Assessing the Oregon Health Care Workforce by Workforce Regions in a System of Universal Health Insurance

Terry Hammond PhD MPH

National Forum of State Nursing Workforce Centers Conference

The Nursing Workforce and Health Reform: Trends and Opportunities in a New Political Era

June 8, 2017
Denver, Colorado

OREGON

RUCA 3.1 ZIP Codes

CLATSOP
COLUMBIA
WASHINGTON
MULTNOMAH
TILLAMOOK
HOOD RIVER
YAMHILL
CLACKAMAS
SHERMAN
GILLIAM
MORROW
UMATILLA
UNION
WALLOWA
WASCO
POLK
MARION
LINCOLN
BENTON
LINN
JEFFERSON
WHEELER
GRANT
BAKER
CROOK
LANE
DESCHUTES
COOS
DOUGLAS
HARNEY
MALHEUR
LAKE
KLAMATH
JACKSON
JOSEPHINE
CURRY

text Counties
2010 Census Urbanized Areas

RUCA Code
1-3 (Urban)
4
5
6
7
8
9
10

10/9/2014

more info about RUCAs: depts.washington.edu/uwruca

Rural-Urban Commuting Areas – www.ohsu.edu/xd/outreach/oregon-rural-health

2014 All Active Docs by FTE per 1000 Persons by County

Darker color means worse conditions.

--Physician FTE data from Oregon Medical Board, Dec 2014
FTE is calculated from patient hours self-reported on survey
--Population data from PSU Population Center, Dec 2014

7/20/2015

2016 Oregon Rural Unmet Healthcare Need by Service Area

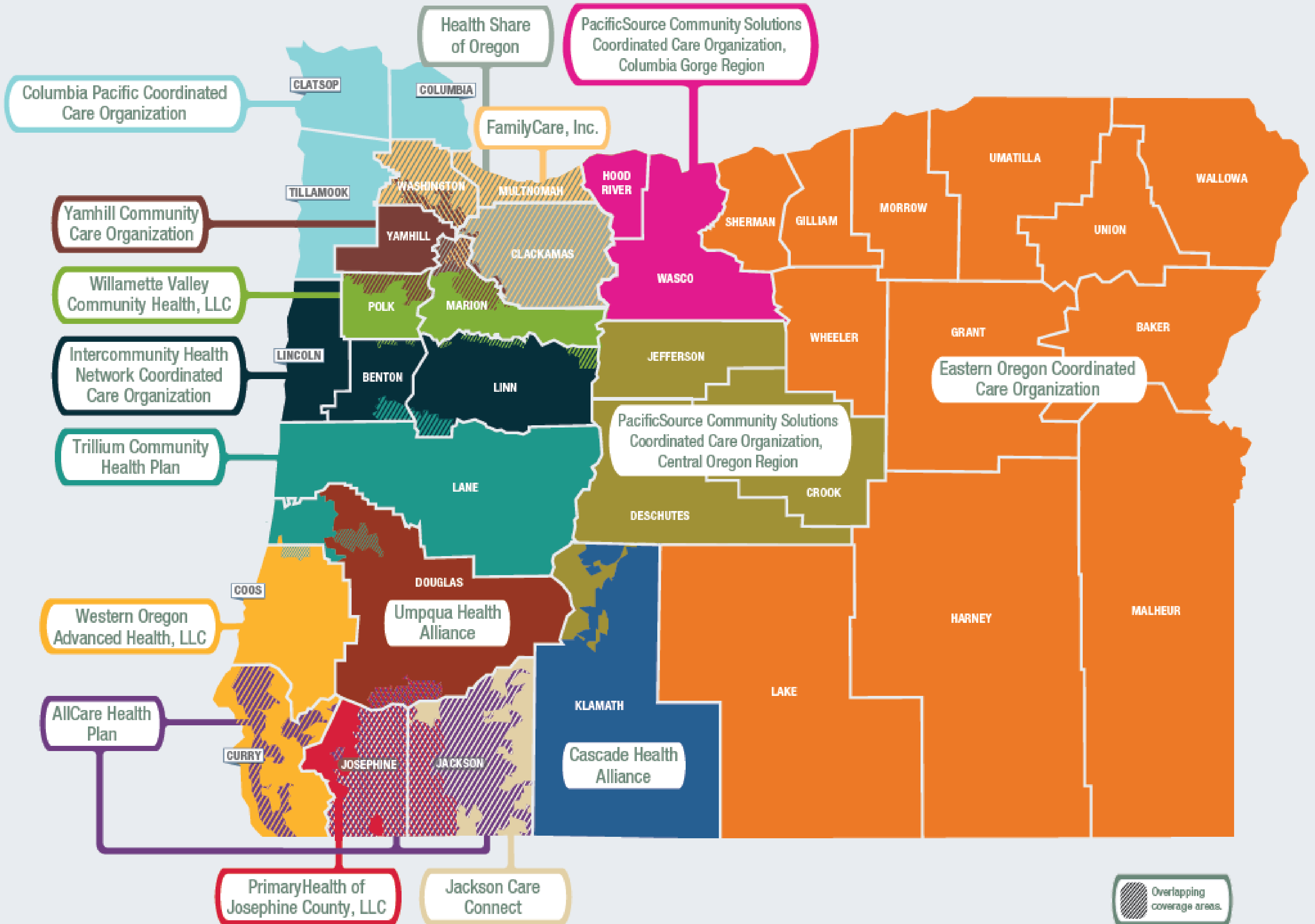
3/27/2016

www.ohsu.edu/xd/outreach/oregon-rural-health/data/health-care-shortage.cfm

“Rational” Medical Market Areas

- Health Professional Shortage Area
- Medically Underserved Area
- Critical Access Hospitals

- Areas of Unmet Health Care Need
- Governor's Certified Shortage Areas

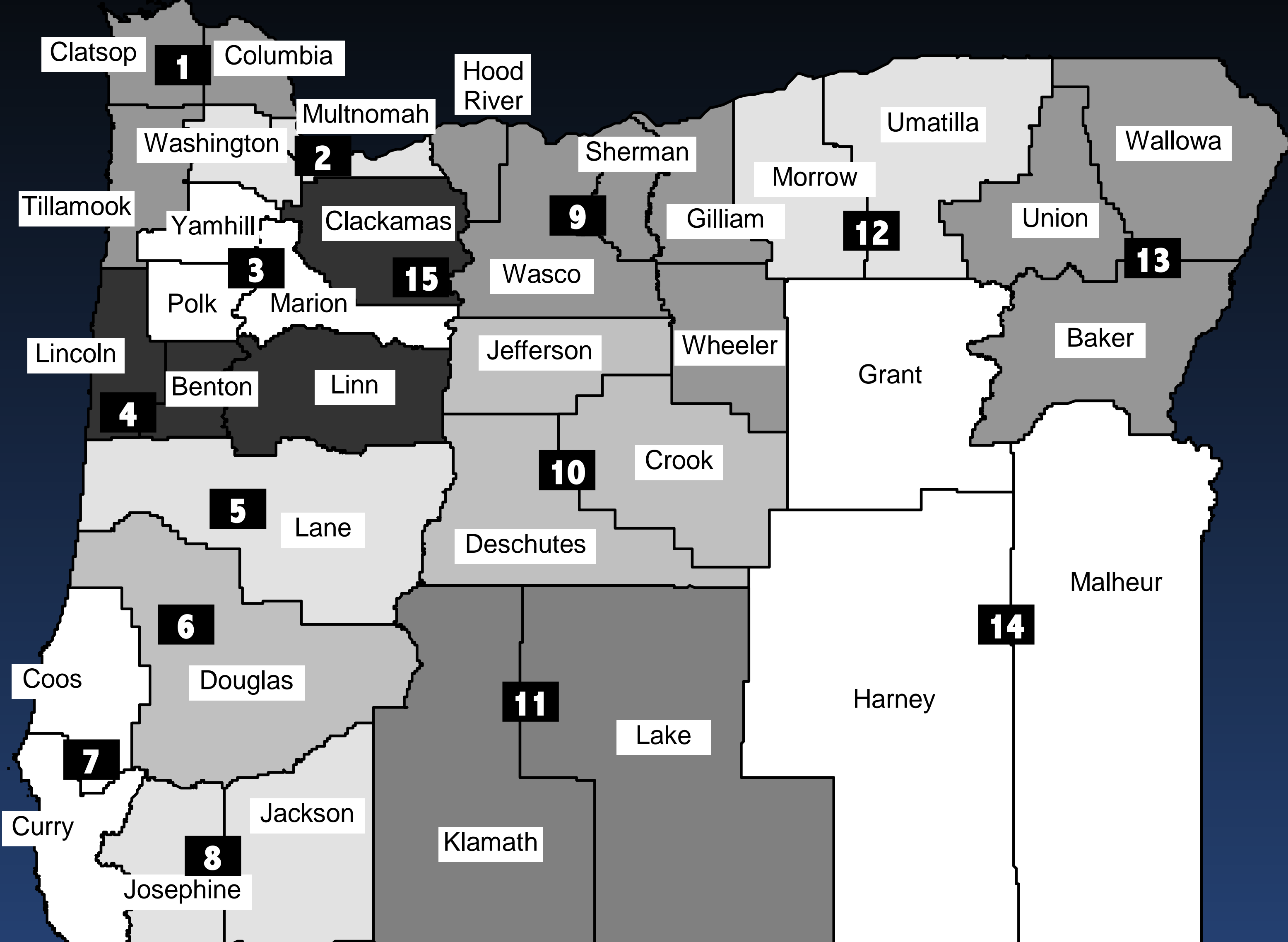

Coordinated Care Organization Service Areas
Health Share of Oregon
PacificSource Community Solutions Coordinated Care Organization, Columbia Gorge Region
Columbia Pacific Coordinated Care Organization
FamilyCare, Inc.
Yamhill Community Care Organization
Willamette Valley Community Health, LLC
Intercommunity Health Network Coordinated Care Organization
Trillium Community Health Plan
PacificSource Community Solutions Coordinated Care Organization, Central Oregon Region
Eastern Oregon Coordinated Care Organization
Umpqua Health Alliance
Western Oregon Advanced Health, LLC
AllCare Health Plan
Cascade Health Alliance
PrimaryHealth of Josephine County, LLC
Jackson Care Connect
Overlapping coverage areas.
CLATSOP
COLUMBIA
TILLAMOOK
WASHINGTON
MULTNOMAH
HOOD RIVER
WASCO
SHERMAN
GILLIAM
MORROW
UMATILLA
UNION
WALLOWA
YAMHILL
CLACKAMAS
POLK
MARION
LINCOLN
BENTON
LINN
JEFFERSON
WHEELER
GRANT
BAKER
CROOK
DESCHUTES
LANE
DOUGLAS
COOS
CURRY
JOSEPHINE
JACKSON
KLAMATH
LAKE
HARNEY
MALHEUR

Health System Transformation

- Address social determinants of health.
- Integrate physical, behavioral, and oral health care services.
- Address cultural competence, social stigma, and equitable access.
- Embrace value-based payment reforms.
- Reflect local community and public needs.

Oregon Health Authority (2017), Quarterly Legislative Report

Oregon Counties and 15 Workforce Regions



Utility Model of Universal Health Insurance

Presuppositions

Add +

- Central Trust Fund
- Risk Solidarity
- Income Solidarity
- Autonomous Regional Funds

Subtract –

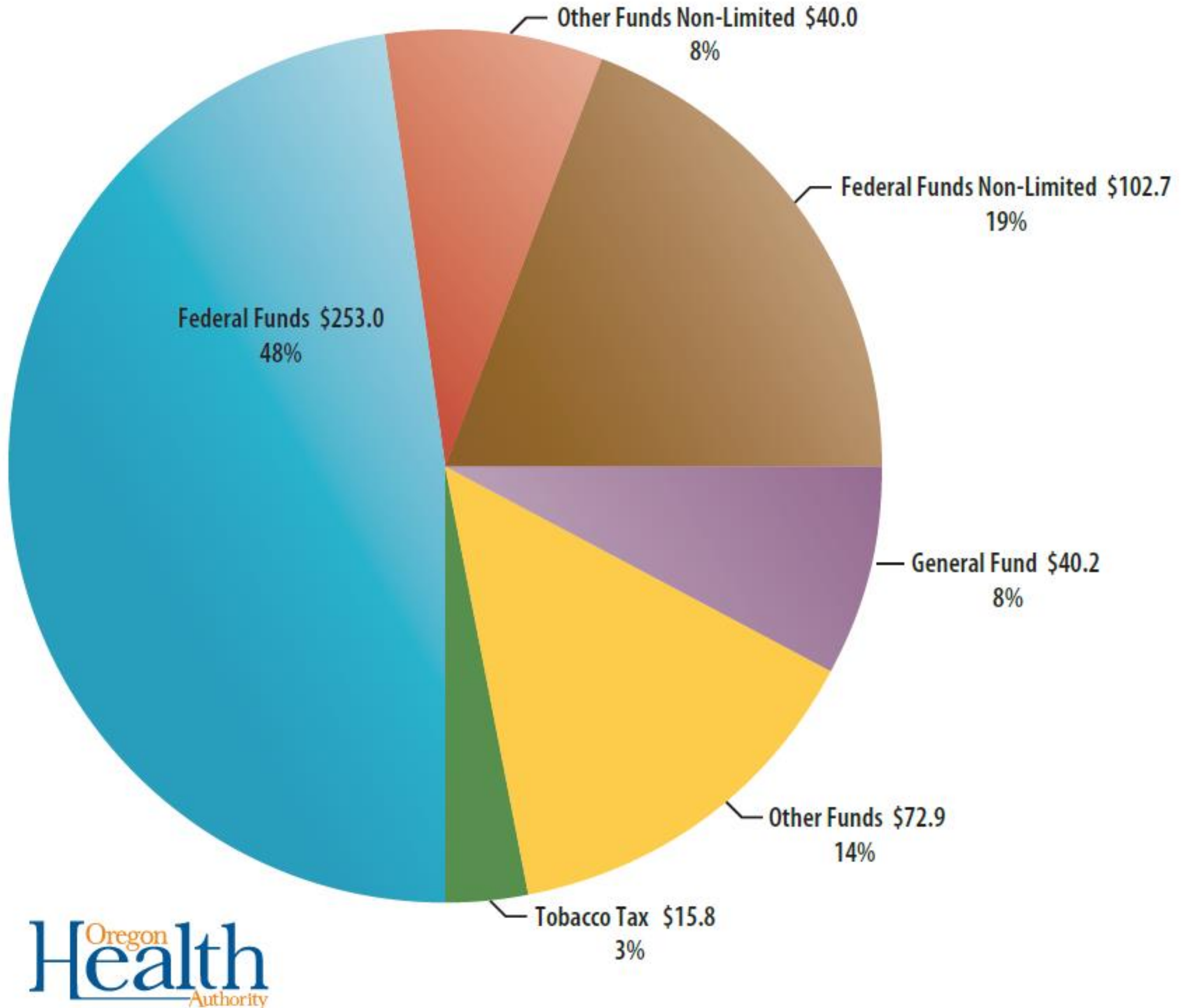
- Monopsony Power
- Political Interference
- Standard Benefit Package

Oregon Health Authority

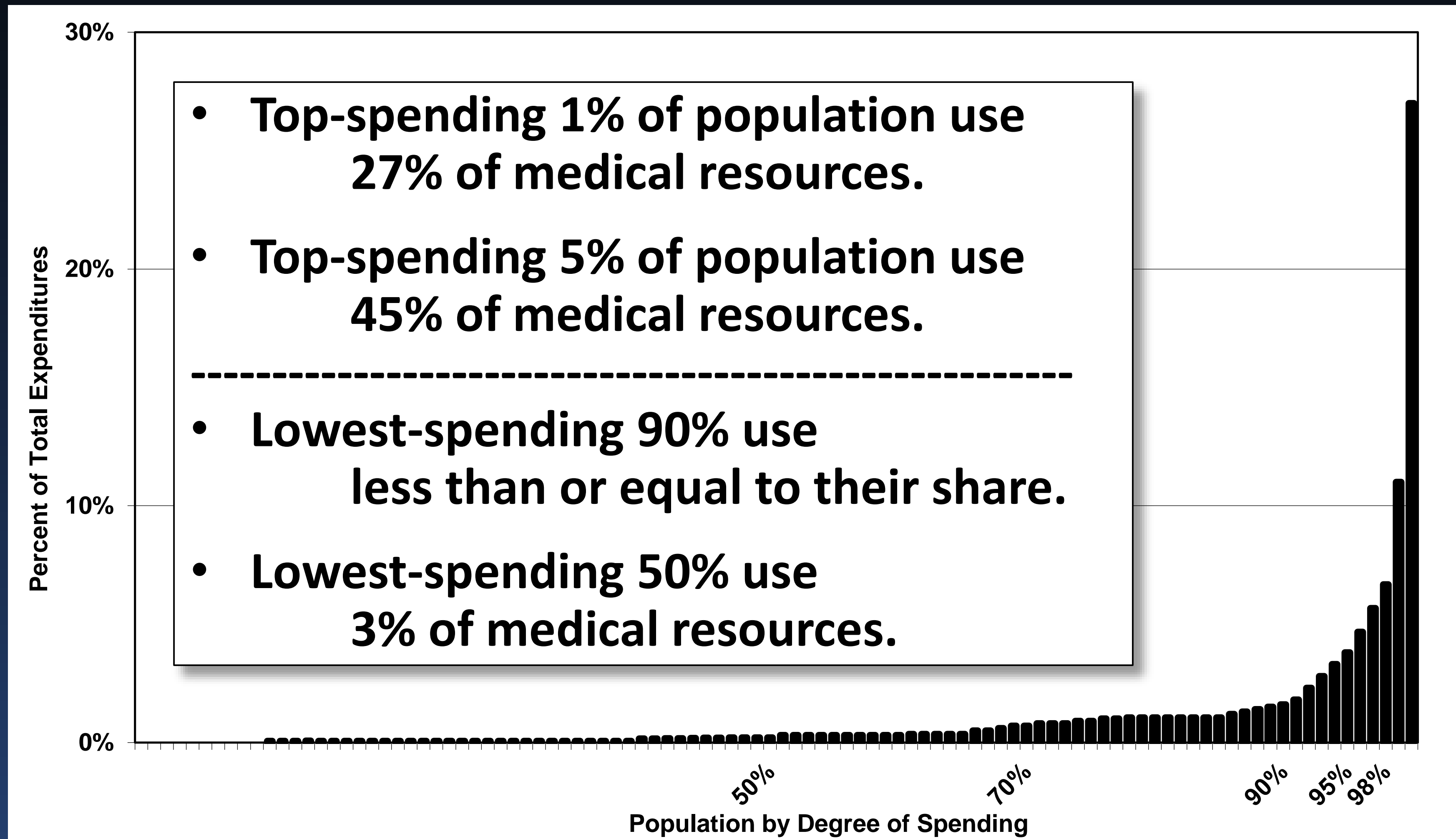
Public Health Division

2013-2015 budget by fund type

$524.6 million total funding



Distribution of Personal Healthcare Expenditures, 1996



Berk & Monheit (2001)

2016 Oregon Rural and Frontier Health Facility Listening Tour

- Rapidly changing regulations, and reliance on impermanent grant or state funds add staff work with no reimbursement.
- Frustration with electronic health record limitations and prohibitive costs.
- Referrals and patient health preferences often do not align with managed care organization provider networks.
- Contested coverage approval can obstruct timely treatment and add to staff burden.

Data / Human Networks

It is the population experience of disease, in actual societies, that is the subject of our investigation. Epidemiologic theory reminds us that our work has a context, and that this context is human society.

– Krieger & Zierler (1999)

Evidence-Based Practice

Recommendations to perform or not perform a preventive service can be influenced by multiple factors …

Recommendations in this report are influenced largely by only one factor, scientific evidence, <u>recognizing that the other factors often need to be considered</u>.

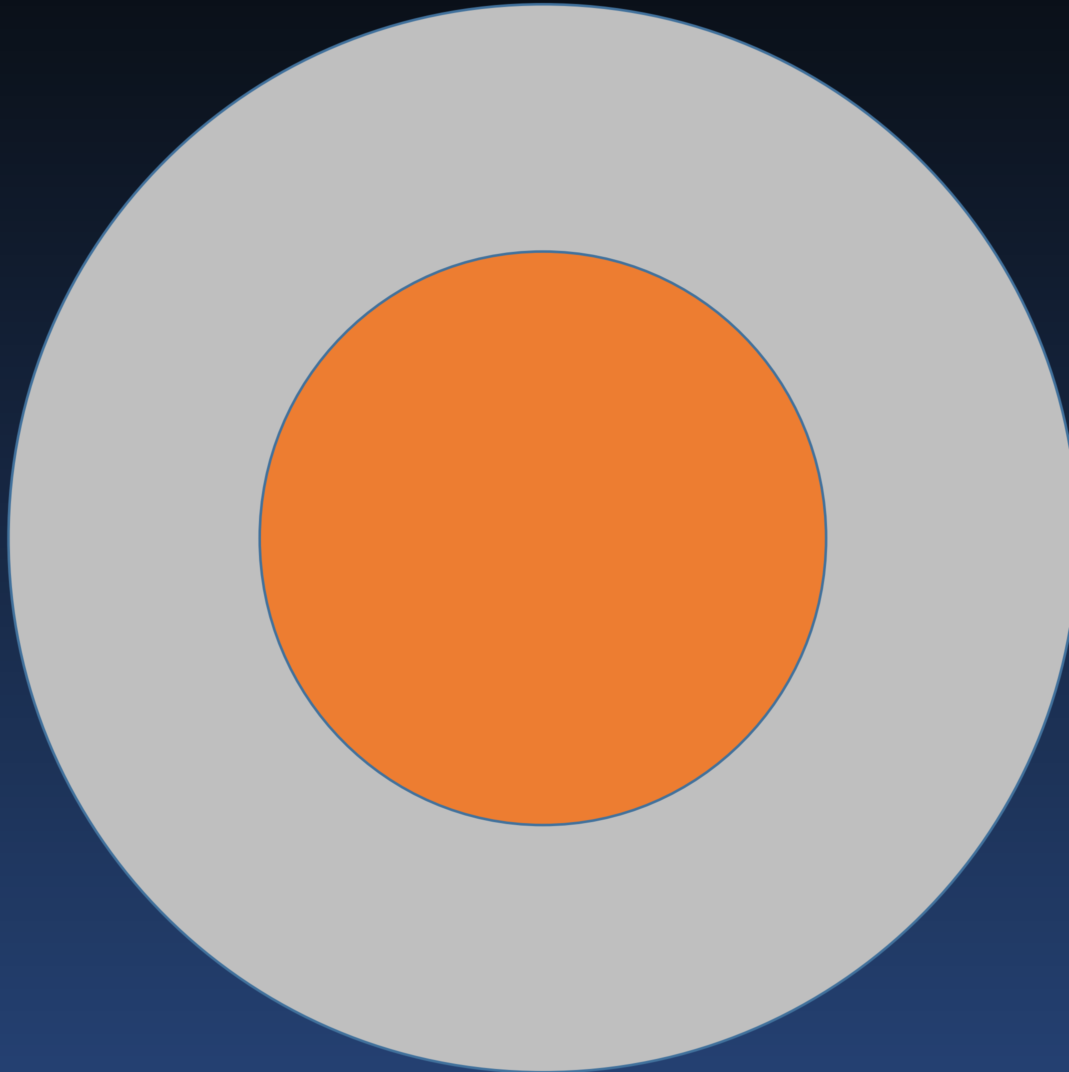
– U.S. Preventive Services Task Force (1996)

Effective Concepts

Certainty of meaning amounts only to various resting places in a process of improving that certainty by substantive debate.

A.L. Stinchcombe (2001)

Knowledge Core-Periphery



Clinical Governance / Guidelines

Regulation of health and social care practice through evidence-based guidelines erodes the very basis of professionalism by removing the opportunity for professional judgment in decision making regarding individual service users.

– Rose & Gidman (2010)

Aligning Health Measurement

Over the past 20 years as evidence grew about defects in care, there was a sense of alarm …

As a result, we began a festival of measurement, an almost measurement mania, where we began to believe that the solution to performance was transparency and measurement.

I'm a complete fan of transparency, but we've overshot.

Now, the number of metrics exceeds the ability of any reasonable human being to consume usefully. And, there has been insufficient diligence about the alignment and harmonization of measures.

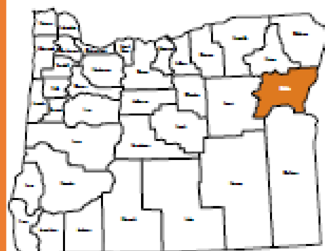
– D. Berwick (Jan. 7, 2016)

Metrics That Matter

1. Proliferation of metrics creates confusion.
2. Best measures drive action, linked to interventions.
3. Greatest opportunities to improve population health lie outside the traditional health sector; good measures catalyze action among those sectors.
4. However, indicators work best in multiple sectors when they reflect collective needs and priorities determined by community stakeholders, measured at a human scale.
5. The metrics realm requires a shift from “data first” to “purpose first.”

– IOM (2016), *Metrics that matter for population health action: Workshop summary*

State of Our Health 2015:
Key Health Indicators for Oregonians



Baker County Snapshot

Population Estimate	16,325
Life Expectancy at Birth male	76
Life Expectancy at Birth female	81
Years of Potential Life Lost (YPLL) age-adjusted per 100,000	7056
Low Birth Weight Rate per 1,000	78.3
Chronic Absenteeism %	22.1

Indicator	Year(s)	Baker	Oregon
Population Estimate (Certified)	2014	16,325	3,962,710
Socioeconomic Status/Social Determinants			
Income Inequality: Gini Coefficients	2009-2013	0.45	0.45
Minority Income as a % of White Income	2009-2013	47.5	57.2
Children in Poverty %	2013	24.7	21.6
	2012	29.6	22.7
Violent Crime per 100,000	2010-2012	21	249
	2009-2011	33	251
Median Household Income	2013	42,200	50,228
	2012	37,025	49,090
Unemployment %	2014	8.3	6.9
	2013	9.2	7.9
Foreclosure Filings ratio to total homes owned	2015 (January)	1:8806	1:1514
Home Ownership %	2009-2013	67.0	62.0
	2000	70.1	64.3
High Housing Costs %	2009-2013	31	40
	2007-2011	31	39
Homelessness count	2011	6	22,116
	2010	4	19,208
High School Graduates %	2009-2013	89.4	88.6
College Degree %	2009-2013	20.9	30.1
Environmental Access			
Fluoridated Water %	2012	N/A	22.6
	2006	0.0	22.2
Access to Exercise Opportunities %	2010 & 2013	70	89
	2010 & 2012	74	81

Indicator	Year(s)	Baker	Oregon
Children Eligible for Free and Reduced Lunch %			
Limited Access to Healthy Foods %			
Fast Food: % living within 1/2 mile			
Supermarkets: % living within 1/2 mile			
Alcohol Outlets count			
Tobacco Outlets count (excluding age-restricted establishmen			
Firearm Dealer Licenses count			
Town & City Walkability: Intersections per mile within urban growth boundaries			
Self-Assessment			
Good General Health age-adjusted %			
Good Physical Health age-adjusted %			
Good Mental Health age-adjusted %			
Inadequate Social Support %			
Health Service Access			
Adults with Any Health Insurance age-adjusted %			
Adults in OHP age-adjusted %			
Pregnant Women Served by WIC %			
Mammography within the past 2 years (women 50-74) age-adjusted %			
Pap Smear within the past 3 years (wor with a cervix) age-adjusted %			
Sigmoidoscopy/Colonoscopy Current c screening (50-75 years old) crude %			
Preventable Hospital Stays per 1,000 (Ambulatory Care Sensitive Conditions)			
Primary Care Physicians ratio to popula			
Dentists ratio to population			
Mental Health Providers ratio to popula			
Could Not See Doctor Due to Cost %			
Inadequate Prenatal Care %			

Indicator	Year(s)	Baker	Oregon
Immunized 2-Year-Olds %			
Immunized Seniors crude %			
Critical Access Hospital (CAH) Beds			
Environmental Health			
Air Pollution days: The average daily r particulate matter in micrograms per (PM2.5) in a county			
Acute Pesticide Exposure: "Likely" illnesses 6-year count			
Nitrate Risk in at Least One Public Water System			
Additional Major Health Indica			
Chronic Absenteeism %			
Overweight age-adjusted %			
Obese age-adjusted %			
Physical Activity age-adjusted %			
Eat Recommended Amount of Frui Vegetables age-adjusted %			
Current Smokers age-adjusted %			
Binge Drinking age-adjusted % of r			
Binge Drinking age-adjusted % of f			
Arthritis age-adjusted %			
Asthma age-adjusted %			
Heart Attack age-adjusted %			
Angina age-adjusted %			
Stroke age-adjusted %			
Diabetes age-adjusted %			
High Blood Pressure age-adjusted %			
High Blood Cholesterol age-adjuste			

Indicator	Year(s)	Baker	Oregon
Cancer age-adjusted new cases per 100,000	2007-2011	420.2	455.9
	2005-2009	417.2	464.6
Teen Pregnancy per 1,000	2013	40	28.4
	2010	35.2	38.6
Life Expectancy at Birth male	2009-2013	76.0	77.4
	2004-2008	74.7	76.4
Life Expectancy at Birth female	2009-2013	81.0	81.8
	2004-2008	79.6	80.8
Infant Mortality Rate per 1,000	2013	***	5.0
	2012	5.7	5.3
Low Birth Weight Rate per 1,000	2014	78.3	62.5
	2013	50.0	63.0
Years of Potential Life Lost (YPLL) age-adjusted per 100,000	2010-2012	7,056	5,958
	2008-2010	10,322	6,076
HIV new cases	2014	0	146
	2013	0	218
Suicide Deaths age-adjusted rate per 100,000	2011-2013	16.5 (Ba,Gr,H, Mal,Mo,U,Un,Wa)	16.9
	2008-2010	19.0 (Ba,Gr,H, Mal,Mo,U,Un,Wa)	16.0
Firearm Deaths count	2013	5	461
	2012	1	442
Car Crashes count	2013	202	49,510
	2012	246	49,798
Car Crash Deaths count	2013	2	313
	2012	4	336
Work-Related Deaths count	2012	0	47
	2011	0	59
Pertussis count	2013	0	485
	2012	0	911
Influenza count	2013	0	84
	2012	0	67
Salmonella count	2013	3	375
	2012	2	404
Chlamydia count	2013	29	14,265
	2012	44	13,501
Smokeless Tobacco Use Among 11th Grade Males %	2013	25.6	9.6
Methamphetamine-Related Deaths count	2013	***	123
	2012	1	93
Children with Developmental Disabilities count	2013	23	5,625
	2012	22	5,191

Oregon Workforce Regions 2016				Principal Practitioners FTE/1000 Population				Practitioners Ratio per MD			
No.	Counties	Population	Pop. Percent	All MD	Phys. Asst	Reg. Nurse	Nurse Pract.	PAs	RNs	NPs	Hospital Beds per 1000
0	**Oregon All**	**4,076,350**	**100%**	**2.0**	**0.3**	**4.7**	**0.4**	**0.13**	**2.35**	**0.20**	**1.6**
2	Mult./Wash.	1,374,265	34%	2.7	0.3	6.2	0.5	0.12	2.28	0.19	2.0
3	Marion+2	518,670	13%	1.4	0.2	4.1	0.3	0.12	**2.88**	0.22	1.2
15	Clackamas	404,980	10%	1.7	0.2	3.3	0.3	0.10	1.98	0.17	1.4
5	Lane	365,940	9%	1.9	0.3	4.4	0.4	0.16	2.35	0.20	1.6
8	Jack./Jos.	298,440	7%	2.0	0.3	4.9	0.6	0.13	2.47	0.29	2.0
4	Benton+2	261,370	6%	1.5	0.3	3.7	0.3	0.18	2.43	0.17	1.2
10	Deschutes+2	221,005	5%	2.1	0.5	4.8	0.4	0.23	2.34	0.19	1.5
1	Columbia+2	114,940	2.8%	**1.0**	0.2	2.3	0.3	0.18	2.35	**0.35**	0.7
6	Douglas	110,395	2.7%	1.5	0.2	4.0	0.4	0.16	2.74	**0.31**	1.3
12	Umatilla+1	91,625	2.2%	**1.3**	0.2	2.9	0.3	0.12	2.16	0.20	0.8
7	Coos/Curry	85,790	2.1%	1.6	**0.1**	4.4	0.4	0.08	**2.87**	0.27	2.2
11	Klamath+1	75,425	1.9%	**1.4**	0.2	3.2	0.3	0.14	2.32	0.24	1.6
9	Wasco+4	56,675	1.4%	2.0	0.3	4.1	0.4	0.15	2.07	0.20	1.3
13	Baker+2	50,395	1.2%	1.9	0.2	**3.5**	0.4	0.10	**1.83**	0.22	1.5
14	Harney+2	46,435	1.1%	1.6	0.4	3.6	0.4	0.22	2.20	0.23	1.8

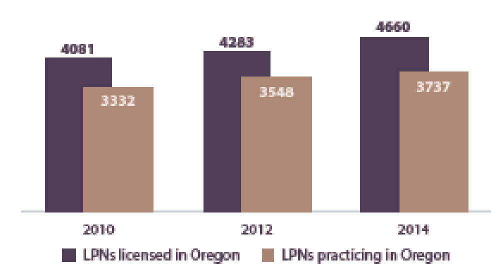
Oregon Center for Nursing 2016

http://oregoncenterfornursing.org/

LPN Workforce

Oregon's LPN workforce has experienced growth in recent years. In 2014, an estimated 3,737 LPNs worked in Oregon.

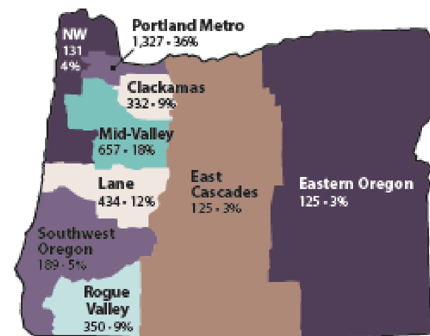
LPNs work in all regions of Oregon though, in 2014, 36% worked in the Portland Metro region while an additional 8% worked in the Clackamas region. The U.S. Bureau of Labor Statistics reported the median pay for LPNs in 2014 as $42,490. *(U.S. Bureau of Labor Statistics, 2016)* The Oregon Employment Department reports LPN wages in Oregon are higher than the national average with the 2015 median salary of more than $48,000. Salaries in Oregon fluctuate by region with LPNs in the Portland Metro area earning significantly higher wages than LPNs in other regions such as Eastern Oregon.



Source: Oregon Health Authority, 2014

Additionally, national reports show female LPNs earn approximately $5,000 less per year than their male colleagues. *(National Council of State Boards of Nursing, 2016)*

Distribution and Salary of Licensed Practical Nurses



REGION DEFINITIONS: East Cascades *(Hood River, Wasco, Sherman, Lake, Gilliam, Jefferson, Wheeler, Deschutes, Crook, Klamath Counties)*, Eastern Oregon *(Morrow, Umatilla, Union, Wallowa, Grant, Baker, Harney, Malheur Counties)*, Mid-Valley (Linn, Marion, Polk, Yamhill Counties), Northwest *(Clatsop, Columbia, Lincoln, Tillamook, Benton Counties)*, Portland Metro *(Multnomah, Washington Counties)*, Rogue Valley *(Jackson, Josephine Counties)* Southwest Oregon *(Coos, Curry, Douglas Counties)*

Source: Oregon Health Authority, 2014; Oregon Employment Department, 2016

Region	Estimate Working	Percent of All LPNs	2015 Median Hourly Wage	2015 Median Annual Salary
Oregon	3737	100%	$23.20	$48,552
Clackamas	332	9%	--	$49,876
East Cascades	182	5%	$22.30	$46,767
Eastern Oregon	125	3%	$20.19	$41,698
Lane	434	12%	$21.96	$46,853
Mid-Valley	657	18%	$22.00	$46,318
Northwest	131	4%	$22.40	$47,365
Portland Metro	1,327	36%	$24.46	$50,548
Rogue Valley	350	9%	$23.28	$48,860
SW Oregon	189	5%	$23.40	$48,728
Missing	10	0%	--	--

Institutions Foster Nurse Activity

- **Scarcity of clinical training sites in rural and frontier Oregon limit the number of nurses.**
- **Often lack inpatient mental health and long-term care facilities, home health.**
- **Unable to pay for telehealth and specialist availability.**
- **"I need a nurse, not a report."**

–**Rural clinic administrator,** ***2016 Listening Tour***

Questions?

For more information, please contact:

Terry Hammond
7624 SE Hawthorne Blvd
Portland OR 97215
thpdx3@gmail.com