



Addressing the Social Determinants of Health

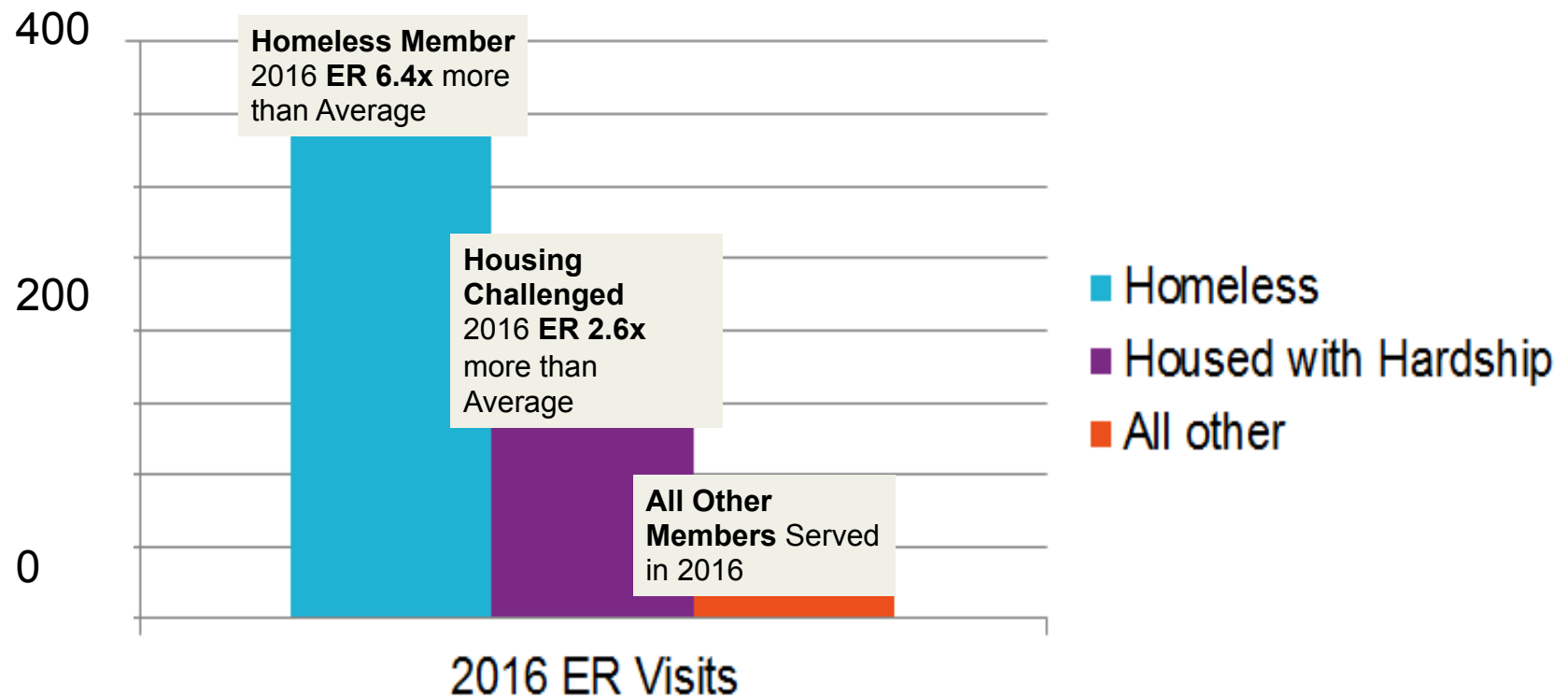
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Senior Vice President
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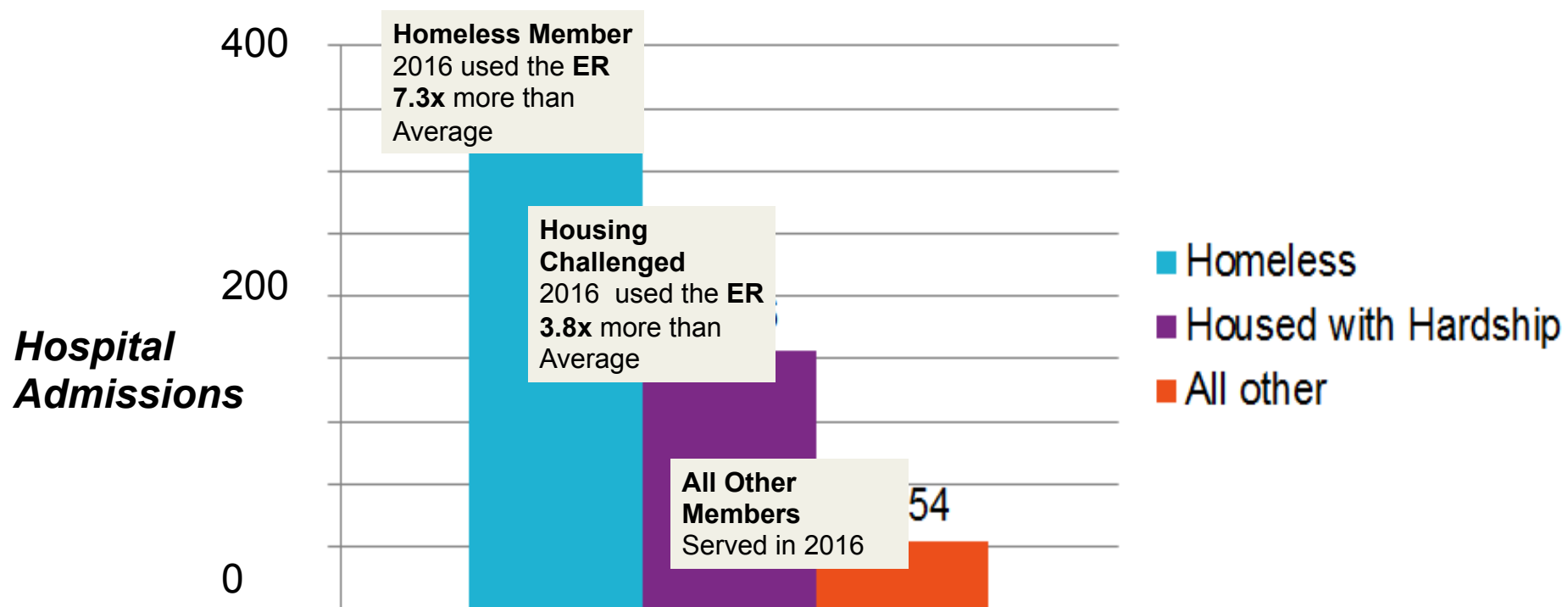
myConnections Case

- Homeless member
- Malignant neoplasm
- Open tracheostomy with severe respiratory based complications (malfunction of trach, acute bronchitis, aspiration pneumonia, etc.).
- Admitted to numerous hospitals in Phoenix.
- He has been rejected by area shelters based on his high risk of infection.
- **2016 cost of care** **\$237,463**
- **Admission** **7**
- **ER visits** **29**

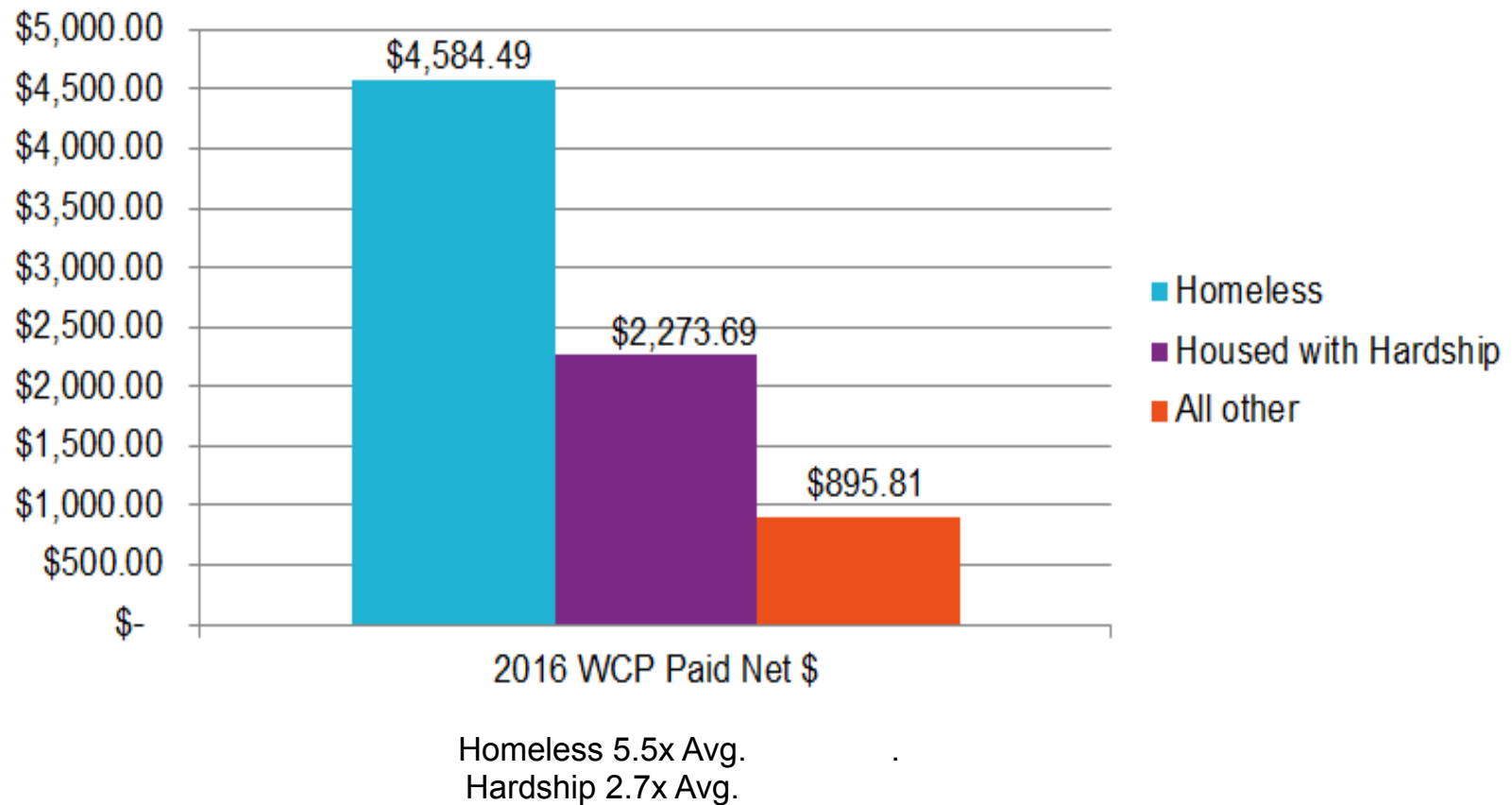
Average ER Visits



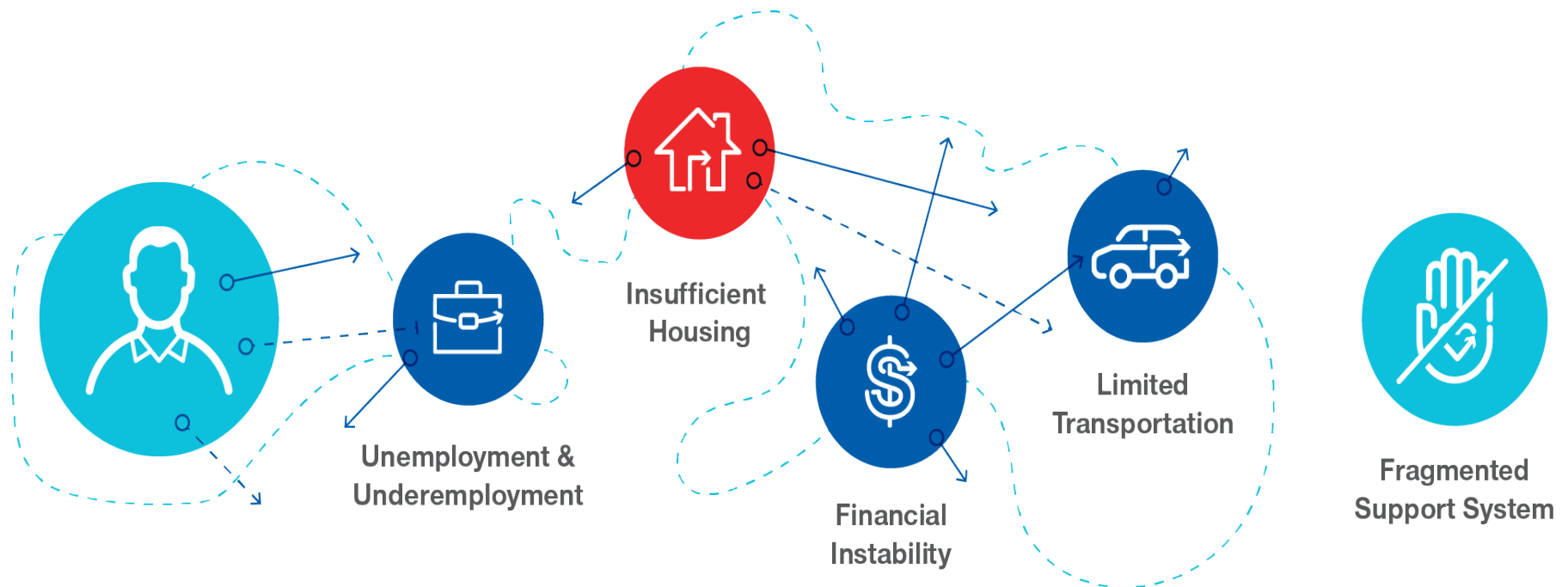
Admissions



Average Paid Cost

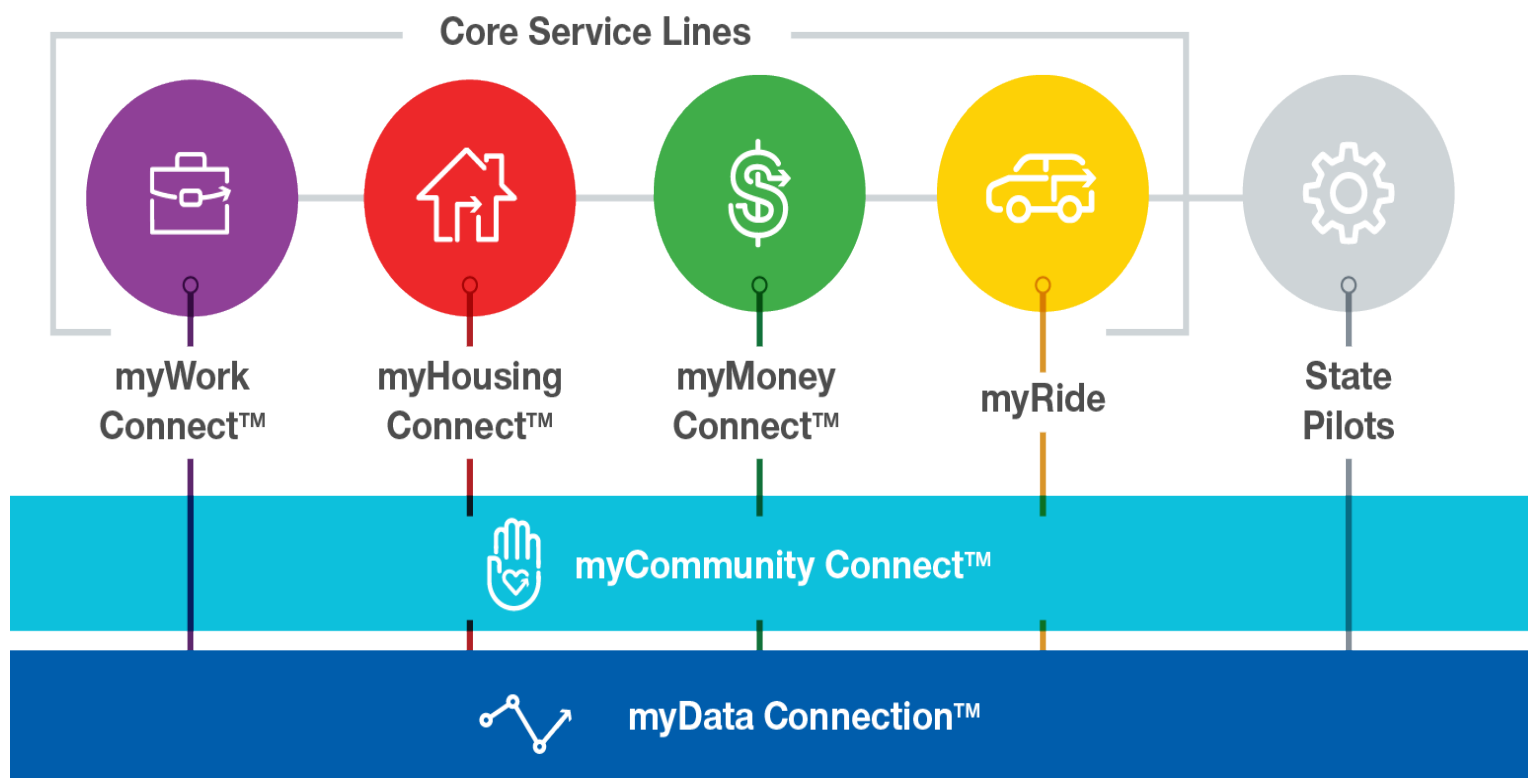


myConnections addresses social determinants with the greatest opportunity to improve health outcomes.

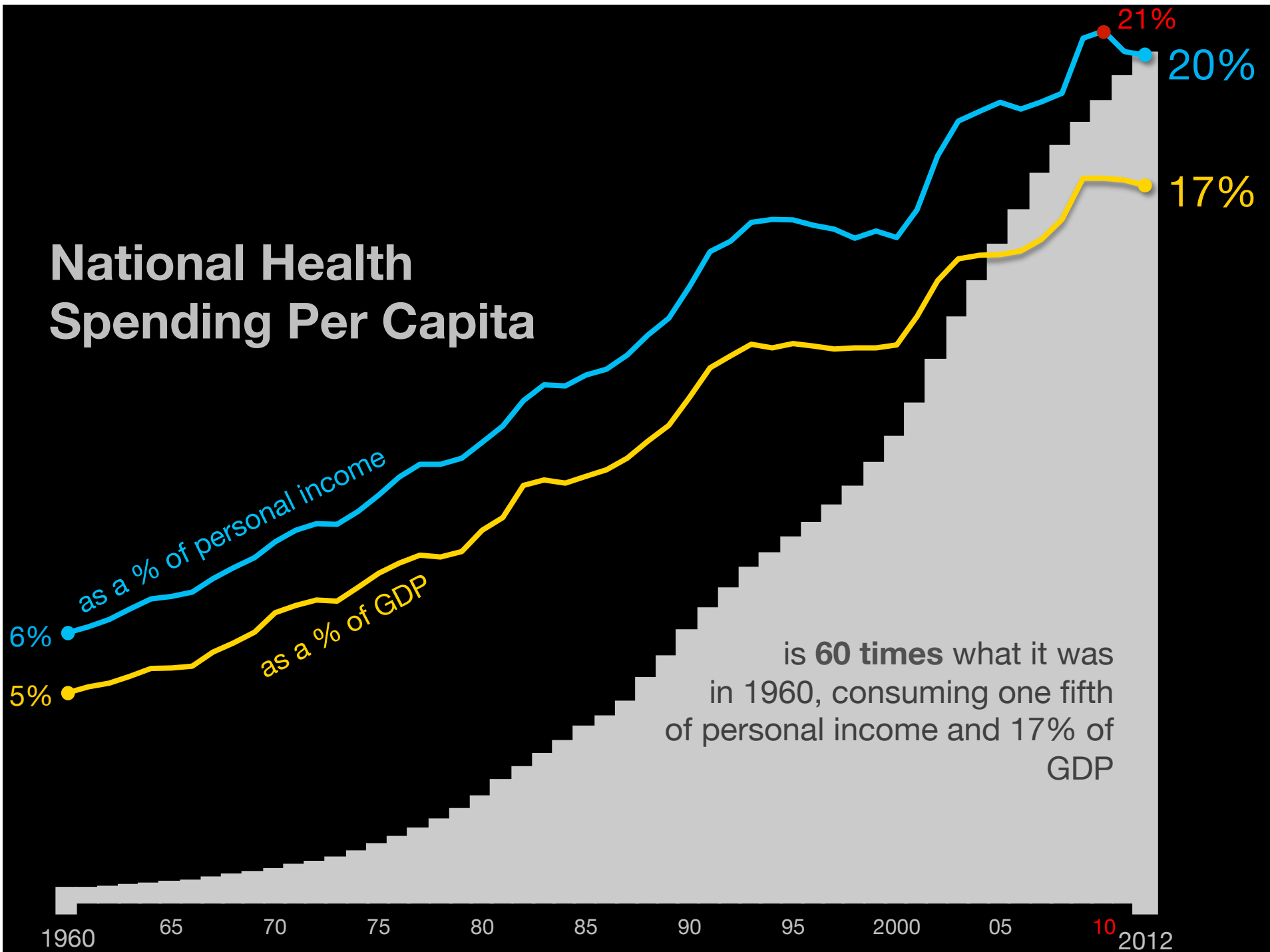


Service lines based on key social determinants integrate to deliver the most impact. But separately, each also provides expert, customized assistance.

myConnections

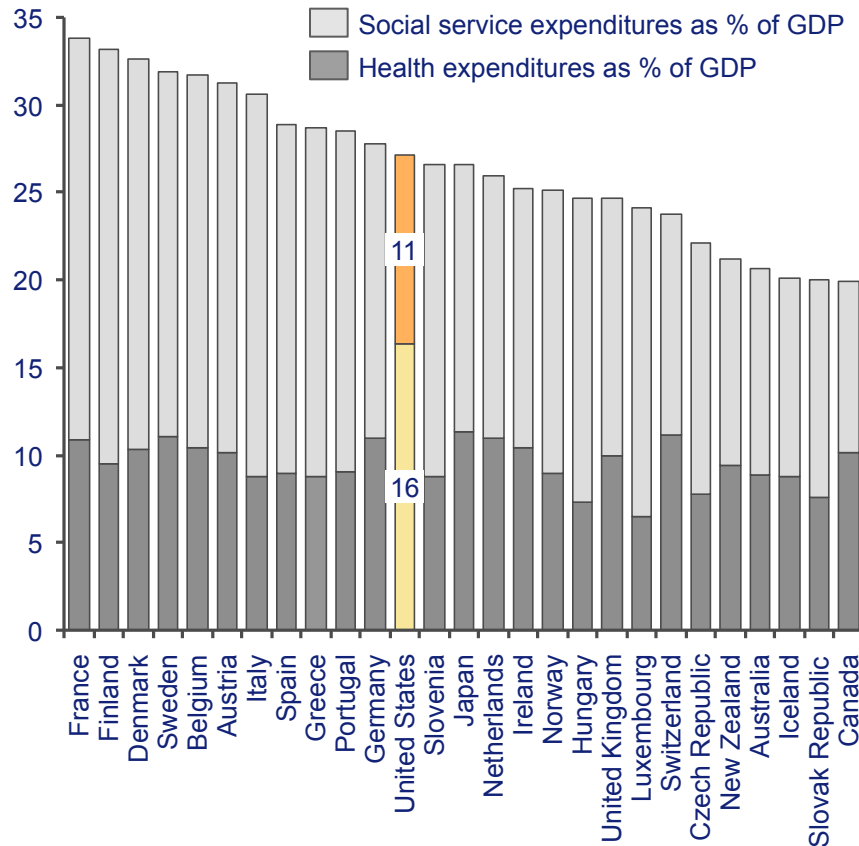


National Health Spending Per Capita



From the “American Healthcare Paradox”

Spending on social and health programs, by country (2013)
Percent of GDP



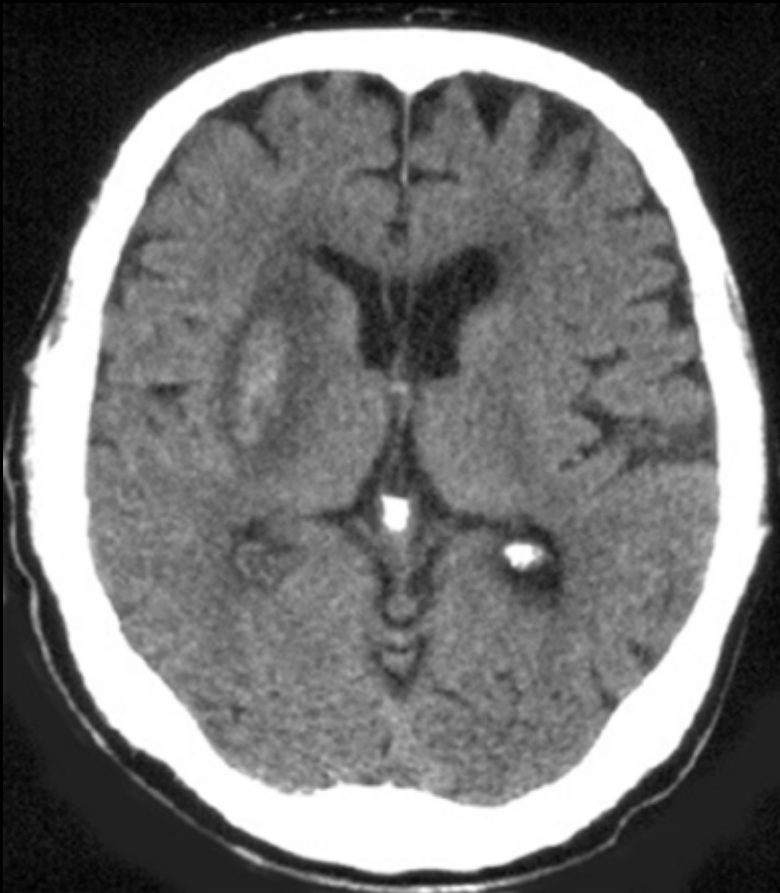
Social service outcomes: U.S. vs. OECD average

Outcome metric	U.S.	OECD average
Life expectancy	78.7 years	80.2 years
Obesity rates among adults	35.3%	22.7%
Infant mortality rate	5.8 per 1,000 live births	3.7 per 1,000 live births
Drug related death rate	234 per million	90 per million
Incarceration rate	698 prisoners per 100,000 pop.	147 prisoners per 100,000 pop.

Source: OECD, CDC, CMS



Hospital Utilization since 1996



ER Visits	102
Admissions	54
Total CT Scans	147
CT Scan-Head	73

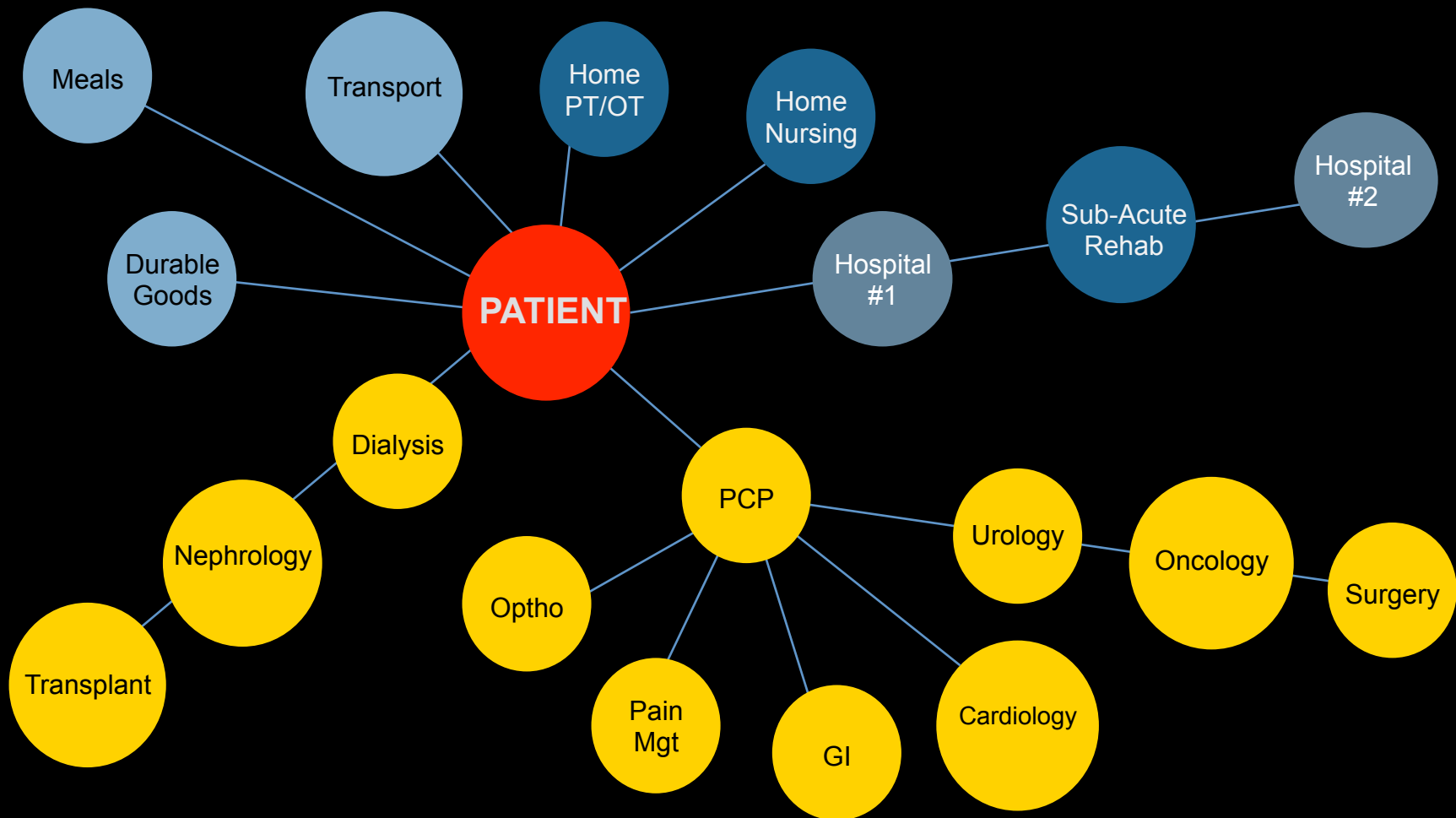
Research Article

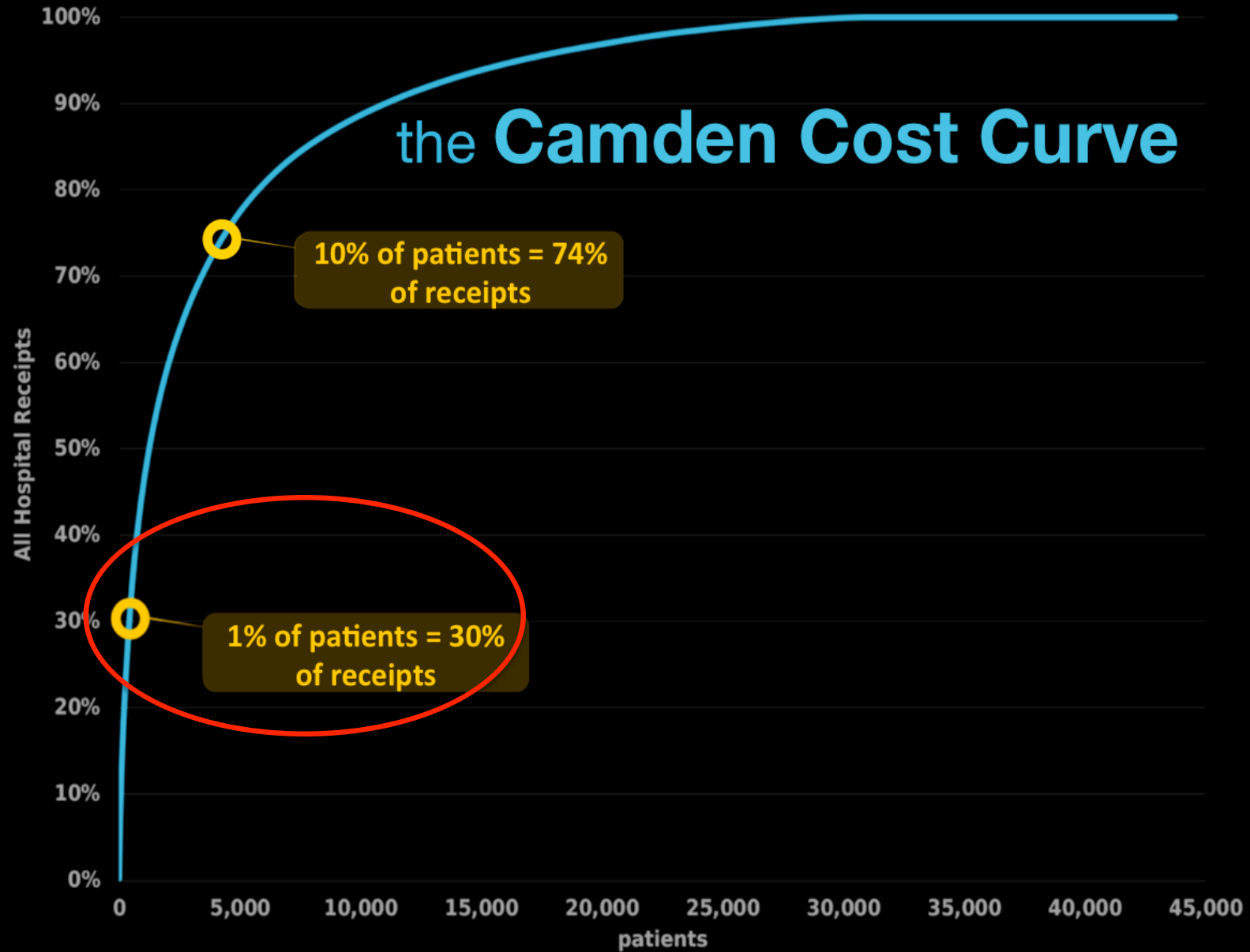
Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults

The Adverse Childhood Experiences (ACE) Study

Vincent J. Felitti, MD, FACP, Robert F. Anda, MD, MS, Dale Nordenberg, MD, David F. Williamson, MS, PhD, Alison M. Spitz, MS, MPH, Valerie Edwards, BA, Mary P. Koss, PhD, James S. Marks, MD, MPH

What are the problems we're trying to solve?



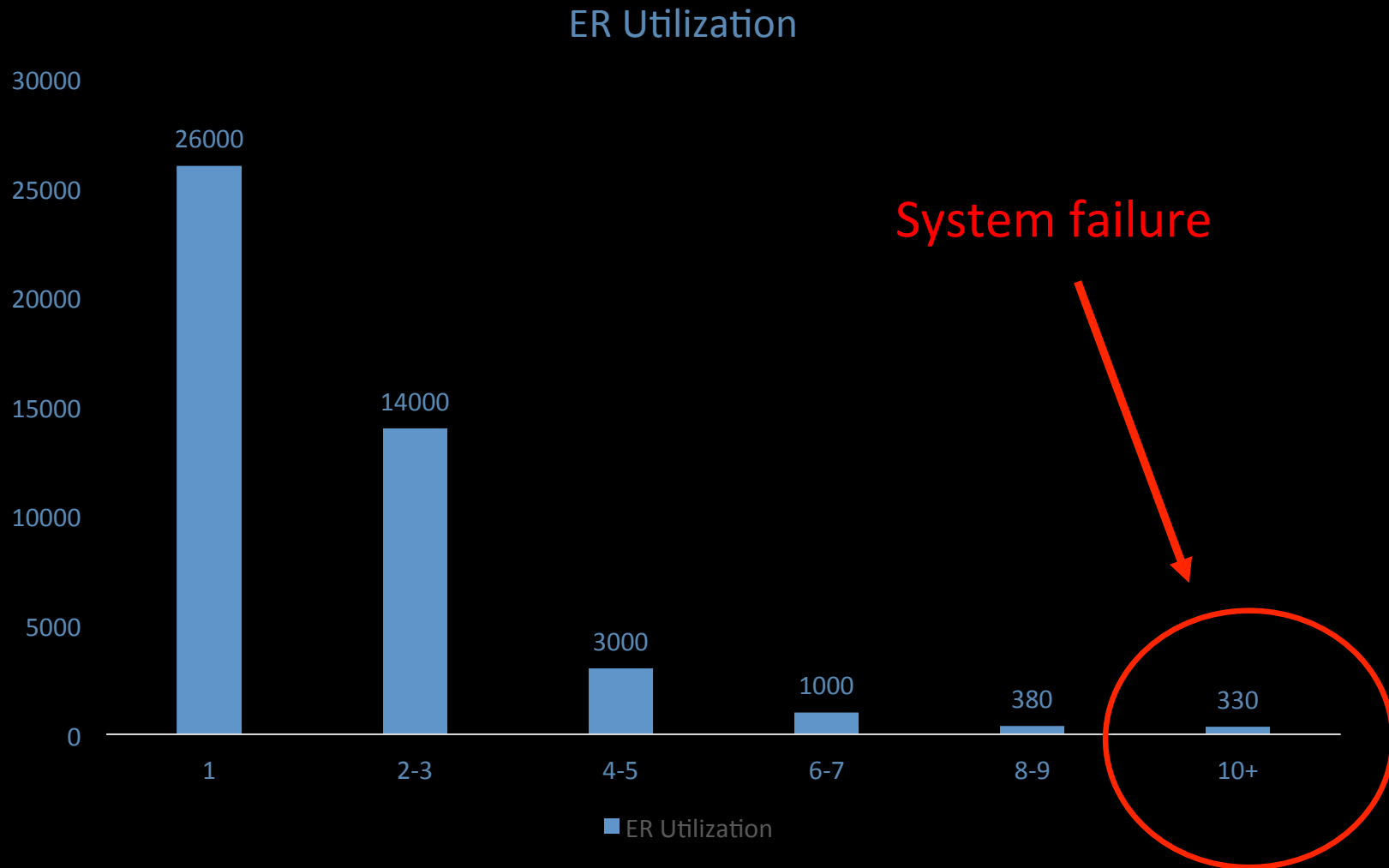


Primary prevention

Secondary prevention

Tertiary prevention

Pareto curve

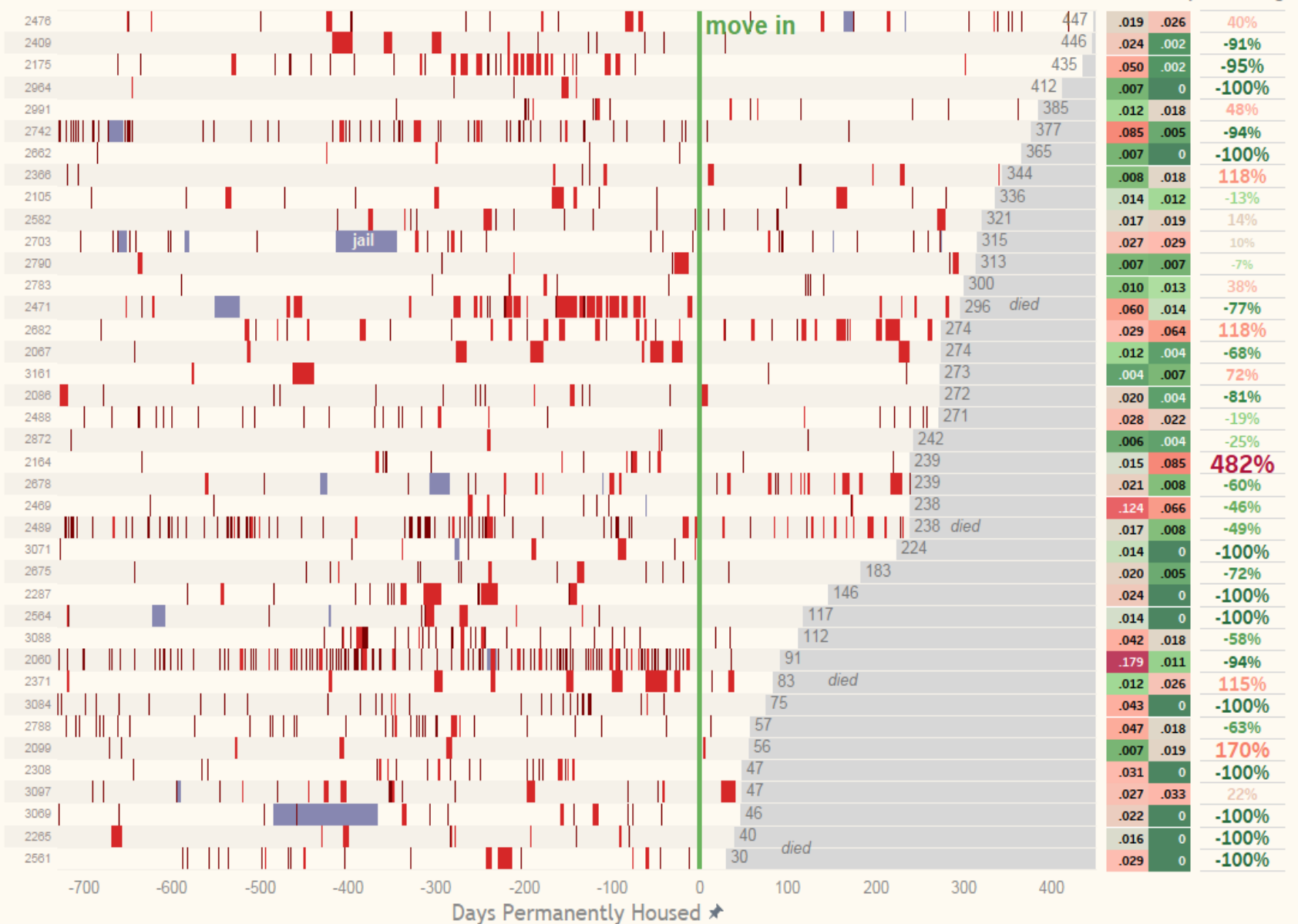


Healthcare hotspotting is the strategic use of data to target evidence-based services to complex patients with high utilization.

These patients are experiencing a mismatch between their needs and the services available.



Inpatient & Emergency Visits per Patient-Day for the 1st 39 Housing First Clients Reduced by 50%



Methodology: To adjust for variation between clients and varied pre & post-move-in periods, we compare hospital visit density. The "density" of hospital visits is the number of **inpatient** and **emergency** visits divided by the number of days on which clients were at risk for a hospital visit. While a patient is **admitted** they cannot have a second admission, so each length of stay is subtracted from the total days at risk. Patients are at risk of multiple **emergency** visits on a given day, so these are not subtracted. Empirically prisoners going to the hospital only do so on 1/100 day incarcerated do 99% of **jail days** are also subtracted from days at risk. *This preliminary analysis cannot attribute cause for improvement to the housing first intervention. We have yet to adjust for regression to the mean, housing quality, or other drivers of change.*

First Level Solutions

- Engagement
- Navigation
- Coordination
- Accompaniment



Second Level Solutions

- Data analysis
- Health information exchange
- Coalition-building
- Payment/legal reform
- Community engagement



Third Level Solutions

- 7 day pledge campaign
- Primary care office engagement
- Patient incentives
- Daily feeds to offices

Fourth Level Solutions

- Harm reduction
- Motivational interviewing
- COACH
- Trauma-informed care
- PhD Psychologist in house

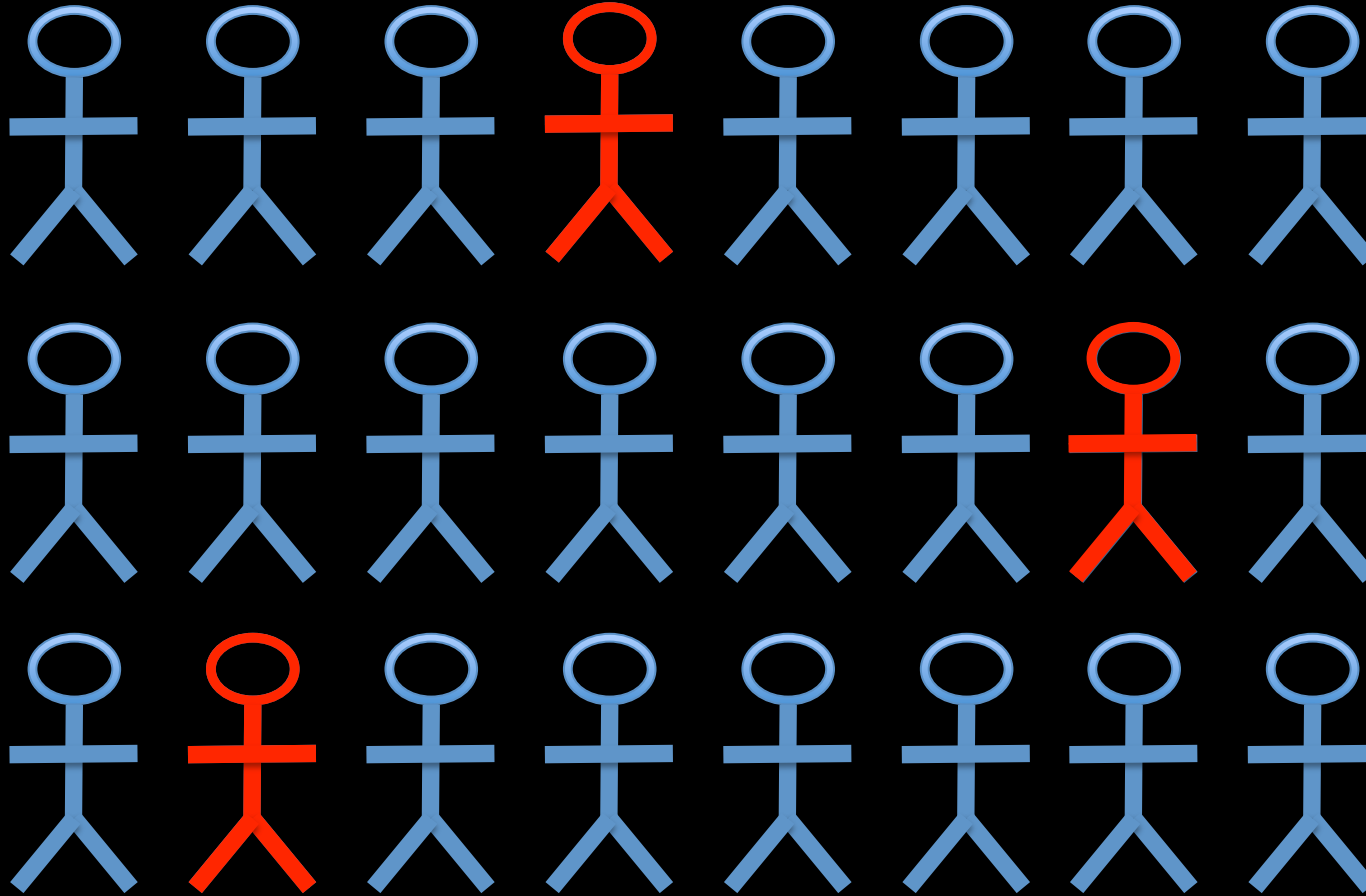


Fifth Level Solutions

- Core values
- Strategic planning
- Dashboards
- Quality improvement cycles
- Staff training
- Wellness benefits



Extreme responders



Extreme Complexity

Medical

- Diabetes
- Kidney failure
- Heart failure
- Pain syndromes
- Age

Addiction

- Cocaine
- Heroin
- Alcohol
- Prescription medication

Mental Health

- Schizophrenia
- Borderline personality disorder
- Bipolar disorder
- Factitious disorder

Social

- Homeless
- Hungry
- Unemployed/disabled
- Isolated
- No transportation
- Criminal record

Our Response to Extreme Complexity

Medical

- Inaccessible and overcrowded
- 15 minute visits
- Incorrect diagnosis
- Unaware of trauma informed care
- Insufficient training in pain, addiction, and mental health
- Inpatient and specialty focused

Addiction

- Sobriety and 12 step focused
- Inaccessible and inpatient oriented
- Uncomfortable with mental health
- Not trauma informed
- Sometimes opposed to medication assisted treatment

Mental Health

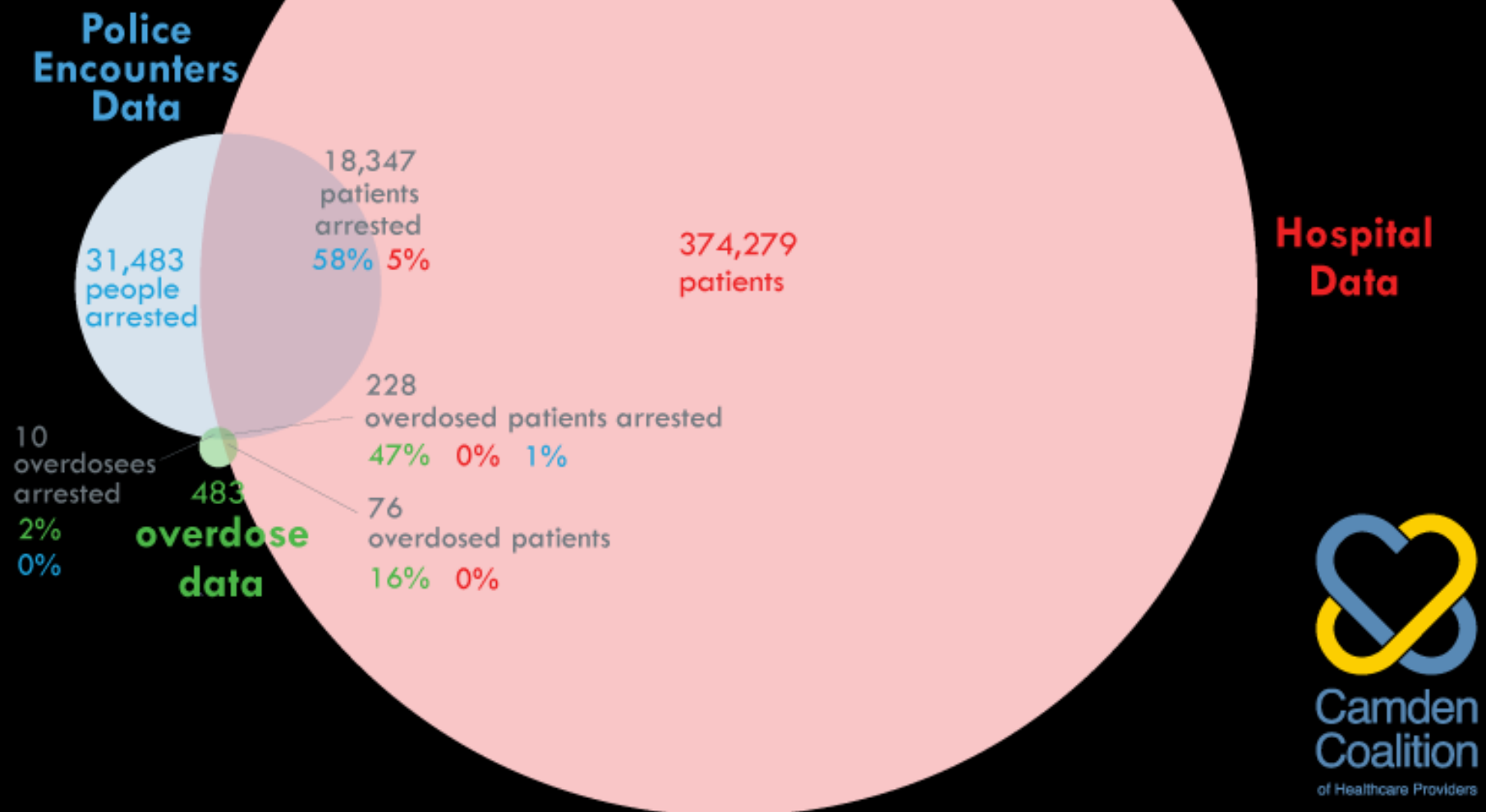
- Incorrect diagnosis
- Medication focused
- Inaccessible
- Uncomfortable with addiction
- Not trauma informed
- Too hierarchical and disability oriented

Social

- Inaccessible
- Long wait times
- Complicated
- Non existent
- Late
- Not evidence based

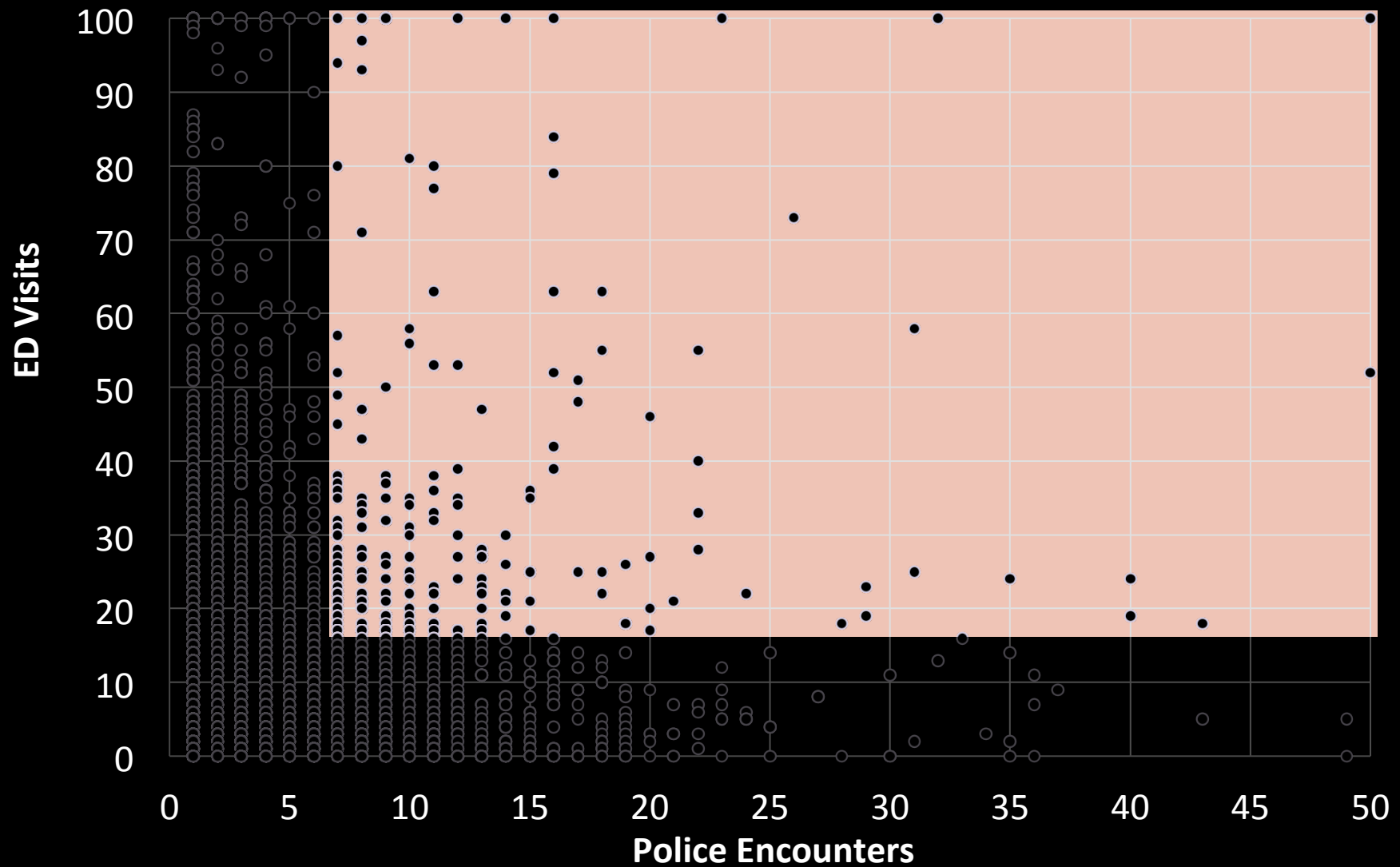


Overlapping Populations



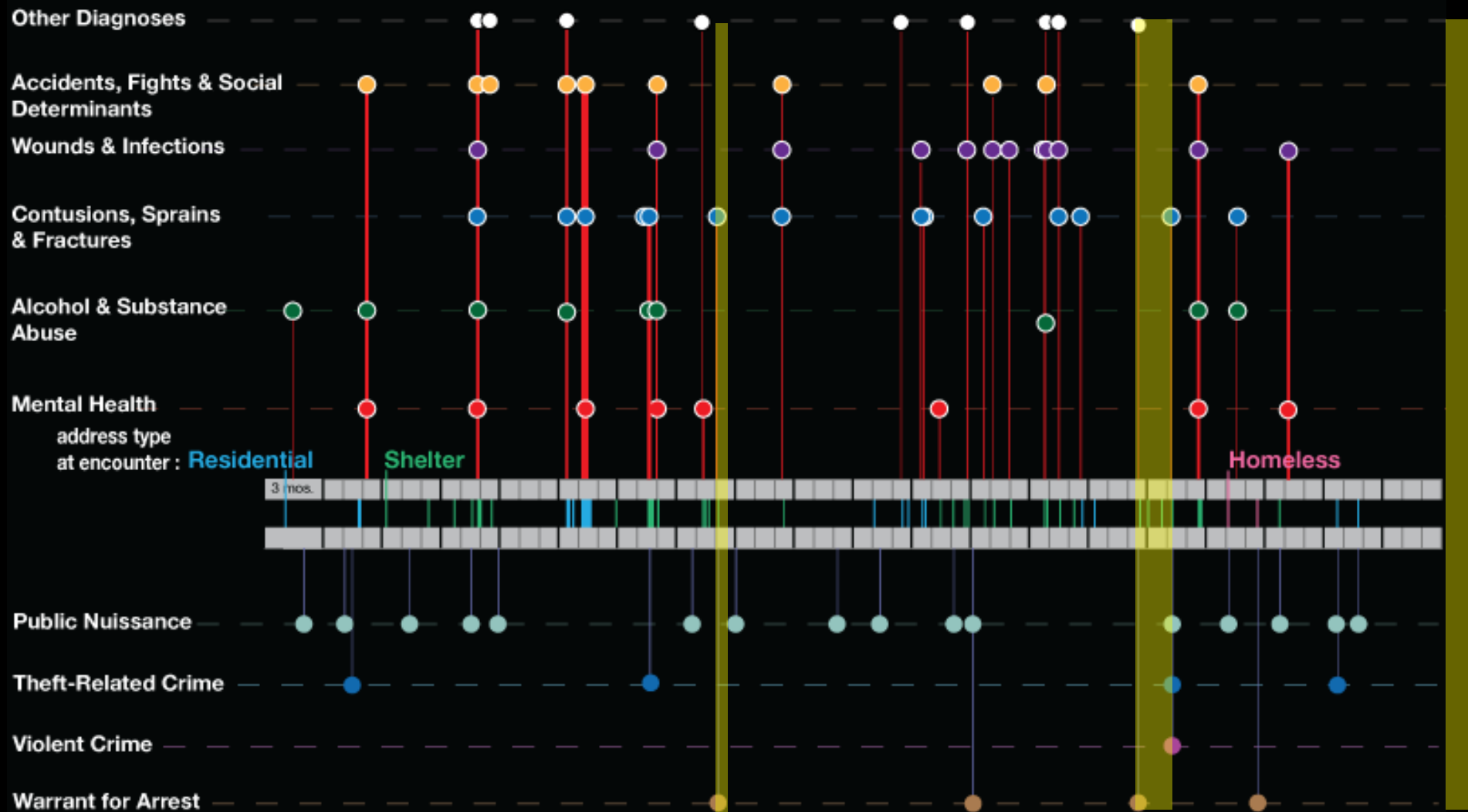
226 Dual-System High Utilizers

(16+ ED visits & 7+ police encounters over five years).

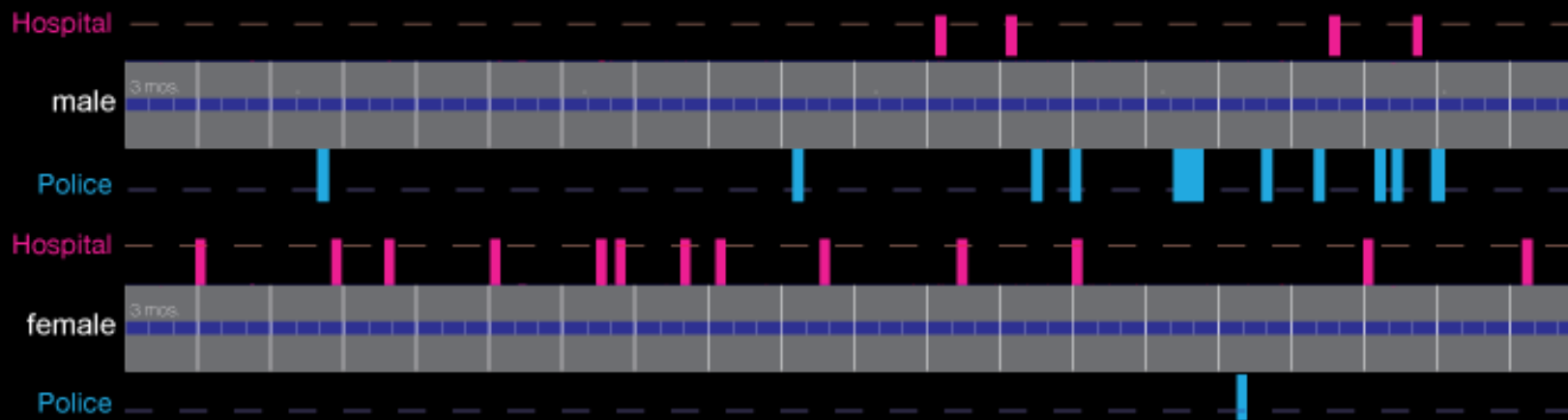


Emergency Department Visit (narrow)

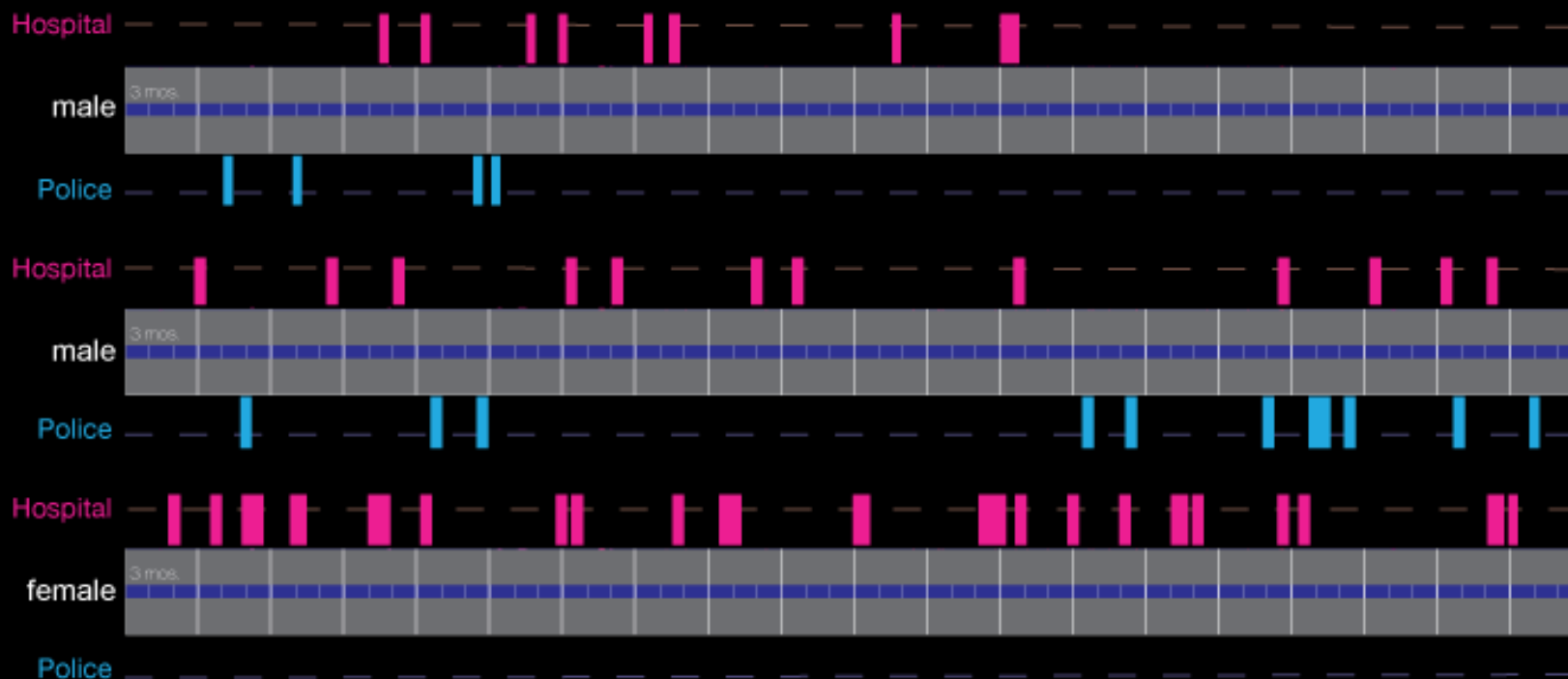
Inpatient Visit (wide)



30-45 year old



17-26 year olds





The National Center
for Complex Health and Social Needs

Save The Date: National Center Conference
Putting Care at the Center
November 15 - 17, 2017
Los Angeles, CA