A Perfect Storm: Health Share's Ecosystem data analysis

Cat Livingston, MD, MPH

May 29, 2024



Bio: Cat Livingston, MD, MPH



Cat Livingston, MD, MPH, is Medical Director of Health Share of Oregon, Oregon's largest Coordinated Care Organization. She is boarded in Family Medicine as well as Preventive Medicine and serves as a primary care physician and researcher at Oregon Health & Science University as an Adjunct Associate Professor.

Prior to joining Health Share, she worked for the Health Evidence Review Commission (HERC) for a decade on evidence-based policy making for Oregon Health Plan's unique Prioritized List. Her key areas of policy interest include evidence-based policy, substance use disorder, population health, metrics, and social determinants of health.



D.S.

- 54 yo man
- Living on streets, struggling with OUD
- Cellulitis, needing IV antibiotics
- Care is complicated by distrust, weekend admission and barrier to MOUD and behavioral concerns from nursing
- Discharge options unsatisfactory

Preventable morbidity, moral distress, systems failures





Intersecting crises



The New York Times

Oregon Leaders Declare Drug Emergency in Portiand

Oregon's governor, Tina Kotek, hopes to counter nomelessness, crime and wicespread, public use of fentanyl that she says threatens the ...

Jan 30, 2024

Substance Use Disorder (fentanyl, meth)

OregonLive.com

Oregon's mental health workforce 'crisis' exacer challenges finding care

All but two Oregon counties are designated as complete mental heal shortage areas by the federal government, according to the ...

Untreated 121,2023 mental health (psychosis)



Oregon officials declare state of emergency to address fentanyl crisis in Portland

Homelessness Oregon officials declared a 90-day state of emergency to address Portland's fi crisis as fatal synthetic opioid overdoses there have... crisis

Jan 31, 2024

Oregon Public Broadcasting - OPB

How homelessness in Oregon started, grew and beca statewide crisis

/here are many factors that contributed to Oregon's current homelessness of most agree that the blame largely falls on one problem: the...



health

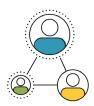
Oregon Public Broadcasting - OPB

Multnomah County, Portland present plan to halve unsheltered homelessness by 2026

Multnomah County and the city of Portland unveiled details Monday of a long-promised plan to overhaul the region's response to homelessness.



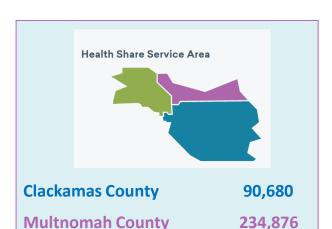
Health Share of Oregon



We bring together health plans, providers and community health resources so our members can get the care they need and achieve their best possible health.



We partner with communities to achieve ongoing transformation, health equity, and the best possible health for each individual.







Oregon's largest Coordinated Care Organization, offering members a choice of five different health plans.















Washington County

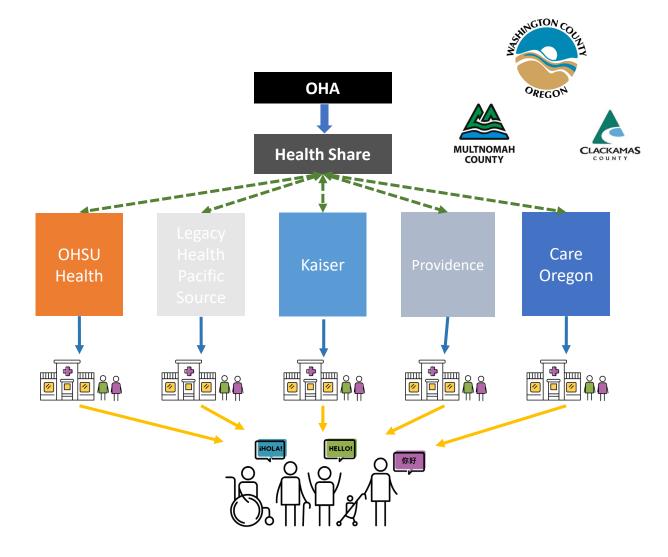
TOTAL MEMBERS



129,026

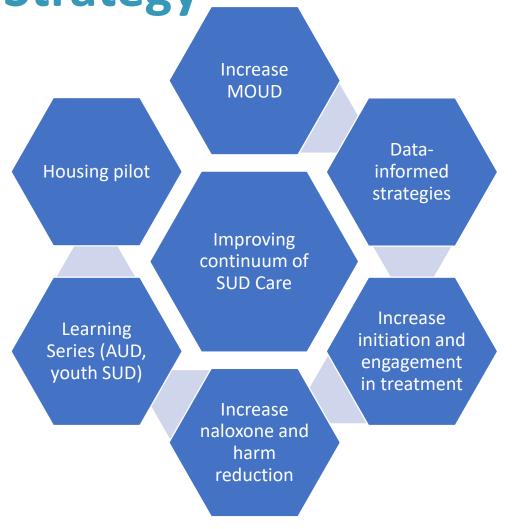
454,582

Health Share Collaborative





Health Share's Substance Use Disorder Strategy ____







Ecosystem

All needed:

Physical health
Behavioral health
Housing organizations
Counties
Community based
organizations

But there is FRAGMENTATION, and inequities



Ecosystem Analysis

- Data analysis looking at the nexus of substance use disorder, mental illness, and social determinants of health
- Known cause of high utilization and (potentially preventable) high morbidity and mortality
- Intersecting crises New drugs, insufficient affordable housing, and the longstanding behavioral health capacity crisis are contributing to increased acuity
- Hospitals also facing capacity crisis
- Moral distress for care teams with discharging people with insufficient follow up care

→unmet needs and system out of balance

Goals:

- Develop structured data and frameworks to support a region-wide response
- Understand the cohorts and acuity
- Inform potential strategies to improve health outcomes
- Will require breakdown of siloes





Ecosystem Cohort Data Analysis



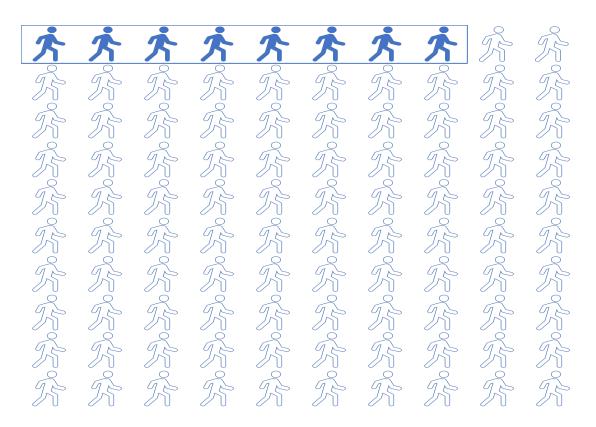
Ecosystem Cohort

Cohort	Current Health Share members (as of 12/31/23) with [listed below] between Jan – Dec 2023 (from claims data)
1. Opioid Use Disorder (OUD)	1+ OUD diagnosis
2. Stimulant Use Disorder	1+ stimulant use disorder diagnosis
3. Psychosis	1+ psychosis diagnosis
4. Substance associated overdose	1+ substance associated overdose (unintentional only)
Final cohort	Any member in one or more of the cohorts 1-4





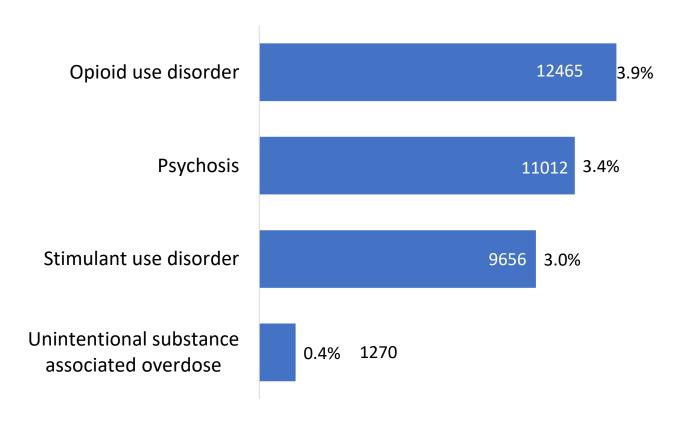
1 in 12 adult Health Share members (8%, n=26,068) are in the ecosystem cohort.







and % of adult members in the ecosystem cohort.

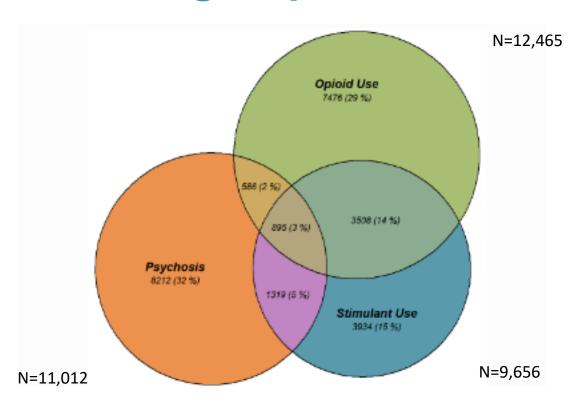


The size of each cohort group ranges from 4% (Opioid Use Disorder) to less than 1% (unintentional substance associated overdose) of all Health Share adult members.





Overlap between the 3 most common cohort groups

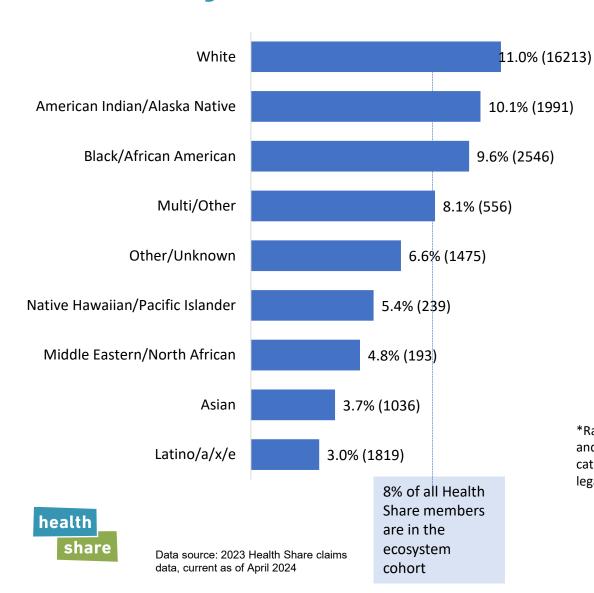


There is significant overlap between the cohort groups – for example, 14% of all members in the ecosystem cohort had diagnoses of both Opioid Use Disorder and Stimulant Use Disorder in 2023.





Race/ethnicity of Health Share members in the ecosystem cohort.

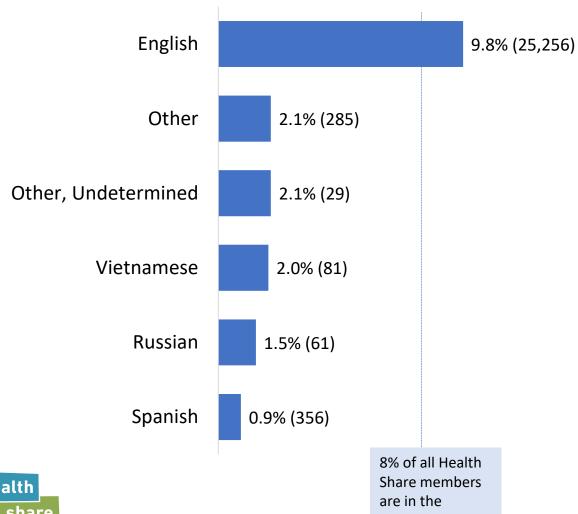


White, American
Indian/Alaska Native, and
Black/African/African
American members are
overrepresented in the
ecosystem cohort.

*Race/ethnicity derived from a combination of REAL data and legacy data (when REAL is unavailable). The MENA category will be underrepresented because it was not a legacy field.



Language spoken for Health Share members in the ecosystem cohort.



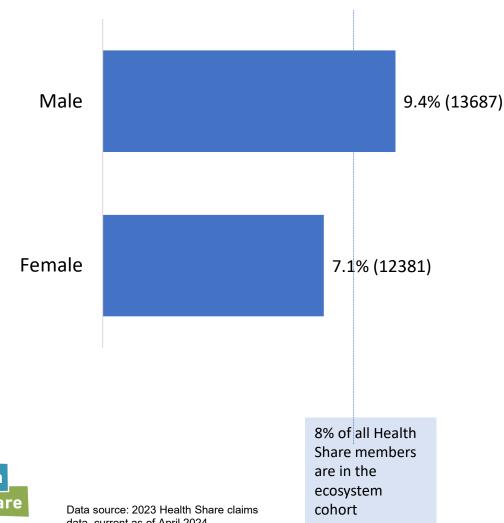
English-speaking members are **overrepresented** in the ecosystem cohort.



ecosystem cohort



Sex assigned at birth for Health Share members in the ecosystem cohort.



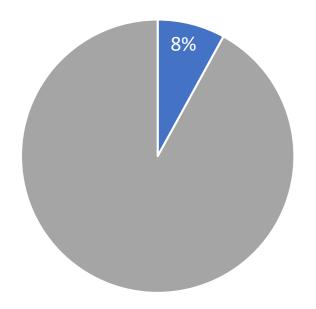
Members assigned male at birth are **overrepresented** in the ecosystem cohort.



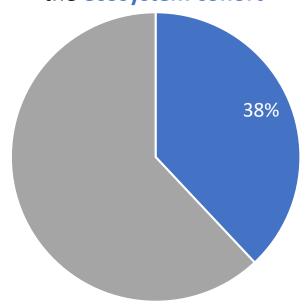


2023 Adult Inpatient Admissions.

8% of Health Share adult members are part of the ecosystem cohort



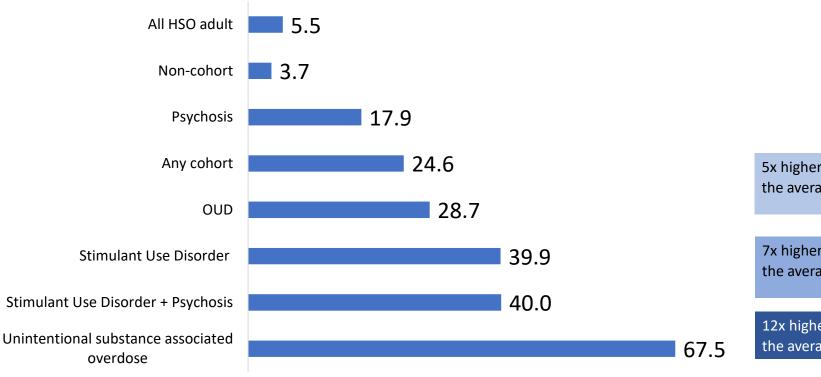
38% of adult medical inpatient admissions are among members of the ecosystem cohort

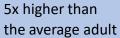


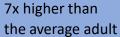




Utilization Comparisons: 2023 Medical Inpatient Admissions per 1000 member months





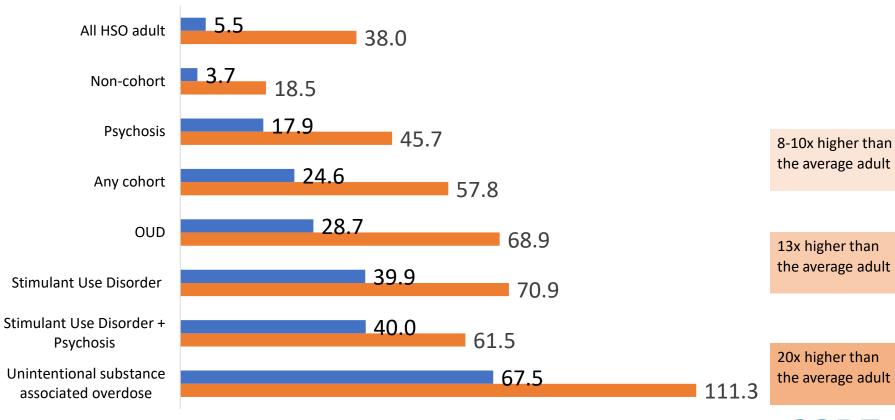


12x higher than the average adult





Utilization Comparisons: 2023 Medical Inpatient Admissions per 1000 member months – Housing Insecurity Overlay

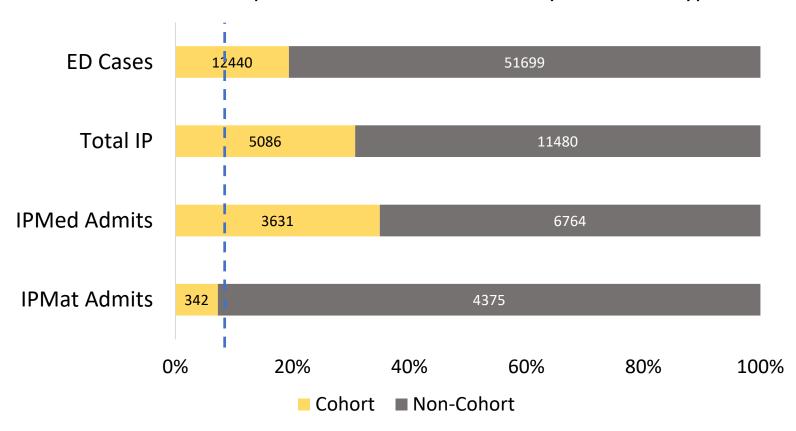




Center for Outcomes Research and Education

Cohort members with an ED or Inpatient admit are overrepresented for all care types except maternity inpatient.

Unique # Health Share member by Utilization Type







ED Top 10 – Primary Diagnosis

DX_Group	Any Cohort	Non- Cohort	Opioid Use	Psychosis	Stimulant and Psychosis	Stimulant Use	Unintentional Overdose
Skin and subcutaneous tissue infections	1	4	1	4	2	1	2
Abdominal pain and other digestive/abdomen							
signs and symptoms	2	1	2	2	6	4	9
Schizophrenia spectrum and other psychotic							
disorders	3			1	1	3	7
Musculoskeletal pain, not low back pain	4	5	4	7	4	2	6
Nonspecific chest pain	5	2	3	6	7	6	4
Alcohol-related disorders	6		5	5	10	10	3
Superficial injury; contusion, initial encounter	7	7	7	9	9	7	10
Suicidal ideation/attempt/intentional self-harm	8			3	5	9	
Any dental condition including traumatic injury	9	8	6			8	
COVID-19	10	3					
Sprains and strains, initial encounter		6					
Urinary tract infections		9					
Nausea and vomiting		10	10				
External cause codes: poisoning by drug			8				1
Opioid-related disorders			9				
Anxiety and fear-related disorders				8	8		8
Stimulant-related disorders				10	3	5	5





Inpatient Top 10 – Primary Diagnosis

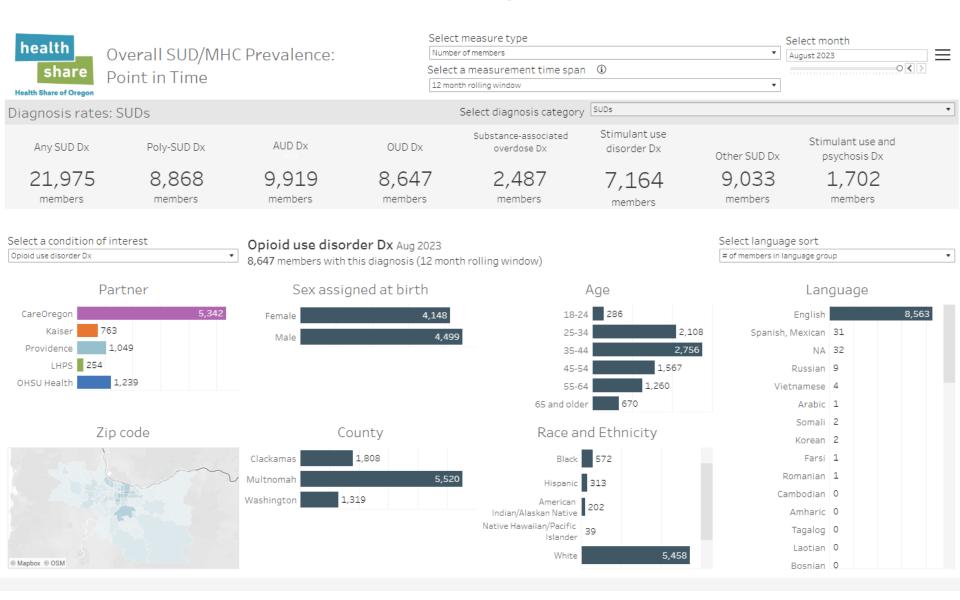
DX_Group	Any Cohort	Non-Cohort	Opioid Use	Psychosis	Stimulant and Psychosis	Stimulant Use	Unintentional Overdose
Septicemia	1	1	1	4	2	1	2
Schizophrenia spectrum and other psychotic disorders	2		6	1	1	3	7
Hypertension with complications and secondary hypertension	3	2	4	8	7	2	3
Depressive disorders	4	. 10	7	3	3	5	10
Bipolar and related disorders	5			2	4	8	
Skin and subcutaneous tissue infections	6		2	9	5	4	4
Diabetes mellitus with complication	7	3	3	7	10	6	9
External cause codes: poisoning by drug	8		5	6	6	7	1
Alcohol-related disorders	g	4	8	5	8	10	8
Respiratory failure; insufficiency; arrest	10		9			9	6
Cerebral infarction		5					
Pancreatic disorders (excluding diabetes)		6					
COVID-19		7					
Acute myocardial infarction		8					
Obesity		9					
Complication of other surgical or medical care, injury, initial encounter			10				
Trauma- and stressor-related disorders				10			
Heart failure					9	7	5



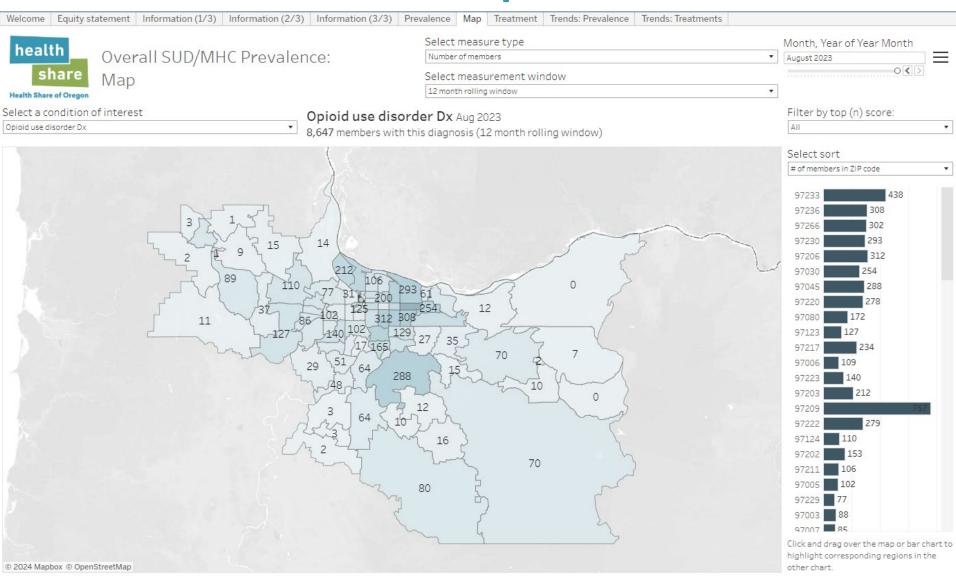
The reasons for inpatient admissions differ significantly between the ecosystem cohort and adult Health Share members not in the cohort – **5 of the most** prevalent diagnoses for cohort members do not appear in the top **10** diagnoses for non-cohort members.



Dashboard Focus: Opioid Use Disorder



Dashboard Focus: Opioid Use Disorder



Synthesis

What does this analysis tell us?

Segmentation by these cohorts helps identify opportunities to improve care

Many of the individuals struggling with these conditions have accessed the system multiple times only to have it fail them

Many of these individuals do not access care in a single place, rely on a single provider, or engage in patterns that look like non-cohort members.

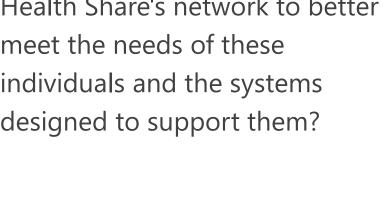
The Medicaid funding model is not optimized to get the right resources to the right places--particularly when it comes to addressing SDOH and significant BH needs.

The systems providing vital services and supports are not coordinated, including health, social services, and housing.

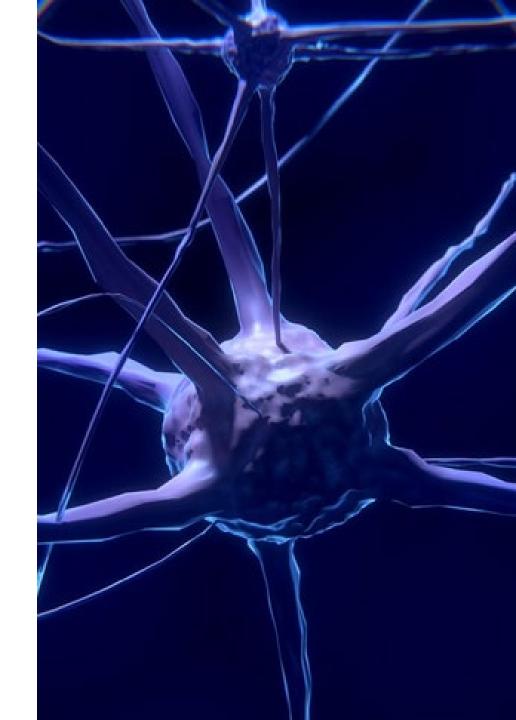


Health Share's Board

Question: How can we optimize Health Share's network to better meet the needs of these individuals and the systems designed to support them?







Health Share Ecosystem Workgroups

Workstream	Scope	Q1 and Q2 Deliverables 2024
Clinical Model (ie. Programs)	Develop population stratification model to identify and respond to segmented clinical needs and meet specific needs of racial/ethnic groups overrepresented in segments.	 Refine clinical data priorities Assess existing models and where to scale Develop intervention(s) draft Identify model and support needed for implementation launch Engagement with model development with services outside health (prioritizing housing, corrections)
Care Management Strategy (ie. Systems)	Determine how population health management should be organized across delivery system discharge, PH and BH health plan care management, and housing providers.	 Assess existing care management structure; define new options Develop mechanisms for engagement of County housing teams Prototype proactive integrated case review/conferencing to learn needs/gaps Identify appropriate Care Management Platform (and/or improvements needed to existing platform?) Develop integrated care coordination strategy (including housing, mobile crisis, etc.)
Risk Model and Outcomes Workgroup (ie Financial Model)	Finalize outcome metrics, incorporating use of an equity lens and develop staged financial model to support clinical model of care.	 Kick off group! Explore national models for this type of arrangement Finalize operating definition of population (in consultation with clinical group) Develop simple model requirements to begin Develop draft of outcomes metrics Assess risk model options Complete recommendation on risk sharing models Develop ongoing monitoring reporting requirements



Ecosystem Care Model Settings

Maternity

Emergency Department

Inpatient Medicine

Outpatient/Interstitial

- Street Medicine
- Post discharge transition



Approach

Mini work groups

- Representation across health plans
- Review research
- Identify current existing services
- Develop consensus on core components of effective models
- Develop recommendations for implementing/scaling/spreading

Questions for each model:

- What are key outcomes?
- How could we better impact equity and support culturally responsive care?
- What is the role of care coordination?

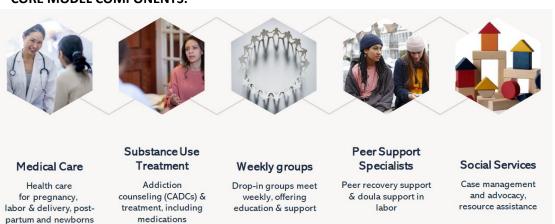




OVERVIEW:

Project Nurture is a "Center of Excellence" model that provides integrated maternity care and substance use treatment during pregnancy and for the first year postpartum. "Center of Excellence" refers to a unique location in the community that provides high quality care to a very specific population. Project Nurture concentrates providers with expertise in treatment of substance use disorders during pregnancy in one location. Pregnant people with a substance use disorder (SUD) experience significantly improved care coordination at Project Nurture sites whereas traditionally SUD and maternity care are distinct and often fragmented from each other.

CORE MODEL COMPONENTS:



Harm reduction & Trauma informed care

PROJECT NURTURE SITES:

OHSU & CODA	Legacy & Lifeworks NW	Providence	Kaiser & MHAAO
*CODA *Richmond Clinic	*Legacy Midwifery Clinic	*Milwaukie *North Portland	*Interstate *Rockwood





KEY OUTCOMES:

McConnell et al., April 2020



Improved parenting outcomes

- · Decreased foster care placements
- · Less child maltreatment
- · 92% parenting one year after delivery



Improved Medical outcomes

- · Increased prenatal care visits
- · Decreased newborn hospital length of stay



Improved substance use recovery

• 92% sustained recovery one year after delivery

PROJECTED COST SAVINGS:

Project Nurture evaluation findings, August 2018

HIGH NEEDS CARE

- 0.9 cases of high needs care prevented for every 100 births.
- > \$16,200 saved per high needs care averted (removed duplication for pre-term deliveries)

C-SECTIONS

- > 8.4 C-sections prevented for every 100 births
- > \$2,900 saved per C-section prevented.

PRETERM DELIVERIES

- 7.6 preterm births prevented for every 100 births.
- > \$13,646 saved per preterm birth prevented.



TOTAL SAVINGS:

- > \$161,339 per 100 births
- > \$1,613 per participant



Project Nurture Expansion

Identified Needs

Potential Solutions

Funding barriers for peers, population management

- Project Nurture enhanced Alternative Payment Methodology (APM)
- Potential statewide APM rates supporting model

Community of practice gaps

- Support network enhancement
- Continue hosting community of practice
- Develop linkages to cross-sector providers

Greater demand; inpatient growth

- Add Project Nurture site(s) in Washington County
- Expand inpatient support
- Contingency management for stimulant use disorder

Housing needs

- Short term: Navigation to housing supports
- Long term: Specific housing for Project Nurture families



SUD Inpatient Consult Core Components Workgroup

Members

Alison Noice, MA. MS, CADC-III Executive Director at CODA, Inc.

Bradley Buchheit, MD, MS
Addiction & Family Medicine Doctor and
Interim Medical Director for Addiction
Consult Service at OHSU

Brian Liebreich, MD Regional Medical Director at Providence

Nick Kashey, MD, MPH Clinical Vice President of Population Health at Legacy

Cat Livingston, MD, MPH Medical Director at Health Share of Oregon

Stacie Andoniadis SUD Program Manager at CareOregon

Current Work

Defining core components of Addiction Consult Model program at OHSU

Synthesizing a document comprised of core components + desired outcomes

Clarifying roles, services, and systems needs for successful implementation

Convening weekly to determine ways to implement the program and maintain understanding of evolving best practices

Next Steps

Identify and discuss desired program outcomes

Determine care coordination needs and workflows

Identify ways to scale model based on hospital size

Bring document and findings to High Risk BH workgroup and steering committee

Send core components document to subgroups on funding/sustainability and care coordination.

Addiction Consult Service Model					
Tier I: Essential Clinical Components					
Component	Possible Roles	Function			
SUD medical consultant	Board Certified Addiction Medicine Provider or Addiction Psychiatrist	In consultation or as attending of record, prescribes and inducts medications for substance use disorders, provides medical care for co-occurring/comorbid diagnoses, and withdrawal management. Leads ACS team. Provides Addiction Consultation to other physicians and clinicians.			
Peer that is fully integrated into the ACS team. Offering advocacy/support to all patients engaged with ACS team	Peer Support Specialist or Certified Recovery Mentor	Establishes rapport and builds trust with patients. Assists patients in navigating SUD recovery and treatment. This role sometimes acts as a support between patient and medical provider. Peers offer continuity after leaving hospital. (60 days)			
Integrated substance use disorder care coordination to SUD-specific services	Behavioral health practitioner who is fully integrated into the ACS team with functional awareness of SUD treatment continuum	Identifies and provides linkage to most appropriate services/provider at discharge. Identifies and links to most appropriate level of care. Functional awareness with ASAM and levels of care. Familiarity with local SUD continuum of care			

Addiction Consult Service Model

Tier I: Essential Systems Components

Component	Possible Roles	Function
Informatics support – capacity to capture, synthesize, and report metrics and outcomes	Informatics and subject matter expert (SME)	Ensures that order sets are developed, updated, and utilized. Ensures EMR supports best practices within substance use disorder treatment.
Medication dispensing and prescribing	Pharmacy and providers	Ensures all medications for SUD are on formulary and can be dispensed, including long acting injectables and naloxone/overdose prevention medications. 72-hour methadone available.
Dedicated workflows with other teams in the hospital	Infectious disease team, cardiology/cardiothoracic surgery team, Labor and Delivery and psychiatric consultation. Defining workflows between teams and/or having collaborative meetings.	Coordination between this program and others in the hospital for concurrent, wraparound care. Include Labor and Delivery and psychiatric consultation. Defining workflows between teams and/or having collaborative meetings.
Collaboration as an ACS team	ACS team members	Regular and frequent communication and rounding.

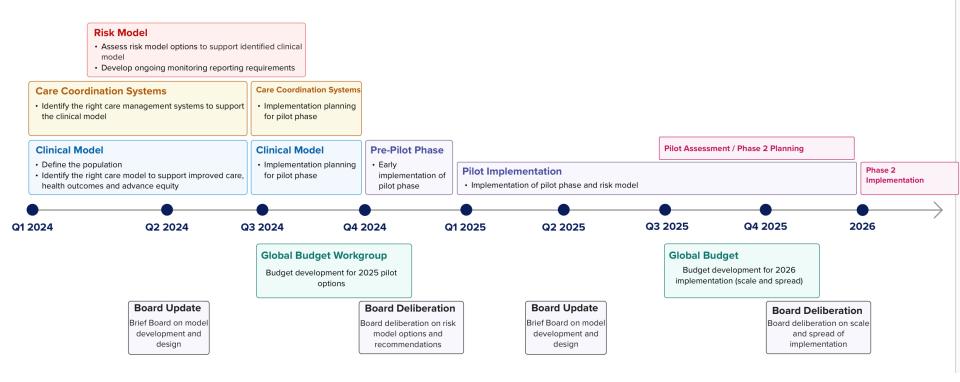
Addiction Consult Service Model

Tier I: Essential Systems Components

Component	Possible Roles	Function
ACS serves as consultants to entire hospital system; ability to triage	Medical Provider	ACS can consult across entire hospital, including L&D, ICU
Systems change champion with decision making capability	At least one medical provider	Generates motivation around program rationale and implementation. Moves the program forward and is accountable to ensuring that workflows are established and maintained. Leads internal program advocacy.
Bi-directional relationship between the hospital and its community-based partners	To be determined by ACS staff	Provides navigation to SUD services and other resources, facilitates warm hand off. Must have expertise and knowledge of the hospital and SUD treatment system.
Cross-training and upskilling	To be determined by ACS staff	Assesses staff knowledge and education needs, implements trainings and upskilling as needed, ensures that evidence-based practices are known and implemented by all staff in the program.

DRAFT Roadmap for BH High Impact Optimization

Feb. 20, 2024



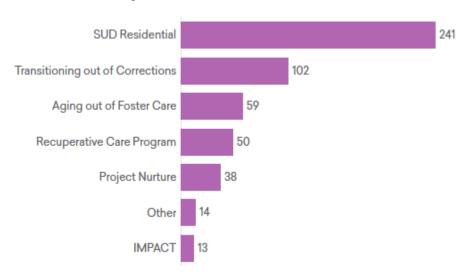


Housing & Health Share Housing Pilot

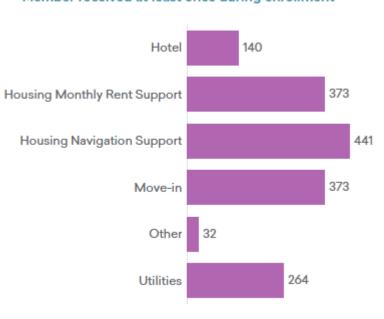
Health Share Housing Pilot 2022-2024

- 505 Total Members served
- 186 Currently active in pilot
- Average length of service 9.8 months

Transition Population



Service Category Member received at least once during enrollment



Housing & Health Share

Health-related Social Needs HRSN Benefit (1115 Waiver)

- Launching November 2024
- Those at-risk of homelessness
- Benefit includes
 - Rental assistance or temporary housing (e.g., rental payments, deposits, utility assistance) for <u>up to 6 months</u>
 - Home modifications (e.g., ramps, handrails, environmental remediation)
 - Pre-tenancy and tenancy support services (e.g., housing application, moving support, eviction prevention)
 - Housing-focused navigation and/or case manager



D.S.

54 yo man with OUD and cellulitis

System changes could have improved his outcomes:

- Initiation of MOUD in hospital
- Peer support during hospitalization and transition
- Temporary housing support with Medicaid funds while healing
- Connection to outpatient behavioral health and physical health, wound care
- Connection to long-term permanent supportive housing
- Care coordination across all these settings

Preventable morbidity, moral distress, systems failures





Conclusion

System(s) not meeting needs of the ecosystem cohort

Re-envisioning care

- Clinical and non-clinical partnerships
- Understanding who leads coordination and navigation
- Call to action

Re-envisioning financing

- Need investment up-front: will require multiple years
- Different payment models needed to offer flexibility

Housing and Medicaid – extraordinary opportunity and work ahead



HEALING THE WAY HOME

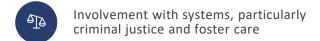
Aligning at the Crossroads Of Health & Housing

Sean Hubert Central City Concern



KEY FACTORS IN HOMELESSNESS

*Most of these are system issues





Race



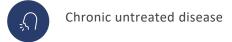


Job loss





Housing Cost





Age

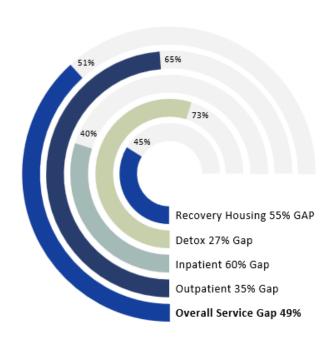


Lack of right time, right care



Domestic Abuse

UNMET BEHAVIORAL HEALTH NEEDS ARE DRIVING CHRONIC HOMELESSNESS





UNDERSTAND & IMPACT KEY "INFLOWS"; BUILD FOR STRONGER "OUTFLOWS"; FOCUS ON CHRONICITY FACTORS

Inflows

- Health & Behavioral Health
 Discharges to the Street
- Criminal Justice Discharges and Diversion
- Youth and Foster Care Transitions
- Housing Returns to the Street by People with Histories of Chronic \ Recurrent Homelessness

Outflows

- Continuum built on Flow, Stability & Connection
- Employment and Income Attainment
- Social Connectivity
- Health & Wellness
- Purpose & Population-Built Communities (Recovery, Aging, Multi-Generational)
- Flexible Assistance
- Flexible Rental Assistance

BUILD A TRUE SUPPORTIVE SHELTER & HOUSING CONTINUUM

Shelter & Transitional Housing Continuum

- Oregon has one of highest rates of unsheltered homeless per capita & lowest rates of shelter beds per capita
- While Permanent Housing is the goal, Shelter is more flexible & has fewer regulations than housing; better at providing immediate, zero-barrier, same-day access
- Critical for system transitions and outreach team engagement
- Shelter can have lower construction & operating costs <u>and take on</u> <u>different risks</u>
- Person-centered design
- On-site shelter services need to be targeted at housing stability; health and behavioral health stability; employment access; and permanent housing placement
- Key opportunity to continue to connect clinical services to housing

INVEST IN COMMUNITY "CONNECTIVE TISSUE" BUILT AROUND KEY INVESTED PARTNERS

Set a new table by establishing system-wide scaled navigation, care coordination & crisis intervention capability that drives enhanced partnership between City, County, Health and Criminal Justice partners.

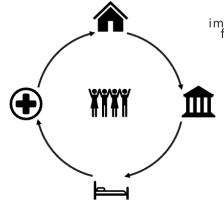
Solve for:

- 1) End Discharges to the Street (Systems & Housing)
- 2) Provide same-day supportive shelter access for outreach and crisis teams

Health Partnerships that support stabilization and wellness and coordinate across key transitions

Crisis Response Network that supports quick connection to health and behavioral health stabilization with the goal of housing retention and stability

- Align Project Respond, Portland Street Response, and Health System Care Navigation
- Focused on rapid Behavioral Health & Shelter Access; Housing retention & stability



Housing Navigation designed for immediate access to Shelter; positive flow from Shelter to Housing; and long-term Housing Stability

System Navigation includes "prerelease or discharge" care and navigation planning

Shared data and system platform includes critical real-time bed access availability as well as ongoing system performance analysis leading to rapid improvement capability

FOUNDATIONAL STRATEGIES

Supply

Increase availability of shelter (built around hardest to house), supportive housing units, and overall housing supply

Navigation

Establish system-wide, scaled navigation, care coordination & crisis intervention; *End discharges to the street.*

• Behavioral Health Access

Increase behavioral health services & access

Governance & Partnership

Enlarge the table to include key systems (Health) with overlapping populations & investments; clarify roles and responsibilities; Jointly develop intentional supported pathways to housing for multiple key populations

Targeted Prevention

Focus on Chronicity Drivers; Prevent people exiting key systems including criminal justice and health from becoming homeless

Fund Comprehensive Services across Navigation, Shelter and Housing

That drive stability, wellness, and flow out of homelessness. (Employment -7x housing stability outcomes)

• Leverage Investments

Use the right dollar for the right services

Real Time Data

Real time data to coordinate care and housing transitions and drive ongoing system performance improvements

VISION



A Community that takes care of one another, fosters opportunity, and works together to tackle tough challenges.



Street Homelessness should be rare and, when it does occur, brief.



Services should be coordinated, key systems aligned, and interventions balanced across short- and long-term outcomes.

By working together, we can build a community that cares for all people and is better at supporting the building blocks of stability and wellness.

Questions/comments

1) Having heard the health data, and the system perspective, are there care or service gaps right now that you think we should be leaning more into?



- 2) Who do you see as key partners in collaborating between safety net, housing, and health?
- 3) Are there additional pilot concepts you would propose that address that intersection of health and housing?



All Together, All for You.























Thank you

