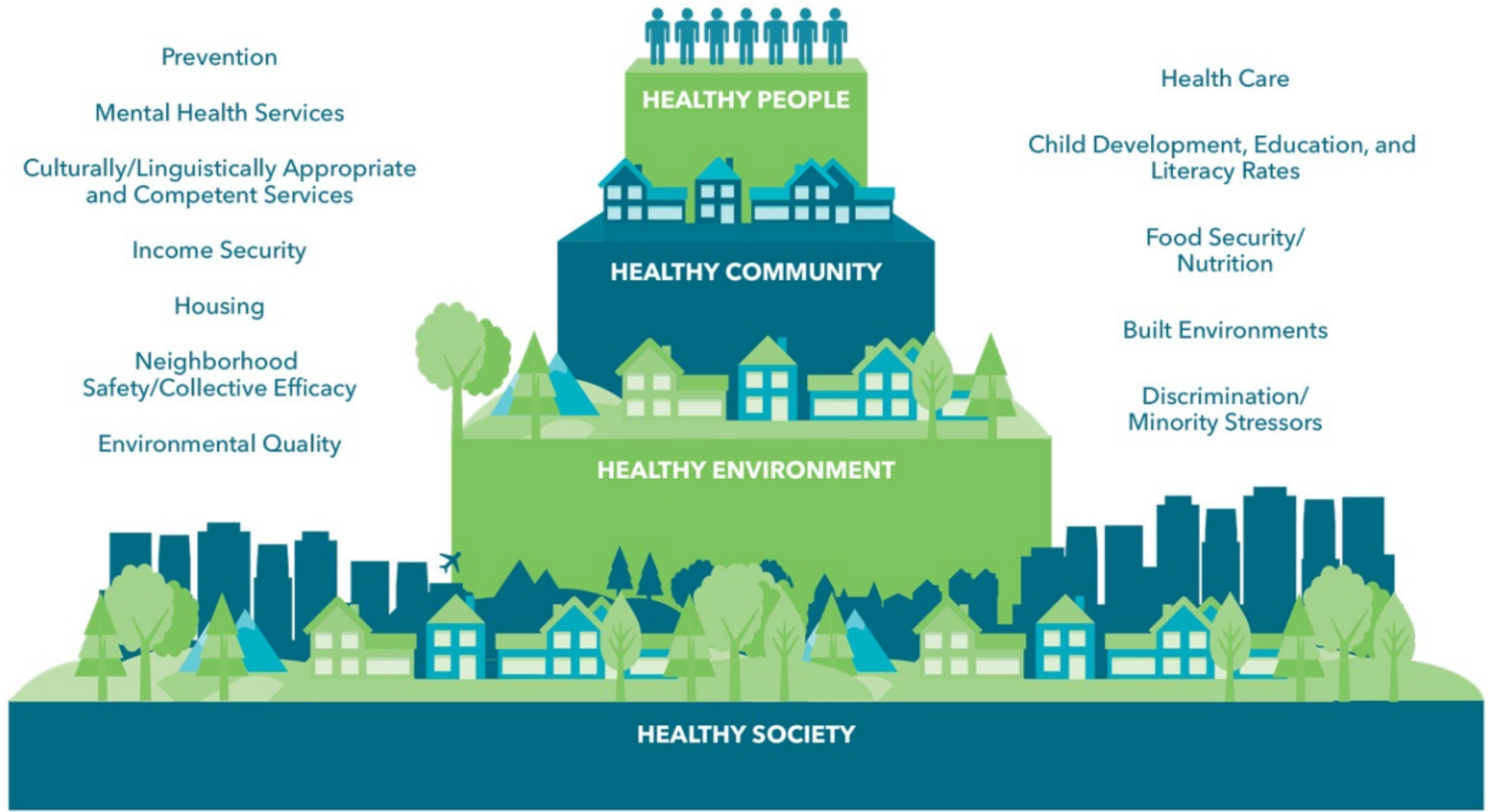


Housing as a social determinant of health: *Stories from the front line*

Transforming the conditions in which people are **BORN, GROW, LIVE, WORK** and **AGE** for optimal health, mental health & well-being.



What is an ACE?

Adverse childhood experiences (ACEs) are stressful or traumatic experiences, including abuse, neglect and a range of household dysfunction such as witnessing domestic violence, or growing up with substance abuse, mental illness, parental discord, or crime in the home. They can cause toxic stress and can lead to a variety of negative outcomes, including adult homelessness².



ACE Score and Relation to Adult Homelessness

Proportion of Washington residents experiencing adult homelessness (among participants in Washington's Behavioral Risk Factor Surveillance System).³

Created by Seattle University's Project on Family Homelessness with information from:

1. Harvard
<http://bit.ly/1jYfIH7>
2. SAMSHA
<http://1.usa.gov/1ttTi65>
3. Infographic adapted from "Factors Associated with Adult Homelessness in Washington State: A Secondary Analysis of Behavioral Risk Factor Surveillance System Data (Final Report)" by Cutuli, Montgomery, Evans-Chase & Culhane (University of Pennsylvania, 2013).
<http://bit.ly/1xbGqDW>

1 Costs to health care systems were lower after people moved into affordable housing.

- Total Medicaid expenditures declined by 12 percent.
- Declines in expenditures were seen for all housing types.
- IMPLICATION: *Access to affordable housing will likely drive down costs to the health care system.*

Overall	FAM	PSH	SPD
-12%	-8%	-14%	-16%

2 Primary care visits went up after move-in; emergency department visits went down.

- Outpatient primary care utilization increased 20 percent in the year after moving in, while ED use fell by 18 percent.
- Similar trends were observed for each housing type.
- IMPLICATION: *Affordable housing helps meet major health reform utilization metrics.*



3 Residents reported that access to care and quality of care improved after moving into housing.

- Many residents reported that health care access and quality were better after move-in than before; very few people reported it was worse.
- IMPLICATION: *Expenditure and utilization differences did not come at the expense of access or quality.*

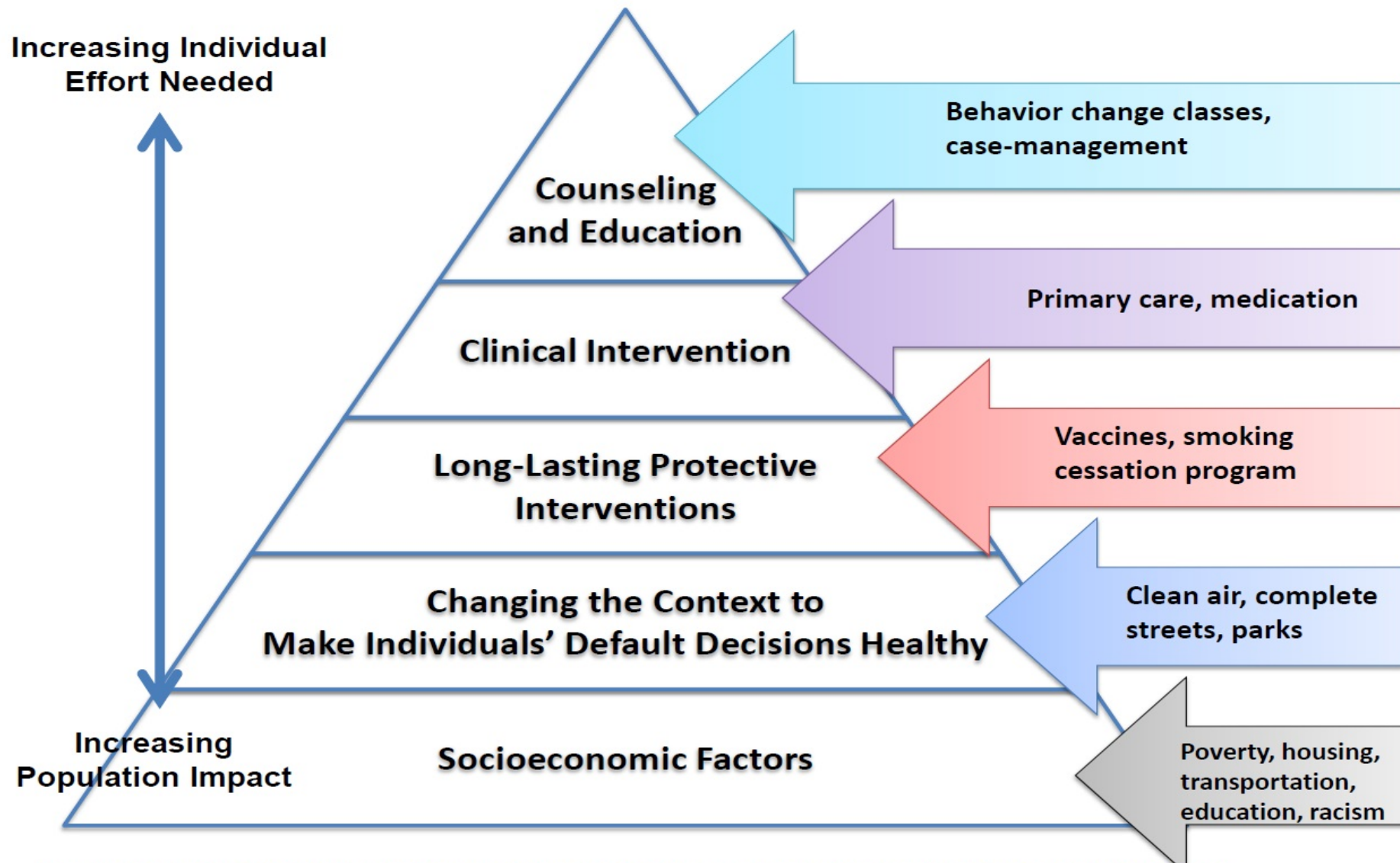
ACCESS to health care after moving to affordable housing	Better	Worse	QUALITY of health care after moving to affordable housing	Better	Worse
	40%	4%		38%	7%

4 Integrated health services were a key driver of health care outcomes.

- The presence of health services was a driver of lower costs and ED use, despite low awareness among residents. (See Exhibits 1 to 21.)
- IMPLICATION: *Increasing use of these services may result in even greater cost differences.*

Adjusted impact of health services:

EXPENDITURES	-\$115 member/month	ED VISITS	-0.43 visits/year
--------------	---------------------	-----------	-------------------



Source: Frieden, T.R. (2010). A Framework for Public Health Action: The Health Impact Pyramid., *American Journal of Public Health*, 100(4), 590-595

Speakers

Tatiana Dierwechter, MSW

Healthy Communities Program Manager

Benton County Health Department

Brad Smith, DVM PhD

Board President

Corvallis Housing First

Tanya Grant, MPH RN

Director of Care Management

Samaritan Health Services

Paulina Kaiser, PhD MPH

Research Development Manager

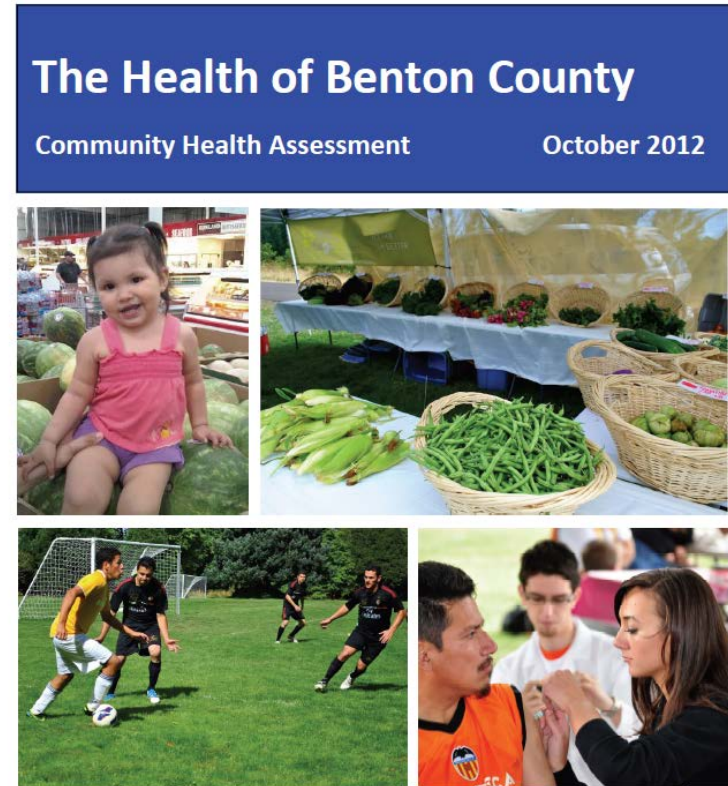
Samaritan Health Services

Using a Public Health Framework to Update a Ten Year Plan to Address Homelessness: Community Engagement & Cross-Sector Partnership Building in Benton County

Tatiana Dierwechter, MSW, Benton County Health Services
Oregon Public Health Association Annual Conference
Tuesday, October 9, 2018


Community Health Assessment (CHA)

- Measures and describes the health of the community
- Used to identify health priorities and set goals for improvement



The Health of Benton County
Community Health Assessment October 2012

Benton County Health Department
530 NW 27th St
Corvallis, OR 97330
Phone: (541) 766-6835
www.co.benton.or.us/health



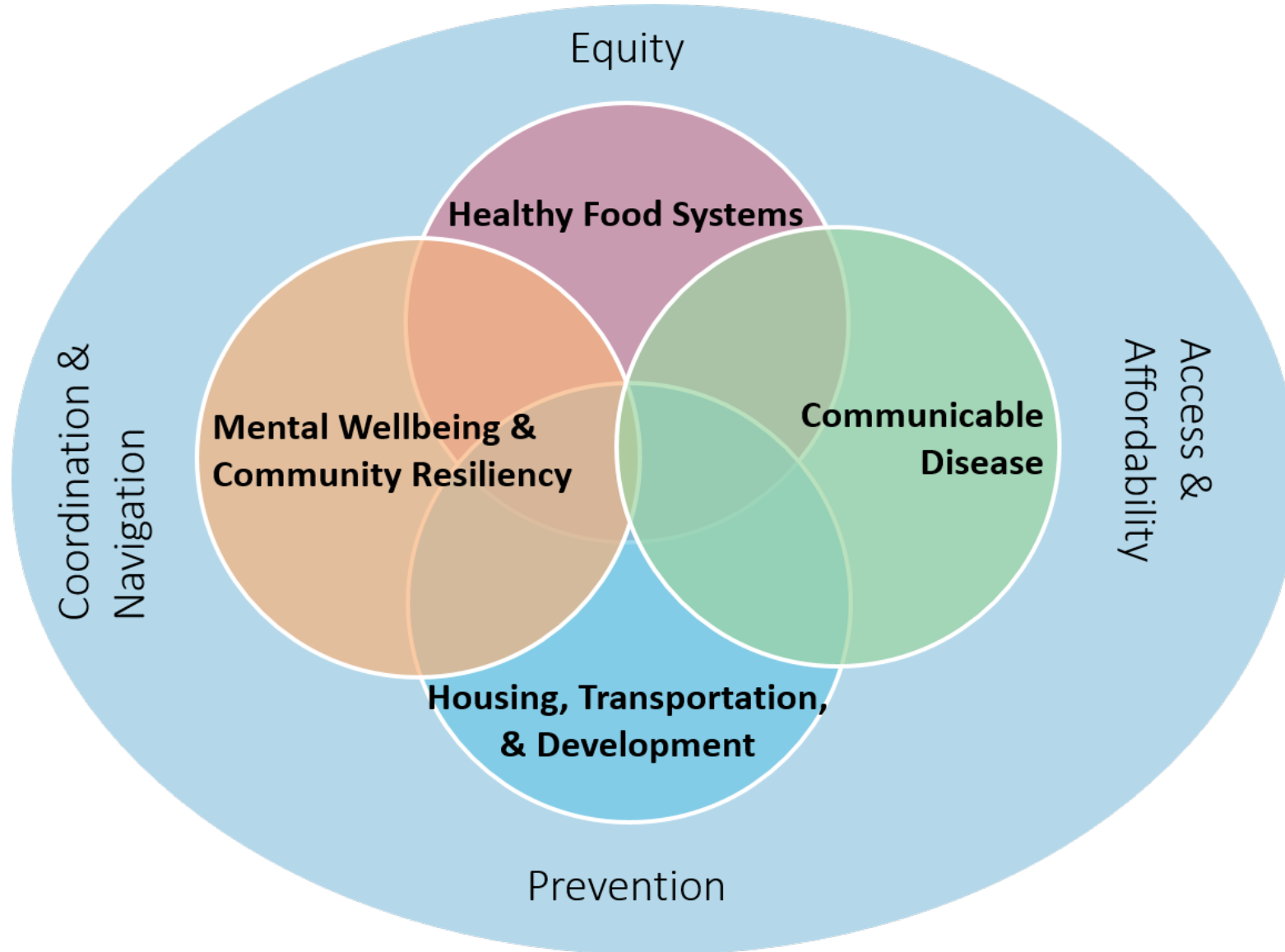
Community Health Improvement Plan (CHIP)

- Informed by the CHA
- Identifies health priorities
- Includes a plan for addressing the priorities
- Product of a collaborative process involving partners



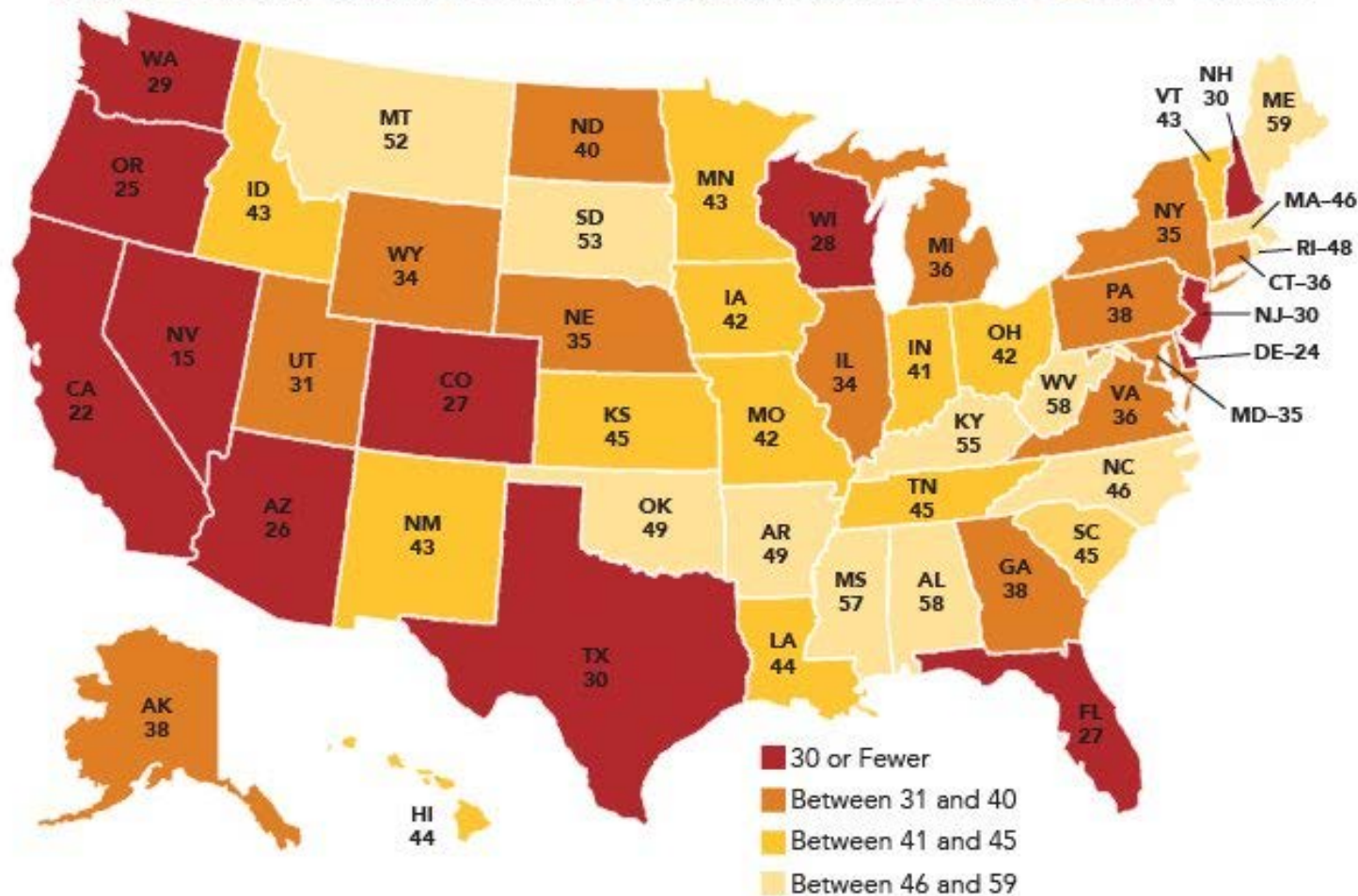
Benton County Health Department
530 NW 27th St
Corvallis, OR 97330
Phone: (541) 766-6835
www.co.benton.or.us/health

2018-2023 Benton County CHIP Priorities



THE GAP

FIGURE 6: RENTAL HOMES AFFORDABLE AND AVAILABLE PER 100 EXTREMELY LOW INCOME RENTER HOUSEHOLDS BY STATE



Note: Extremely low income (ELI) renter households have incomes at or below the poverty level of 30% of the area median income

Source: NLIHC tabulations of 2016 ACS PUMS Data.

© 2018 National Low Income Housing Coalition

Homelessness in Oregon

Oregon ranked:

- #2 among states for percent of homeless people who were unsheltered (60.5%)
- #1 in the proportion of families with children who were unsheltered (59.1%)
- #4 in the proportion of unaccompanied youth who were unsheltered (64.4%)
- #5 in the proportion of chronically homeless individuals who were unsheltered (83.6%)

Housing Instability

- From 2011-2015, 37% of Benton County households had housing cost burdens.
- Renters were more likely to have cost burdens (59%) than home owners (29% of home owners with mortgages, 13% of home owners without mortgages).
- 2/3 of households below the median income (\$50,000 per year) had cost burdens.
- 21% of Benton County households had extreme housing cost burdens (more than 50% of income spent on housing). This included 9% of owners and 39 % of renters.

Benton County has extreme income inequality.

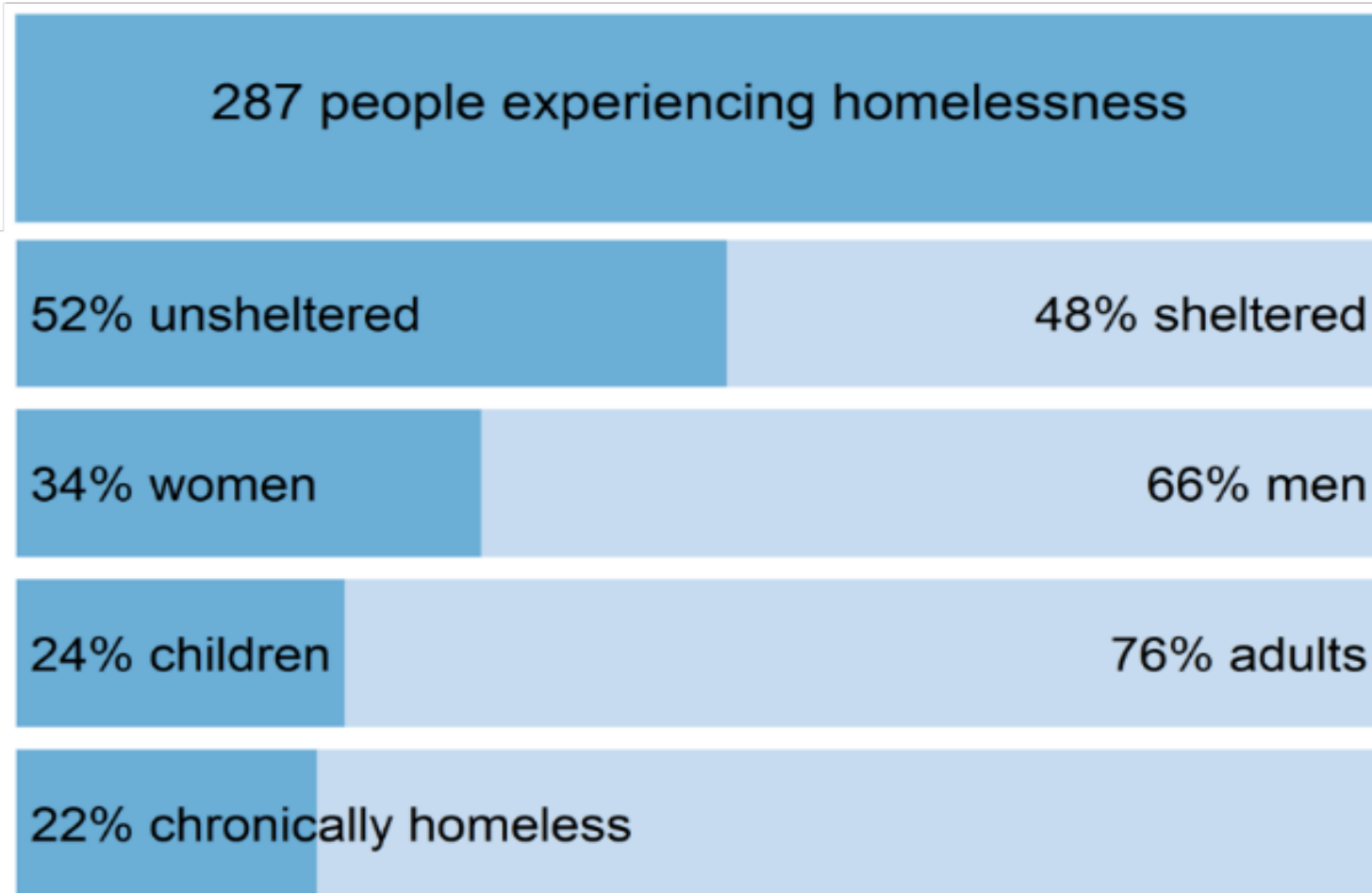
The top 80% of households make at least \$108,000

The bottom 20% of households make at most \$18,000

Benton County has higher income inequality than 98% of counties in the United States

Homelessness in Benton County

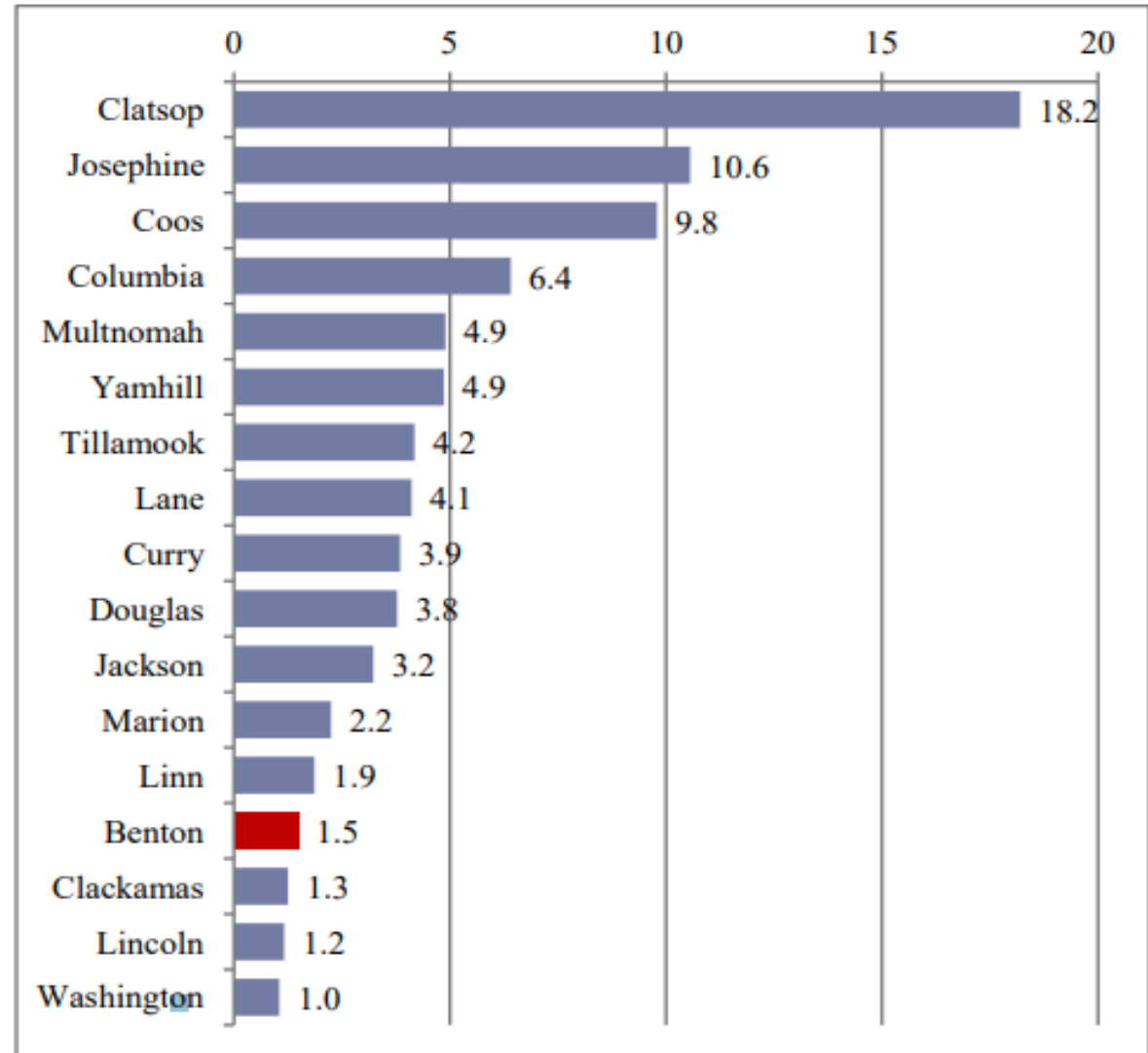
On one night in January, 2017, there were



Homelessness in Benton County

FIGURE 28: RATE OF HOMELESSNESS PER 1,000 POPULATION, 18 WESTERN OREGON COUNTIES, 2015 PIT

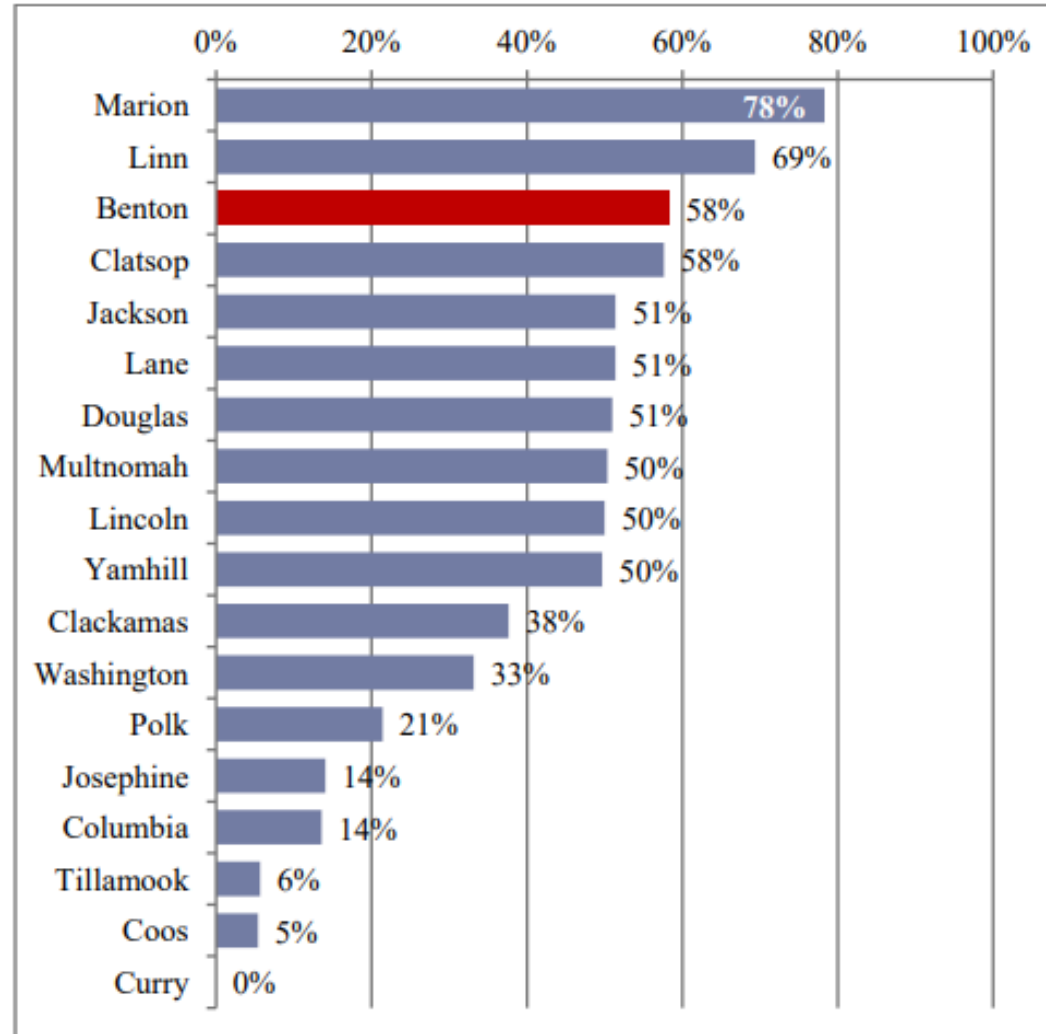
- Point in Time (PIT) data from Oregon, to compare Benton County to other counties
- In January 2015, Benton County ranked among the bottom 5 of 18 counties in Western Oregon in the rate of homelessness per 1,000 population
- Benton County has a low percentage of homeless individuals compared to other counties



Shelter Services in Benton County

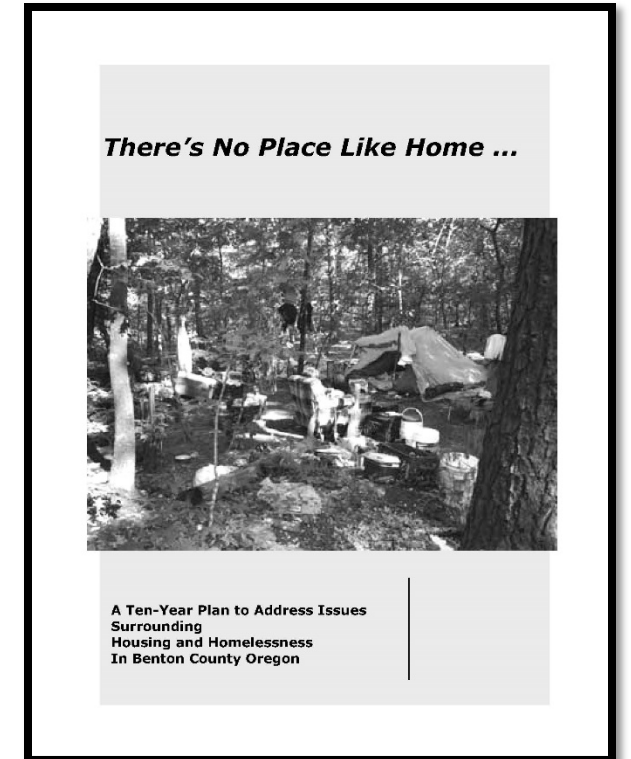
FIGURE 29: PROPORTION OF HOMELESS POPULATION THAT WAS SHELTERED, 18 WESTERN OREGON COUNTIES, 2015 PIT

- In January 2015, Benton County ranked third among the 18 counties in Western Oregon in the proportion of sheltered homeless people
- Benton County houses 58% of our homeless population
- Benton County does not supply significant levels of shelter for homeless individuals when compared with other counties



Background and Partnerships

- **2009** - Homeless Oversight Committee (HOC) published a Ten Year Plan to Address Homelessness
- **2015** – Hosted Homelessness Summit; reconvened as the Housing Opportunities Action Council (HOAC)
- **2016 -17** - Mid-point update to Ten Year Plan Planning and Engagement Process
 - Funded through Benton County, City of Corvallis, and Samaritan Health Services.
 - Benton County Healthy Communities and Epidemiology Teams facilitate planning process



Key Planning Tools

- Data Snap Shot
- Scanning the Landscape Survey (SWOT) (168)
- Community Partner Mapping
- Key Informant Interviews / Group Discussions (138)
- Special Population Input (364)

Input from Persons experiencing Homelessness and Housing instability

- Better system of support and case management
- Access to addictions and mental health treatment
- More employment and training
- Education and awareness of services for homeless
- Camp site with basic amenities
- Shelters (bigger, more hours, year round, etc.)
- More transitional and supportive housing
- More Project based Section 8
- Change laws about no cause eviction
- Fund the Ten Year Plan
- Set aside land for low-income housing
- Regulate OSU regarding housing
- More community involvement and awareness
- OPEN HEARTS and minds, and compassion to deal with traumatized people

Broad Intervention Areas

- 1) Community and Organizational Systems & Policy Change
- 2) Comprehensive Care Coordination
- 3) Prevention
- 4) Street Outreach & Rapid Response
- 5) Housing
- 6) Community Integration & Neighborhood Belonging

Broad Intervention Areas and 31 Strategies

1. COMMUNITY AND ORGANIZATIONAL SYSTEMS & POLICY CHANGE		
<i>Mobilize HOAC and community to advocate for affordable housing.</i>		
1.1. Develop messaging strategy to build broad-based support for affordable housing advocacy.	1.3. Advance priority policy recommendations including those identified through the Corvallis Housing Development Task Force.	1.5. Align advocacy and planning efforts with other key sectors (i.e., economic development, health care, etc.).
1.2. Build capacity of HOAC and community to mobilize and advocate for policy, planning, and funding opportunities with high potential to impact housing affordability.	1.4. Track emerging policy, planning, and funding opportunities with high potential to impact housing affordability.	
2. COMPREHENSIVE CARE COORDINATION		
<i>Inform a new system of care coordination and data sharing</i>		
2.1. Increase capacity to provide comprehensive, well-coordinated case management services aligned with health care transformation.		
2.2. Pilot social determinant of health screening in conjunction with every new mental health intake at Benton County Health Services.		
2.3. Develop, implement, and evaluate coordinated entry, assessment, and application process.		
2.4. Establish centralized, comprehensive data system to understand size, scope, and needs of population.		
2.5. Coordinate with 211 information system to ensure information is updated, accurate, and disseminated.		
3. PREVENTION		
<i>Prevent residents from experiencing homelessness.</i>		
3.1. Expand linkages with existing and/or new supported employment programs.		
3.2. Assure eviction and foreclosure prevention and emergency financial resources.		
3.3. Limit displacement due to violations of building and safety codes.		
3.4. Improve capacity to engage residents and landlords to address renter grievances.		
3.5. Develop, implement, and evaluate a comprehensive Healthy Homes Program.		
3.6. Increase capacity to provide mental health treatment and detox services.		
4. STREET OUTREACH & RAPID RESPONSE		
<i>Provide safe and accessible crisis response.</i>		
4.1. Expand street outreach capacity in both City of Corvallis and rural Benton County.		
4.2. Establish permanent site for a daytime drop-in center and soup kitchen (with expanded hours).		
4.3. Strengthen partnerships with Parks & Recreation and Law Enforcement to mitigate and address issues with illegal camping.		
4.4. Strengthen partnerships with Law Enforcement and Mental Health to ensure mental health and other support needs are appropriately addressed.		
4.5. Assure availability of one-time flex funds to respond to individual emergency requests.		
5. HOUSING		
<i>Expand housing options and other supports.</i>		
5.1. Establish permanent location(s) for year-round emergency shelter for men, women, and families.	5.4. Facilitate entry into permanent housing among those experiencing homelessness or living in temporary or transitional housing.	5.7. Secure more permanent supportive housing for special populations.
5.2. Establish other temporary shelter strategies (e.g., legal camp site, scattered site camping, etc.).	5.5. Improve capacity of Section 8 Housing Choice Voucher Program (e.g., provide care coordination, other rental assistance to those on waiting list, etc.).	5.8. Expand homeownership opportunities for low-income residents.
5.3. Expand capacity to conduct transition/discharge planning.	5.6. Develop new and convert existing units to project-based rent assisted housing.	5.9. Increase affordable housing supply in Benton County, in coordination with Intervention Area 1.
6. COMMUNITY INTEGRATION & NEIGHBORHOOD BELONGING		
<i>Mobilize the HOAC to foster a community in which everyone has opportunities to participate and feel valued and supported.</i>		
6.1. Implement social marketing campaign to educate the broader community about the complexity of homelessness/housing instability, in coordination with Intervention Area 1.		

Keystone Strategies, 2017-2019

A. Mental and Behavioral Health

- ★ Increase capacity to provide mental health treatment and detox services (3.6).

Supporting Activities:

- ★ Strengthen partnerships with Law Enforcement and Mental Health to ensure mental health and other support needs are appropriately addressed (4.4).

B. Comprehensive Care Coordination

- ★ Increase capacity to provide comprehensive, well-coordinated case management services aligned with health care transformation (2.1).

Supporting Activities:

- Develop, implement and evaluate coordinated entry, assessment and application process (2.3).
- Establish centralized, comprehensive data system to understand size, scope and needs of population (2.4).

C. Housing Supply

- ★ Increase the affordable housing supply in Benton County (5.9).

Supporting Activities:

- ★ Develop messaging strategy to build broad-based support for affordable housing advocacy (1.1).
 - Build capacity of HOAC and community to mobilize and advocate for policy, planning, and funding opportunities with high potential to impact housing affordability (1.2).
 - Advance priority policy recommendations, including those identified through the Corvallis Housing Development Task Force (1.3).
 - Track emerging policy, planning, and funding opportunities with high potential to impact housing affordability. (1.4).

D. Emergency Shelter

- Establish permanent location(s) for year- round emergency shelter for men, women, and families. (5.1).

E. Other Temporary Shelter

- Establish other temporary shelter strategies (e.g., legal camp sites, scattered site tent/car camping, etc.) (5.2).

F. Daytime Drop-in Center

- Establish a permanent site for a daytime drop-in center and soup kitchen (with expanded hours) (4.2).

G. Entry into Permanent Housing

- Facilitate entry into permanent housing for persons experiencing homelessness or living in temporary or transitional housing (5.4).

H. Permanent Supportive Housing

- Secure more permanent supportive housing for special populations (5.7).

For More Information

Tatiana Dierwechter, MSW
Healthy Communities Program Manager
Benton County Health Department
tatiana.dierwechter@co.benton.or.us

Housing Opportunities Action Council:
<http://bentonhoac.com/>

Housing as a social determinant of health:
stories from the front line
OR
The homeless male in Corvallis – who is he?

Brad Smith – DVM, PhD; Board President – Corvallis Housing First

Question:

- ◆ How do we develop sound public policy if we don't first define the characteristics and needs of the population?

Men's Winter Shelter – Corvallis, OR

Season #	Years	Location	# Nights	Total Bed Nights	Mean Beds/Night	# Clients	# Bed Nights / Client
1	2006-2007	Taylor & 25th	85	1347	15.8	71	19.0
2	2007-2008	Taylor & 27th	137	4226	30.8	110	38.4
3	2008-2009	Westside Church	121	3314	27.4	97	34.2
4	2009-2010	Westside Church	121	3603	29.8	97	37.1
5	2010-2011	Westside Church	110	3111	28.3	112	27.8
6	2011-2012	Westside Church	122	3133	25.7	106	29.6
7	2012-2013	4th St Shelter	141	4082	29.0	140	29.2
8	2013-2014	4th St Shelter	151	5123	33.9	169	30.3
9	2014-2015	4th St Shelter	151	5184	34.3	167	31.0
10	2015-2016	4th St Shelter	151	4699	31.1	158	29.7
11	2016-2017	4th St Shelter	150	4368	29.1	198	22.1
12	2017-2018	Chapman Dr	149	5657	38.0	164	34.5
Total:			1440	47847		1589	

Population

- all single individuals who self identify as male
- Over age 18
- Low barrier; able to interact in an appropriate manner





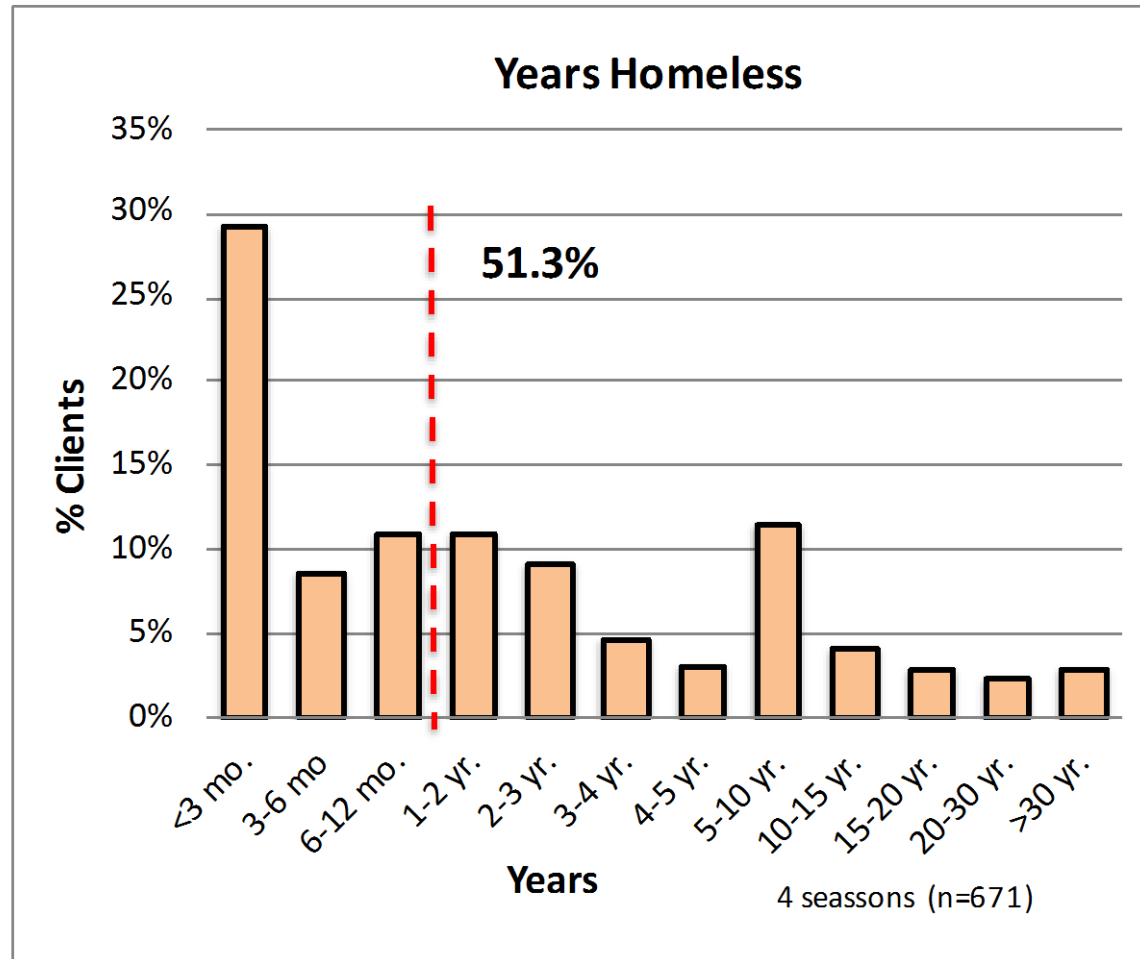
Men's Winter Shelter – Corvallis, OR



Some of the items found during bag search



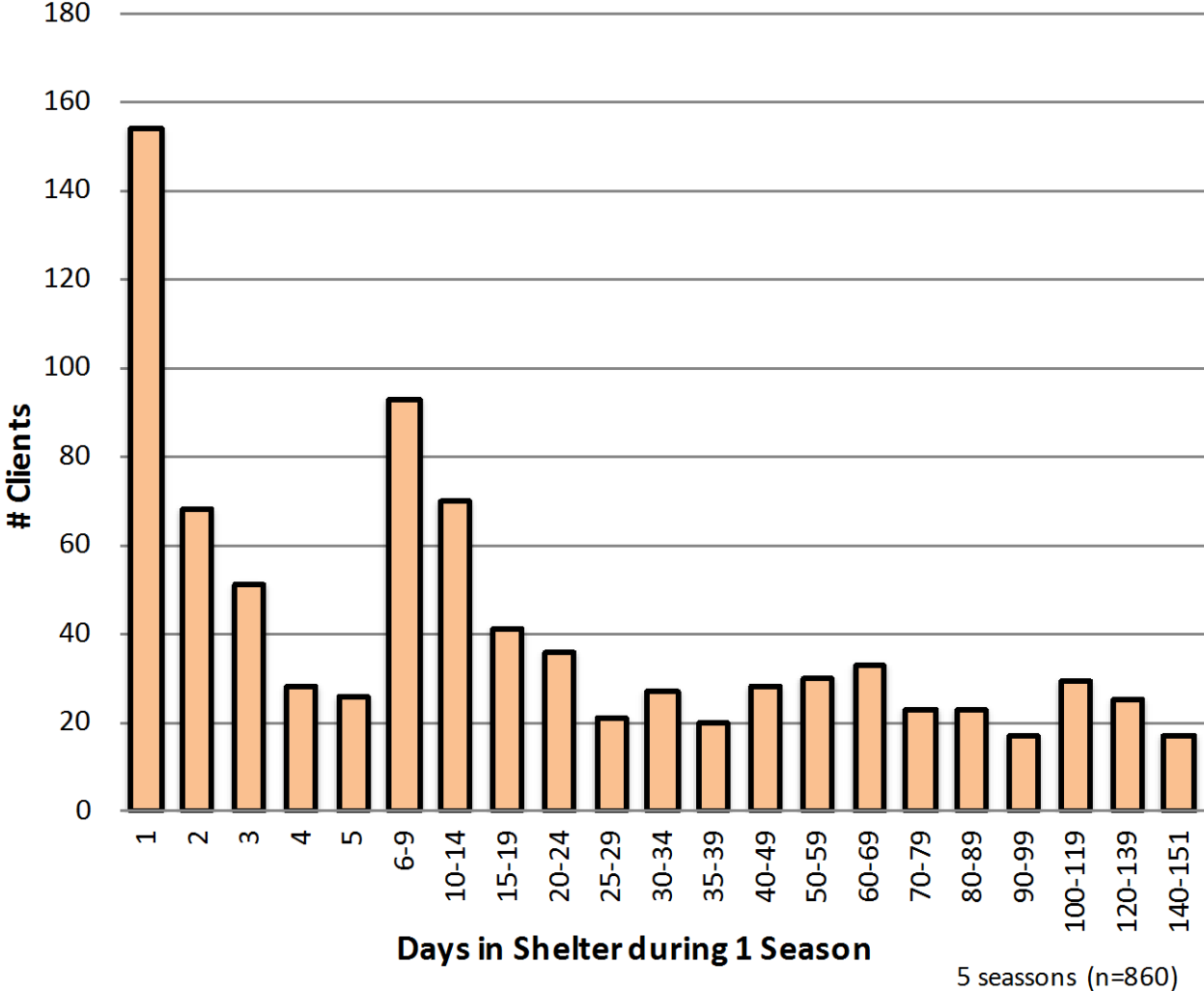
Men's Winter Shelter – Corvallis, OR



Men's Winter Shelter – Corvallis, OR



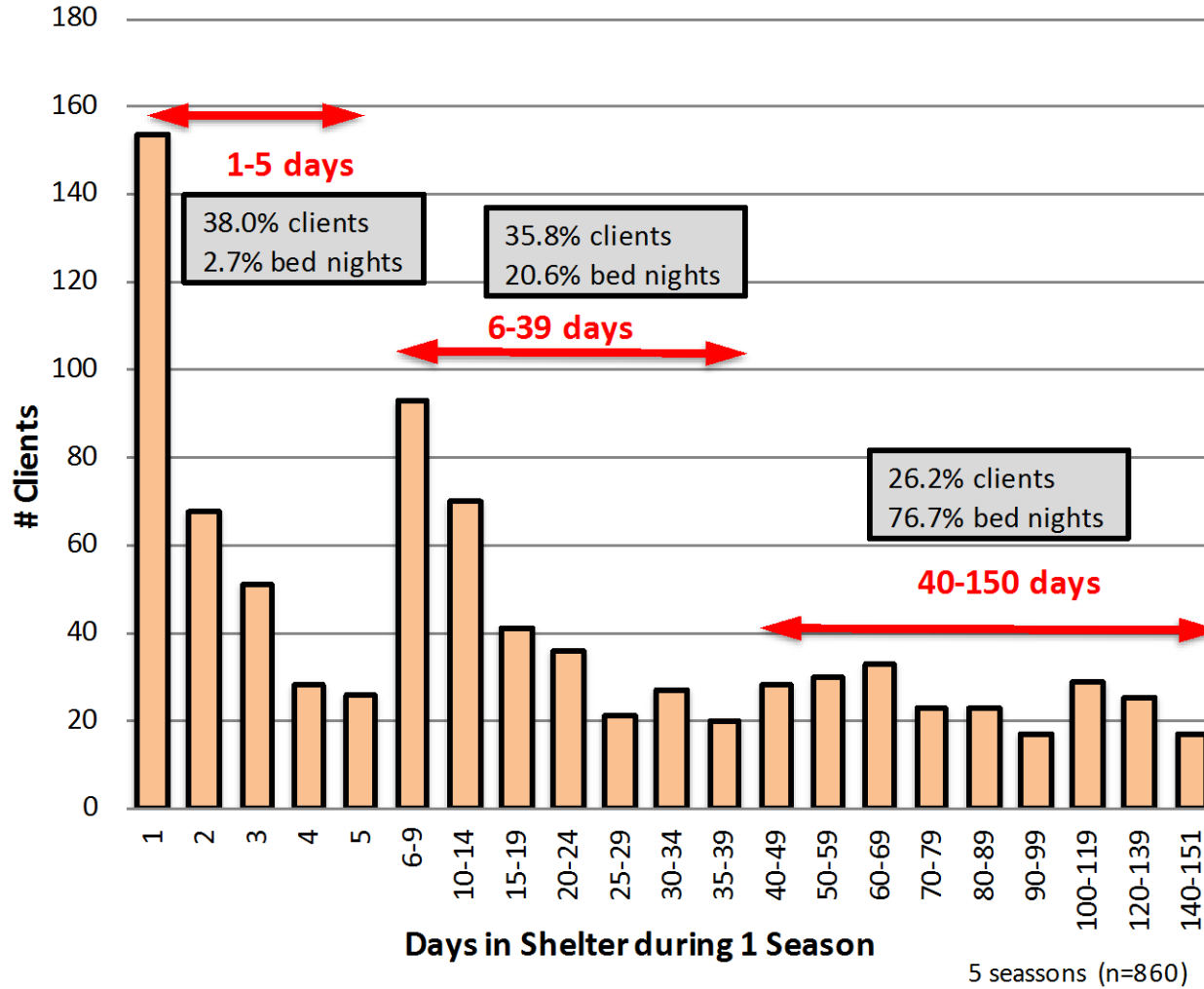
Bed Nights per Client During a Season



Men’s Winter Shelter – Corvallis, OR



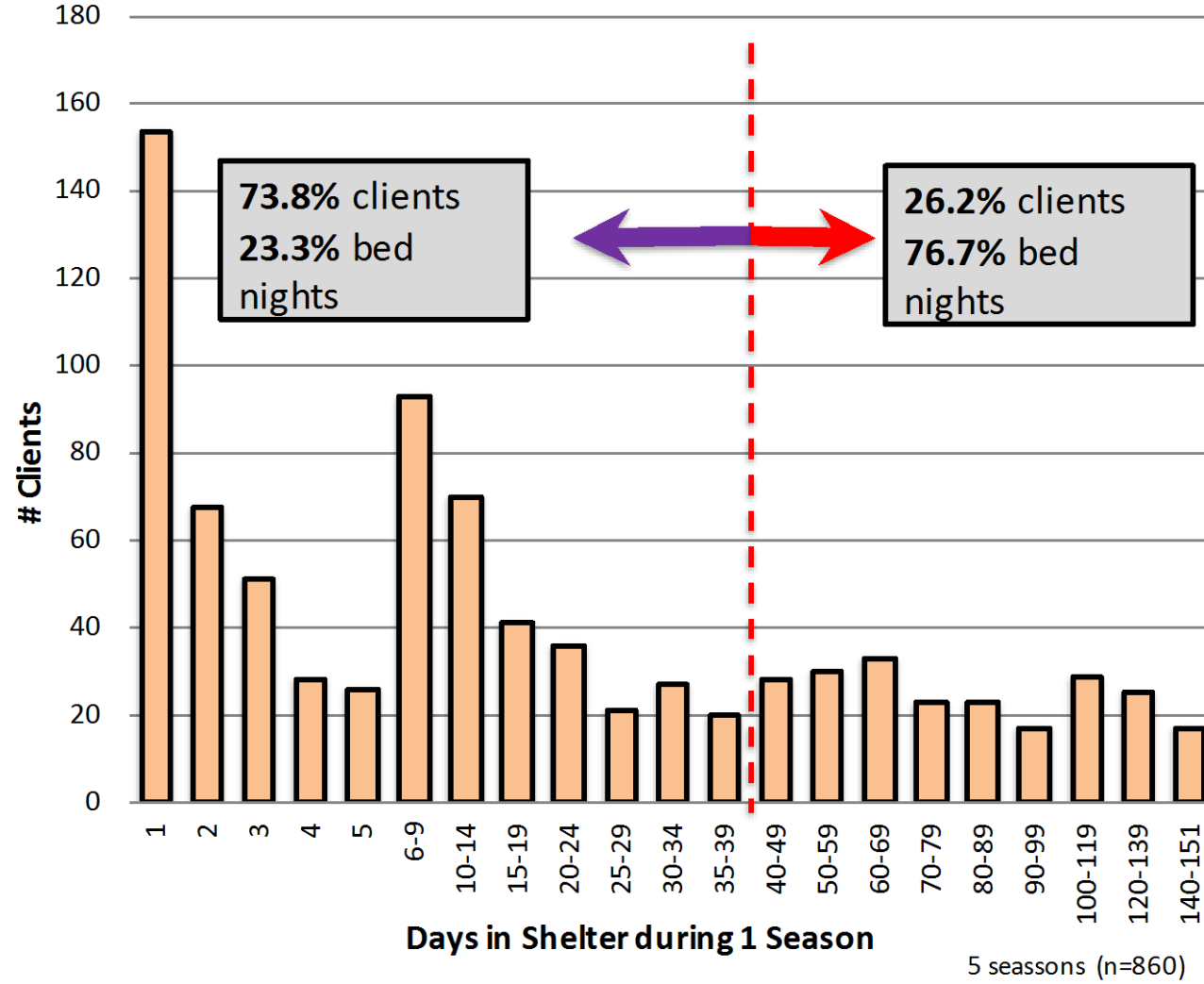
Bed Nights per Client During a Season



Men's Winter Shelter – Corvallis, OR

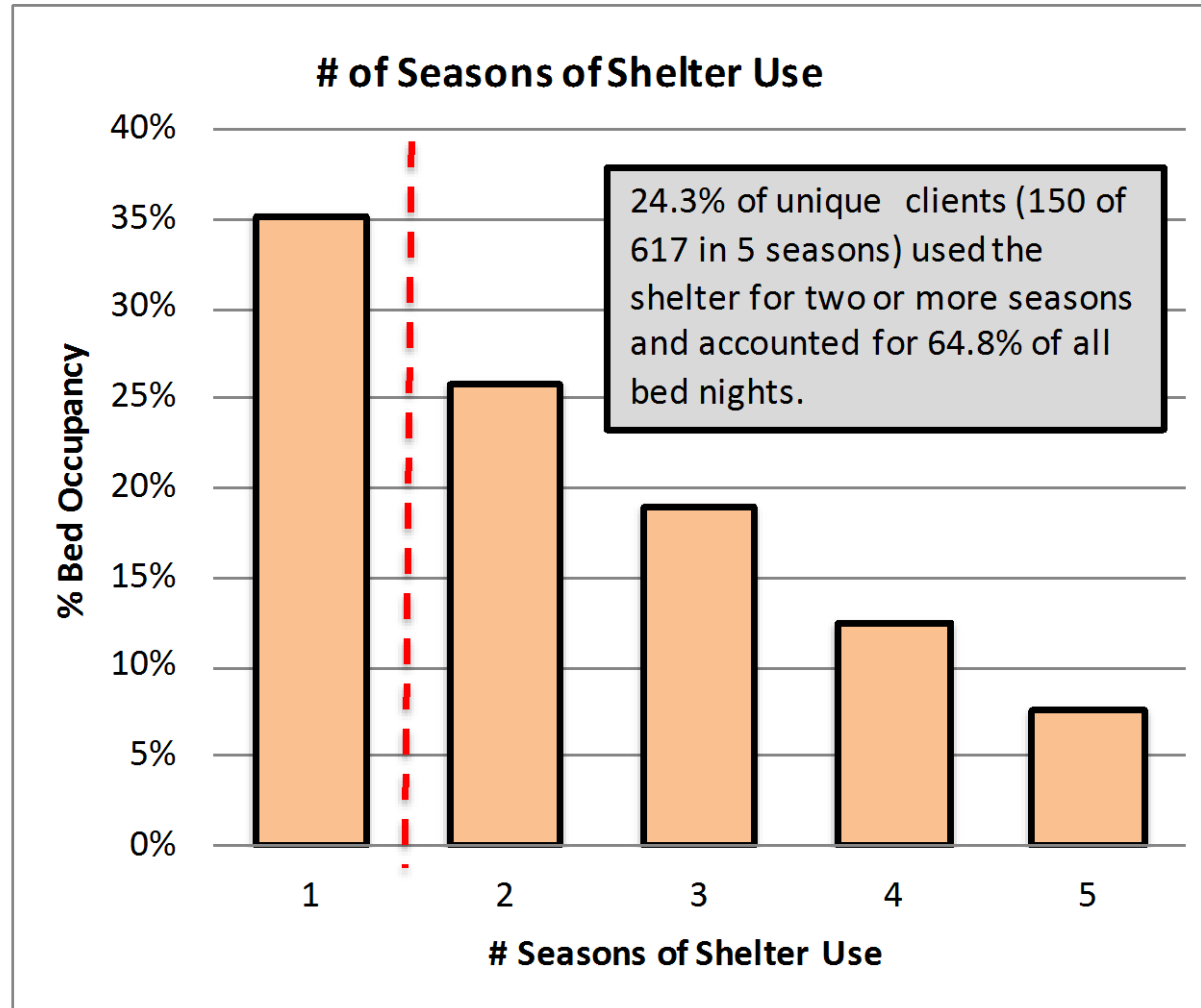


Bed Nights per Client During a Season



Men's Winter Shelter – Corvallis, OR





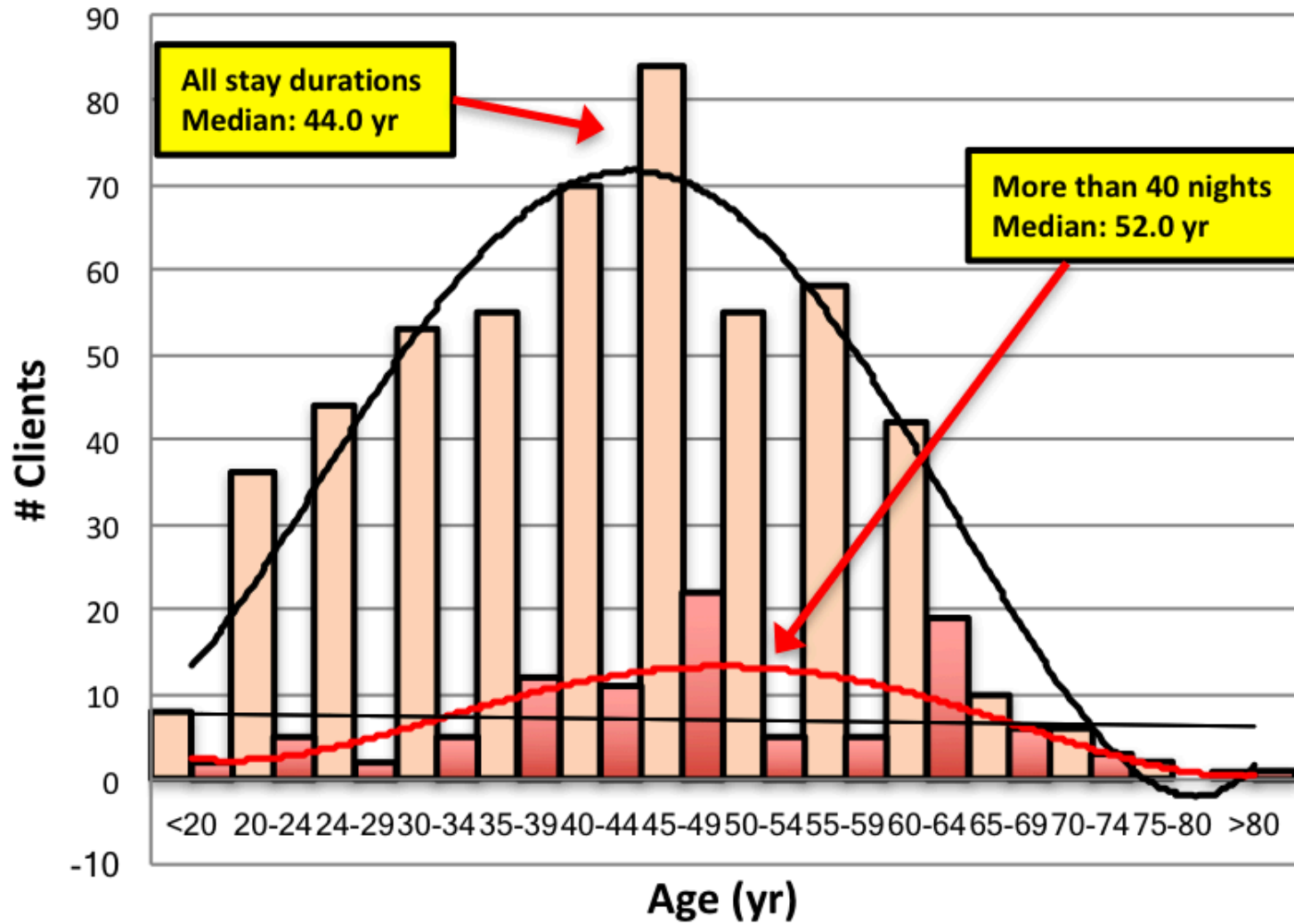
Men's Winter Shelter – Corvallis, OR



Observations:

- ◆ About 50:50 split between less than 1 yr. homeless and more than 1 yr. homeless
- ◆ 3 distinct use patterns
- ◆ Substantial % of individuals are multi-seasonal users

Age Distribution



Men's Winter Shelter – Corvallis, OR



Self identified ethnicity.

	#	%
WHITE	466	66.9%
HISPANIC	64	9.2%
AFRICAN AMERICAN	45	6.5%
NATIVE AMERICAN	96	13.8%
PACIFIC ISLANDER	14	2.0%
ASIAN	12	1.7%
TOTAL	697	100.0%

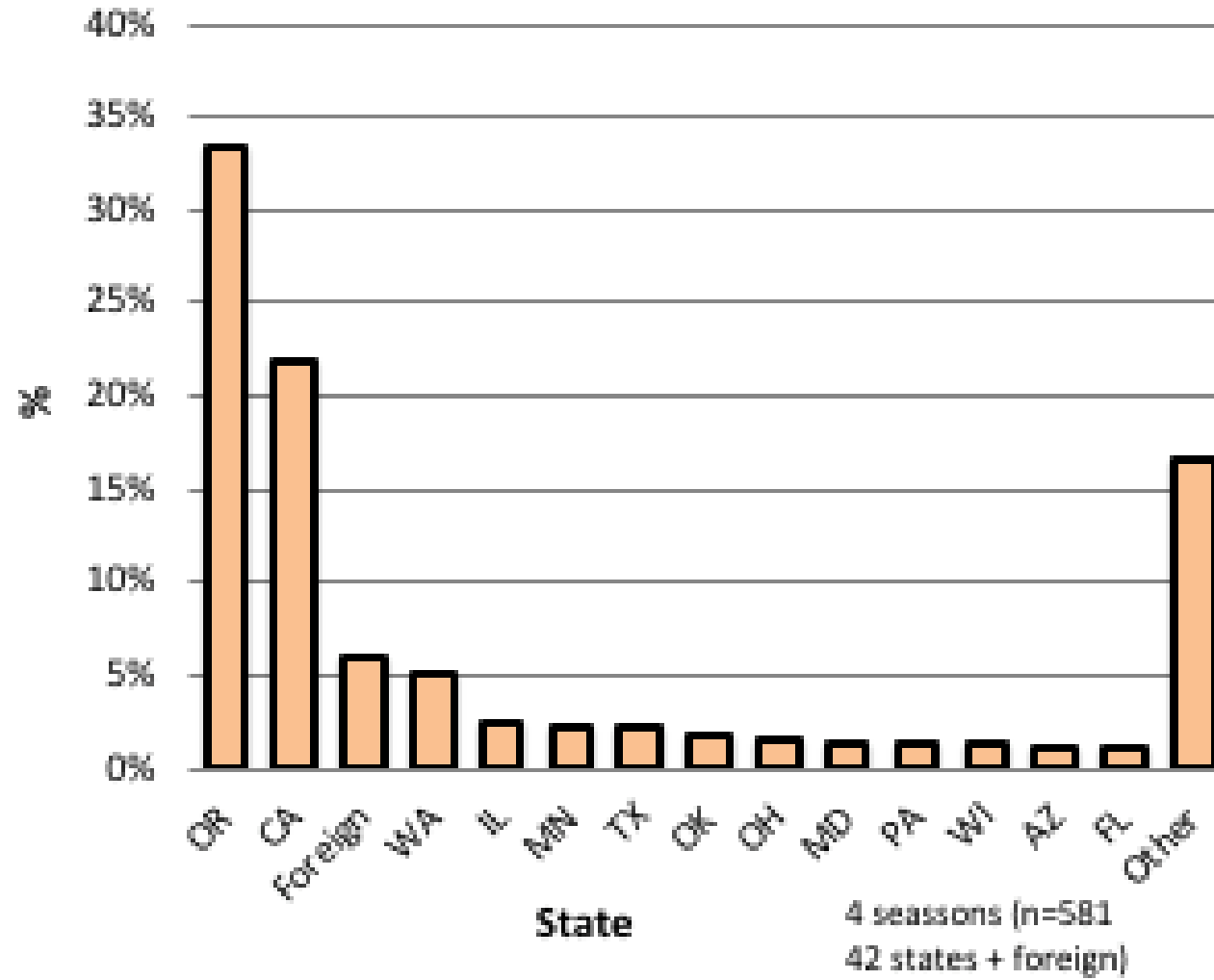
Veterans status.

	# Clients	% Clients	Bed Nights	% Bed Nights
No	484	80.4%	13568	72.6%
Yes	118	19.6%	5,125	27.4%
Total	602	100.0%	18,693	100.0%

Observations:

- ◆ Older individual – mean age: 44 yr.; over 50 for individuals using the shelter for > 40 days
- ◆ About 2/3 population is white
- ◆ Native Americans over represented in the population
- ◆ Veterans represent about 20 % of population

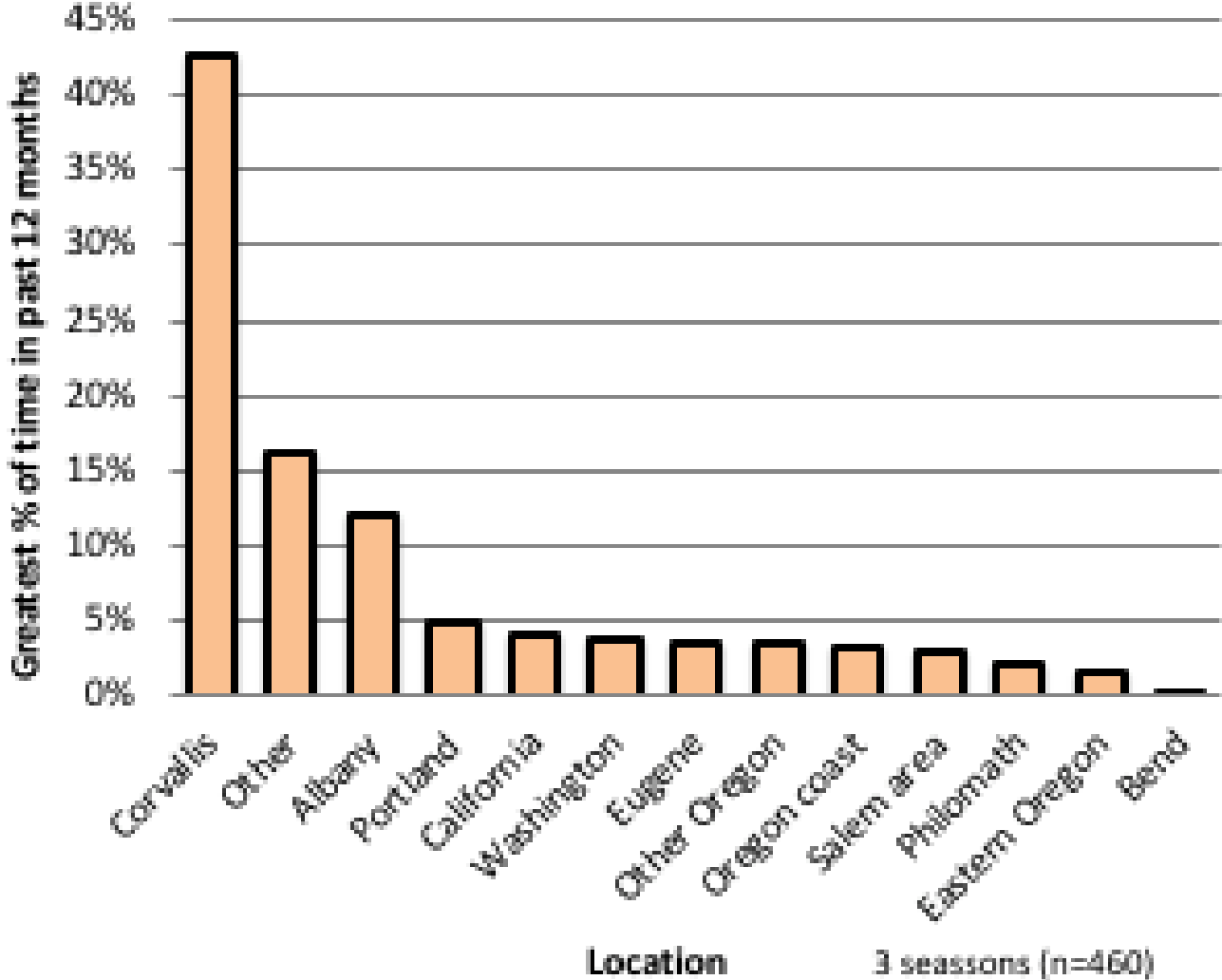
State of Birth



Men's Winter Shelter – Corvallis, OR



Greatest % Occupancy for the past 12 Months



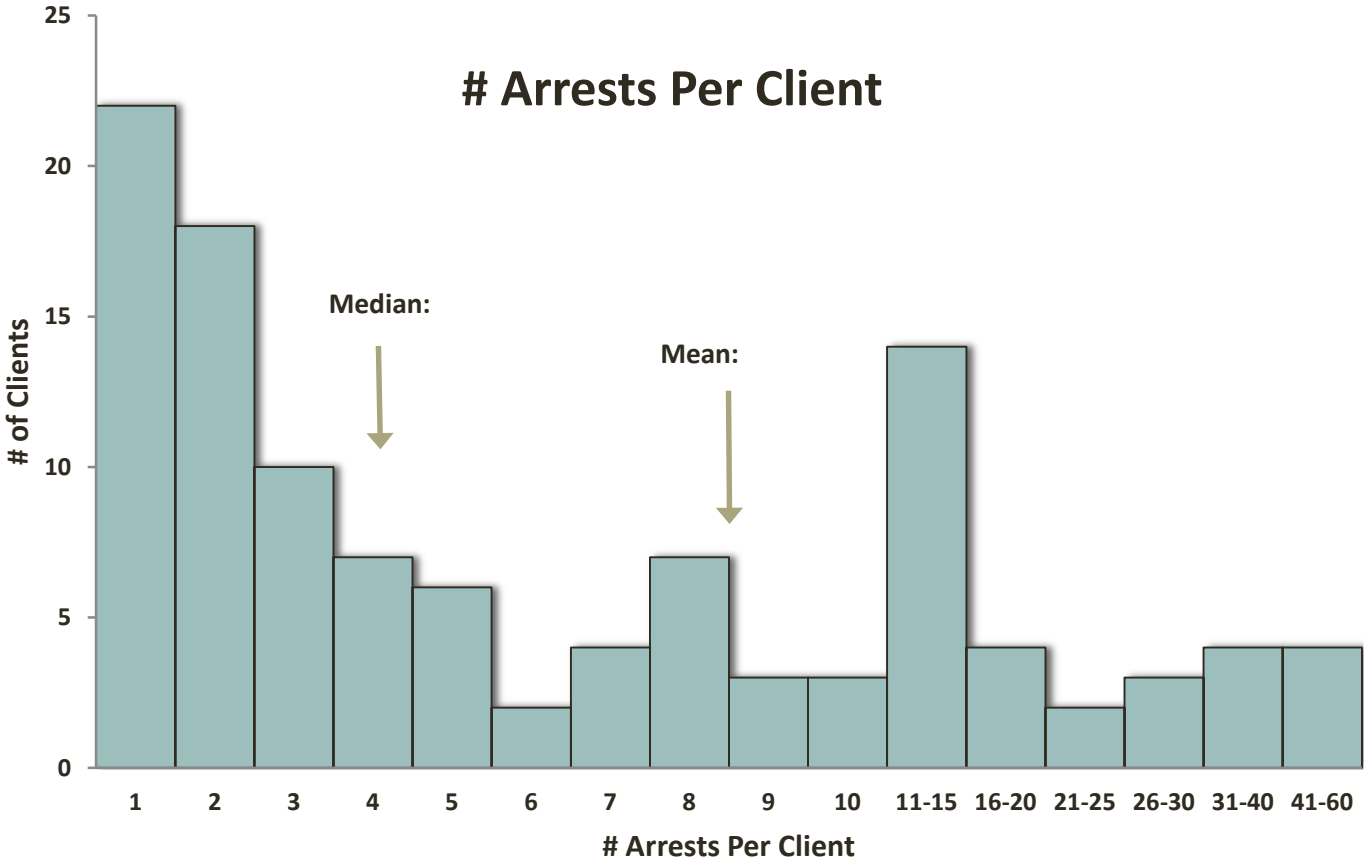
	SSI		SSDI		OHP		Food Stamps		TANF	
	#	%	#	%	#	%	#	%	#	%
YES	153	26.1%	89	15.6%	354	60.4%	433	71.5%	6	1.3%
NO	434	73.9%	483	84.4%	232	39.6%	173	28.5%	440	98.7%
TOTAL	587	100.0%	572	100.0%	586	100.0%	606	100.0%	446	100.0%

Men's Winter Shelter – Corvallis, OR

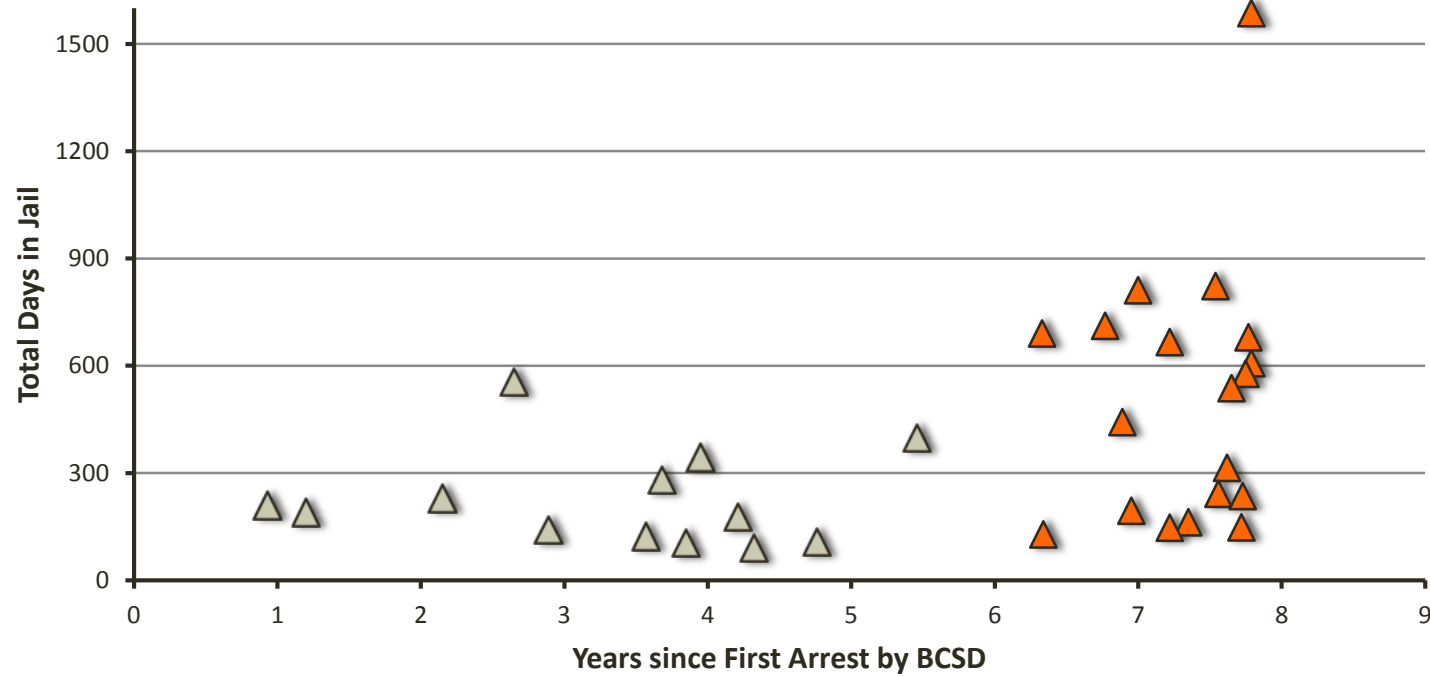


2013/2014 and 2014/2015 clients

Period: 1/1/13 – 7/1/15
113 of 261 = 43.3% arrested for something



Days in Jail as Fcn. of Years in Town



Individuals shown in orange (n=19) who had arrest records going back >6 years accounted for 8892 jail nights or 63.4% of total incarceration.

Observations:

- ◆ About 1/3 born in Oregon
- ◆ 40-50% have spent most of the past 12 months in Corvallis
- ◆ About 60% on OHP
- ◆ About 50:50 on needing transitional vs permanent supported housing
- ◆ 40-45% have been arrested in the previous 12 months

“Charlie” vs the population:



	“CHARLIE”
Age:	61
Years Homeless	>12
Years in Town	>10
# of Shelter Seasons	4
Ethnicity	White
Veteran Status	Yes
State of Birth	Oregon
Substance Abuse	Alcohol
Medical:	Severe Respiratory Problems

Perspectives from a Healthcare System

Tanya Grant, MPH, RN
Director of Care Management



Samaritan
Health
Services

Samaritan Health Services

- Nonprofit regional healthcare system
 - 5 hospitals, 80 clinics
 - Primarily serving Lincoln, Benton, & Linn Counties

- ~190,000 people served in 2017



Caring For Homeless Patients



Many challenges:

- Chronic conditions exacerbated by living outdoors
- Getting to routine appointments
- Trauma/negative past experiences with medical system
- Frequent visits to emergency department, hospitalization, readmissions
- Interpersonal conflicts

Tracking Homeless Patients

- Identifying homelessness in electronic medical records:
 - Address: “homeless,” PO Box, shelter address, friend’s house, billing office address
 - Electronic Health Record (EHR) Epic: 2018 update will improve documentation of Social Determinants of Health (SDoH)
 - Code for SDoH: Z59.0 – Problems related to housing and economic circumstances
- Cross-reference lists of men and women who spent ≥ 1 night at a Corvallis shelter during the 2016-2017 or 2017-2018 winter seasons

Data

- 261 of 319 people had records in Epic electronic health record
- These 261 individuals had a total of:
 - 3,496 encounters of any type at Samaritan in 2016-2017
 - 1,351 inpatient days in 2016-2017
 - 629 ED encounters and 127 hospital admissions in the prior year (as of Jan 2018)

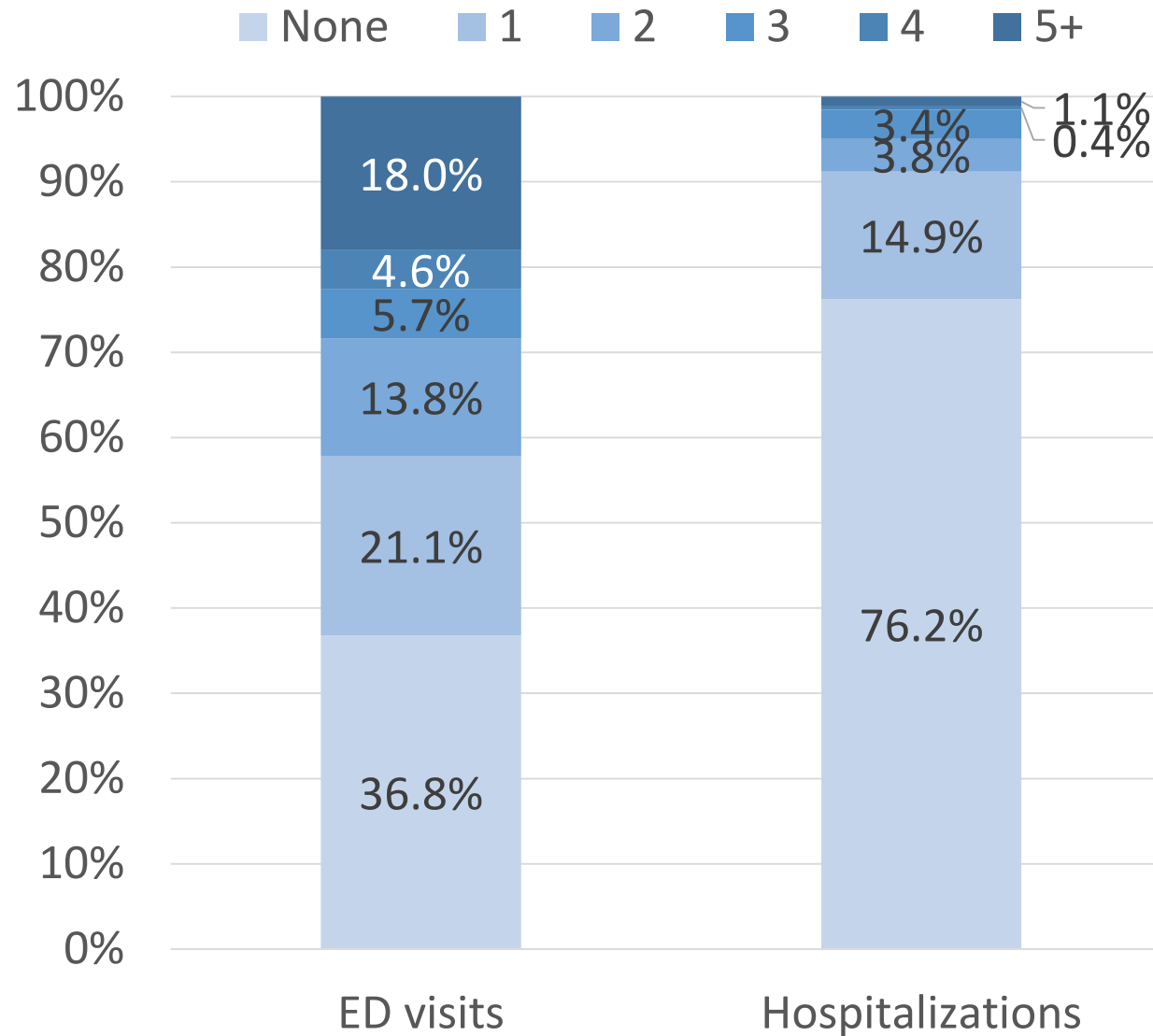


Shelter visitors (N=261)	
Gender	
Male	69.6%
Female	30.4%
Race	
White or Caucasian	86.5%
Black or African American	4.2%
American Indian or Alaska Native	2.3%
Asian	1.2%
Other	1.9%
Unknown	3.8%
Ethnicity	
Not Hispanic or Latino	93.1%
Hispanic or Latino	3.1%
Unknown	3.8%
Veteran	8.8%

Shelter visitors (N=261)

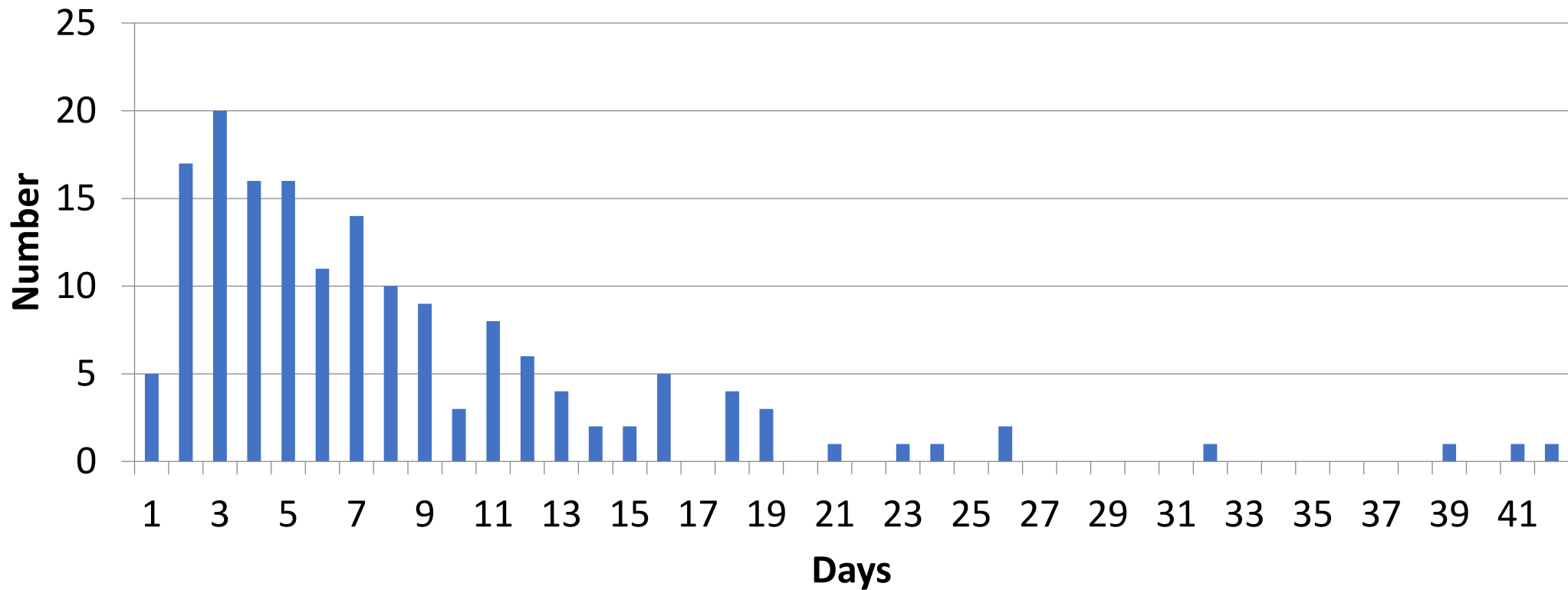
Insurance Group	
Medicaid	57.5%
Medicare	14.6%
Self-Pay	14.9%
Commercial	2.7%
Other	0.8%
Unknown	9.6%
Chronic Diseases	
Chronic Kidney Disease	8.0%
Diabetes	7.3%
Congestive Heart Failure	1.9%
Cancer	1.9%
PCP Status	
Has a PCP, and saw them in 2017	19.5%
Has a PCP, and saw them before 2017	5.4%
Has a PCP but has never seen them	34.9%
No PCP listed	40.2%

Acute care over 1 year



Length of Stay

- 164 hospital admissions at any Samaritan hospital in 2016-2017



Primary Causes of Hospitalization

	# of hospital admissions	Median LOS	Sum of all LOS for this diagnosis in 2016-2017
Mental Health	71	8	758
Infection	21	8	184
Respiratory	18	5.5	106
Heart	6	4	26
Liver Related	2	9	18
Diabetes	3	3	15
Substance Abuse	3	3	12
Other Reason	40	4	232

Primary Diagnoses Among All Encounters

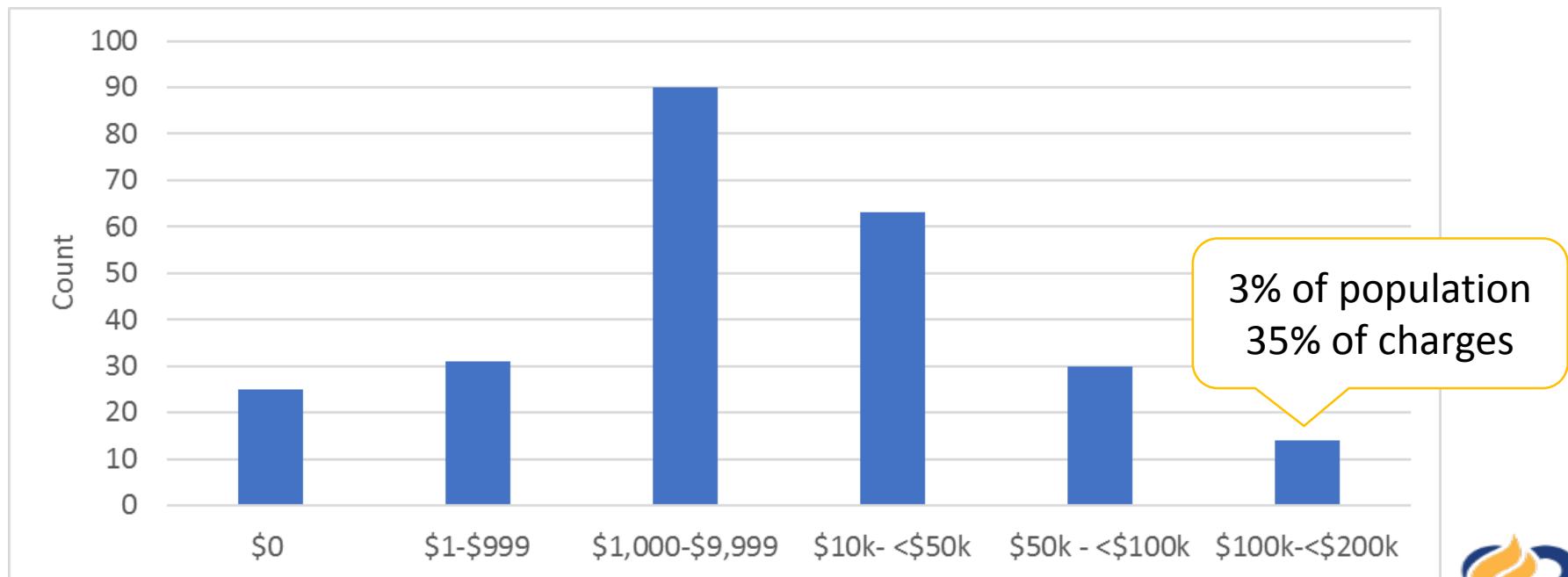
	Individuals with ≥ 1 encounter with this diagnosis category	Encounters related to this diagnosis category
Pain	44%	24%
Mental Health	33%	19%
Respiratory	31%	13%
Infection	20%	6%
Substance Abuse	20%	12%
Heart	20%	12%
Hypertension	9%	3%
Diabetes	7%	12%
Liver Related	5%	3%
Arthritis	3%	2%

Out of 261 individuals

Out of 1,503 encounters

Cost of Care

- We summarized charges assigned to the care provided
 - **Charges are not an accurate estimate of the cost incurred or amount reimbursed**
 - **Interpret as a rough proxy for amount of healthcare utilization**
- Total charges over 2 years for 261 people: \$9.3 million



Cost of Care

- \$936,000 in Housing



Cost of Care

- \$936,000 in Housing



Homeless Committee

- Attendance:
 - Linn & Benton Co. Health Dept reps, SHS care coordinators & health navigators, SHS Veterans Navigator
 - Benton County Health Dept mental health, SHS mental health
 - Community Agencies working on Homelessness:
 - Housing Opportunities Action Council
 - Willamette Neighborhood Housing Services
 - Corvallis Housing First
 - Community Services Consortium
 - Benton County Jail nurse & county jail avoidance representatives
- Share current barriers, identify housing options, coordinate follow up care & deploy interventions

Next Steps

- 1-year pilot project funded by IHN-CCO's Delivery Systems Transformation committee
 - Dedicated case manager for homeless/SDOH-vulnerable patients, based at hospital
 - BCHD funded Health Navigator, based with harm reduction outreach team
 - Goals: increase primary care utilization, decrease acute care utilization, increase provider knowledge about SDOH and trauma-informed care, transition more people into supported housing
- SHS presence at Corvallis Cold Weather Shelter
- Continue efforts to collaborate with interdisciplinary partners

Questions?
