



Accountable Community of Health Structures and Cross-Sector Coordination

Research In Progress Webinar

Wednesday, June 21, 2017

12:00-1:00pm ET/ 9:00-10:00am PT

Funded by the Robert Wood Johnson Foundation

Agenda

Welcome: Anna G. Hoover, PhD, Systems for Action Coordinating Center, and Assistant Professor, University of Kentucky College of Public Health

Accountable Community of Health Structures and Cross-Sector Coordination

Presenter: Eli Kern, MPH, Epidemiologist, Public Health - Seattle and King County eli.kern@kingcounty.gov

Commentary: JudyAnn Bigby, MD, Senior Fellow, Mathematica Policy Research, Systems for Action Research National Advisory Committee Member JBigby@mathematica-mpr.com

Elya Moore, PhD, Executive Director, Olympic Community of Health, Port Townsend, Washington elya@olympicch.org

Questions and Discussion

Presenter



Eli Kern, MPH

Epidemiologist

Assessment, Policy

Development & Evaluation Unit

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County

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Accountable Community of Health Structures and Cross-Sector Coordination

Final Report

Support for this report was provided by the Robert Wood Johnson Foundation (72456). The views expressed here do not necessarily reflect the views of the Foundation.



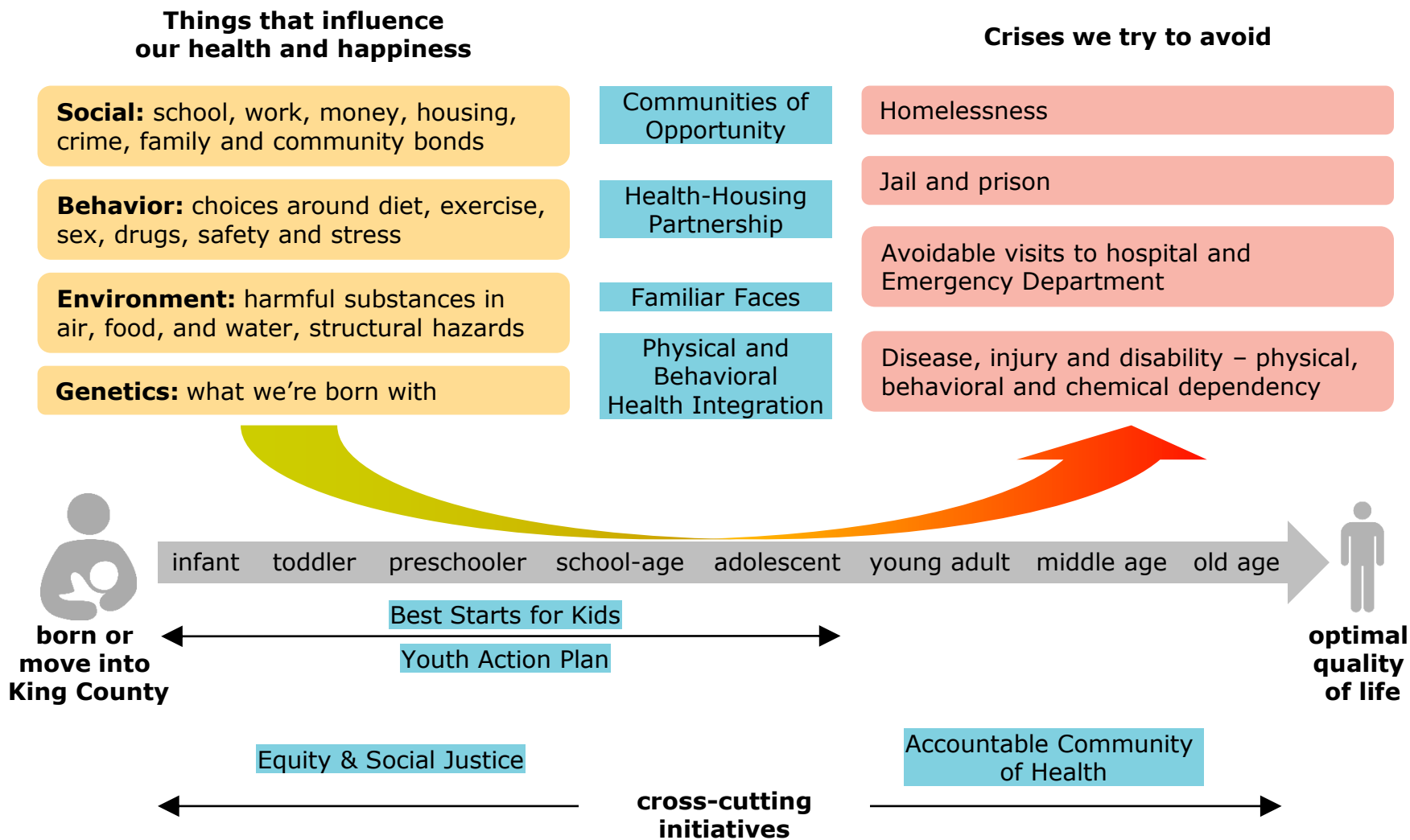
King County

Public Health – Seattle & King County

Department of Community & Human Services

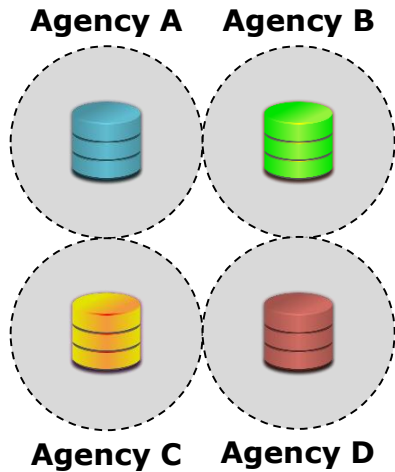
The Story

In King County, many initiatives work across sectors to improve health and well-being throughout the life course



Data fragmentation limits our collective ability to improve health & well-being

data fragmentation



data systems are program specific and largely do not talk with each other

impact on health & human services providers



Providers struggle to:

- Provide whole person care
- Avoid care gaps and overlaps
- Alert other providers to significant events
- See impact of social determinants of health
- Understand full context of health

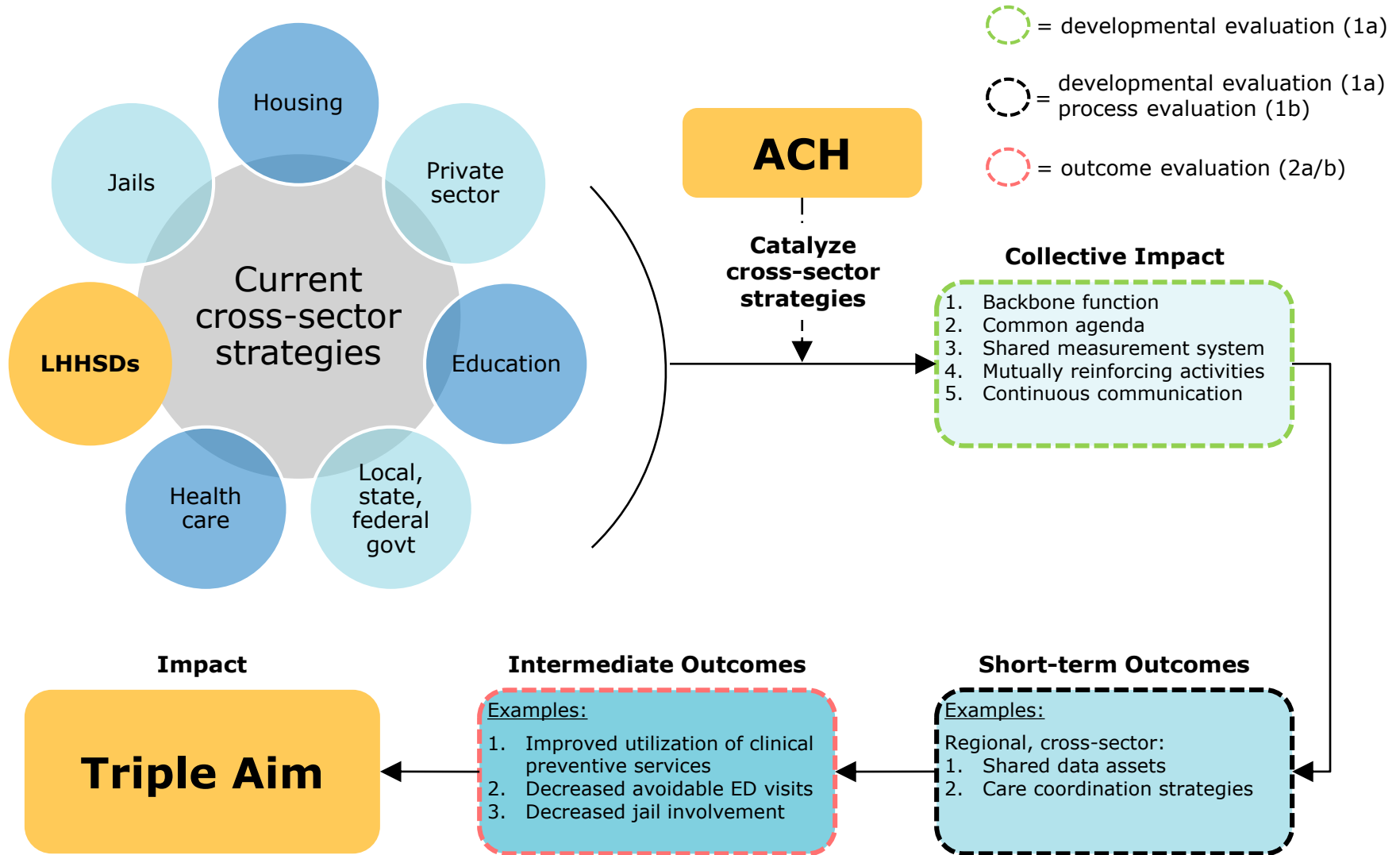
impact on analysts



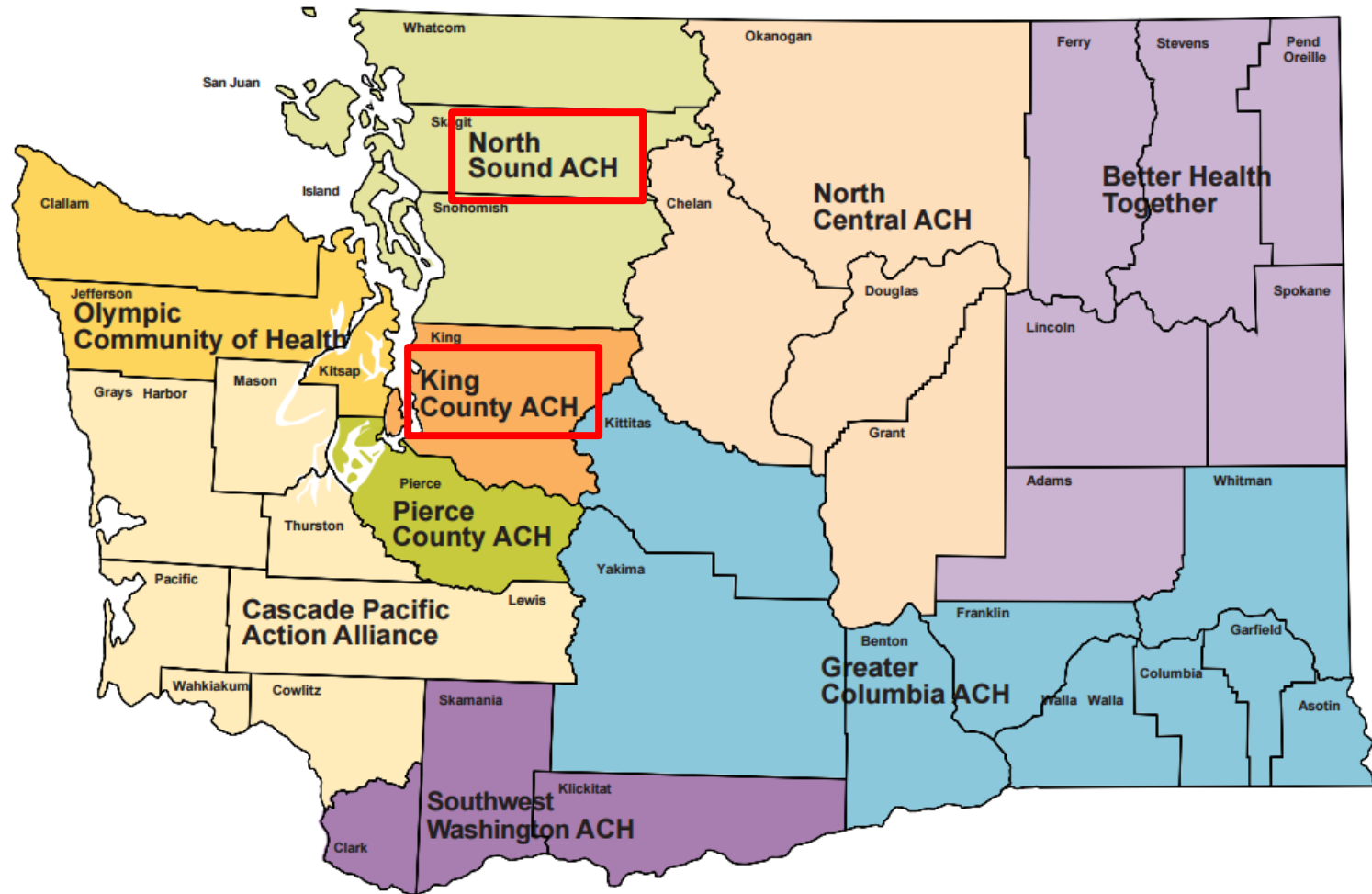
Population health analysts struggle to:

- Provide actionable and timely information
- Accurately identify disparities
- Measure meaningful progress
- Avoid duplication of work

Theory of change



Two of nine ACHs included in study



Our research questions

1

What factors support or inhibit local health & human services departments' (LHHSDs) ability to develop shared data?

2

Role of LHHSDs in building shared data through ACH context?

3

Is care coordination (King County - Familiar Faces, Whatcom County – Intensive Case Management) associated with better health care and jail outcomes?

Methods

LHHSDs building shared data in ACH context

- Primary and secondary data collection and analysis between June 2015 - July 2016
- Document review (n=60): ACH-related meetings on fiscal, legal and political environment, guiding principles, roles and responsibilities, regional health improvement priorities
- Participant observations (n=60): ACH-related meetings on developing cross sector relationships, governance and decision making, and building shared and linked data
- Shared learning sessions (n=54): Monthly meetings between study partners, quarterly regional convening, and bi-weekly project improvement huddles
- Systems mapping: Created multiple study visualizations to depict pre-ACH data sharing and options for future data sharing and linkage

Care coordination outcome evaluation

- Outcome evaluation of care coordination program in Whatcom County and continuity of care program in King County
- Whatcom County – Intensive Case Management System:
 - Retrospective cohort design with no comparison group
 - Outcomes: Pre/post change in ED visit and hospitalization rate (and associated charges)
 - 130 enrollees between Jan 2014 and Mar 2016
- King County – Jail Health Services Release Planning:
 - Difference in differences analysis comparing intervention group and propensity score matched comparison group
 - Outcomes: Pre/post change in jail bookings, jail days, ED visits, voluntary and involuntary hospitalizations for behavioral health (BH) concerns, outpatient BH service utilization, and time to 1st BH service post-release
 - 112 individuals who received intervention between Mar 2014 and Mar 2015, and 127 individuals in propensity score matched comparison group

ACHs, local health & human services departments, and the path towards improved data sharing, linkage and dissemination

ACHs embrace a population health perspective

History

King County ACH Performance Measurement Work Group established in June 2015 to meet data, information and evaluation needs of King County ACH

Value statement

- Providing the right people the right information at the right time can promote evidence-based decision making for health policy and programs
- By making available a current, fuller picture of health and well-being at the individual and community level, decision makers will be better able to both gauge and make progress towards our collective goals

Short-term goals

Improved data sharing

Improved data linkage

Improved data dissemination

Data to
action

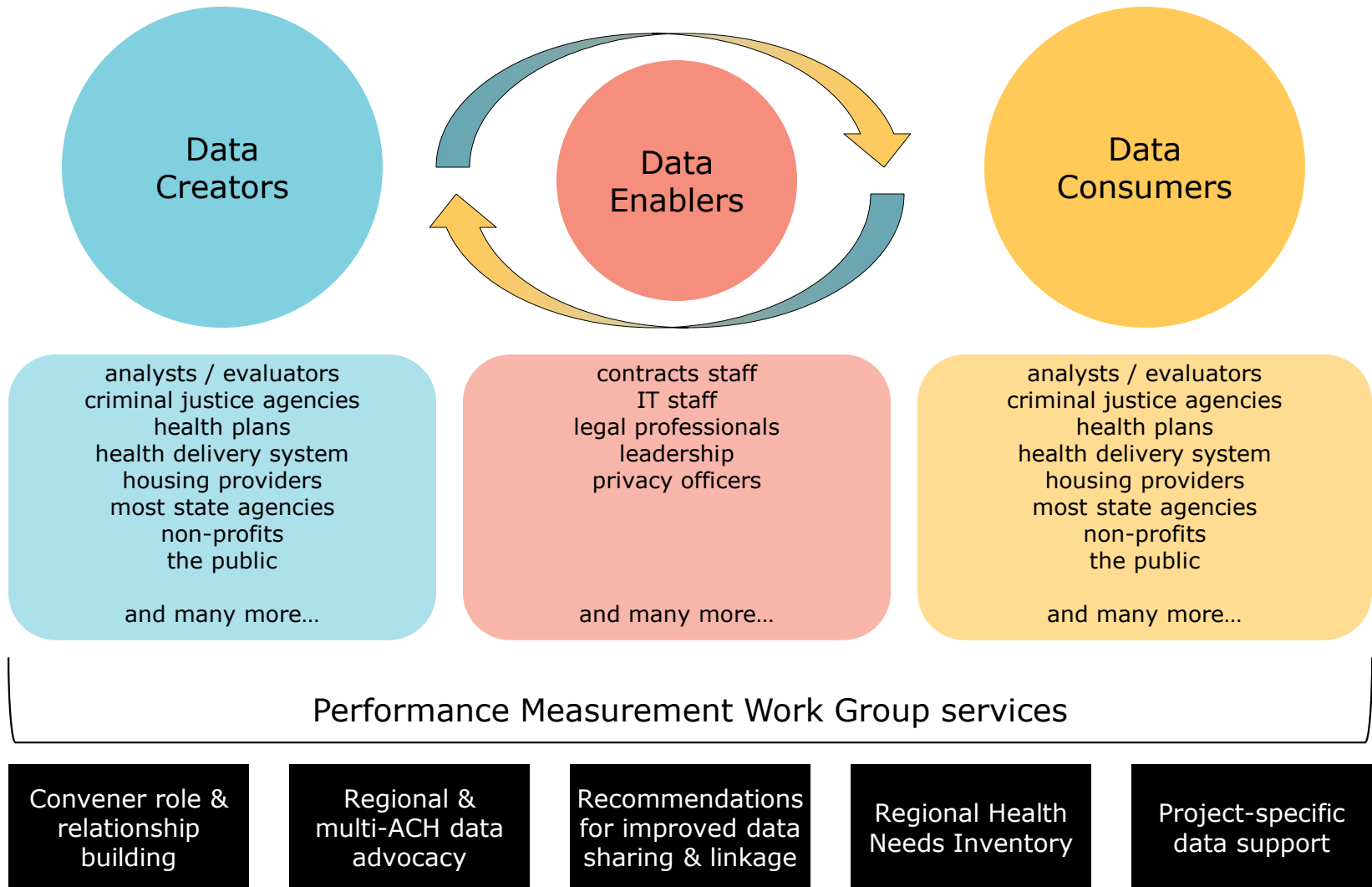
Long-term goals

Improved social determinants of health -
where we live, learn work and play

Triple Aim -
better health & care at lower costs

Equity & social justice

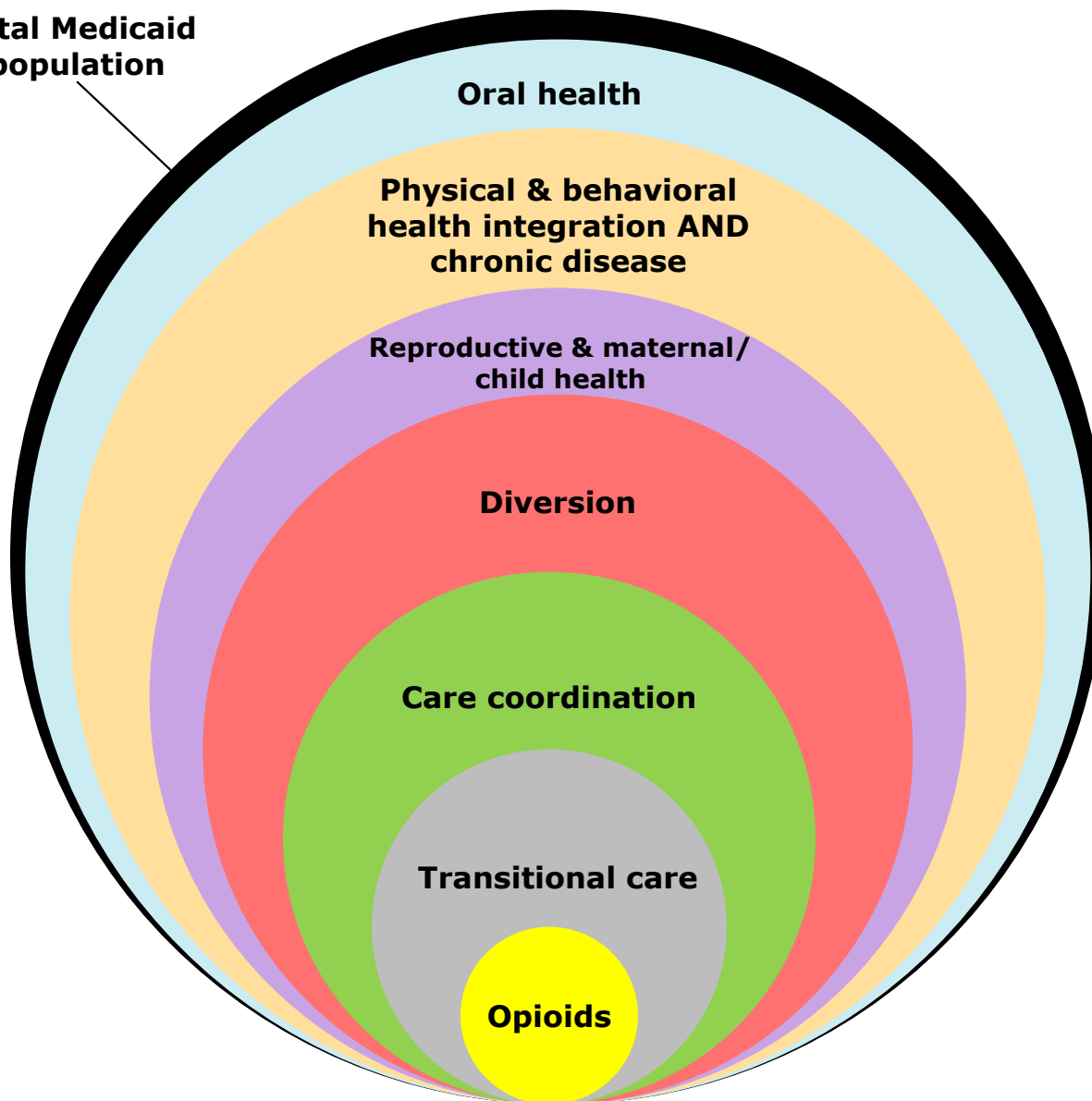
Multi-disciplinary approach to addressing data fragmentation



Data creators, enablers and consumers theme adapted from *Toward a Structure for Classifying a Data Ecosystem*, Seeder A., Smart Chicago, 2014, <http://www.smartchicagocollaborative.org/toward-a-structure-for-classifying-a-data-ecosystem/>

Medicaid transformation: Overlapping target populations and multiple data perspectives

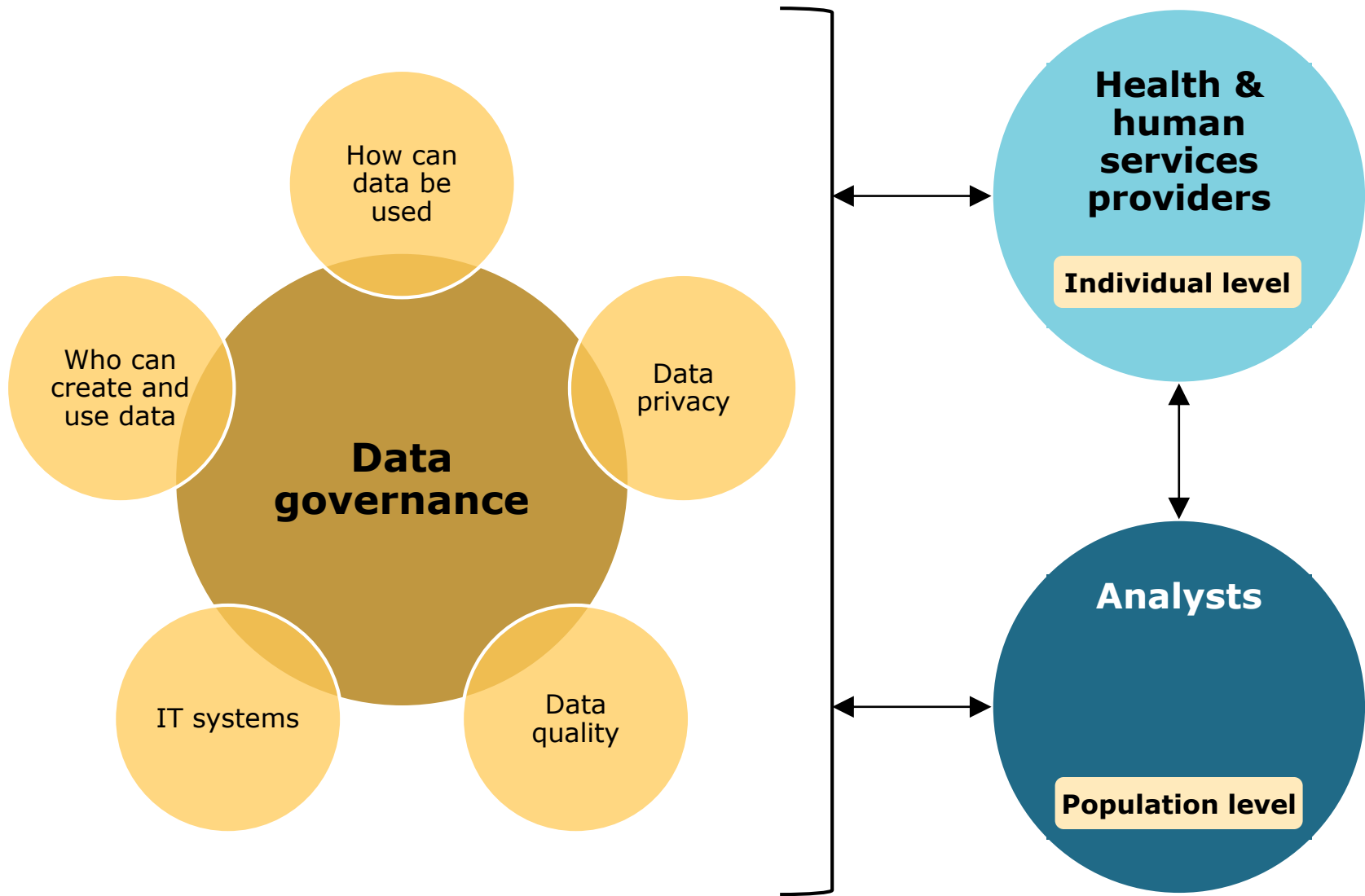
Total Medicaid population



Data perspectives include...

- Community members
- Community-based organizations
- Data privacy officers
- Health and human service providers
- Health insurance plans
- IT professionals
- Population health
- State health and human services agencies

Data governance is essential for data to action

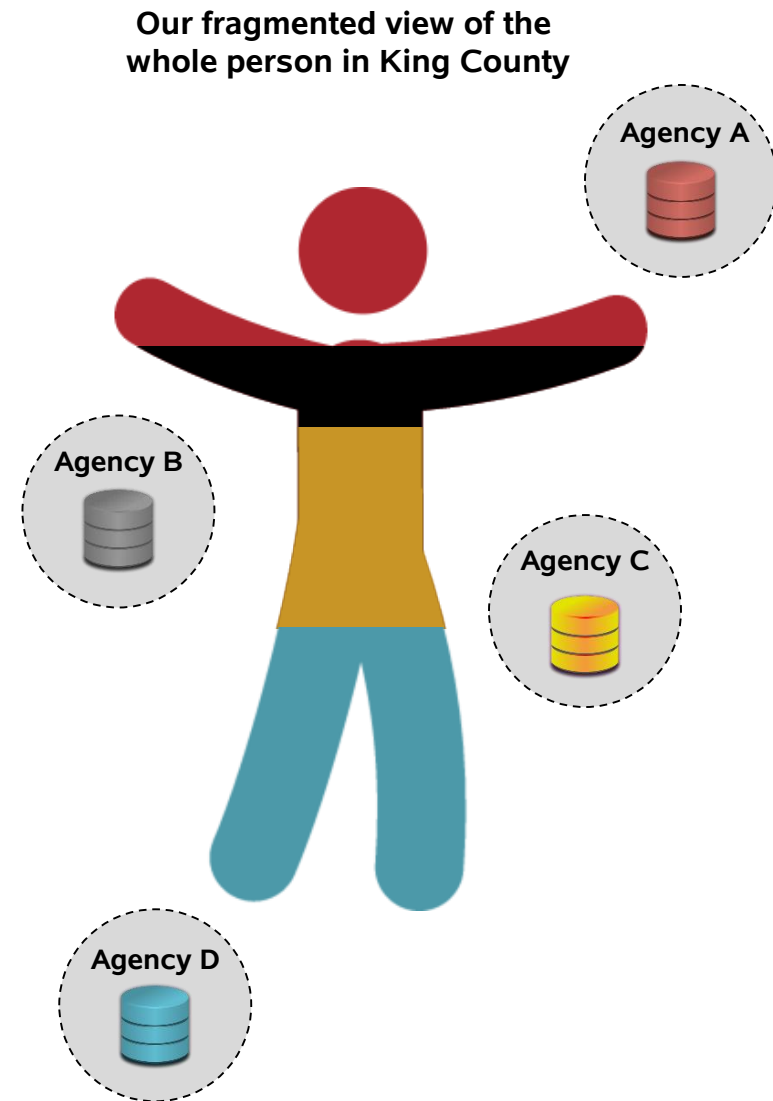


Adapted from Prashant, Kumar (2011). [An overview of architectures and techniques for integrated data systems implementation](#). Actionable Intelligence for Social Policy, University of Pennsylvania.

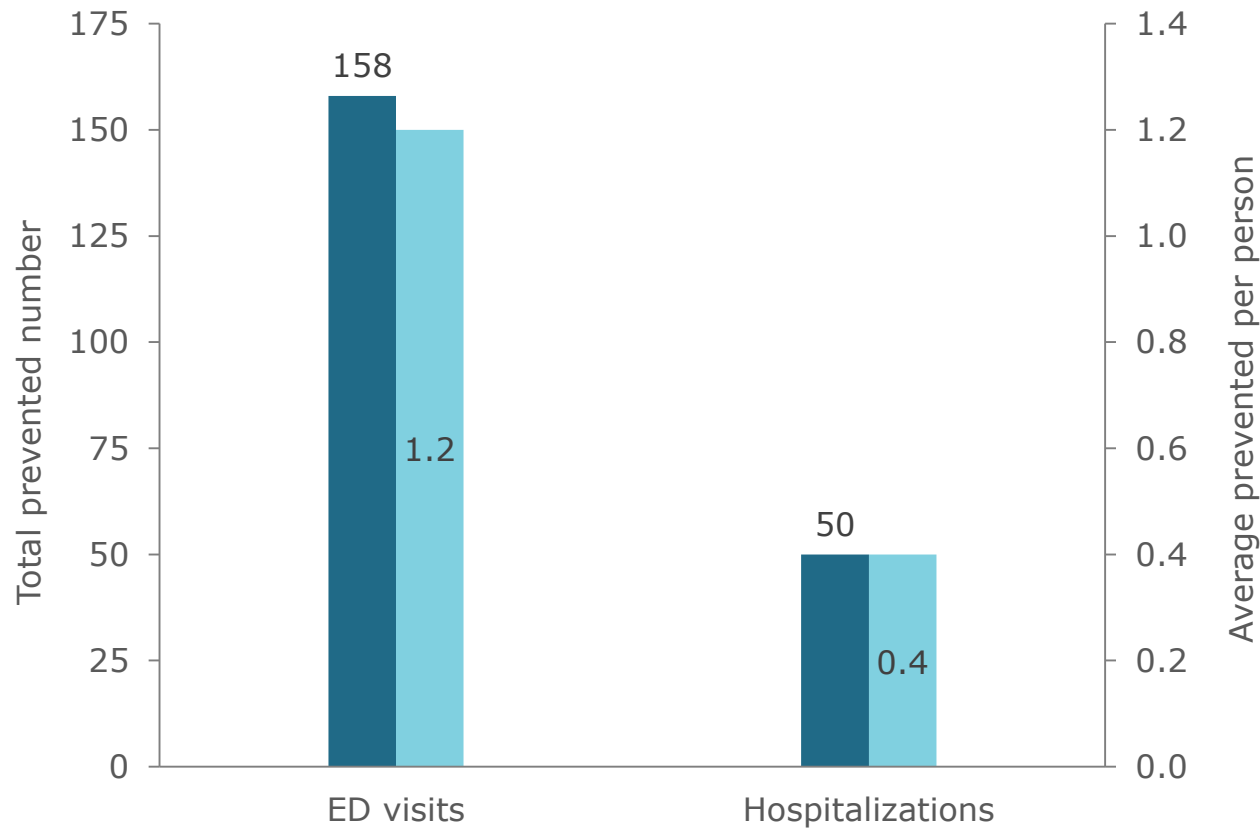
Data sharing and data linkage are essential components for supporting equity and social justice

How data fragmentation creates barriers for equity and social justice

- In an era of data fragmentation, data systems are program specific and largely do not talk with each other
- This forces us to depend on population-based surveys and vital statistics for much of our health information
- While some vital statistics are linked routinely (e.g. birth and hospitalization), many vital statistics databases and most survey databases are not allowed to be linked for routine public health assessment, monitoring and evaluation
- If all-payer claims were linked to electronic health data and human services data on all King County residents, this would create an environment in which we could better understand a fuller picture of individual and community health and identify disparities



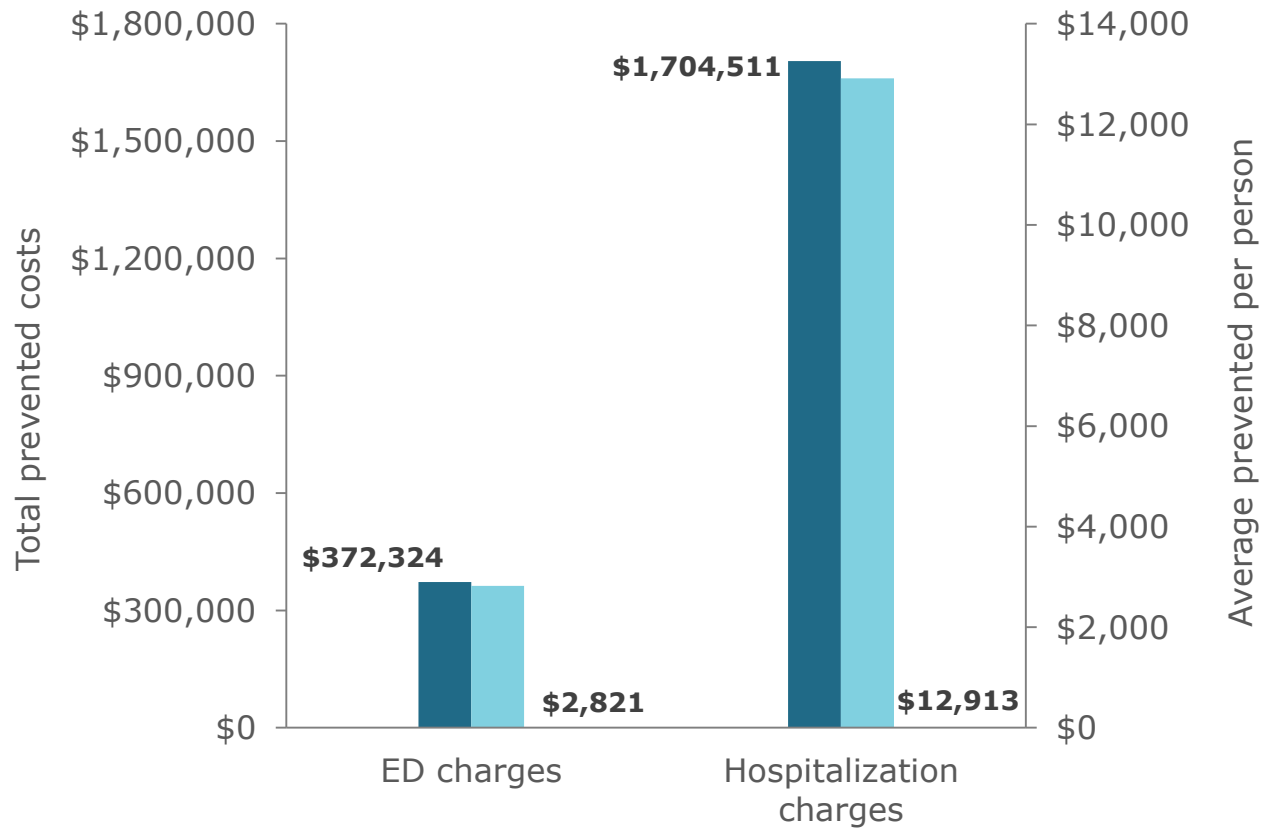
Care coordination program in Whatcom County reduces ED and hospital use



Sample interpretation

Given that total ED visits in pre period were ~408 per 200 days (the median enrollment period) for our cohort of 132 enrollees, a 38.8% reduction translates to a total of 158 prevented visits for a median enrollment period of 200 days. Or averting 1.2 ED visits per person during this time period.

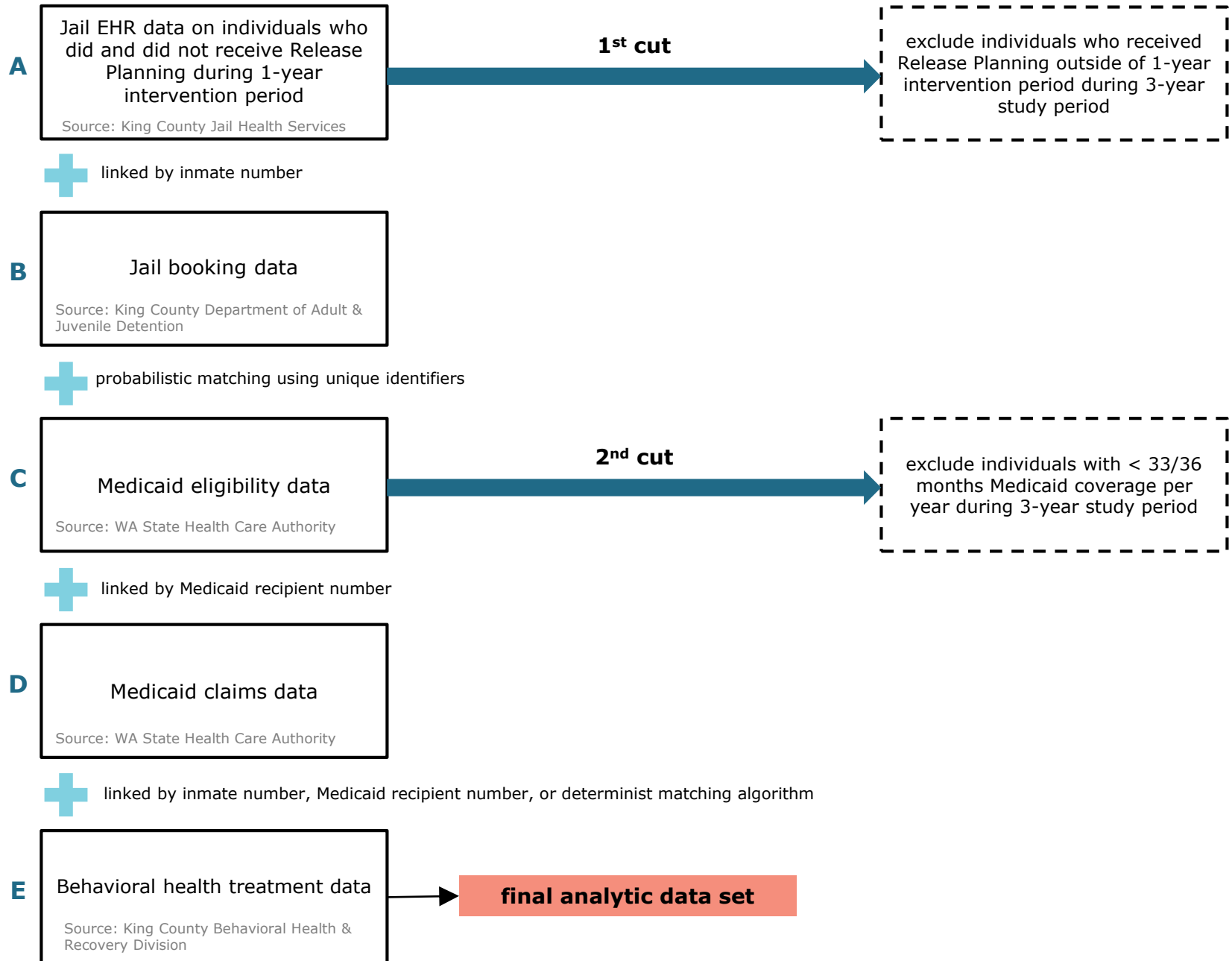
Prevented healthcare costs associated with care coordination program



Sample interpretation

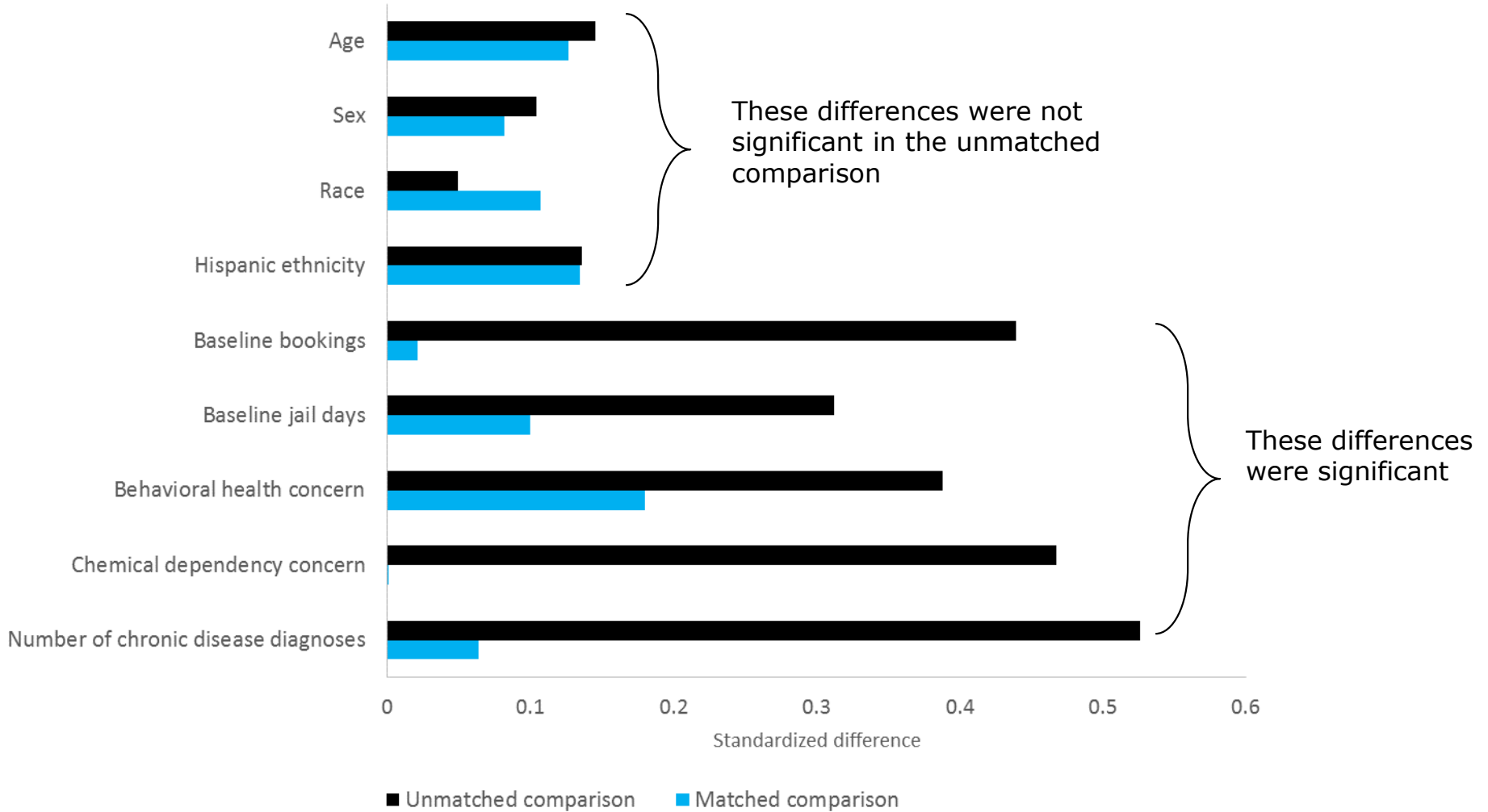
Given that total ED charges in pre period were \$1,048,801 per 200 days (median enrollment period) for our cohort of 132 enrollees, a 35.5% reduction translates to a total savings of \$372,324 for a median enrollment period of 200 days. Or savings of \$2,821 per person during this time period. Note that this is not net savings as cost of ICM program is not considered.

Robust data linkage used to evaluate King County continuity of care program



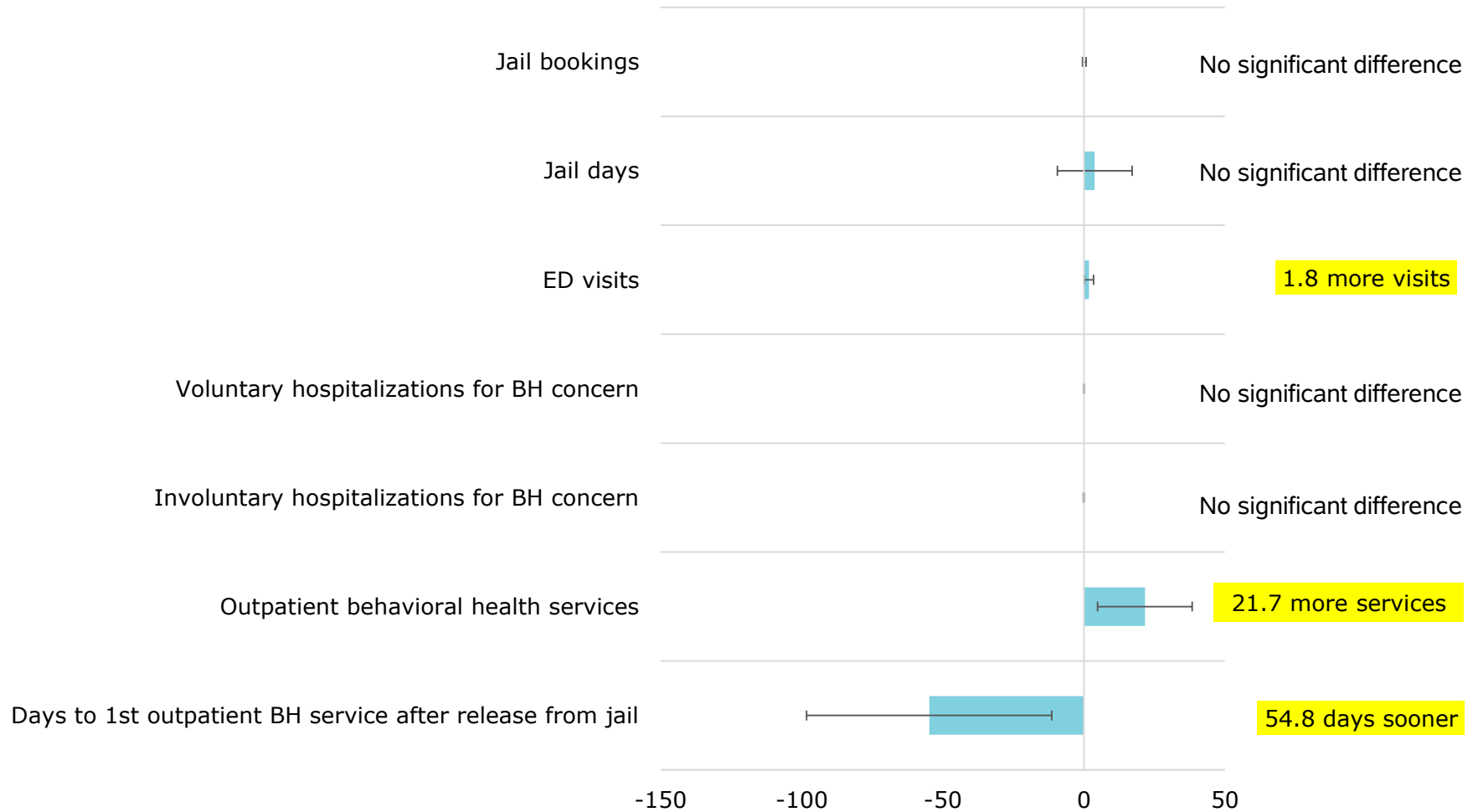
Propensity score matching used to identify a comparison group

Balance of covariates



Effect of Release Planning on criminal justice and health care outcomes

Compared to a matched comparison group*, individuals who received Release Planning services one or more times between 2013 and 2014 experienced the following changes over one year...

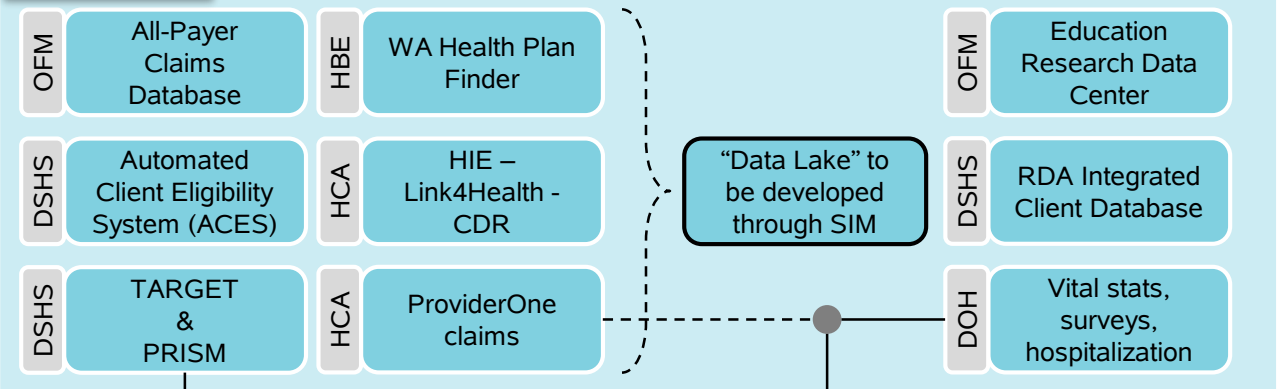


*Propensity score model included age at true/mock intervention, sex, race, Hispanic ethnicity, pre-intervention jail bookings and jail days, and behavioral health concern, chemical dependency concern and # chronic disease diagnoses (all as defined for Familiar Faces initiative)
Note: For all outcomes other than jail bookings and days, only days NOT in jail were included in the denominator for calculating the pre and post-intervention rates.

Implications

Pre-ACH Landscape of King County data assets to measure progress towards the Triple Aim

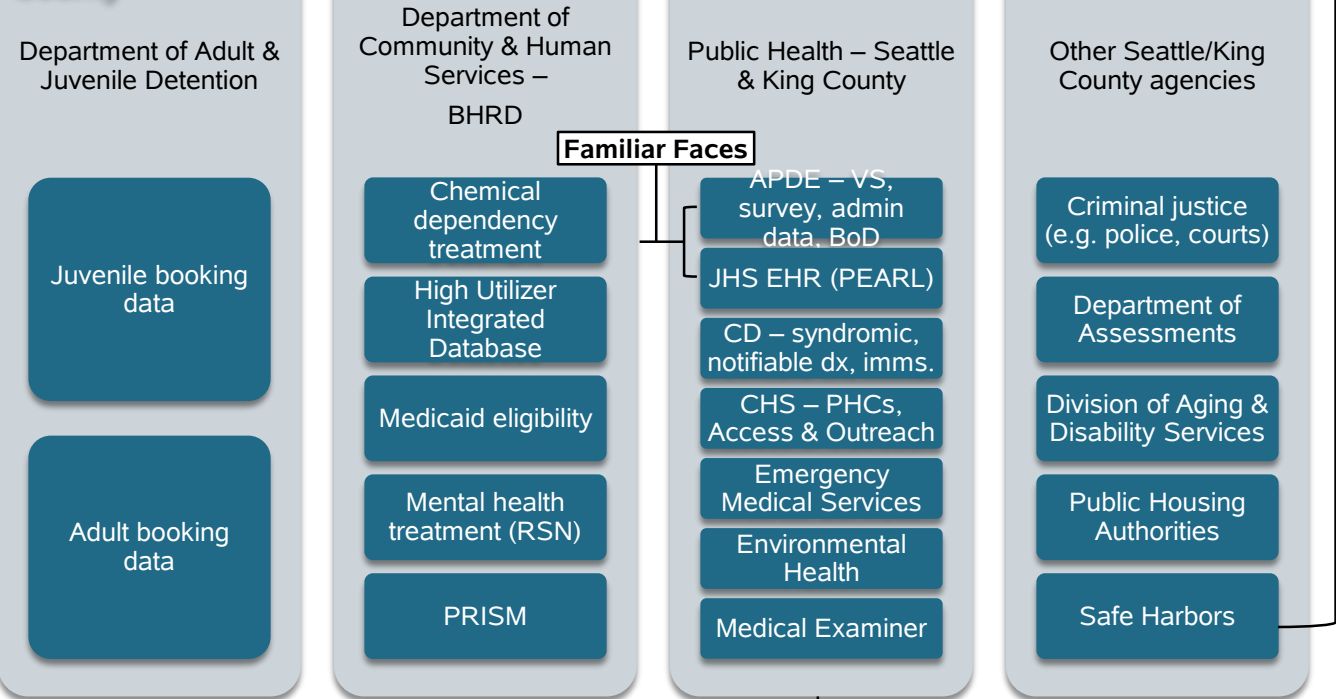
WA State



Non-profit and private sector



King County



Legend

Data sharing ...

- established
- - - - in process

[Click for glossary of terms](#)

Data moves at the speed of trust

Acknowledgements

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Research team

King County ACH:

- Nadine Chan, PhD MPH
- Eli Kern, MPH RN
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- Tamara Babasinian
- Evan Buckley

North Sound ACH:

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- Jordan Storey
- Robin Fenn, PhD LICSW

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- Stephanie Farquhar, PhD
- Marguerite Ro, DrPH
- Debra Srebnik, PhD
- Michael Stanfill, PhD

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Glossary of Terms

ACH – Accountable Community of Health

APDE – Assessment, Policy Development & Evaluation, PHSKC

BHRD – Behavioral Health & Recovery Division, DCHS

CD – Communicable disease

CDR – Clinical Data Repository, Link4Health

CHS – Community Health Services, PHSKC

DAJD – King County Department of Adult and Juvenile Detention

DCHS – King County Department of Community and Human Services

DSHS – WA State Department of Social and Health Services

ED – Emergency department

EHR – Electronic health record

ERDC – WA State Education Research & Data Center

HBE – WA Health Benefit Exchange

HCA – WA State Health Care Authority

HIE – Health Information Exchange

ICM - Intensive Case Management System

KCIT – King County Information Technology

LHHSD – Local health and human service department

OFM – WA State Office of Financial Management

PHC – Public Health Center

PHSKC – Public Health – Seattle & King County

PMW – Performance Measurement Workgroup, King County ACH

PRISM – Predictive Risk Intelligence System, DSHS

PSB – King County Office of Performance, Strategy, and Budget

RDA – Research & Data Analysis Division, DSHS

RSN – Regional Support Network

SIM – State Innovation Model

TARGET – Treatment & Assessment Report Generation Tool, DSHS

VS – Vital statistics

WAHA – Whatcom Alliance for Health Advancement

WHA – WA Health Alliance

Commentary



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Questions and Discussion

Webinar Archives

<http://systemsforaction.org/research-progress-webinars>

Upcoming Webinars

Friday, June 23, 12-1pm ET/ 9-10am PT

LARGE SCALE REAL TIME ASTHMA EVENT MONITORING: CIVIC TECH AND PUBLIC POLICY

Ted Smith, PhD, Chief Executive Officer, Revon Systems, Louisville, Kentucky

Wednesday, July 19, 12-1pm ET/ 9-10am PT

IMPROVING THE EFFICIENCY OF NEWBORN SCREENING FROM COLLECTION TO TEST RESULTS

Beth Tarini, MD, MS, University of Iowa College of Medicine

Thursday, July 27, 1-2pm ET/ 10-11am PT

CLINICAL-COMMUNITY PARTNERSHIPS & 2-1-1 TECHNOLOGY TO IMPROVE EARLY CHILDHOOD DEVELOPMENT

Bergen Nelson, MD, MSHS, Virginia Commonwealth University School of Medicine

Thursday, August 10, 12-1pm ET/ 10-11am MT

HOSPITAL INVESTMENT AND INTERACTION IN PUBLIC HEALTH SYSTEMS

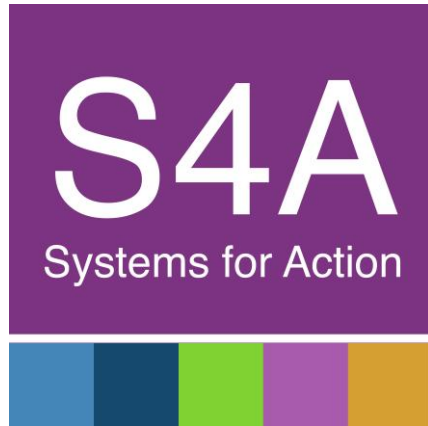
Danielle Varda, PhD and Adam Atherly, PhD, University of Colorado

Wednesday, August 23, 12-1pm ET/ 9-10am PT

COMPREHENSIVE POPULATION HEALTH SYSTEMS & HOSPITAL UNCOMPENSATED CARE COSTS

C.B. Mamaril, PhD, Senior Scientist, University of Kentucky College of Public Health

Thank you for participating in today's webinar!



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For more information about the webinars, contact:

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Speaker Bios

Eli Kern, MPH, is an Epidemiologist in the Assessment, Policy Development & Evaluation Unit at Public Health - Seattle and King County. He is a Public Health Epidemiologist, and a Clinical Instructor of Health Services at the University of Washington. Mr. Kern focuses primarily on health reform monitoring, cross sector data sharing and linkage, and measuring equity gains at a local level.

JudyAnn Bigby, MD, is a health policy expert with a broad range of experience, including more than 25 years of primary care internal medicine practice. Her areas of expertise include primary care design and integration with public health; state health policy; primary care transformation; and integration of physical and behavioral health, with a special focus on women's health, minority health, and disparities. Dr. Bigby led a project for the Ohio Department of Health to assess the effect of Medicaid expansion under the Affordable Care Act on public health programs, and an evaluation of the Oregon 1115 Medicaid waiver demonstration on how the demonstration transforms the delivery of health care to improve access and quality. Previously, Dr. Bigby served as secretary of health and human services for the Commonwealth of Massachusetts, where she was responsible for implementing many aspects of the 2006 Massachusetts health care reform law. She served as a director of Brigham and Women's Hospital's community health programs, in addition to designing clinical programs and conducting community-based research to eliminate health disparities among low-income and minority women, particularly related to breast and cervical cancer.

Elya Moore, PhD, is Executive Director of the Olympic Community of Health in Port Townsend, Washington. With 12 years of training as an epidemiologist and 6 years of experience leading a local nonprofit health collaborative, Dr. Moore is grounded by the belief that health care is local, and therefore solutions to the problems that exist today must derive from the local experience. She drives toward improved population health by blending her experience and training with her passion for supporting communities.