Life Expectancy and Income in Oregon's Counties

Can where you live influence how long you live? Perhaps not directly, but evidence shows that how you live certainly influences how long you live, and there may be no greater proxy for how people live than income. Prevalence of obesity, smoking, and leaving chronic conditions like diabetes untreated all contribute to how long a person lives, and have all been linked to income, most especially, to poverty. In America, poor people are more likely to smoke, weigh more, and suffer from untreated illnesses due to not having consistent access to healthcare. The Institute for Health Metrics and Evaluation (http://www.healthdata.org/) has published county-by-county data on health indicators. Reproducing some of their methods, we have graphed the relationship between median per-person income and life expectancy using census data for both from 2009.

In Oregon, as nationwide, life expectancy is very different for men and women. In 2009 Oregon's men lived, on average, to an age of 77.2, while women lived to be 81.7. Oregon's life expectancy is very similar to the nation as a whole.

Behind those statewide values, things vary a lot at the county level. For men, the range is from a low of 74 in Josephine County to a high 79.5 in Washington County. For women, the low end of the range– 79.4 years in Lake County – is approximately equal to the high end for men. The highest life expectancy for women is in Washington County at 82.9 years. The most modest difference between female and male longevity is found in Deschutes County at 3 years. The highest is Josephine, where women live on average 6.1 years longer than men.

The table on the following page shows life expectancy for Oregon's 36 counties. A ranking for male and female life expectancy, where 1 is longest lived, can be seen to the right. As can be seen in the table, some counties exceed the statewide values for women and men, but most counties are actually lower than the statewide value. This is because the high-population areas tend to have higher life expectancy, and therefore have a greater impact on the overall state number. Portland-area counties like Washington and Clackamas, as well as Deschutes (Bend) for men, and Lane (Eugene) for women, exceed the statewide life expectancy. The vast majority of counties, however, lag behind the overall state number.

County life expectancy also varies by gender – life expectancy for women is more clustered, with a maximum difference of 3.5 years separating the best outcome from the worst. Differences in life expectancy are more extreme for men, with a maximum difference of 5.5 years separating best from worst.

How life expectancy relates to income can be seen in the following figures. Each figure shows median wages on the vertical axis (where more income is higher on the line), and life expectancy on the horizontal axis (where longevity increases from left to right). A trend line, in red, has been added. The statewide value is also displayed.

It is obvious from the figures that income plays a significant part in longevity. In general, people who live in higher income areas live longer. People in counties with lower average wages (and by extension, more poverty) have shorter lives. This relationship isn't perfect, though. The most obvious outlier is Multnomah County. Oregon's most urbanized county has very high median income, but a life expectancy for both men and women at about the middle of the distribution. The diversity of Portland, with large numbers of people of varied incomes, backgrounds, and stages of life – all occupying a relatively small physical space – plays a large part in this difference.

Geography, of course, isn't destiny. There may be individuals who live well past the average life expectancy in any given county. Genetics undoubtedly plays a part. Although low income in itself can't be seen as the prime trigger for shorter life, it is a good indicator for a constellation of problems that lie behind income. Washington County, with the highest income and longest lifespan, has consistently lower rates of smoking, hypertension, and obesity than most other counties in the state, while counties that have the shortest lifespan, such as Lake and Josephine have high rates. Other indicators play a part – education and employment are also correlated with income levels, and with longevity.

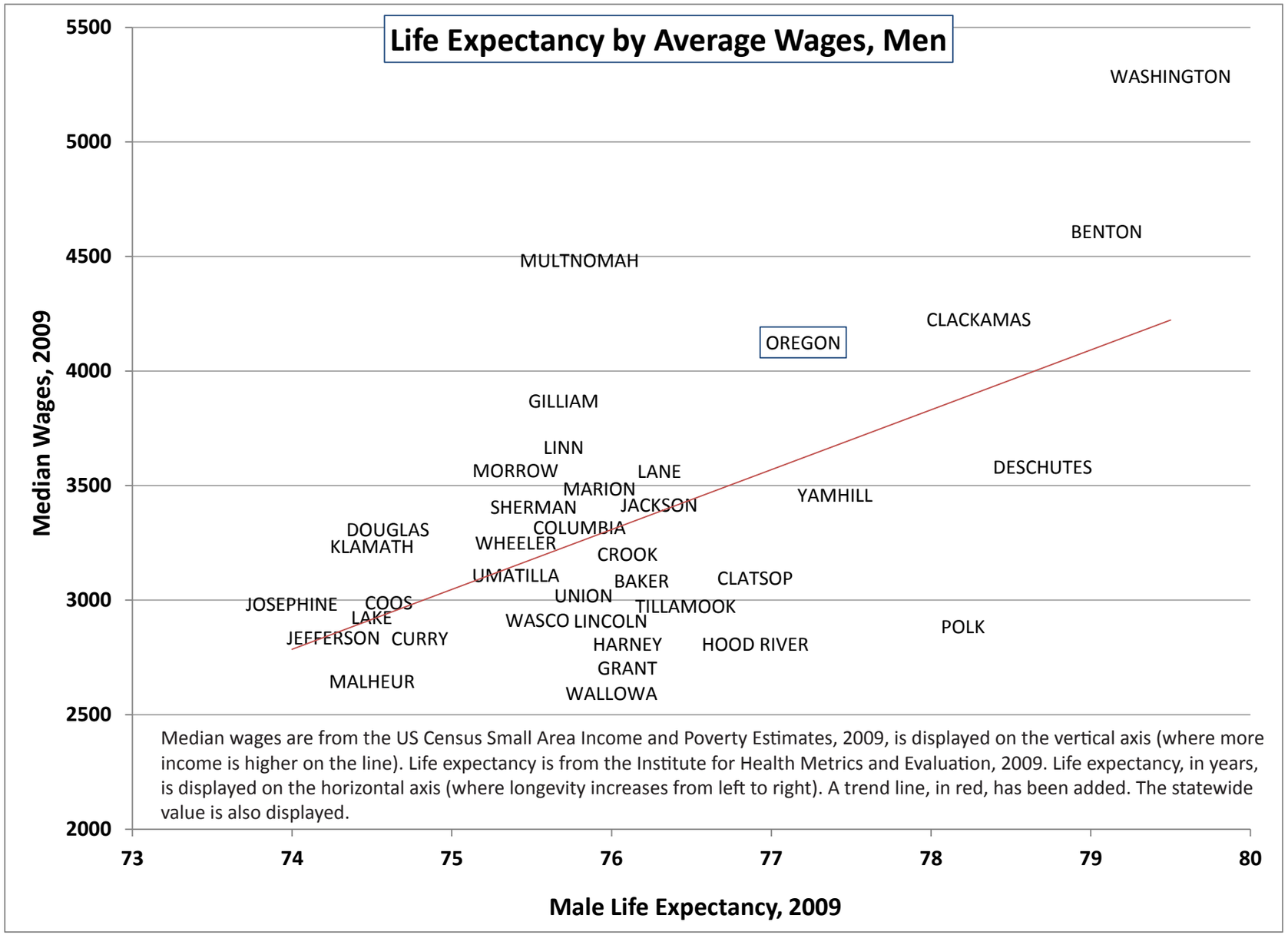
Increasing access to healthcare through the Affordable Care Act will likely make some difference in the relationship between income and lifespan. But to remove all disparities in health for Oregonians, policymakers may need to take into account income and poverty not only as economic and family self-sufficiency issues, but as a part of people's long-term health as well.

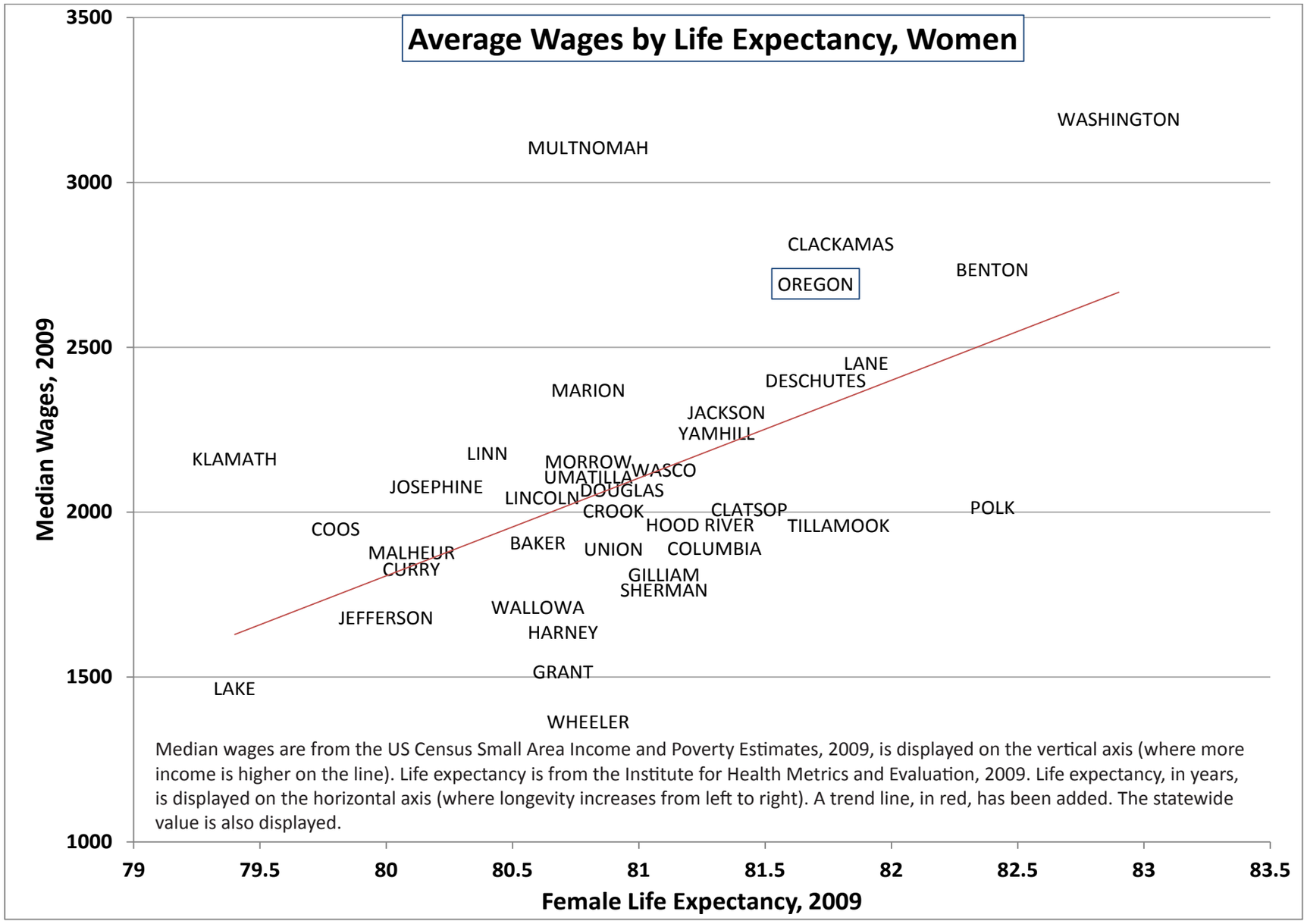
Life Expectancy by Gerographic Area, 2009

Area	Male Life Expectancy	Female Life Expectancy	Rank, Male	Rank, Female
United States	**76.0**	**80.9**	-	-
Oregon	**77.2**	**81.7**	-	-
BAKER	76.0	80.6	15	27
BENTON	79.1	82.4	2	2
CLACKAMAS	78.3	81.8	4	5
CLATSOP	76.9	81.4	7	8
COLUMBIA	75.8	81.3	20	12
COOS	74.5	79.8	31	34
CROOK	76.1	80.9	11	16
CURRY	74.8	80.1	29	31
DESCHUTES	78.7	81.7	3	6
DOUGLAS	74.6	80.7	30	26
GILLIAM	75.7	81.1	22	13
GRANT	76.1	80.7	12	23
HARNEY	76.1	80.7	13	24
HOOD RIVER	76.9	81.4	8	9
JACKSON	76.3	81.4	9	10
JEFFERSON	74.4	80.0	35	33
JOSEPHINE	74.0	80.2	36	30
KLAMATH	74.5	79.4	32	35
LAKE	74.5	79.4	33	36
LANE	76.3	81.9	10	4
LINCOLN	75.9	80.7	18	25
LINN	75.7	80.4	23	29
MALHEUR	74.5	80.1	34	32
MARION	75.9	80.8	19	18

Area	Male Life Expectancy	Female Life Expectancy	Rank, Male	Rank, Female
MORROW	75.4	80.8	26	20
MULTNOMAH	75.8	80.8	21	19
POLK	78.2	82.4	5	3
SHERMAN	75.7	81.1	24	14
TILLAMOOK	76.1	81.7	14	7
UMATILLA	75.4	80.8	27	21
UNION	76.0	80.9	16	17
WALLOWA	76.0	80.6	17	28
WASCO	75.7	81.1	25	15
WASHINGTON	79.5	82.9	1	1
WHEELER	75.4	80.8	28	22
YAMHILL	77.4	81.3	6	11

*Life expectancy from institute for Health Metrics and Evaluation, 2009.


Life Expectancy by Average Wages, Men
Median Wages, 2009
Male Life Expectancy, 2009
5500
5000
4500
4000
3500
3000
2500
2000
73
74
75
76
77
78
79
80
WASHINGTON
BENTON
MULTNOMAH
CLACKAMAS
OREGON
GILLIAM
LINN
MORROW
LANE
DESCHUTES
MARION
YAMHILL
SHERMAN
JACKSON
DOUGLAS
COLUMBIA
KLAMATH
WHEELER
CROOK
UMATILLA
BAKER
CLATSOP
JOSEPHINE
COOS
UNION
TILLAMOOK
LAKE
WASCO
LINCOLN
POLK
JEFFERSON
CURRY
HARNEY
HOOD RIVER
GRANT
MALHEUR
WALLOWA
Median wages are from the US Census Small Area Income and Poverty Estimates, 2009, is displayed on the vertical axis (where more income is higher on the line). Life expectancy is from the Institute for Health Metrics and Evaluation, 2009. Life expectancy, in years, is displayed on the horizontal axis (where longevity increases from left to right). A trend line, in red, has been added. The statewide value is also displayed.


Average Wages by Life Expectancy, Women
Median Wages, 2009
Female Life Expectancy, 2009
3500
3000
2500
2000
1500
1000
79
79.5
80
80.5
81
81.5
82
82.5
83
83.5
WASHINGTON
MULTNOMAH
CLACKAMAS
BENTON
OREGON
LANE
DESCHUTES
MARION
JACKSON
YAMHILL
KLAMATH
LINN
MORROW
WASCO
UMATILLA
JOSEPHINE
DOUGLAS
LINCOLN
CROOK
CLATSOP
POLK
HOOD RIVER
TILLAMOOK
COOS
BAKER
UNION
COLUMBIA
MALHEUR
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