

Camden ARISE

*Integrated Data Unlocks Key Insights
into Vulnerable Populations*



Camden
Coalition



With generous support
from:



Camden, NJ



"Abe" hospital use history 2010-2014

Emergency Department Visit (narrow)

Inpatient Visit (wide)

Other Diagnoses

Accidents, Fights & Social Determinants

Wounds & Infections

Contusions, Sprains & Fractures

Alcohol & Substance Abuse

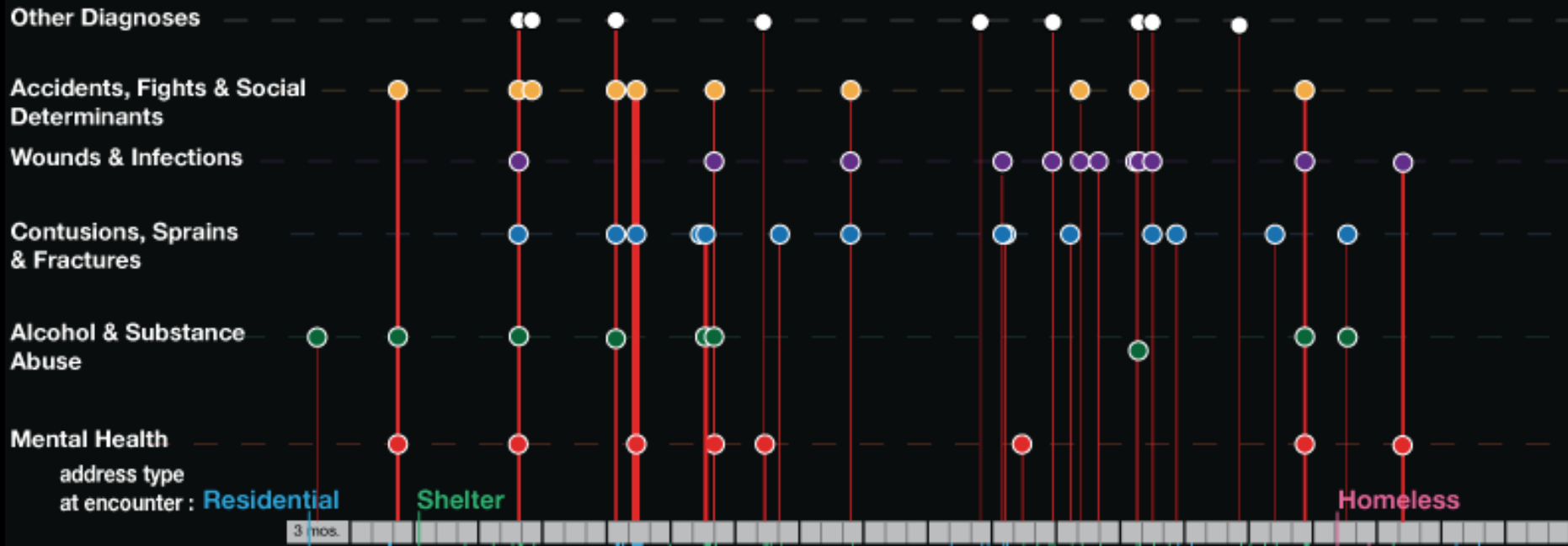
Mental Health

address type at encounter : Residential

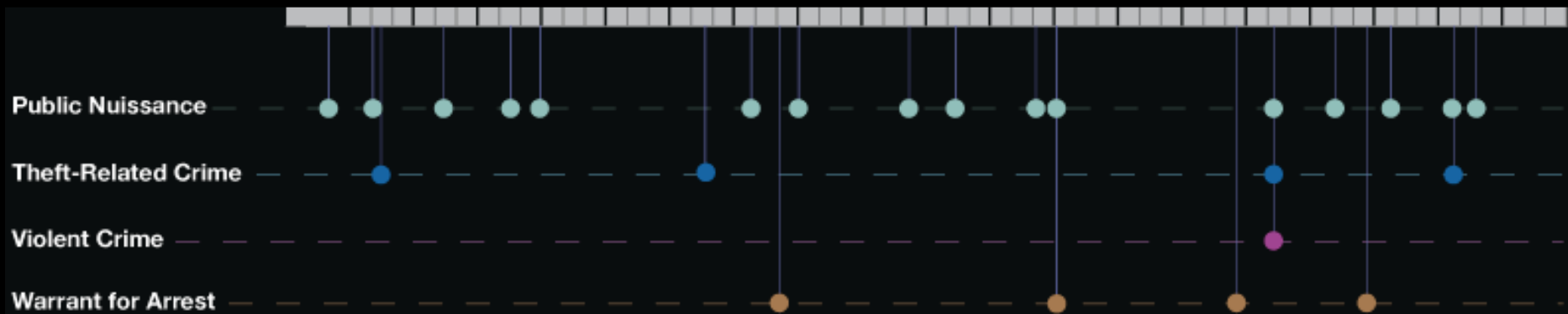
Shelter

Homeless

3 mos.



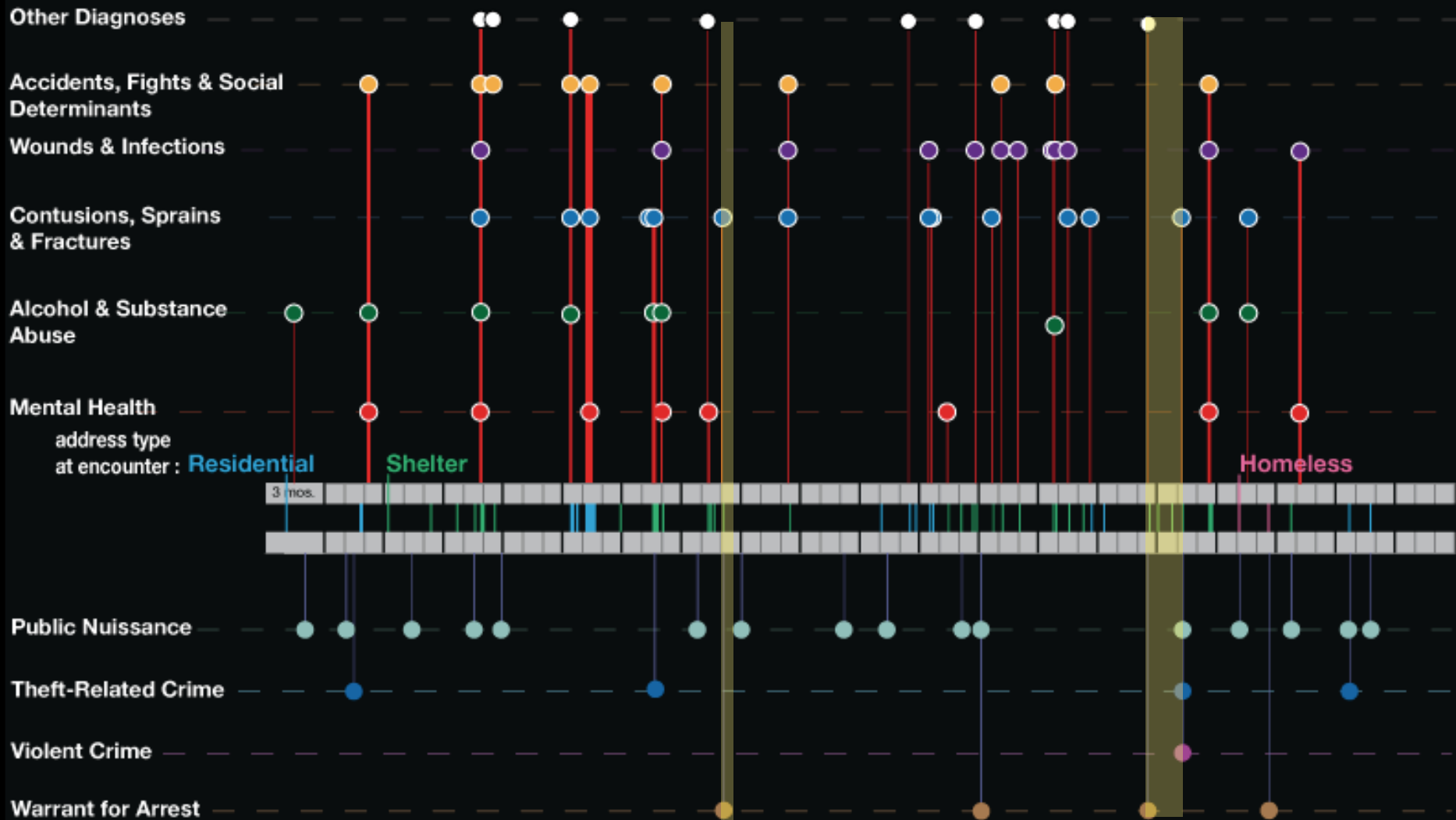
"Abe" arrest history, 2010-2014



"Abe" cross-system journey, 2010-2014

Emergency Department Visit (narrow)

Inpatient Visit (wide)



Jail Stays



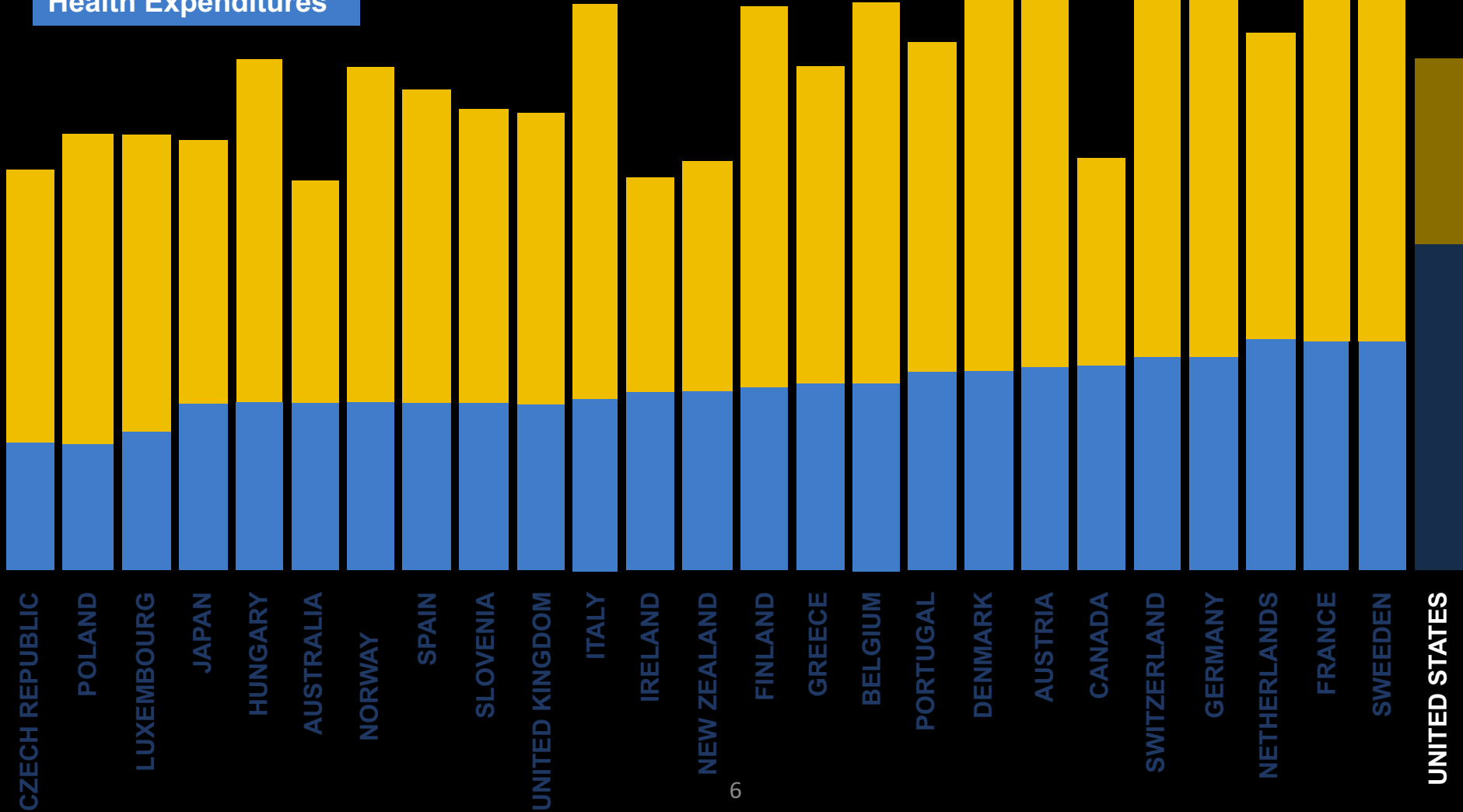
Countries ranked by amount spent on health expenditures

2009 United States spends the most (out of top 26 countries)

Source: American Healthcare Paradox

Social Expenditures

Health Expenditures



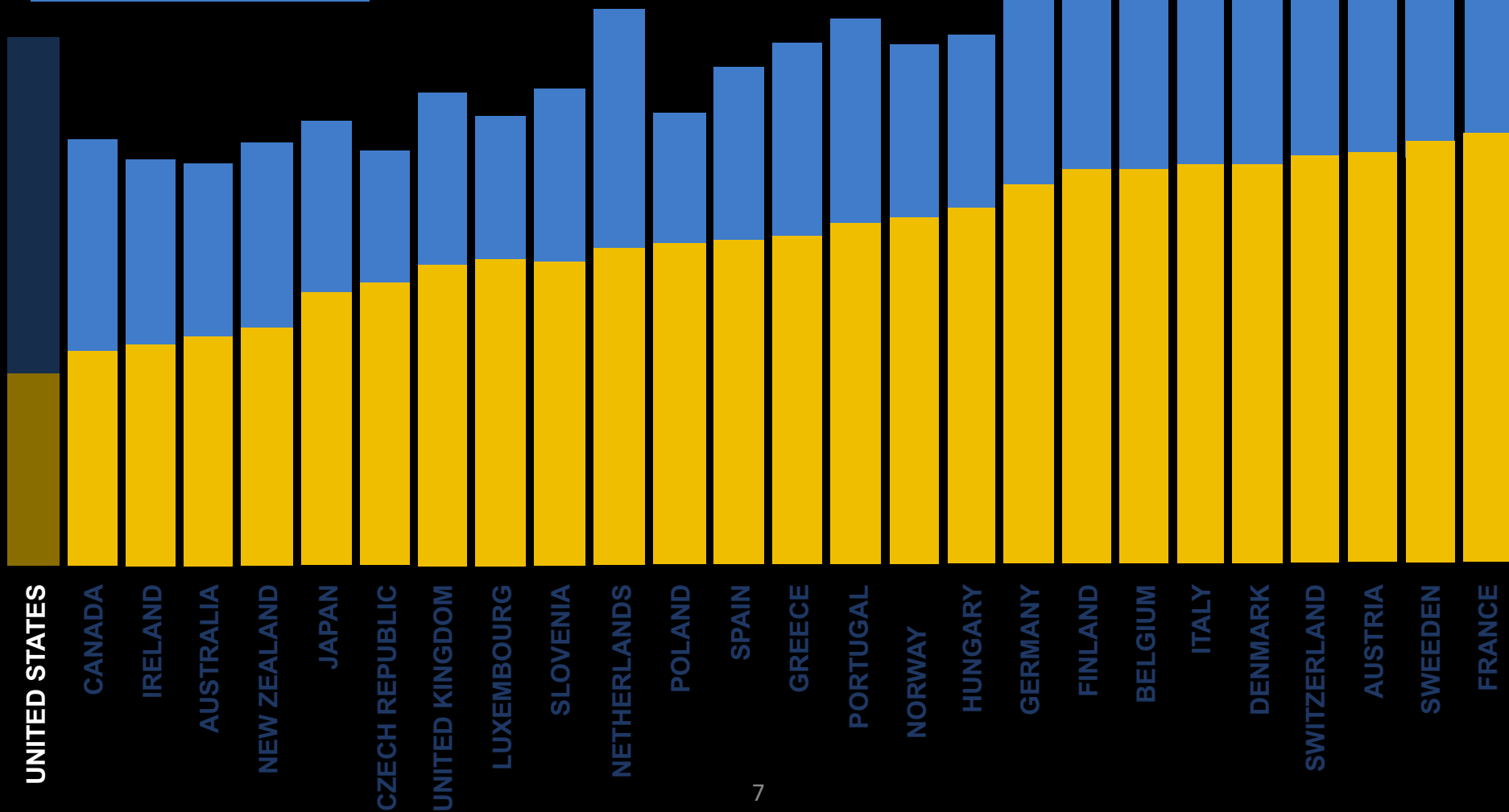
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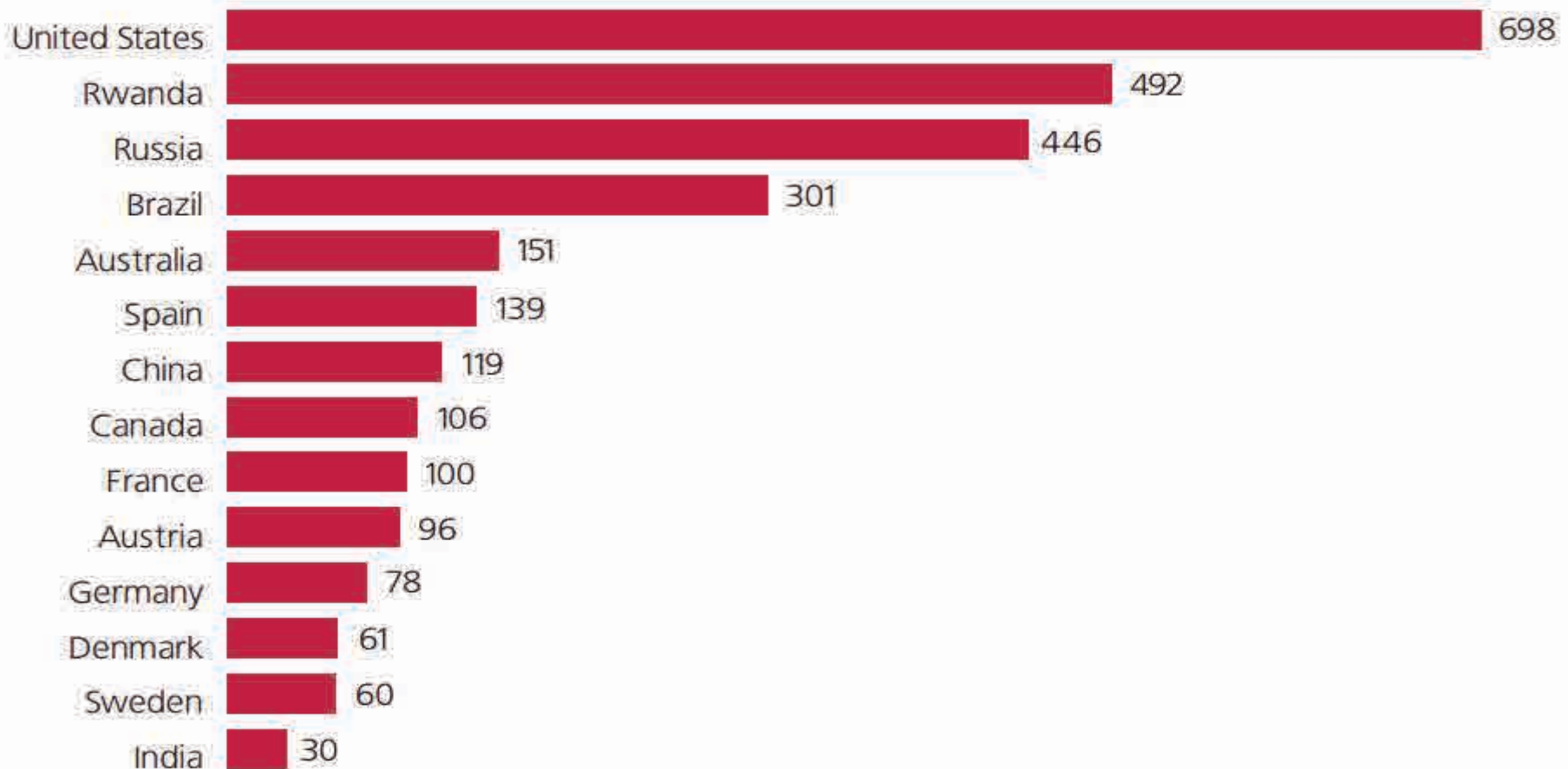
Social Expenditures

Health Expenditures



Is there a comparable American criminal justice paradox?

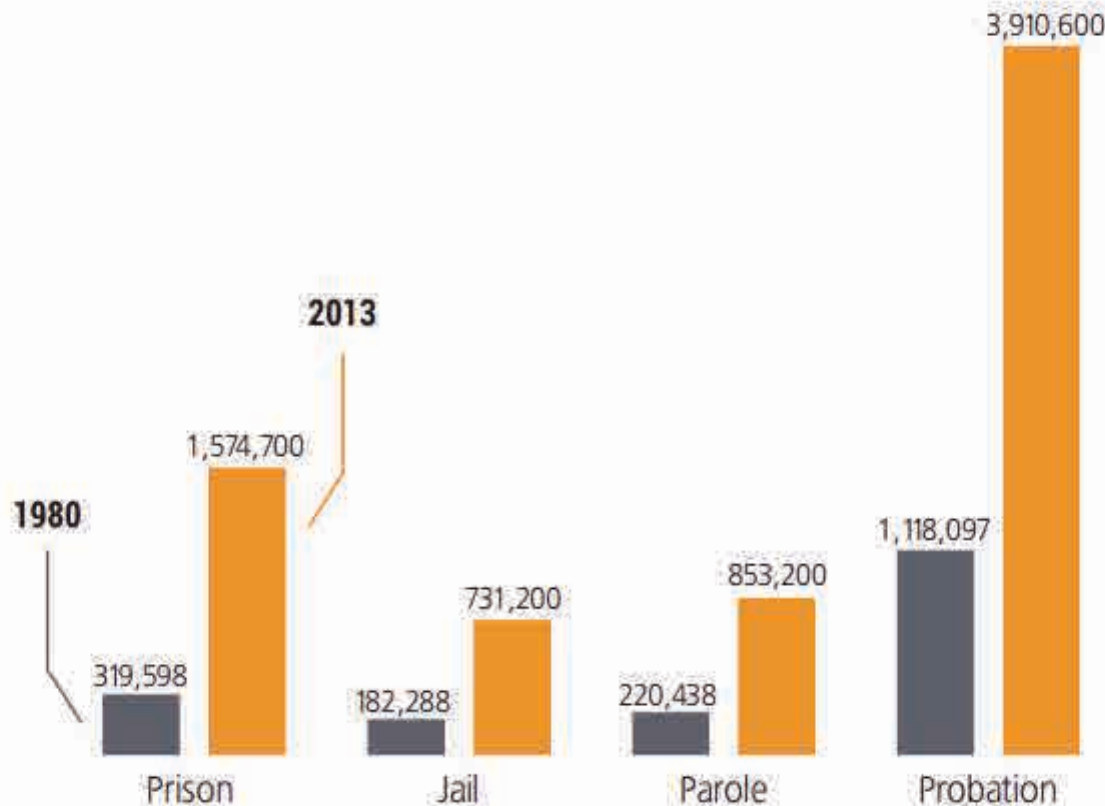
International Rates of Incarceration per 100,000



Source: Walmsley, R. (2015). World Prison Brief. London: Institute for Criminal Policy Research. Available online: <http://www.prisonstudies.org/world-prison-brief>

Over 1980-2013, the US population grew by 39%; the jail population grew by 300%

Population Under Control of the U.S. Corrections System, 1980 and 2013



Sources: Glaze, L. E. and Herberman, E.J. (2014). *Correctional Populations in the United States, 2013*. Washington, DC: Bureau of Justice Statistics; *Corrections: Key Facts at a Glance*. Washington, DC: Bureau of Justice Statistics.

The overwhelming majority had been arrested for “crimes of survival” such as retail theft (to find food or supplies) or breaking and entering (to find a place to sleep).

Washing

A shocking number of mentally ill Americans end up in prison instead of treatment

America's Jails and Prisons Have Become Cruel, Expensive Institutions for the Mentally and Physically Disabled

Inmates in prisons and jails are three to four times more likely than average to report having a disability, new report finds.

C.J. Ciaramella | Jul. 19, 2016 2:45 pm

NEW CASA® REPORT FINDS: 65% OF ALL U.S. INMATES MEET MEDICAL CRITERIA FOR SUBSTANCE ABUSE ADDICTION, ONLY 11% RECEIVE ANY TREATMENT

NEW YORK, N.Y., FEBRUARY 26, 2010

tal Is a Jail

ers, officials are looking for

Hotspotting



“ Hotspotting is segmentation. It’s taking big data sets, [and] segmenting them into a strategy

so that you can target different pockets of need...

Hotspotting is making sure that people who are in need get their needs met... in a rigorous, data-driven way. ”

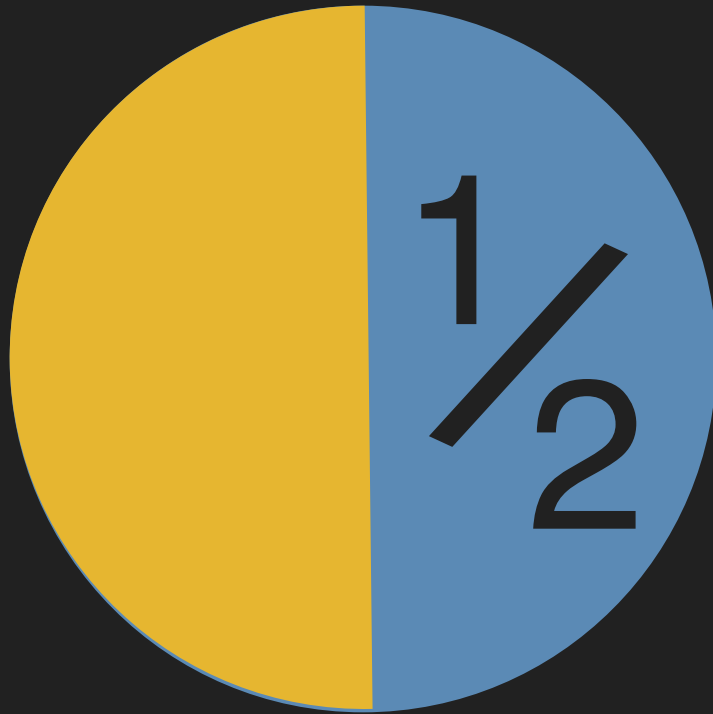
Dr. Jeffery Brenner,
family physician &
founder, Camden Coalition



Building a Citywide, All-Payer, Hospital Claims Database
to Improve Health Care Delivery
in a Low-Income, Urban Community

Kennen Gross, PhD, MPH¹, Jeffrey C. Brenner, MD¹, Aaron Truchil, MS¹,
Ernest M. Post, MD,² and Amy Henderson Riley, MA, CHES¹

Population Health
Management

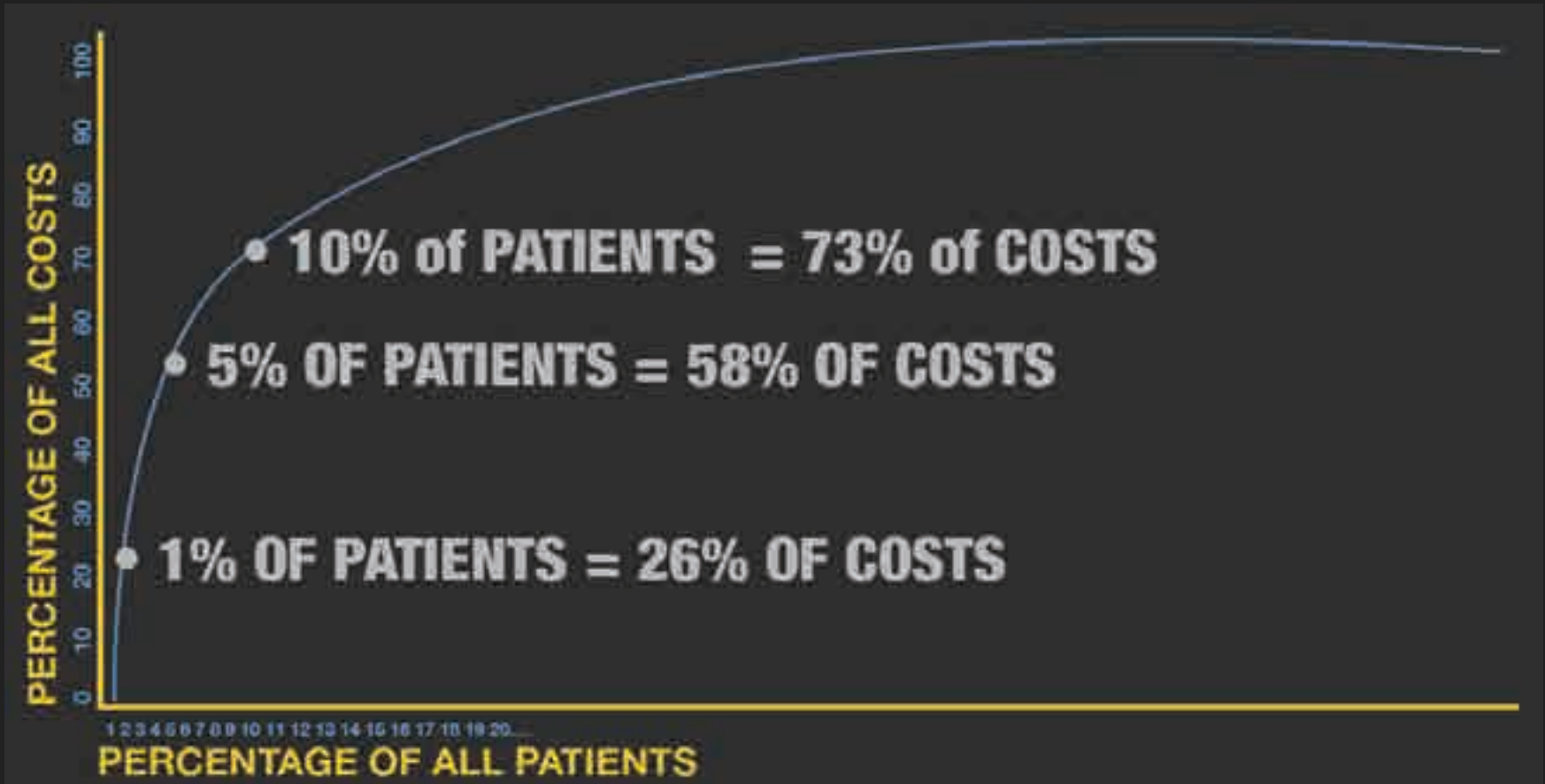


50%

*of population use the
ER/hospital in one year*

Camden Health Data

- **2002 – 2011 with Lourdes, Cooper, Virtua data**
- **500,000+ records with 98,000 patients**
- **50 % population use ER/hospital in one year**



Total revenue to hospitals for Camden residents \$100 million per year

- Most expensive patient \$3.5 million
- 30% costs = 1% patients
- 80% costs = 13% patients
- 90% costs = 20% patients



Spatial Analysis of Camden Hospital Costs



Several buildings (e.g.) annually generate \$1+ million in hospital costs.

6% of city blocks account for 18% of patients and 37% of receipts.

Receipts (deciles in dollars)

Red	\$1,000,000 - \$16,729,000
Dark Green	\$813,900 - \$1,000,000
Medium Green	\$559,900 - \$813,800
Light Green	\$397,900 - \$559,800
Very Light Green	\$290,800 - \$397,800
Lightest Green	\$206,200 - \$290,700
Yellow-Green	\$122,400 - \$206,100
Yellow	\$53,630 - \$122,300
Light Yellow	\$11,090 - \$53,620
White	\$421 - \$11,080
Grey	0
Black	No Visits



January 2002
– June 2008

Clinical Interventions

Bedside Engagement

Community-Based

Multi-disciplinary Care Management for Vulnerable Populations

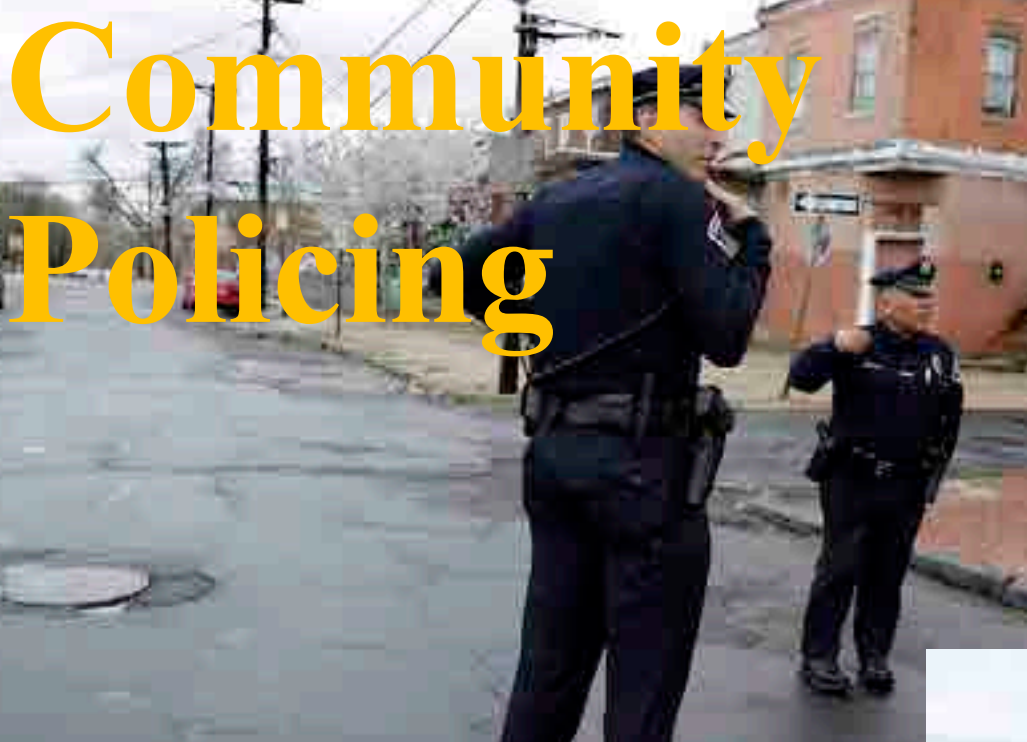


Building genuine, healing relationships



Accompaniment

Community Policing



Camden

af

There will be a...



Jeffrey Brenner



J. Scott Titman



Overlapping Populations

police
arrest data

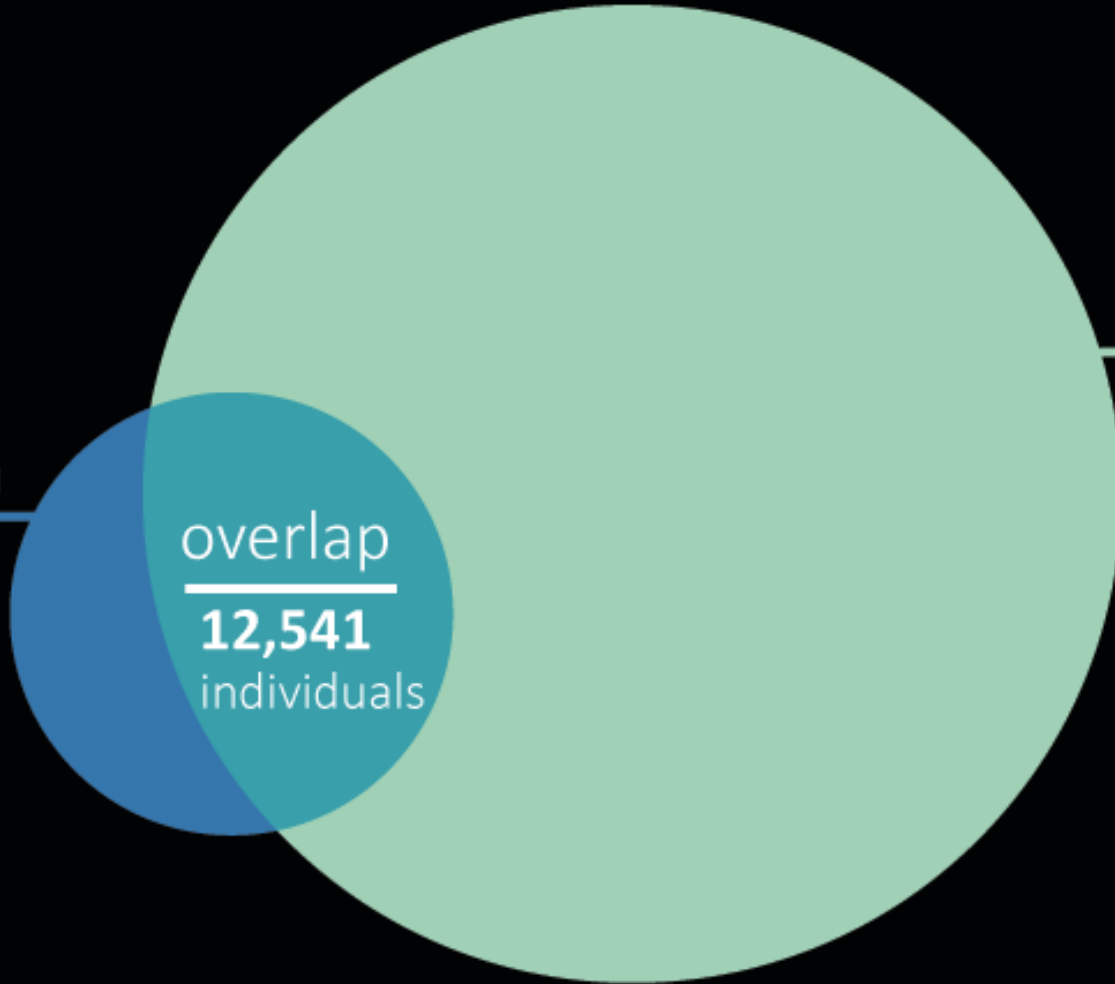
18,755
individuals

overlap

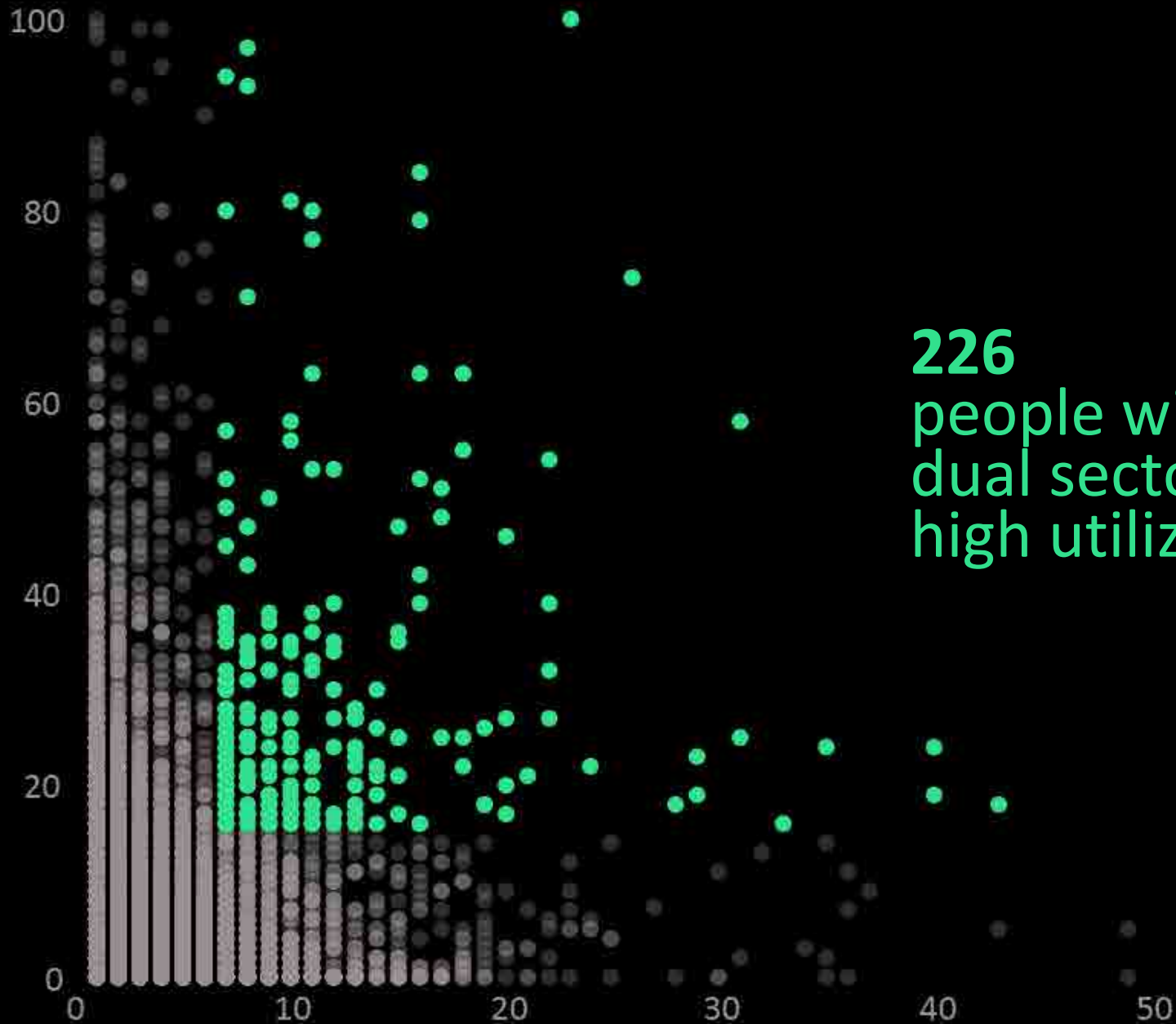
12,541
individuals

hospital
claims data

93,344
individuals



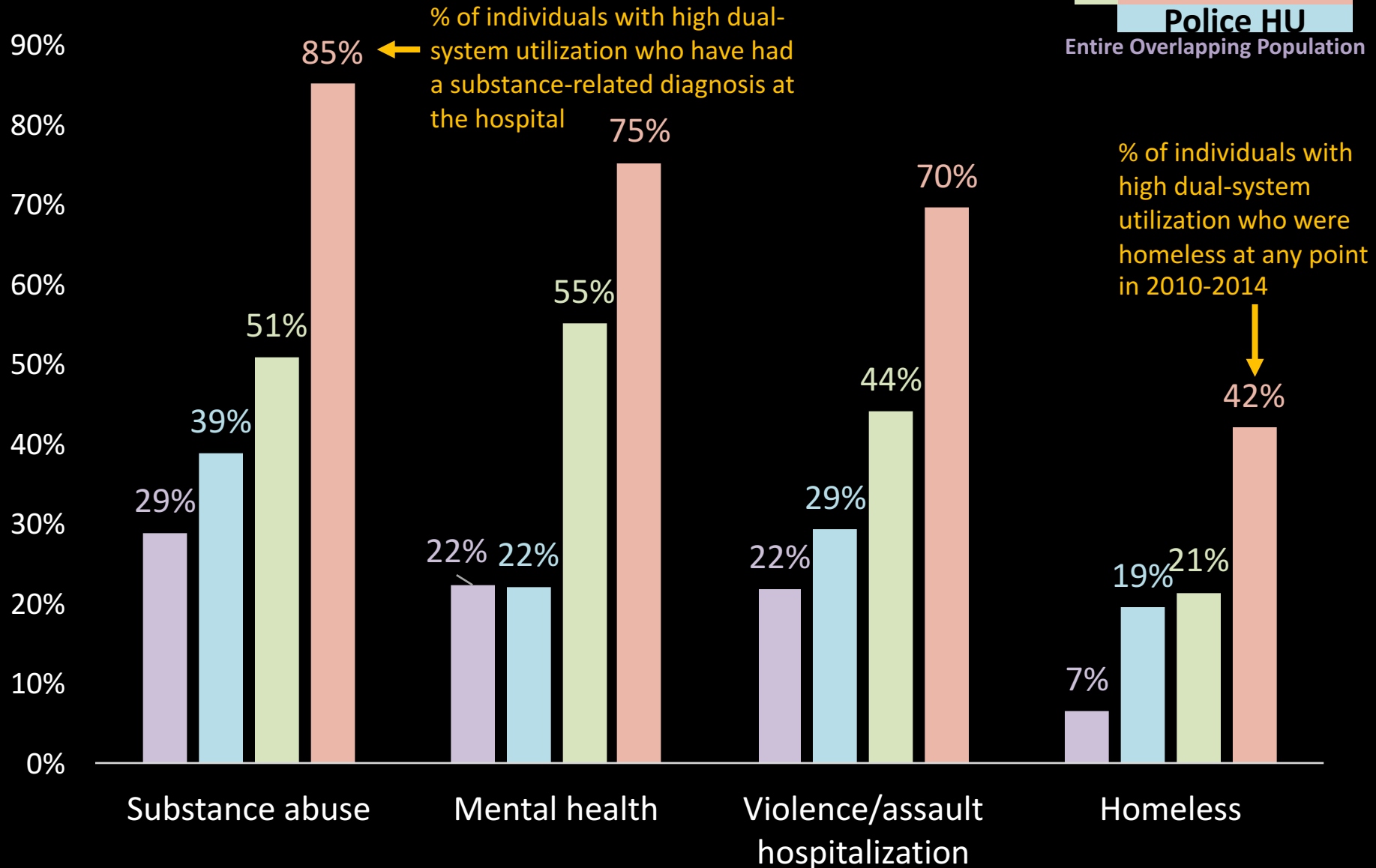
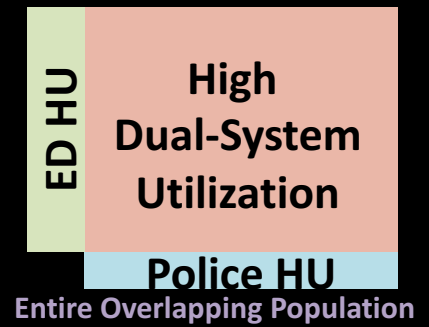
emergency department visits



226
people with
dual sector
high utilization

7+ police encounters

Socio-behavioral complexity



2010

2014



Police Overdose

Other Hospital or
Police Encounters

Overdose Victims Intercepted by the Camden County Police Department





Police Overdose

Hospital Overdose

Drug Charge

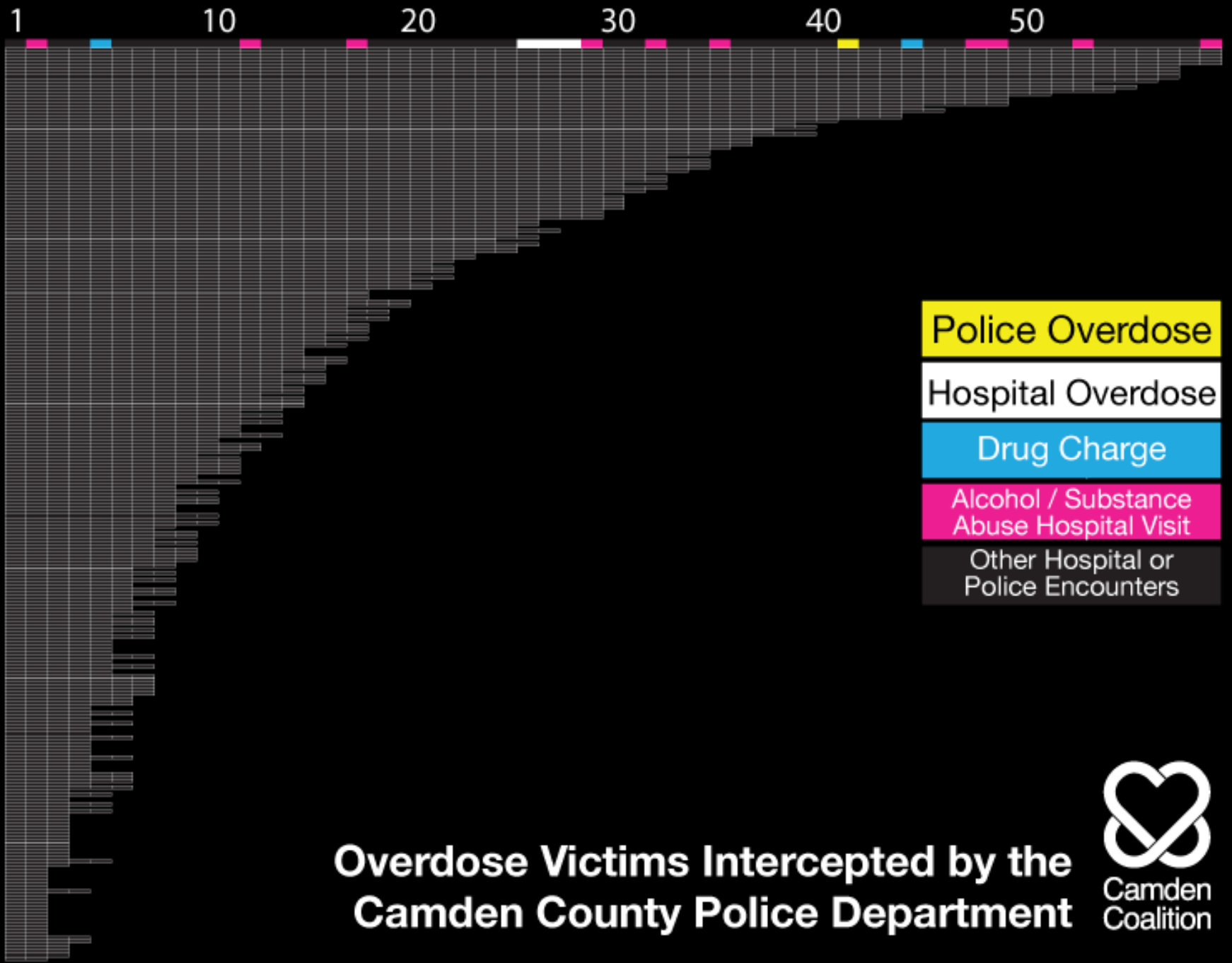
Alcohol / Substance Abuse Hospital Visit

Other Hospital or Police Encounters

Overdose Victims Intercepted by the Camden County Police Department

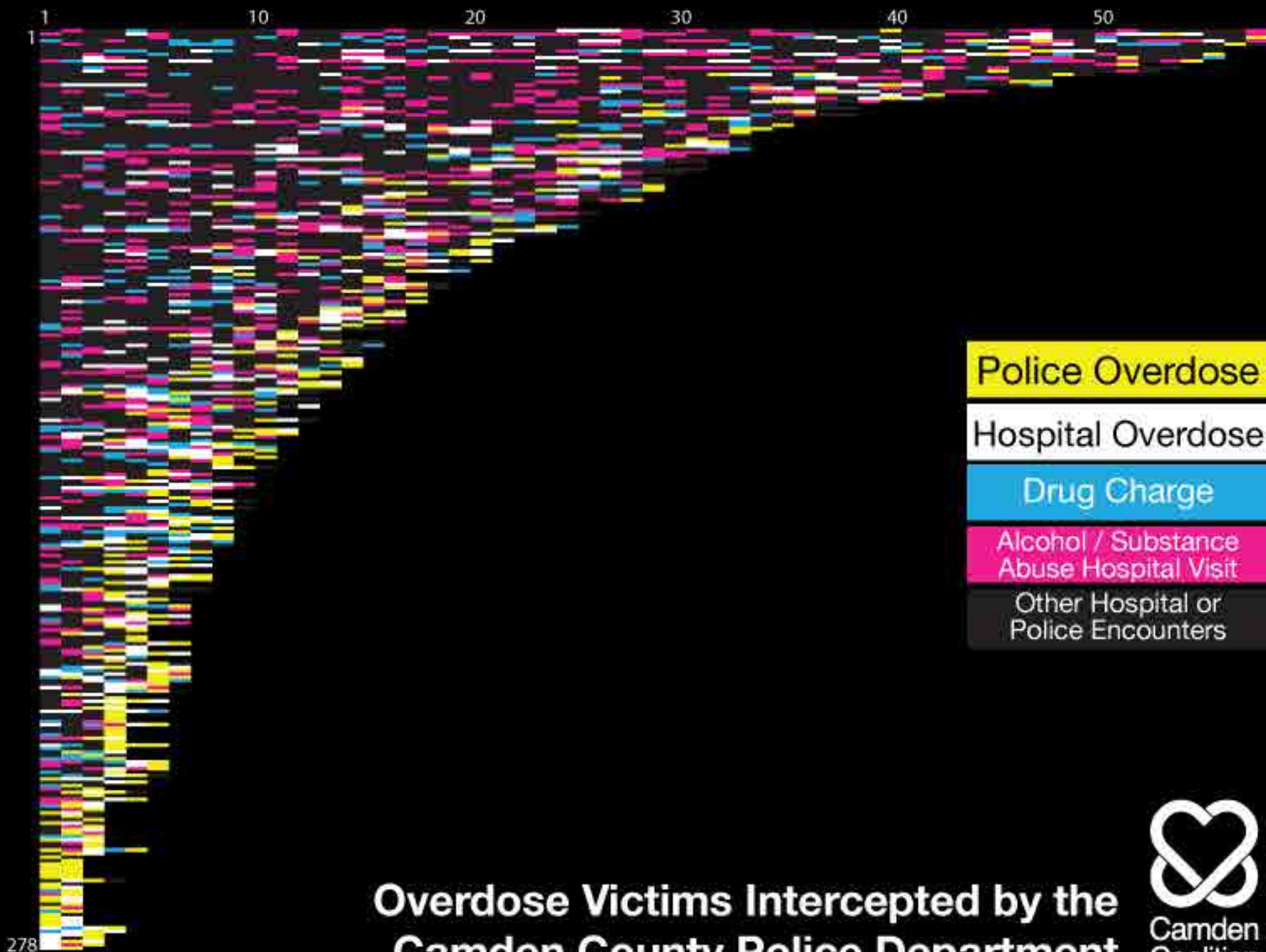


Camden Coalition



**Overdose Victims Intercepted by the
Camden County Police Department**





**Overdose Victims Intercepted by the
Camden County Police Department**



Next Steps in cross-sector collaboration

- Medication Assisted Treatment for Opioid Addiction
- Jail-Based Engagement/Medical Home
- Dr. Jen Wood (Temple University)
Police Screening and Diversion Tool
Development