Gallup · Healthways Well-Being Index™

The Wellbeing of America's Workforce, and Its Effects on an Organization's Performance

Gallup · Healthways Well-Being Index™

- 25-year commitment; initiated January 2, 2008.
- 1,000 completed surveys per day, 7 days per week, 350 days per year.
- English and Spanish
- Landline (n=600) and Cell (n=400)
- 95%+ coverage of U.S. adult population
- 1.8 million completed surveys and counting
- Sampling error for one year of data for any given item is about +/-0.2% ($p<.05$) nationally.
- Sampling error ($p<.05$) for states, congressional districts, and cities range from around +/-5.0% to under +/-1.0%.
- Sampling error for professions range from around +/-3.0% (physicians) to under +/-1.0% (service workers).

The Gallup-Healthways Well-Being Index: A Comprehensive Approach to Measuring Wellbeing

Gallup-Healthways tracks 55 items that comprise six core sub-indexes to provide leaders with a comprehensive metric that covers six key interrelated areas of wellbeing:

Life Evaluation
Ranking one's life today and in the future

Emotional Health
Daily feelings; Clinical depression

Physical Health
Chronic conditions, obesity, physical pain, cold/flu

Healthy Behaviors
Smoking, healthy eating, exercise

Work Environment
Using strengths, supervisor relationships

Basic Access
Healthcare, community satisfaction, money for basics

Well-Being Index Composite Score
(Average of six sub-indexes)

Gallup · Healthways Well-Being Index

Wellbeing in America

2012 Overview

There is Range in Wellbeing in America, and it is Consistently Highly Regionalized

Overall Wellbeing Among the 50 States:
The Top, Middle, and Bottom Thirds

1. **Hawaii**
2. **Colorado**
3. **Minnesota**
4. **Utah**
5. **Vermont**
6. **Montana**
7. **Nebraska**
8. **New Hampshire**
9. **Iowa**
10. **Massachusetts**
11. **Maryland**
12. **South Dakota**
13. **Wyoming**
14. **Virginia**
15. **Washington**
16. **Connecticut**
17. **Kansas**
17. **California**
18. **North Dakota**
19. **Wisconsin**
20. **Maine**
21. **Idaho**
22. **Arizona**
23. **Oregon**
24. **New Mexico**
25. **Delaware**
26. **Texas**
27. **Illinois**
28. **Pennsylvania**
29. **New York**
30. **Alaska**
31. **New Jersey**
32. **Georgia**
34. **Florida**
35. **North Carolina**
36. **Michigan**
37. **Rhode Island**
38. **Missouri**
39. **Nevada**
40. **South Carolina**
41. **Oklahoma**
42. **Indiana**
43. **Louisiana**
44. **Ohio**
45. **Alabama**
46. **Arkansas**
47. **Tennessee**
48. **Mississippi**
49. **Kentucky**
50. **West Virginia**

The 2012 WBI Sub-Indexes:
Life Evaluation, Emotional Health, and Physical Health

Life Evaluation

Best: Hawaii (1st), Maryland (2nd)

Worst: West Virginia (50th), Kentucky (49th)

Emotional Health

Best: Hawaii (1st), Wyoming (2nd)

Worst: West Virginia (50th), Kentucky (49th)

Physical Health

Best: Colorado (1st), Hawaii (2nd)

Worst: West Virginia (50th), Kentucky (49th)

The 2012 WBI Sub-Indexes:
Healthy Behaviors, Work Environment, Basic Access

Healthy Behaviors

Best: Vermont (1st), Hawaii (2nd)

Worst: Kentucky (50th), Indiana (49th)

Work Environment

Best: Hawaii (1st), Wyoming (2nd)

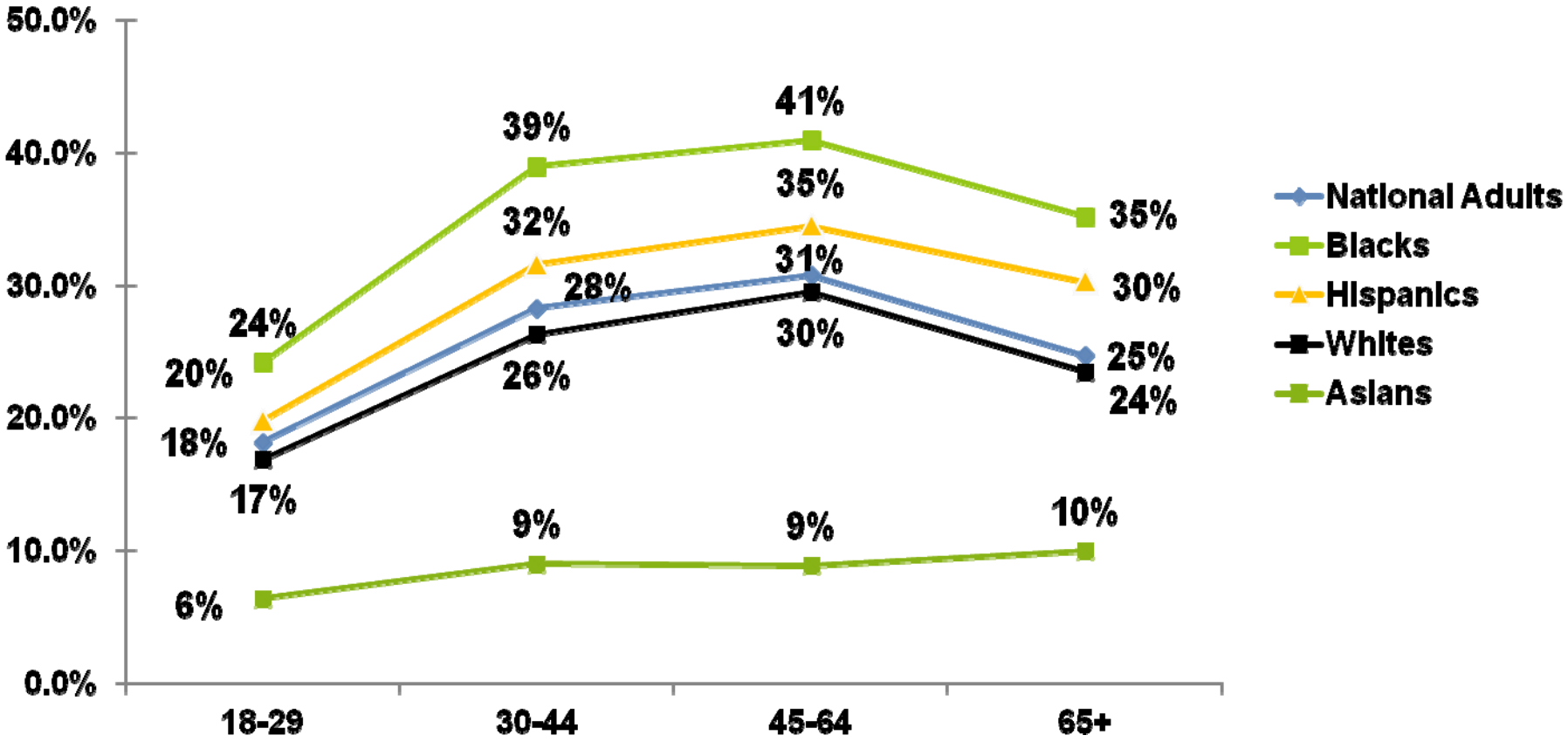
Worst: Rhode Island (50th), New Jersey (49th)

Basic Access

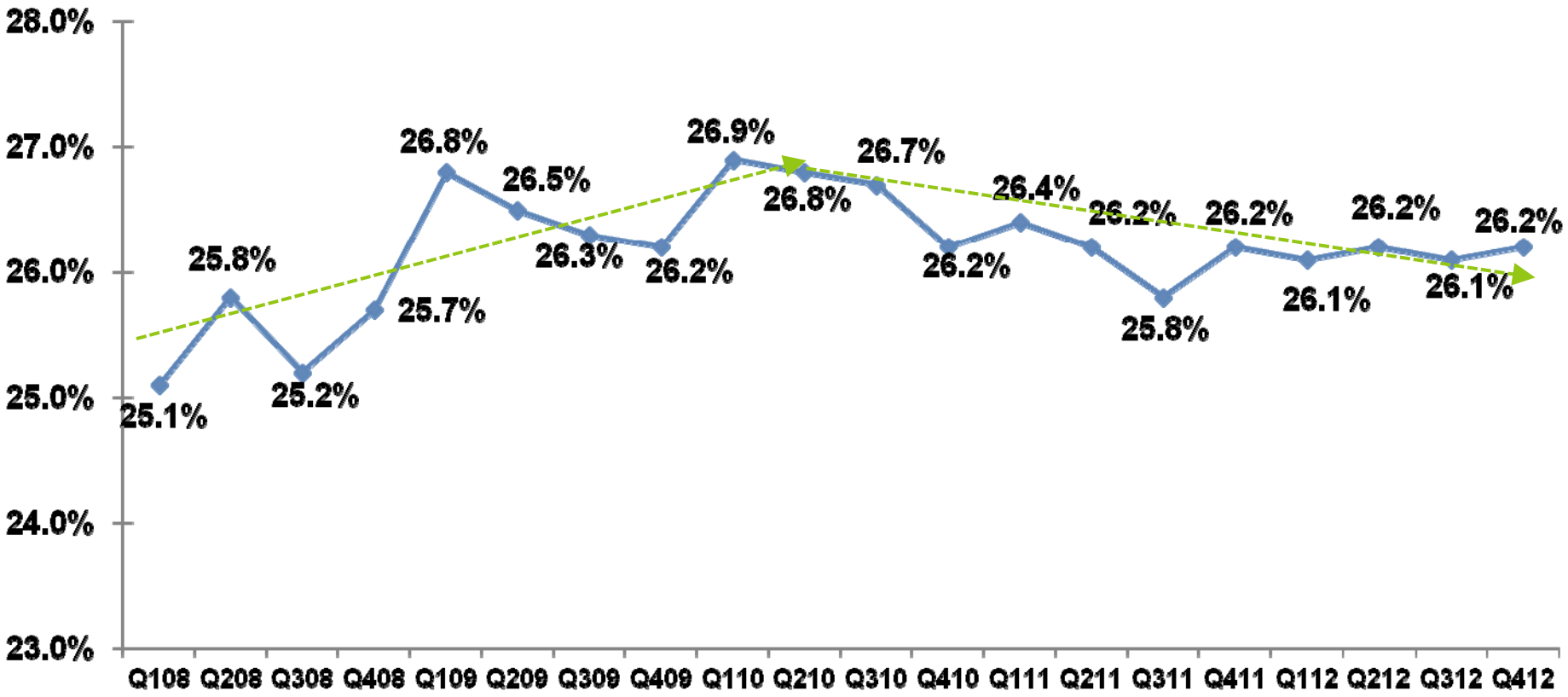
Best: Massachusetts (1st), Minnesota (2nd)

Worst: Mississippi (50th), West Virginia (49th)

26.2% of American Adults are Obese, and Obesity is Shockingly High for Middle Aged Blacks and Hispanics



The Good News is That Obesity Appears to Have Plateaued...and May Be Slowly Declining



The Well-Being Index Across States, 2008-2012: The Elite 5 and the Bottom 5

The Elite 5

1. **Hawaii**
2. **Utah**
3. **Minnesota**
4. **Colorado**
5. **Montana**

The Bottom 5

1. **West Virginia**
2. **Kentucky**
3. **Mississippi**
4. **Arkansas**
5. **Ohio**

The Elite 5: How They're Different

Compared to residents of low wellbeing states, residents of *elite* wellbeing states:

- ✓ Rate their lives much better, today and in the future.
- ✓ Have better emotional health, including much lower clinically diagnosed depression and daily sadness.
- ✓ Have much lower obesity.
- ✓ Carry substantially reduced disease burden, including lifetime high blood pressure, diabetes, high cholesterol, heart attack incidences, and chronic physical pain.
- ✓ Enjoy their jobs more.

The Elite 5: What They Do Differently

Compared to residents of low wellbeing states, residents of *elite* wellbeing states:

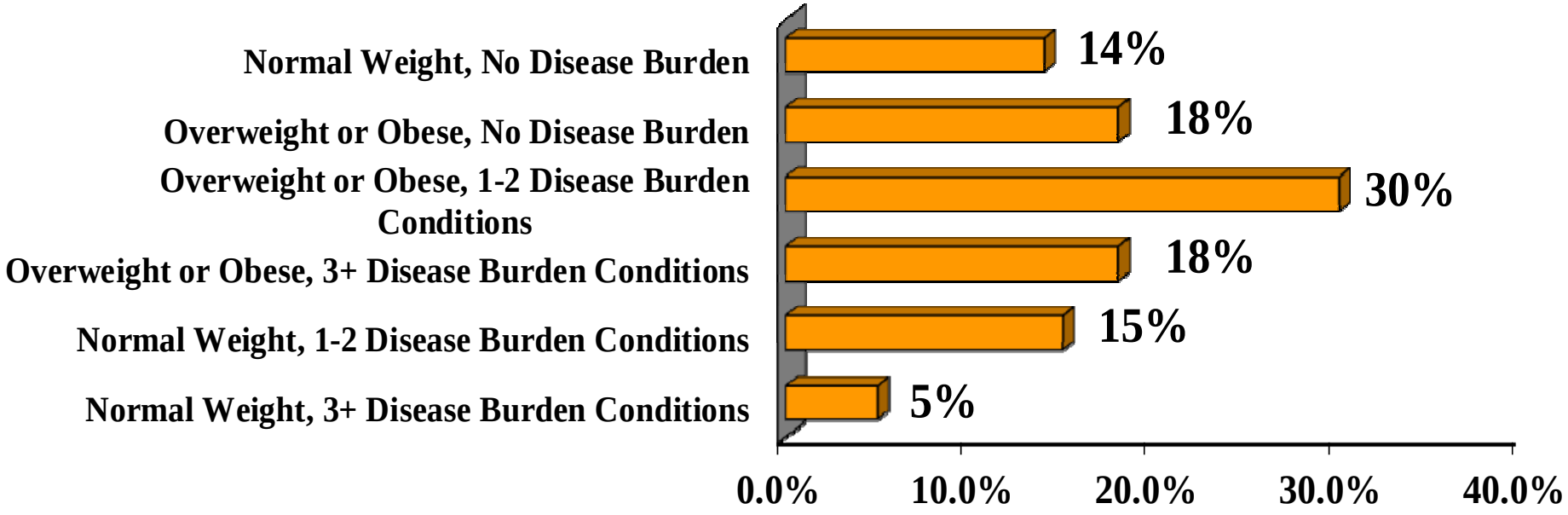
- ✓ Are optimistic that their city is getting better as a place to live.
- ✓ Exhibit a lot of energy every day.
- ✓ Smoke a lot less, but exercise much more.
- ✓ Learn more new and interesting things every day.
- ✓ Are better partnered with in their workplaces by their managers.
- ✓ Have safer places to exercise, and feel safer walking alone at night.
- ✓ Visit their dentists regularly.
- ✓ Have confidence that their water is clean and safe.

The Wellbeing of American Workers

86% of Full-Time Workers in the U.S. Have Subpar Health; 66% are Overweight or Obese

They are overweight, obese or have at least one other chronic condition.

(Controlling for age, gender, income, education, race, region, and marital status):



Total Annual Cost of Lost Productivity Due to Poor Health Among FT Workers : $153 Billion

"During the past 30 days, for about how many days did poor health keep you from doing your usual activities?"

"Earlier, you indicated that you had [___] days in the last month where poor health prevented you from doing your usual activities. How many actual work days in the last month did you not work due to poor health?"

(Controlling for age, gender, income, education, race, region, and marital status):

- ✓**Normal weight workers have 0.34 unhealthy days and .11 missed work days per month.**
- ✓**Overweight or Obese workers with at least 3 lifetime conditions of disease burden have 3.51 unhealthy days and 1.1 missed work days per month.**
- ✓**Estimated cost of lost productivity to U.S. employers is $341 per day.**

Wellbeing Ranked by Occupation (2012)

1. Physicians
2. School Teachers (K-12)
3. Business Owners
4. Professionals (excluding physicians, nurses, and teachers)
5. Managers and Executives
6. Nurses
7. Farming, Fishing, Forestry
8. Clerical/Office
9. Sales
10. Construction or Mining
11. Service
12. Installation or Repair
13. Manufacturing
14. Transportation

Wellbeing by Occupation in the U.S. (2012)

Profession	Life Evaluation	Emotional Health	Physical Health	Healthy Behaviors	Work Environment	Basic Access
Physicians	74.9	83.7	85.4	71.3	61.5	91.1
School Teachers (K-12)	68.8	82.7	82.1	68.9	49.9	88.9
Business Owners	56.3	81.7	81.5	68.4	67.8	84.8
Professionals	64.3	82.3	82.6	66.2	54.0	88.6
Managers/Executives	61.2	81.5	82.4	64.1	56.5	88.2
Nurses	63.9	81.8	80.0	66.9	50.1	86.8
Farmers, Foresters, Fishers	43.3	82.7	79.7	69.9	53.3	79.9
Clerical or Office Workers	55.3	80.3	79.9	63.3	44.4	85.2
Sales	54.1	80.2	81.9	61.7	45.5	84.6
Construction or Mining	44.0	80.9	82.4	61.5	50.3	77.4
Service Workers	50.3	79.6	79.3	61.1	42.4	79.2
Installation or Repair	43.1	80.7	80.3	59.4	44.8	80.6
Manufacturing or Production	44.1	80.1	80.3	59.3	41.5	80.5
Transportation	40.0	80.0	80.2	59.4	39.2	81.2

A Tale of Two Professions: Physicians vs. Transportation Workers

Life Evaluation, Physical Health, and Emotional Health:

	Physician	Transportation worker
"Thriving"	76%	45%
Obese	14%	37%
Diabetes	6%	11%
Physical pain "a lot of the day" on any given day	13%	20%
High blood pressure diagnosis (lifetime)	16%	29%
Anger "a lot of the day" on any given day	11%	15%
Stress "a lot of the day" on any given day	50%	37%
Learn or do something interesting "a lot of the day" on any given day	82%	57%

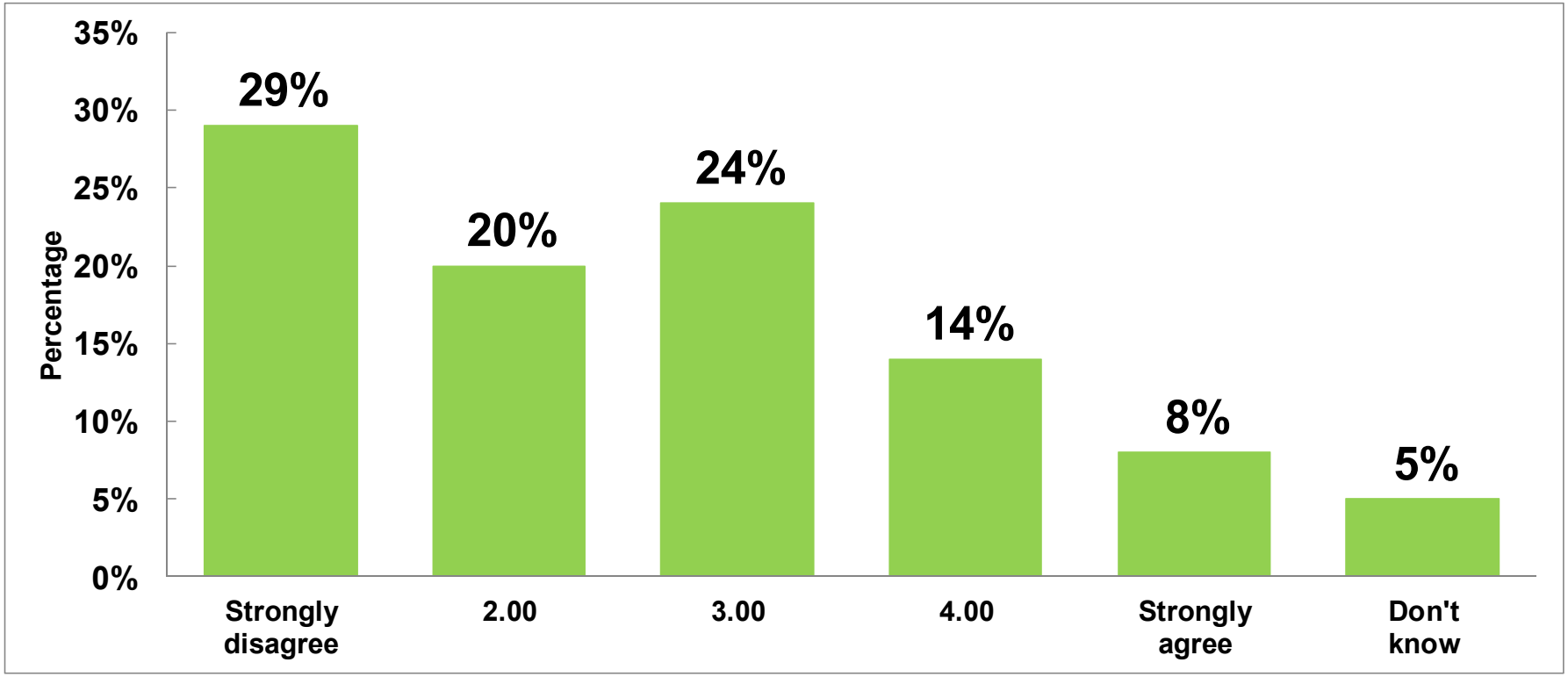
A Tale of Two Professions: Physicians vs. Transportation Workers

Healthy Behaviors, Work Environment, and Basic Access:

	Physicians	Transportation workers
Smoker	4%	30%
At least 4 days in last week with 5+ servings of produce	61%	52%
At least 3 days in last week with 30+ minutes of exercise	60%	52%
Supervisor acts like a boss, not a partner	24%	43%
Use strengths at work	95%	80%
Not enough money for healthcare (last 12 months)	3%	20%
Not enough money for shelter/housing (last 12 months)	3%	9%
Not enough money for food (last 12 months)	2%	18%
Has health insurance	97%	77%
Visited dentist in last 12 months	82%	57%

Are Employers Helping?
13,800 Randomly Selected Workers Across the U.S.

"Please indicate how much you agree or disagree with each of the following: I have substantially higher overall wellbeing because of the employer I work for today."



Gallup Panel of U.S. households September 2009 (weighted)

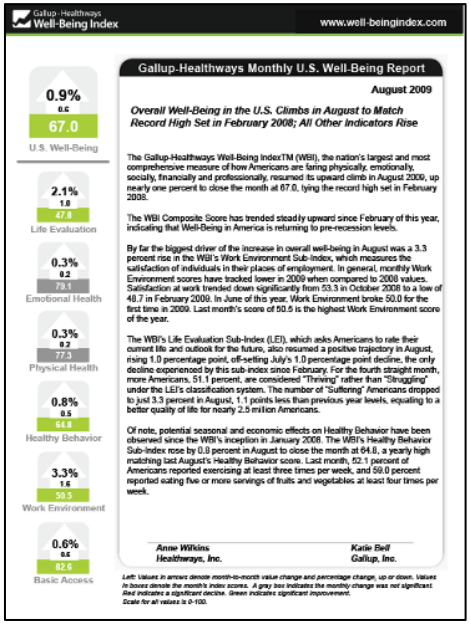
Gallup · Healthways Well-Being Index

The Science of Improving Well-Being

Carter Coberley, Ph.D.
Healthways Center for Health Research

Individual and Organizational Well-Being

Gallup-Healthways Well-Being Index™ → Healthways Well-Being Assessment™


Gallup-Healthways Well-Being Index www.well-beingindex.com

Gallup-Healthways Monthly U.S. Well-Being Report

August 2009

Overall Well-Being in the U.S. Climbs in August to Match Record High Set in February 2008; All Other Indicators Rise

0.9% 0.6 67.0 U.S. Well-Being

2.1% 1.0 47.8 Life Evaluation

0.3% 0.2 72.1 Emotional Health

0.3% 0.2 77.3 Physical Health

0.8% 0.5 64.8 Healthy Behavior

3.3% 1.6 59.5 Work Environment

0.6% 0.6 82.5 Basic Access

The Gallup-Healthways Well-Being Index™ (WBI), the nation's largest and most comprehensive measure of how Americans are faring physically, emotionally, socially, financially and professionally, resumed its upward climb in August 2009, up nearly one percent to close the month at 67.0, tying the record high set in February 2008.

The WBI Composite Score has trended steadily upward since February of this year, indicating that Well-Being in America is returning to pre-recession levels.

By far the biggest driver of the increase in overall well-being in August was a 3.3 percent rise in the WBI's Work Environment Sub-Index, which measures the satisfaction of individuals in their places of employment. In general, monthly Work Environment scores have tracked lower in 2009 when compared to 2008 values. Satisfaction at work trended down significantly from 53.3 in October 2008 to a low of 48.7 in February 2009. In June of this year, Work Environment broke 50.0 for the first time in 2009. Last month's score of 50.5 is the highest Work Environment score of the year.

The WBI's Life Evaluation Sub-Index (LEI), which asks Americans to rate their current life and outlook for the future, also resumed a positive trajectory in August, rising 1.0 percentage point, off-setting July's 1.0 percentage point decline, the only decline experienced by this sub-index since February. For the fourth straight month, more Americans, 51.1 percent, are considered "Thriving" rather than "Struggling" under the LEI's classification system. The number of "Suffering" Americans dropped to just 3.3 percent in August, 1.1 points less than previous year levels, equaling to a better quality of life for nearly 2.5 million Americans.

Of note, potential seasonal and economic effects on Healthy Behavior have been observed since the WBI's inception in January 2008. The WBI's Healthy Behavior Sub-Index rose by 0.8 percent in August to close the month at 64.8, a yearly high matching last August's Healthy Behavior score. Last month, 52.1 percent of Americans reported exercising at least three times per week, and 59.0 percent reported eating five or more servings of fruits and vegetables at least four times per week.

Anne Wilkins, Healthways, Inc. *Katie Bell, Gallup, Inc.*

Left: Values in arrows denote month-to-month value change and percentage change, up or down. Values in boxes denote the month's index scores. A gray box indicates the monthly change was not significant. Red indicates a significant decline. Green indicates significant improvement. Scale for all values is 0-100.

Life Evaluation	Healthy Behavior	Work Quality
Emotional Health	Basic Access	Physical Health

HRA	Life Evaluation	Healthy Behavior	Work Quality	Productivity
Biometrics	Emotional Health	Basic Access	Physical Health	

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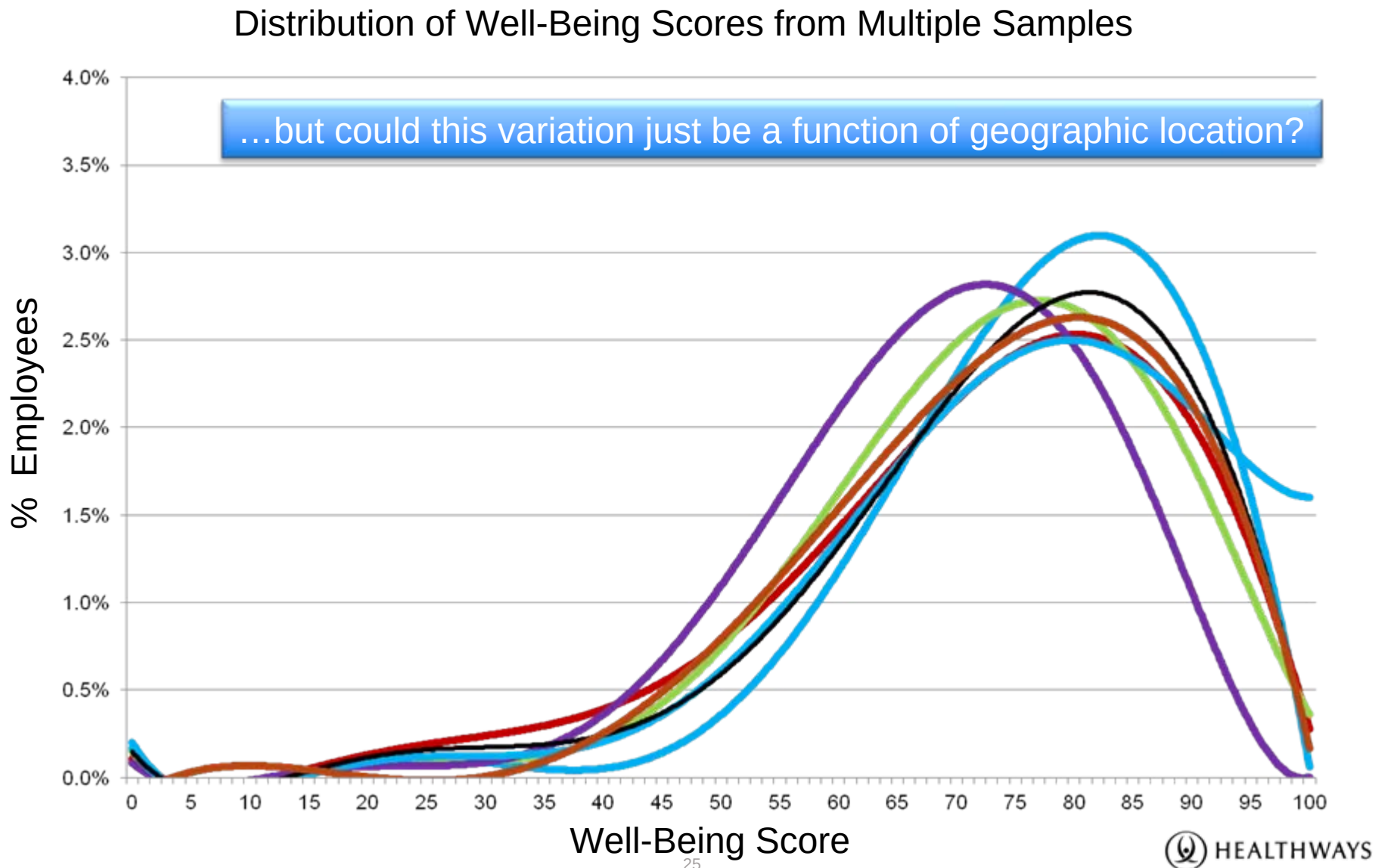
Well-Being Varies Among Employers



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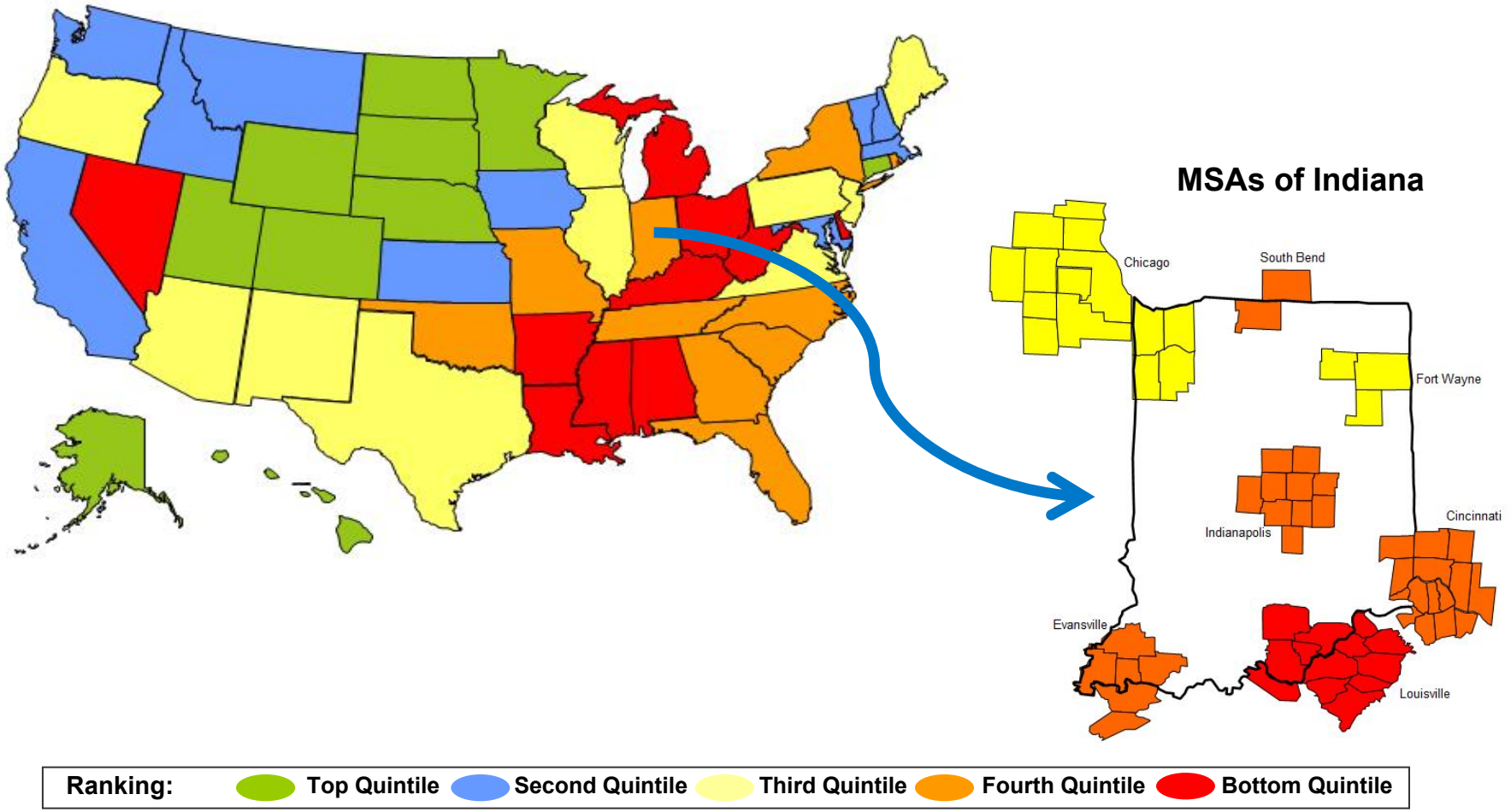
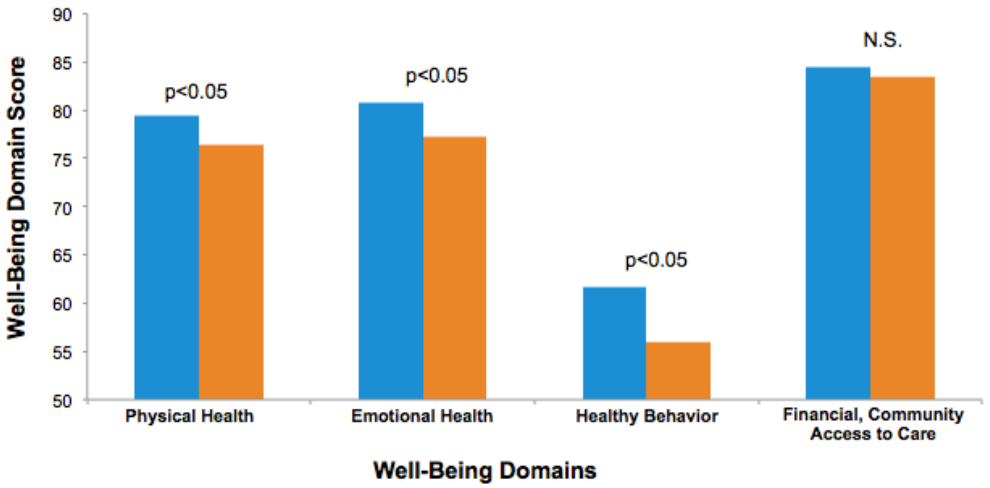
Well-Being Varies Across the U.S.

Striking Differences Between Regions and Within Regions of the U.S.



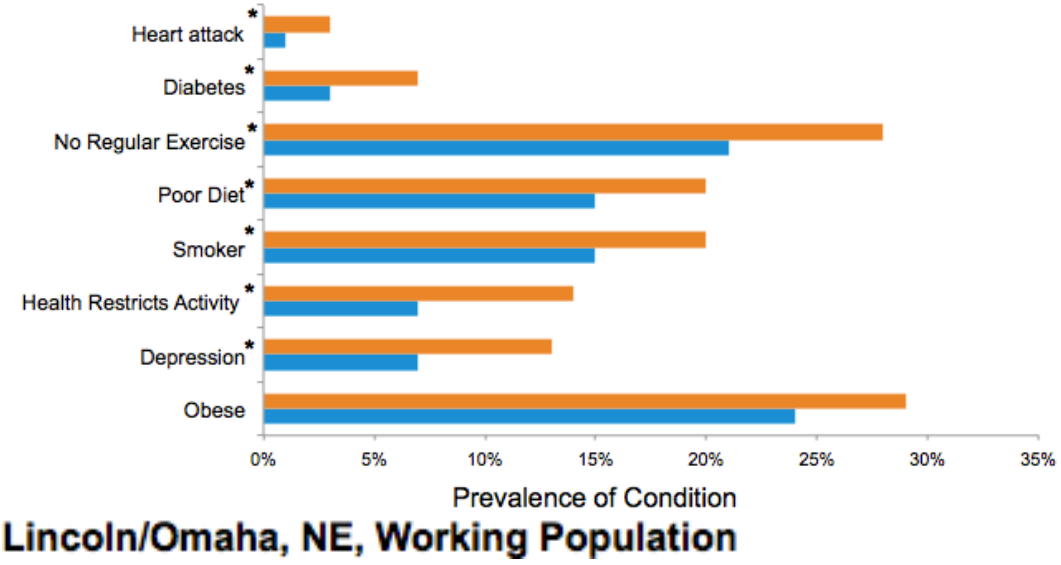
Comparing Employees to their Community

Lincoln Industries Employees compared to Lincoln / Omaha, NE



Employees Well-Being differs significantly* from surrounding communities except domains related to the environment

…and that difference is expressed in a significant* difference in prevalence of conditions / risk factors (except obesity)



Merrill et al. *JOEM* (April 2011); * Employees compared to the working population of Lincoln / Omaha, NE, P<0.05

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Well-Being Varies Within Company Business Units

Ranking 25 Separate Business Units by Well-Being Score

Well-Being Scores

Internal corporate measure % at Optimal Income

Well-Being Assessment Results by Business Unit

Overall	Life Evaluation	Emotional Health	Physical Health	Healthy Behavior	Work Environment	Basic Access	% at Optimal Income
68.4	60.9	76.4	78.1	62.6	46.9	85.5	41.7%
73.5	73.1	80.6	80.2	65.1	53.7	88.1	66.7%
72.4	70.4	79.7	82.4	66.3	49.5	86.0	64.5%
72.0	71.4	73.8	81.1	67.0	51.2	85.9	59.6%
72.0	69.6	78.6	78.1	65.6	52.6	88.6	39.2%
71.9	66.5	78.4	78.6	66.5	54.9	86.7	50.3%
71.8	[illegible]	79.1	81.5	64.9	53.9	[illegible]	69.2%
71.4	68.6	78.0	78.5	67.5	49.3	86.7	47.9%
71.2	67.7	80.0	81.7	64.4	49.1	84.5	51.4%
70.6	60.7	76.5	80.2	66.5	51.9	85.4	44.9%
70.6	65.8	79.6	77.6	62.6	54.4	86.0	41.6%
70.0	63.9	76.2	80.3	63.6	48.5	87.4	55.6%
69.7	58.0	76.5	78.4	68.4	53.2	83.6	63.6%
69.6	62.5	75.0	79.0	65.0	50.0	86.0	56.2%
69.2	64.7	77.5	76.8	62.6	46.0	87.9	51.8%
69.1	60.8	76.8	78.1	61.9	52.2	85.0	39.3%
68.6	61.6	75.5	76.8	65.2	46.4	86.2	51.8%
68.6	59.6	76.3	80.3	66.4	44.4	84.8	41.6%
68.1	59.9	77.9	78.9	61.5	45.3	85.0	40.8%
67.8	58.0	75.7	78.1	63.9	45.6	87.7	57.2%
66.3	58.3	74.7	76.4	59.2	46.0	83.3	31.7%
66.2	52.4	75.0	76.9	61.1	45.4	86.5	37.9%
65.8	59.1	76.4	75.8	53.4	45.6	84.2	28.4%
65.7	57.3	73.9	76.8	61.7	40.1	84.2	36.6%
65.5	56.8	76.3	76.7	56.8	43.2	83.4	28.3%
64.5	52.5	73.0	75.3	60.2	42.4	83.8	26.8%

TOP QUINTILE | 2ND QUINTILE | 3rd QUINTILE | 4TH QUINTILE | 5TH QUINTILE

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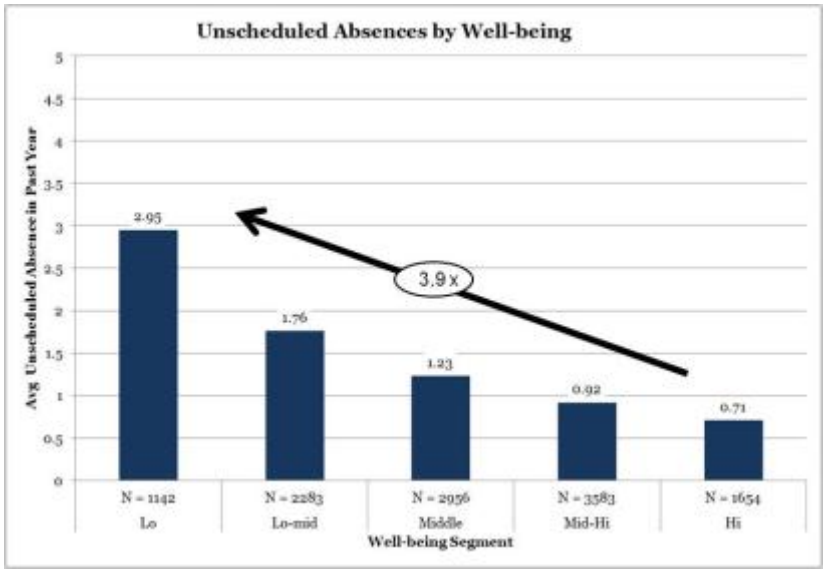
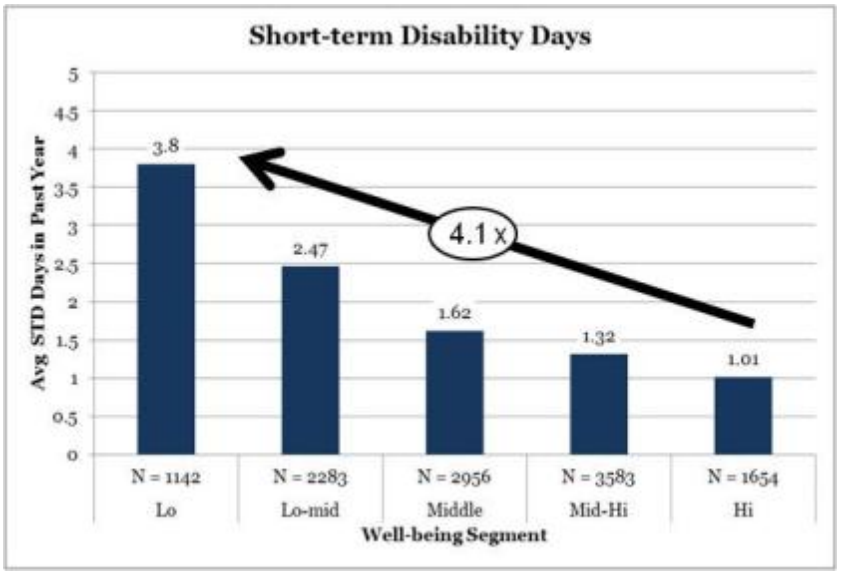
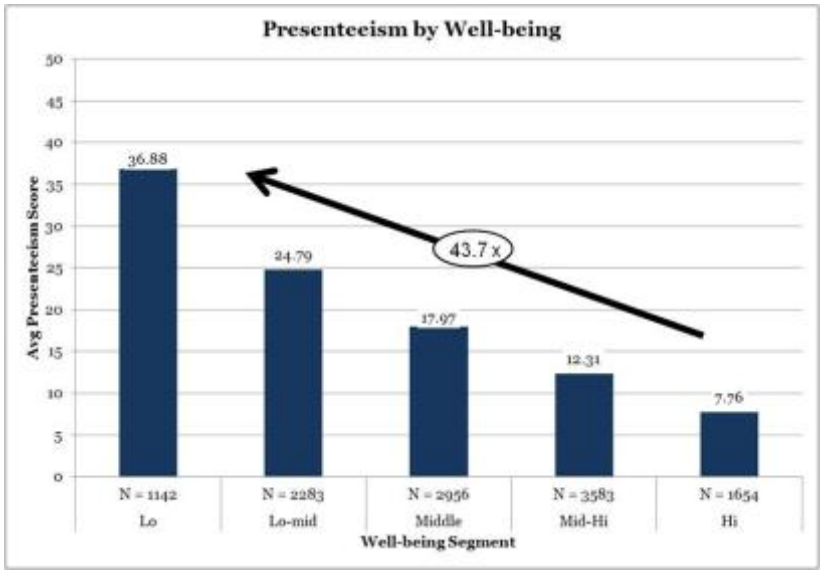
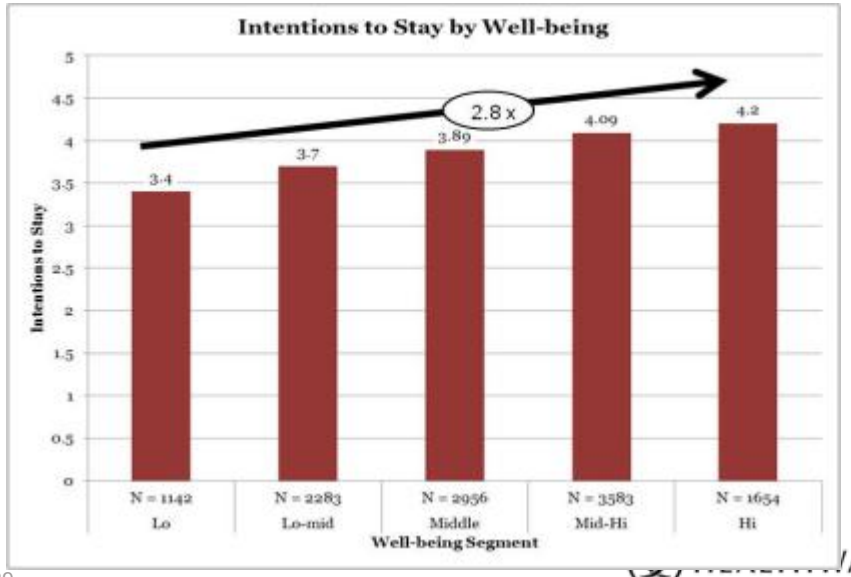
Well-Being and Business Performance









Comparison of WBI and Disease Prevalence Rank*

Hospital Referral Regions Ranked by Average WBI Rank (2008-2011)

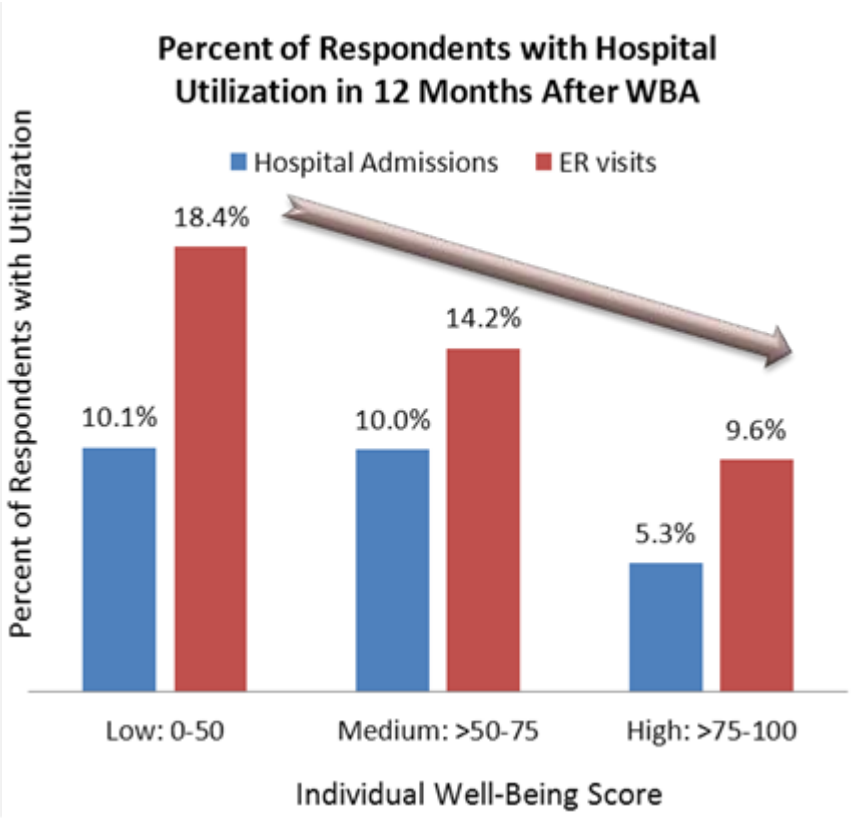
Hospital Referral Region	State	Avg. WBI Rank over 4 Years	2011 WBI Data						Heart Attack	Heart Failure	Ischemic Heart Disease	Diabetes	COPD	Depression	Disease Prevalence Average Rank
			LEI	EHI	PHI	HBI	WEI	BAI							
Washington	DC	2	1	4	2	7	13	3	7	5	9	19	4	2	8
Bridgeport	CT	2	4	21	4	2	21	2	16	7	11	8	1	9	9
Austin	TX	2	2	8	3	9	6	6	5	4	4	3	2	22	7
Melrose Park	IL	5	5	18	1	6	19	1	8	15	12	10	7	11	11
Tucson	AZ	6	10	1	6	1	15	15	6	1	2	1	3	3	3
Kansas City	MO	7	9	6	7	19	4	8	9	3	8	6	15	17	10
Baltimore	MD	7	3	12	8	15	10	10	18	12	16	18	11	13	15
Spokane	WA	8	6	9	19	3	9	9	1	2	1	2	6	6	3
Wichita	KS	9	13	2	9	10	8	12	13	17	7	4	9	23	12
Albany	NY	12	15	23	10	5	16	7	14	13	18	11	13	10	13
Nashville	TN	12	7	14	13	18	5	11	20	18	14	12	19	25	18
Milwaukee	WI	13	19	3	5	14	18	4	11	6	6	7	5	8	7
Pensacola	FL	14	12	5	17	11	3	17	4	10	20	21	23	20	16
Jacksonville	FL	14	11	15	14	13	23	20	3	14	22	20	21	7	15
Waco	TX	16	17	20	15	12	1	24	10	22	3	5	8	24	12
Buffalo	NY	17	22	10	11	16	20	5	25	21	21	17	22	21	21
Evansville	IN	18	16	17	25	25	2	13	12	11	5	14	18	18	13
Mobile	AL	18	14	22	24	20	17	23	2	9	17	15	10	1	9
Binghamton	NY	18	25	7	12	4	22	22	19	8	10	9	12	16	12
Birmingham	AL	19	8	24	23	23	14	19	15	23	19	22	17	4	17
Indianapolis	IN	20	20	25	18	24	11	16	17	16	13	16	16	15	16
Detroit	MI	21	21	19	20	21	24	25	22	25	25	25	25	5	21
Flint	MI	22	23	16	16	22	25	21	23	24	24	24	24	19	23
Saginaw	MI	23	24	11	22	8	12	18	21	20	23	23	20	14	20
Kalamazoo	MI	24	18	13	21	17	7	14	24	19	15	13	14	12	16

Top Quintile Bottom Quintile

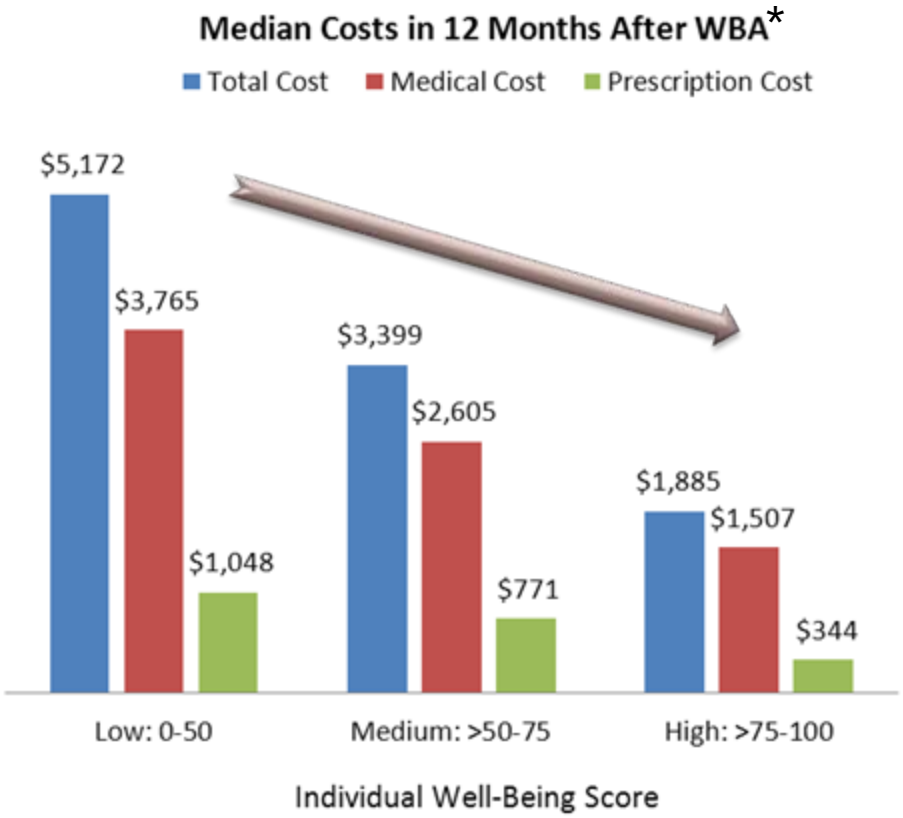
** Disease prevalence from the 2008 Institute of Medicine (IOM) HRR data for Medicare beneficiaries*

Well-Being Predictive of Cost & Utilization

Higher Well-Being = Lower Utilization

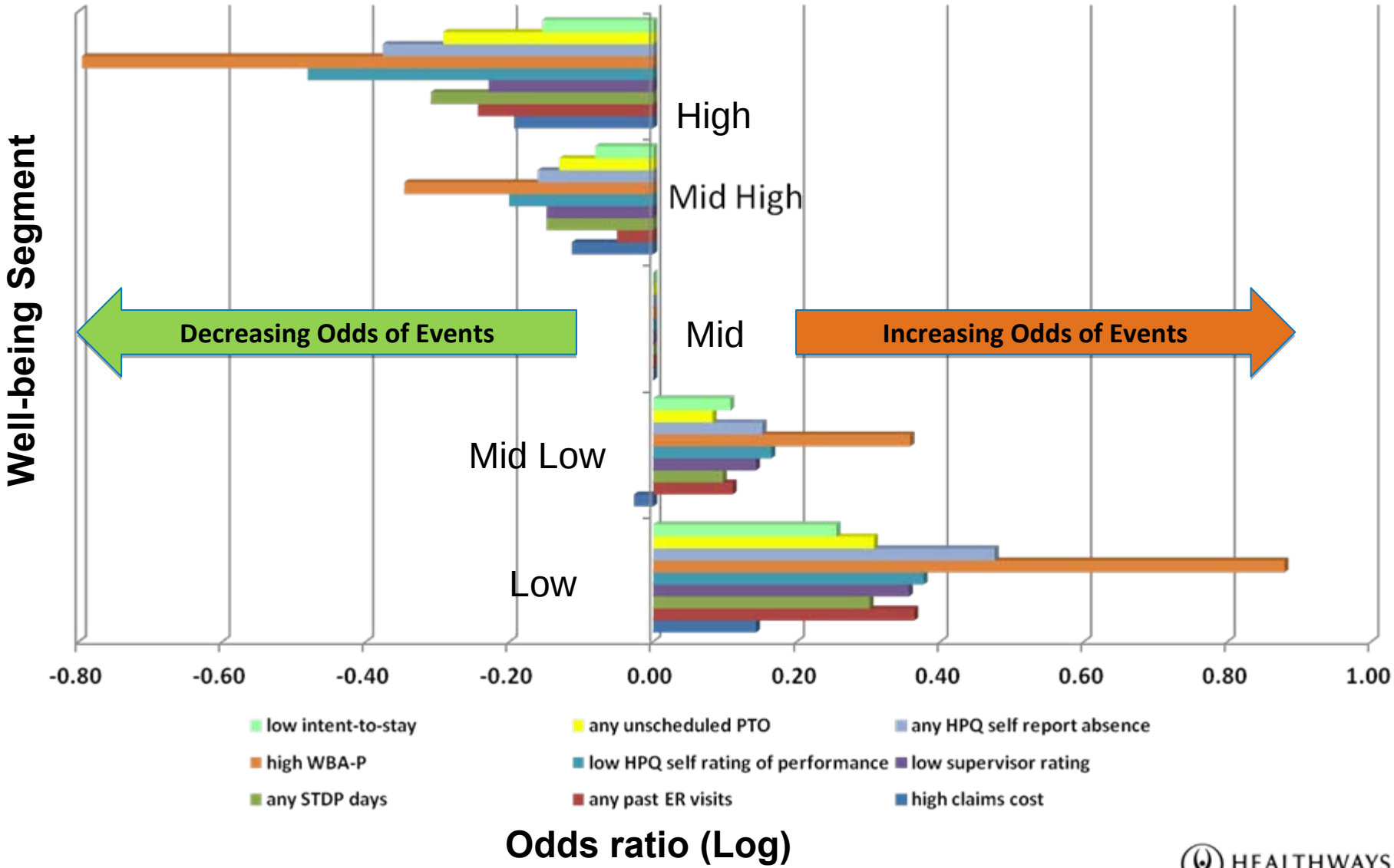


Higher Well-Being = Lower Cost



Harrison, Pope, Coberley, and Rula. Evaluation of the Relationship Between Individual Well-Being and Future Health Care Utilization and Cost. Pop Health Mgmt, 2012.

Declining WB Increases Odds of Adverse Outcomes



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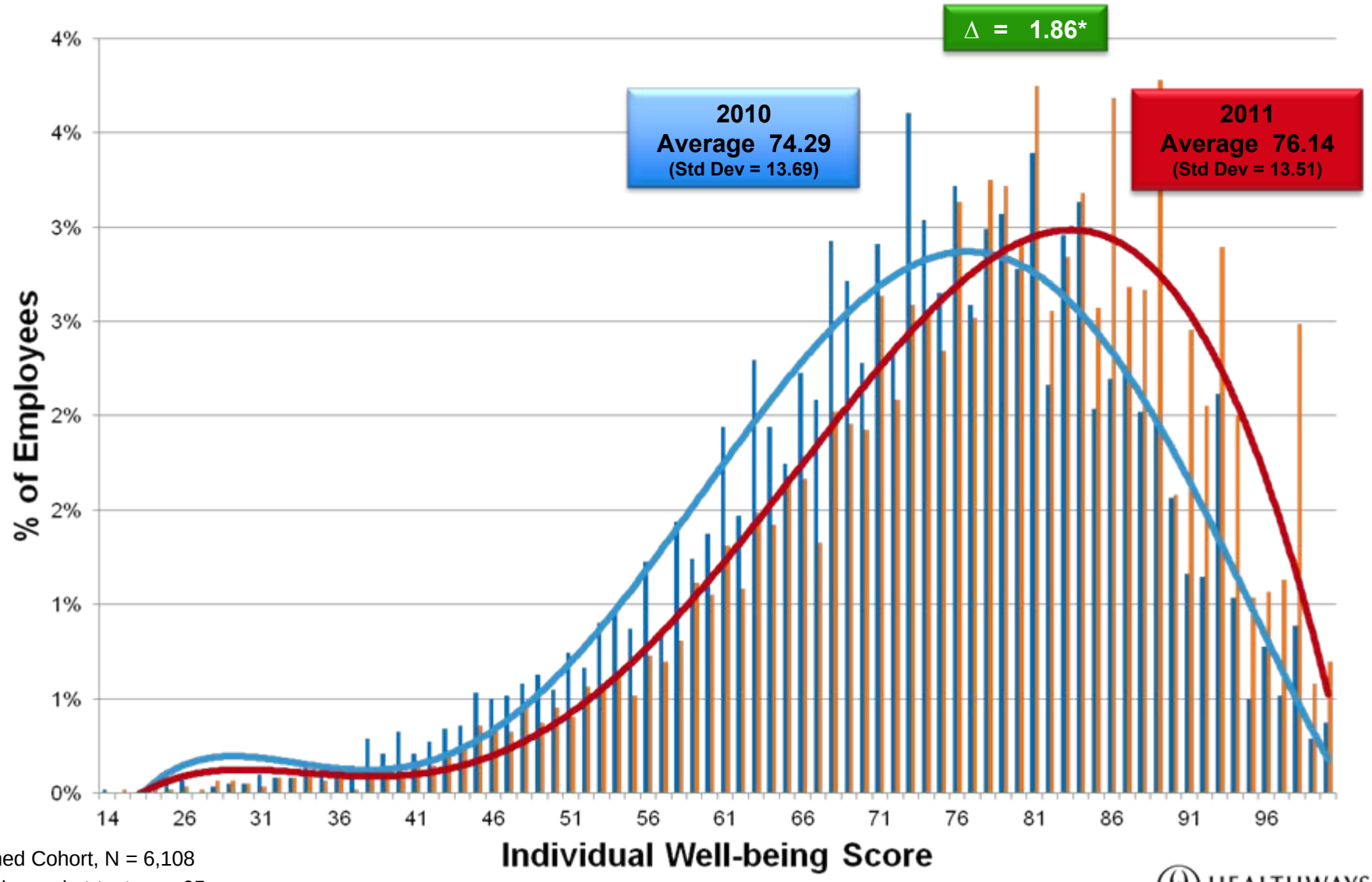
Med-High set as reference point (equal to 1) Absenteeism cost is for those who had any absence only; does not represent absence rate of entire population.

Comprehensive Program at a Fortune 100 Company

Well-Being Improved Significantly in Matched Respondents



Matched Cohort, N = 6,108

*Paired sample t-test, $p < .05$

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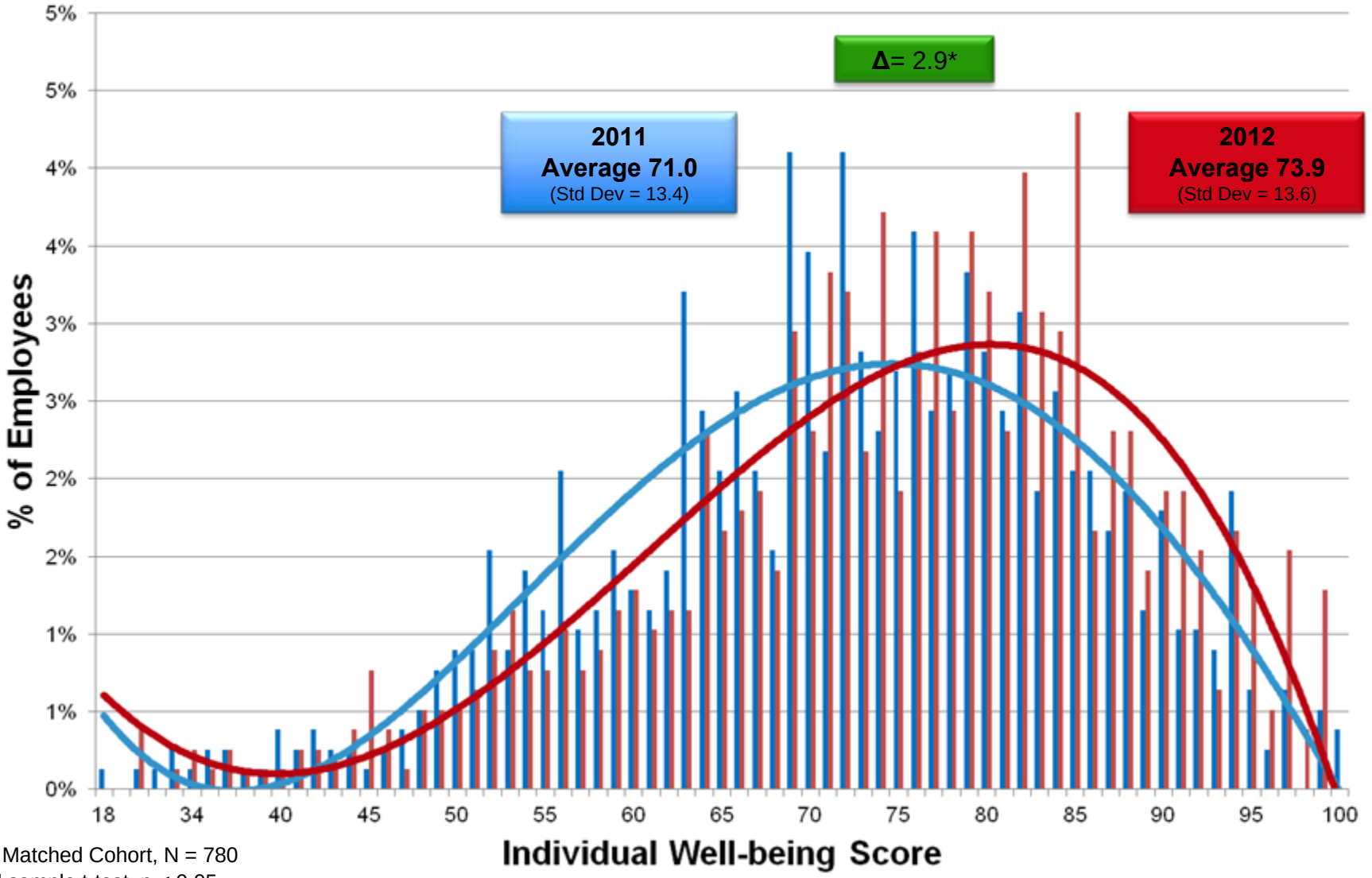
Pilot Study at a Fortune 50 Company

Well-Being Improved Significantly in Matched Respondents

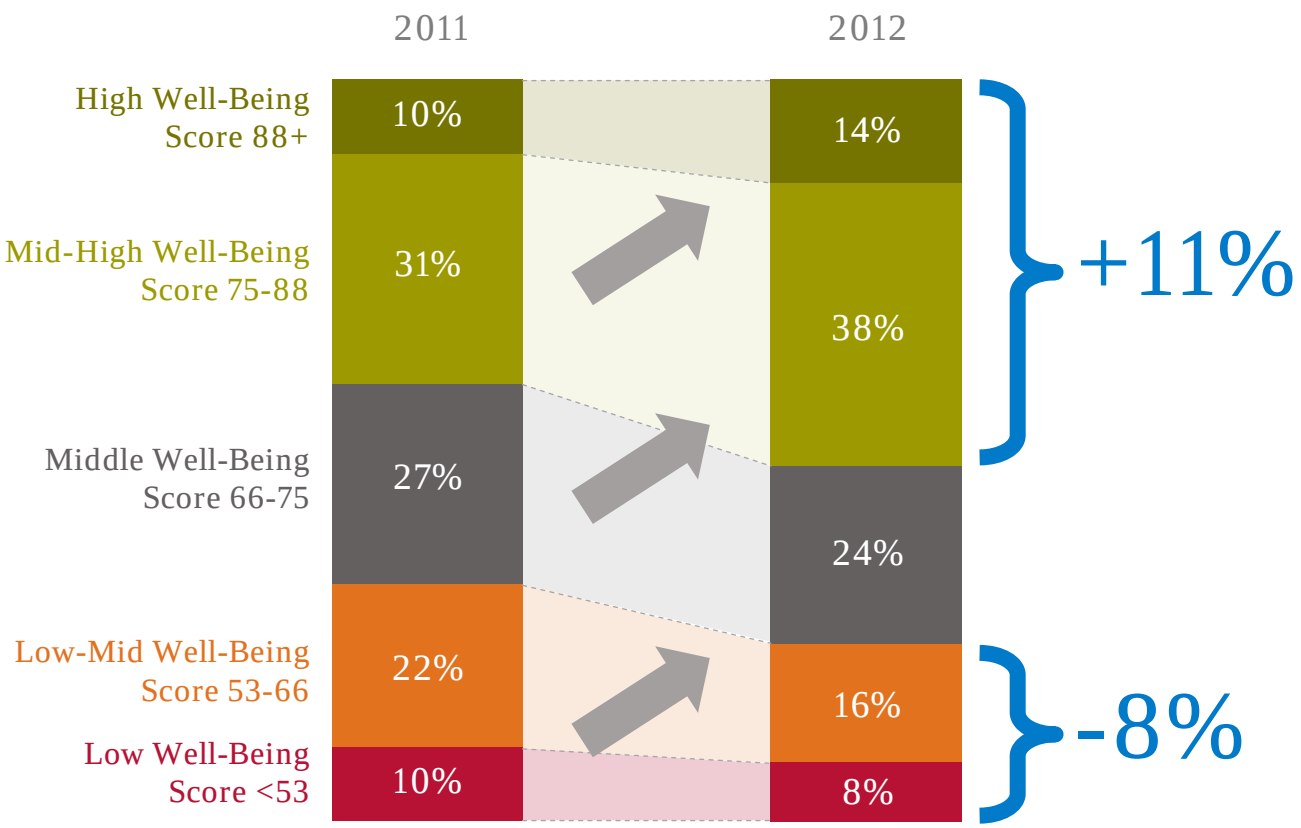


T1-T2 Matched Cohort, N = 780

*Paired sample t-test, $p < 0.05$

Fortune 50 Case Study

Healthways Longitudinal Well-Being Improvement



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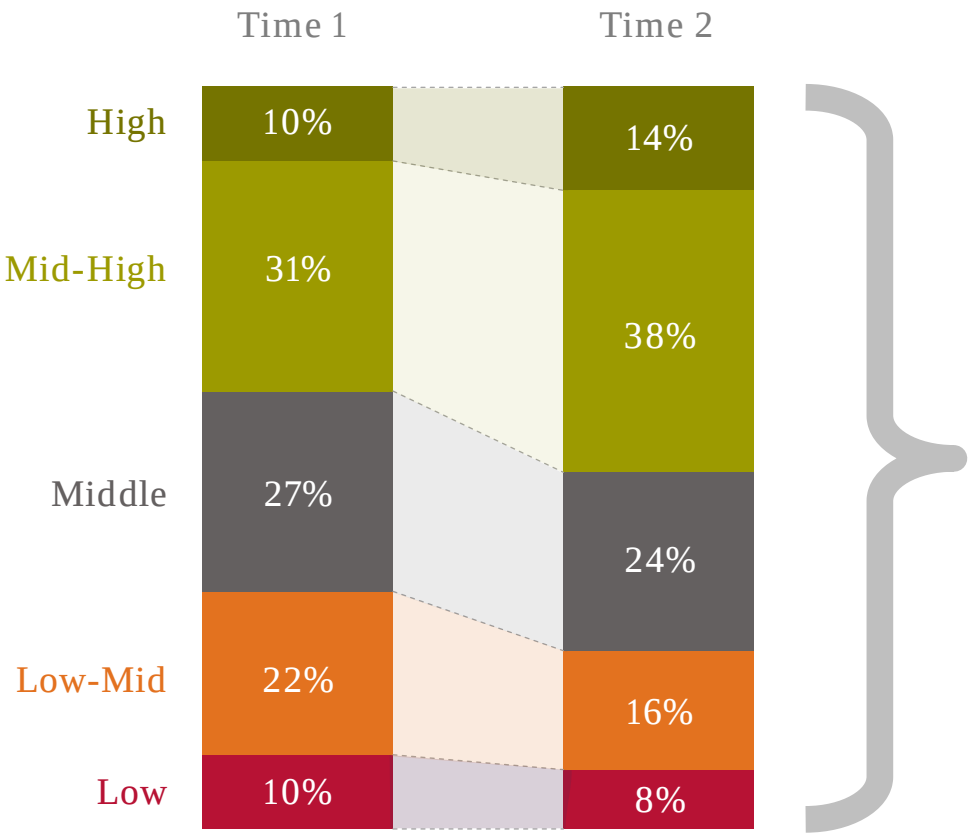
Business Performance Implications

Fortune 50 Employer Pilot

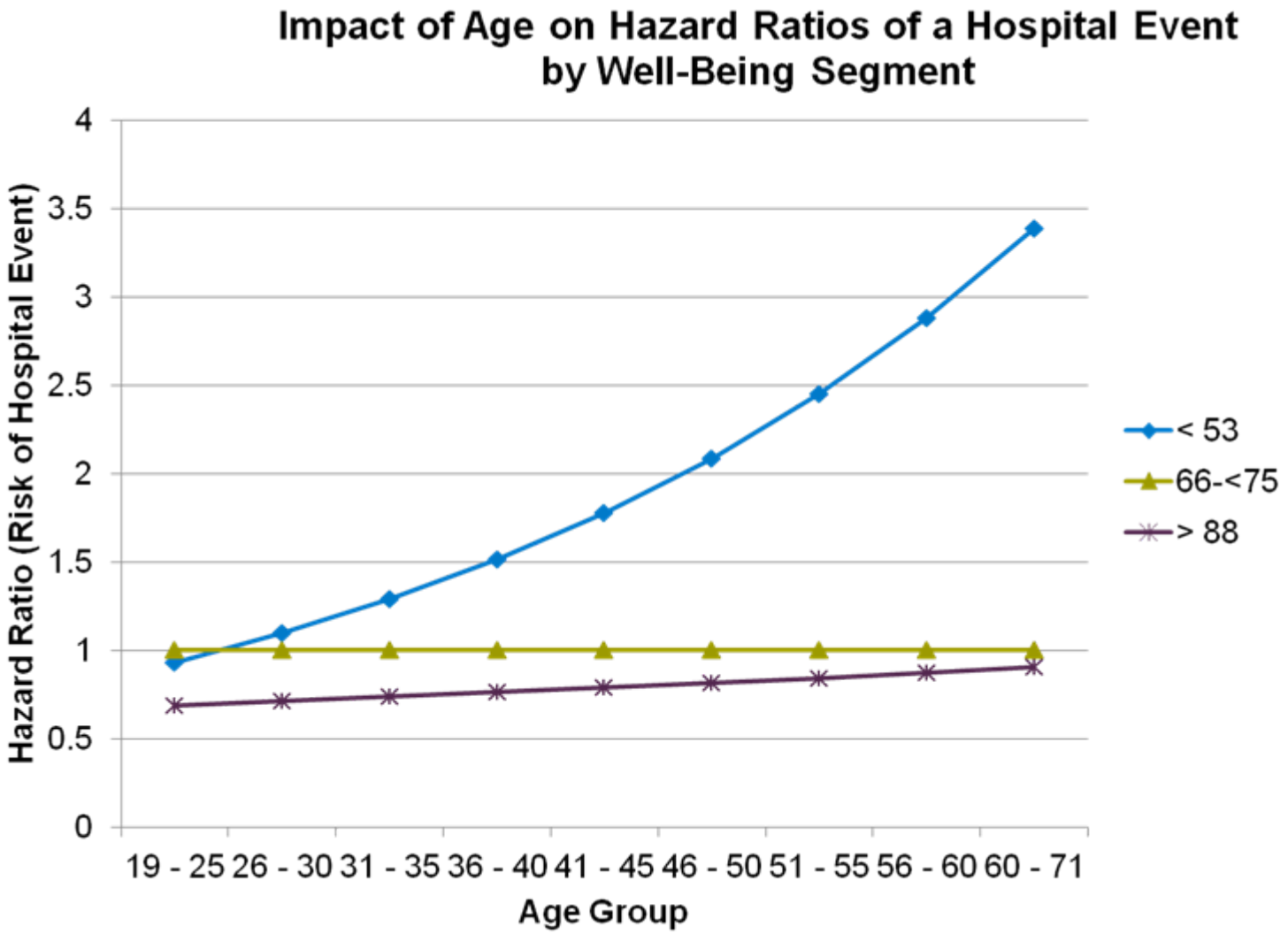


Extrapolated Impact

- 18,666 more high performers
- 21,179 fewer associates with 1 or more unscheduled absences per month

WB relationship to health care utilization is non-linear

WB is a more significant predictor of hospitalization in older individuals



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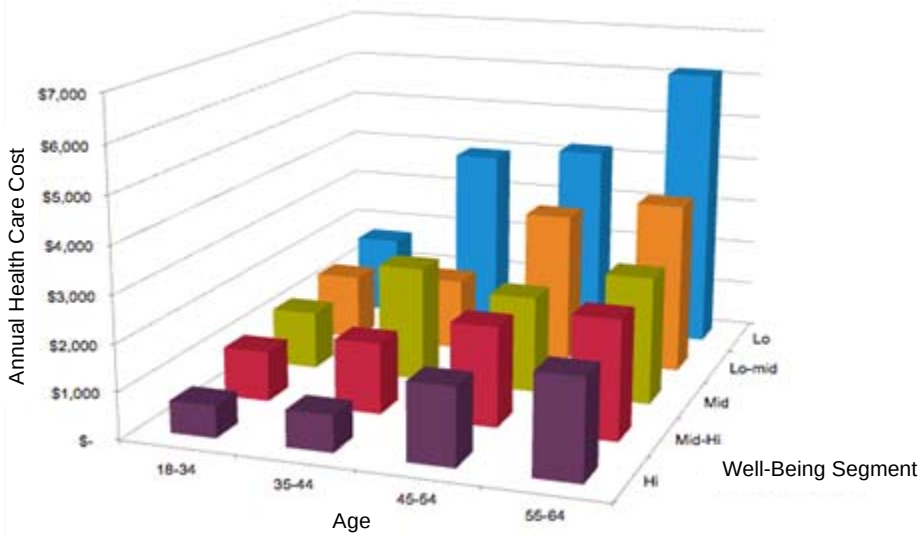
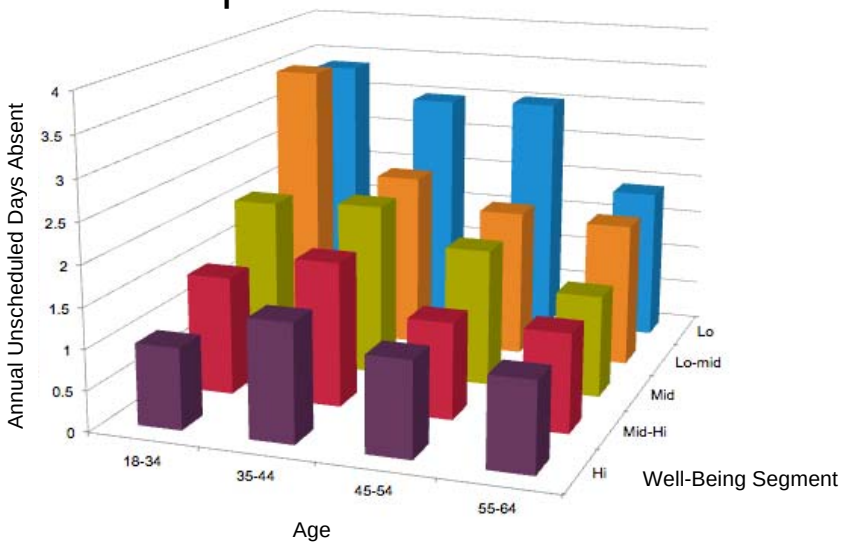
Impact of Low Well-Being Can Vary by Age

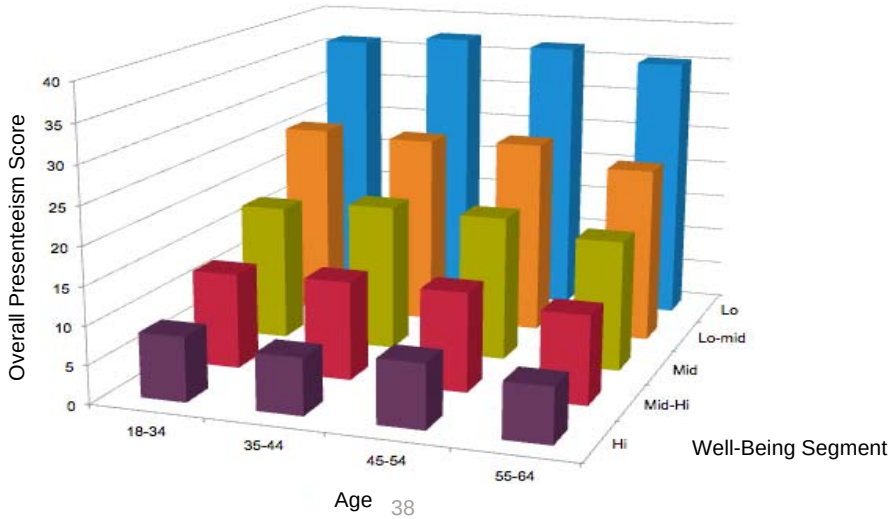
Health Care Utilization



Unplanned Absence



Presenteeism



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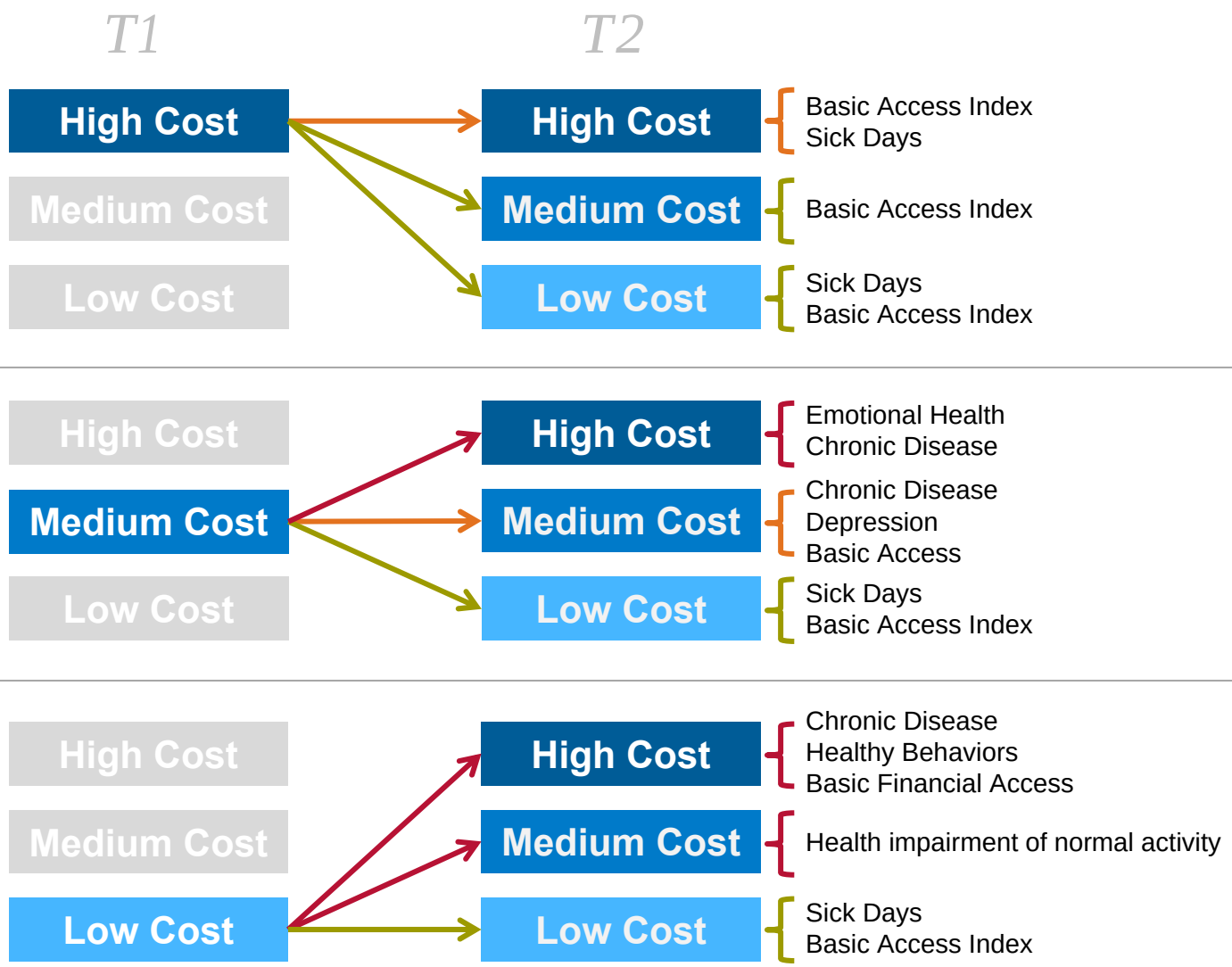
Well-Being Predicts Cohort Transitions



While we identify four cut points, for the purpose of illustration we show three categories here.

Summary

- Well-being varies nationally, regionally, and within organizations
- Changes in well-being are directly linked to changes in health care cost and human performance
- Well-being can be improved, and improvements in well-being positively impact business performance
- Well-being factors are important non-linear predictive variables in advanced predictive modeling