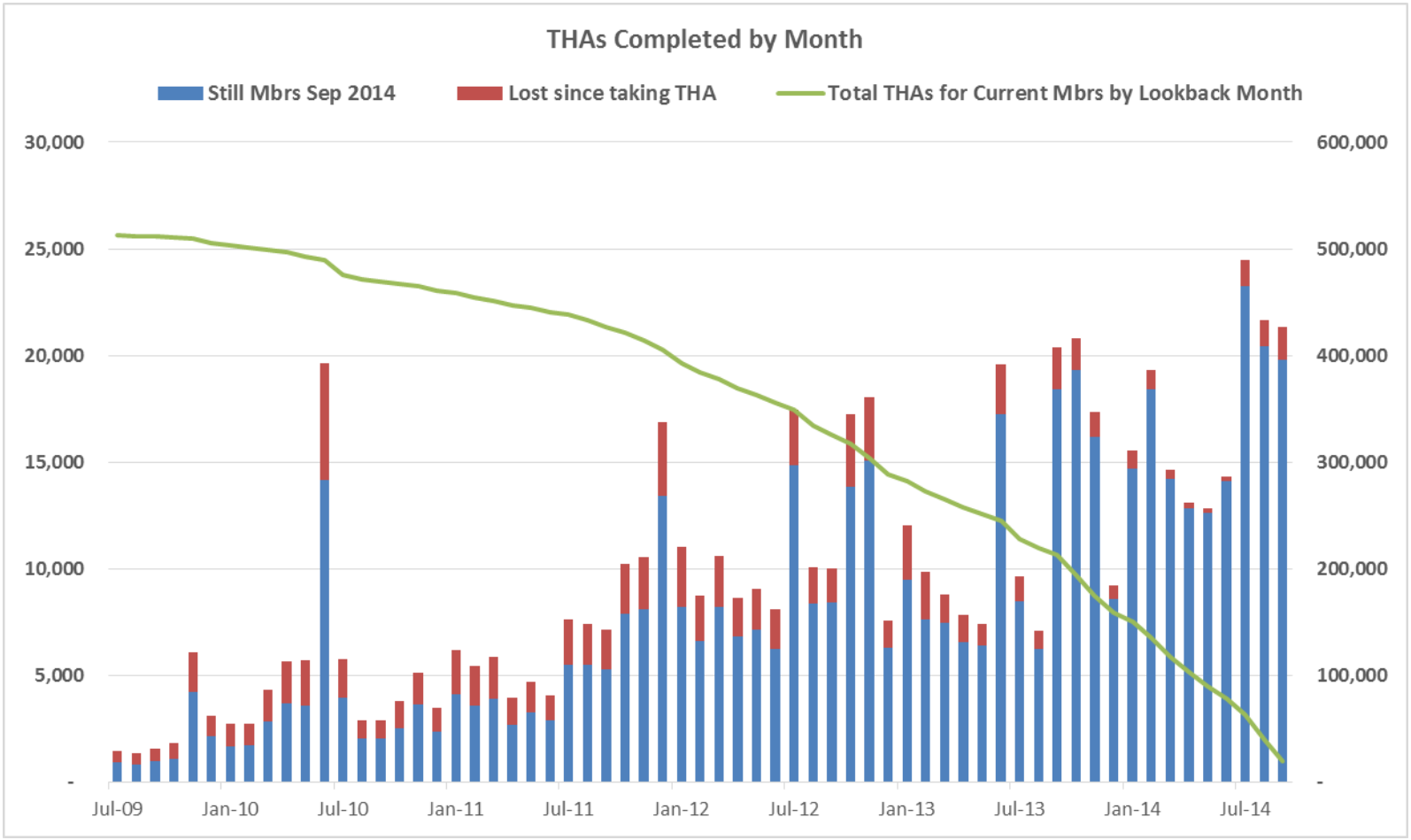


Some current research studies:

- Genome-Wide Association Study of Cutaneous Squamous Cell Carcinoma
- Pharmacogenomics of Statin Therapy
- Using Genomic Technologies to Comprehensively Characterize Acral Melanoma
- Genomics of Blood Pressure-Induced Target Organ Damage
- Identification of DNA Methylation Markers for Risk of Metastasis in Localized Prostate Cancer
- Clinical and Translational Science Institute (facilitating collaborative use of RPGEH Biobank)

Asking the member: THA (and Healthy Lifestyle Programs)

The Total Health Assessment (THA) is an online health risk assessment integrated with online behavior change programs. This questionnaire helps participants examine what is affecting their overall health and prioritize lifestyle changes based on their confidence, readiness and motivation to change. Members have the opportunity to send their THA results to their electronic medical chart.



Predicted High-Utilizers Program: Top Needs - Telephonic Outreach (one region)

High Prevalence

- Caregiver Support (32%)
- Financial (28%)
- Affording healthy meals (26%)
- Food didn't last (26%)

Medium Prevalence

- Health literacy/ numeracy (25%)
- Social Isolation (22%)
- Transportation (18%)
- Utilities (18%)
- Medical Care Costs (16%)

Lower Prevalence

- Homelessness (8%)
- Housing conditions (8%)
- Applying for public benefits (7%)
- Financial Counseling (7%)
- Child-related (4%)
- Employment (3%)

Regional Hunger Screening: Lessons Learned

Food insecurity exists even in "middle class neighborhoods"

Medical teams lack the communication skills and tools to adequately connect members to services

Trust makes a difference in what patients / members will disclose

"We Care" language matters

Clear pathway and follow-up are critical

Telephonic outreach to members consistently had greater success than written referrals

Medicaid Transportation Effort

Transportation Pilot – [redacted]

[redacted]

Non-Medical Transportation Pilot ([redacted])

Aim: To evaluate providing Non-Medical Transportation (NMT) services to adult [redacted] members *age 21 and over* beginning July 2016—and to help members access medical appointments.

The Need

- Missed appointments due to unreliable or unavailable transportation are major barriers to addressing population health
- Approximately **3.6 million Americans** miss or have to delay a medical appointment due to a transportation issue
- Transportation barriers disproportionately affect disadvantaged Medicaid recipients. [redacted] currently has [redacted] largest Medicaid concentration in [redacted], approximately **91,000 members** (52% are adults).
- For patients suffering from chronic conditions, the need for reliable transportation is even more acute and compounds other social determinants many patients are struggling to overcome
- The pilot provides travel for those with non-medical transportation needs

[redacted]

What lies ahead . . .

Geography: from “static” to “dynamic”

Information flow: from “pull” to “push”

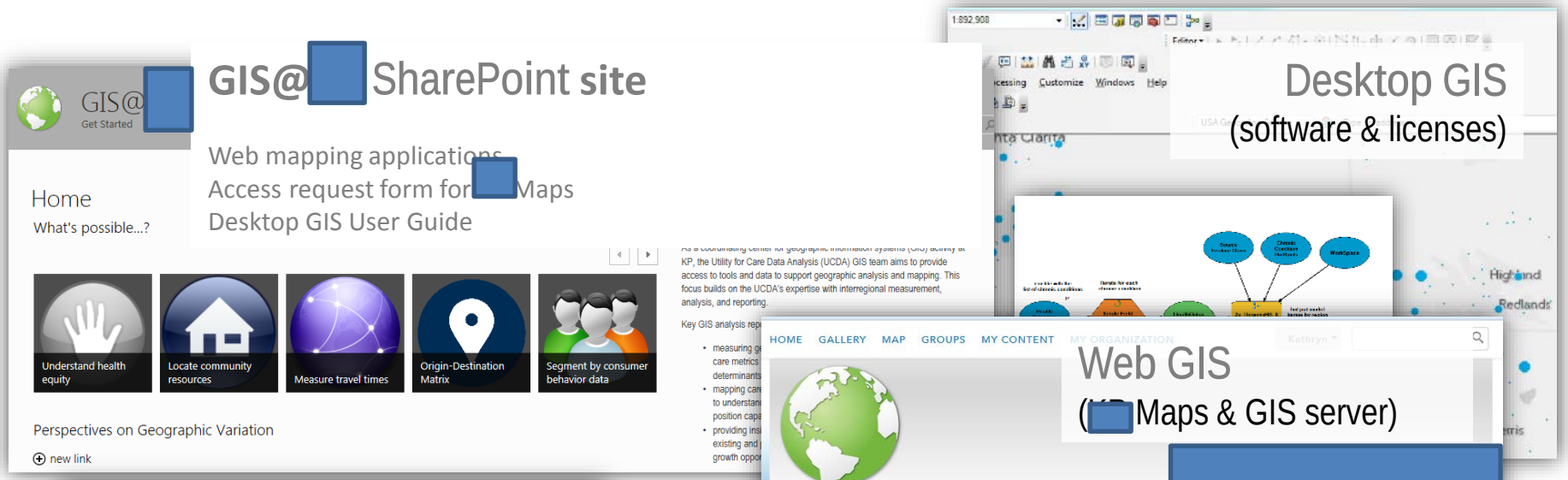
Future Capabilities

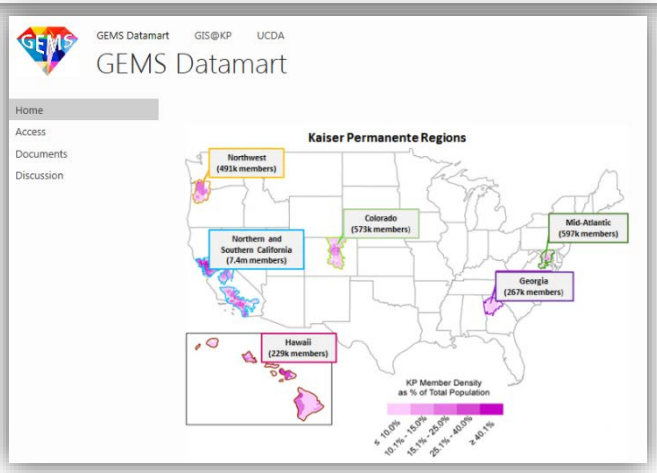
- ONE-CLICK Enrollment
- PERSONALIZED Home Page
- MEDICATION Reminders
- DEDUCTIBLE Tracker
- EASY Mobile Payments
- VIDEO Visits
- Rx REFILL With Barcode
- WEB Chat
- SOCIAL Networking
- GEOLOCATION Services

Connecting with THA/HLP & GIS

Total Health Assessment & Healthy Lifestyle Programs

https://sites.sp.kp.org/services/infosource/mkt/Pages/Wellness/Healthy-Lifestyle-Programs-(HLP)Total-Health-Assessment-(THA).aspx





GEMS Datamart SharePoint site

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