



Health and Wellness

Using Data to Identify Cost Drivers



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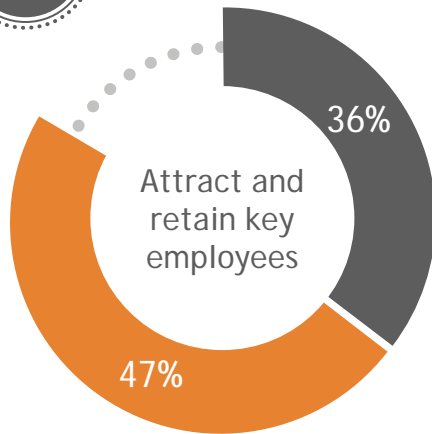
3 November, 2014

MetLife & AXA working in partnership

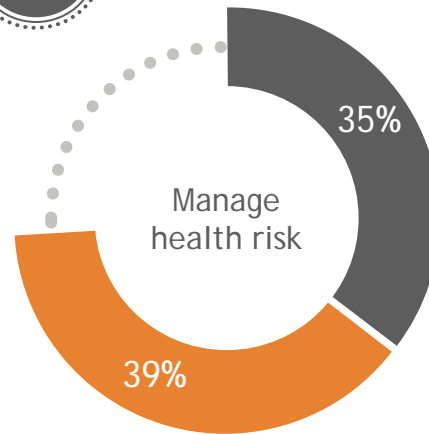


Why are employers increasingly providing private health benefits worldwide?

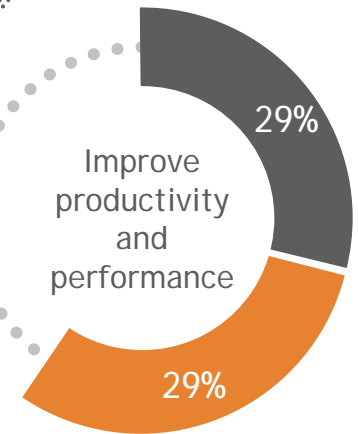
1



2



3



Important objectives



Very important objectives










ATTRACTION & RETENTION








- Tops employers' list of objectives for providing health benefits

SOURCE:
Mercer 2013 EMEA Health Care Survey



What are projected increases in PMI premiums around the globe?

E7 country	2014 Projected Medical Trend
 China (Mainland)	11.0%
 India	19.0%
 Brazil	14.0%
 Mexico	12.0%
 Russia	11.0%
 Indonesia	10.0%
 Turkey	12.0%

G7 country	2014 Projected Medical Trend
 United States	8.0%
 Japan	11.0%
 United Kingdom	6.0%
 Germany	3.5%
 France	4.0%
 Canada	5.5%
 Italy	4.5%

SOURCE: Mercer 2014 Global Medical Trends



What exactly is included in / causes Medical Trend?

INFLATION, OF COURSE (INCREASE IN UNIT COSTS)

Yes, absolutely.
But also:

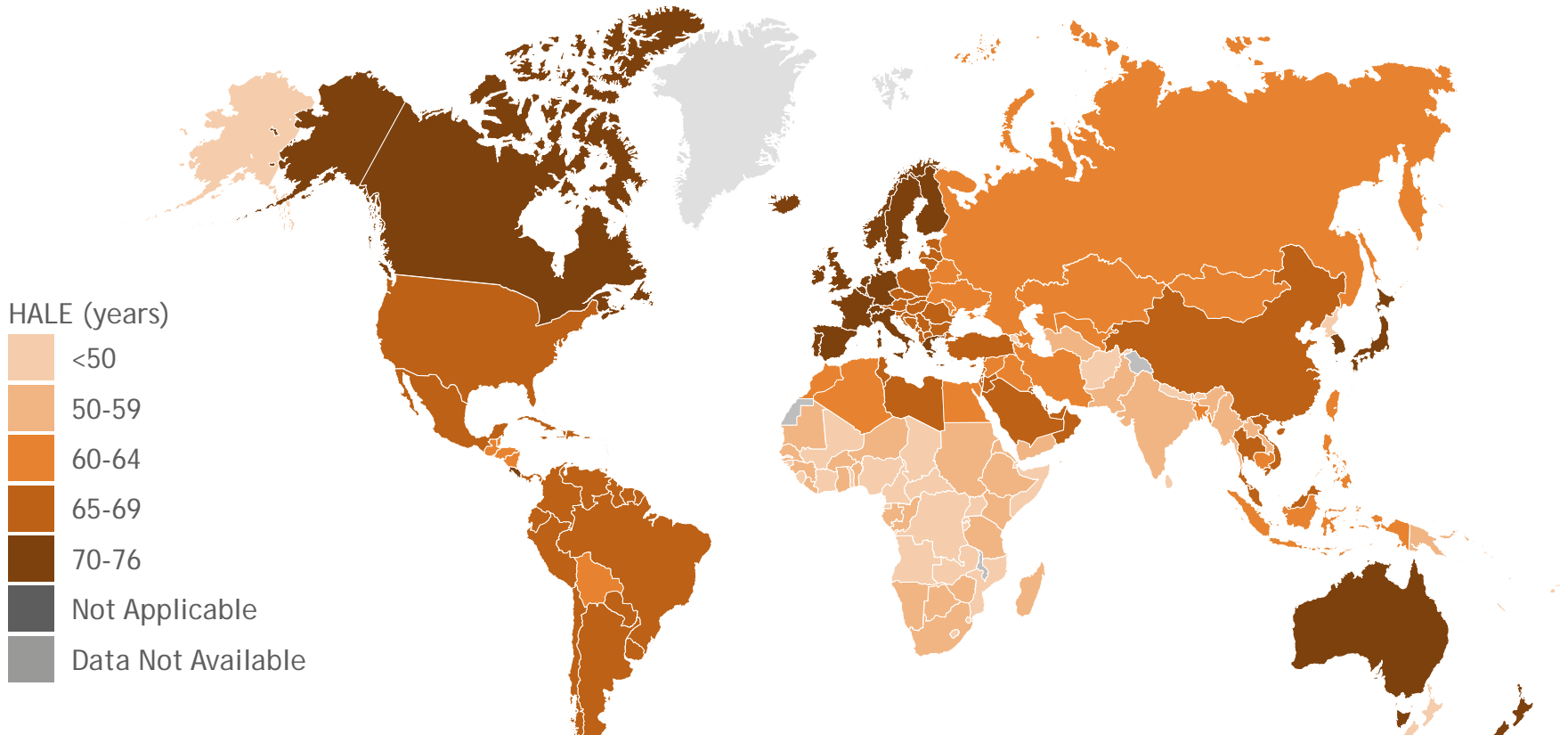
- CHANGES IN A POPULATION'S BURDEN OF ILLNESS
- IMPROVEMENTS / ADVANCES IN TECHNOLOGY AND PHARMACEUTICALS
- INCREASES IN CONSUMER (PATIENT) DEMANDS
- CHANGES IN PHYSICIAN TREATMENT PATTERNS
- SHIFTS AWAY FROM LOCAL PUBLIC HEALTH SYSTEMS

WHAT DOES THIS REALLY MEAN?



We are living longer

HEALTHY LIFE EXPECTANCY (HALE) AT BIRTH, BOTH SEXES, 2012



WE ARE LIVING LONGER

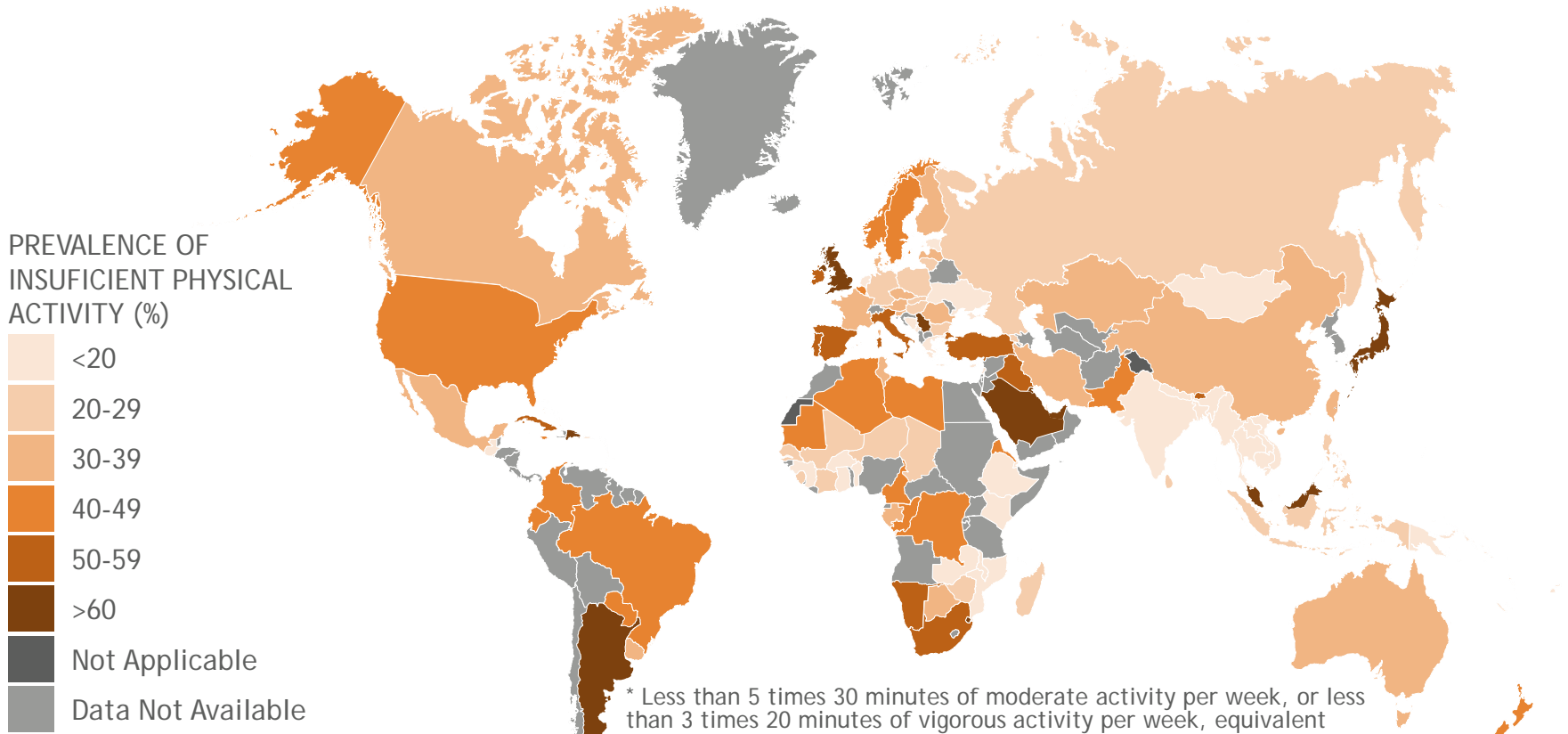
A baby born in 2012 can expect to live to 72.7 (girls) or 68.1 (boys). This is 6 years longer than the life expectancy for a child born in 1990.

DATA SOURCE: World Health Organization
MAP PRODUCTION: Health Statistics and Information Systems (HSI) World Health Organization



We lead increasingly sedentary lives

PREVALENCE OF INSUFICIENT PHYSICAL ACTIVITY*, AGES 15+, AGE STANDARIZED BOTH SEXES, 2008



WE ARE INCREASINGLY SEDENTARY

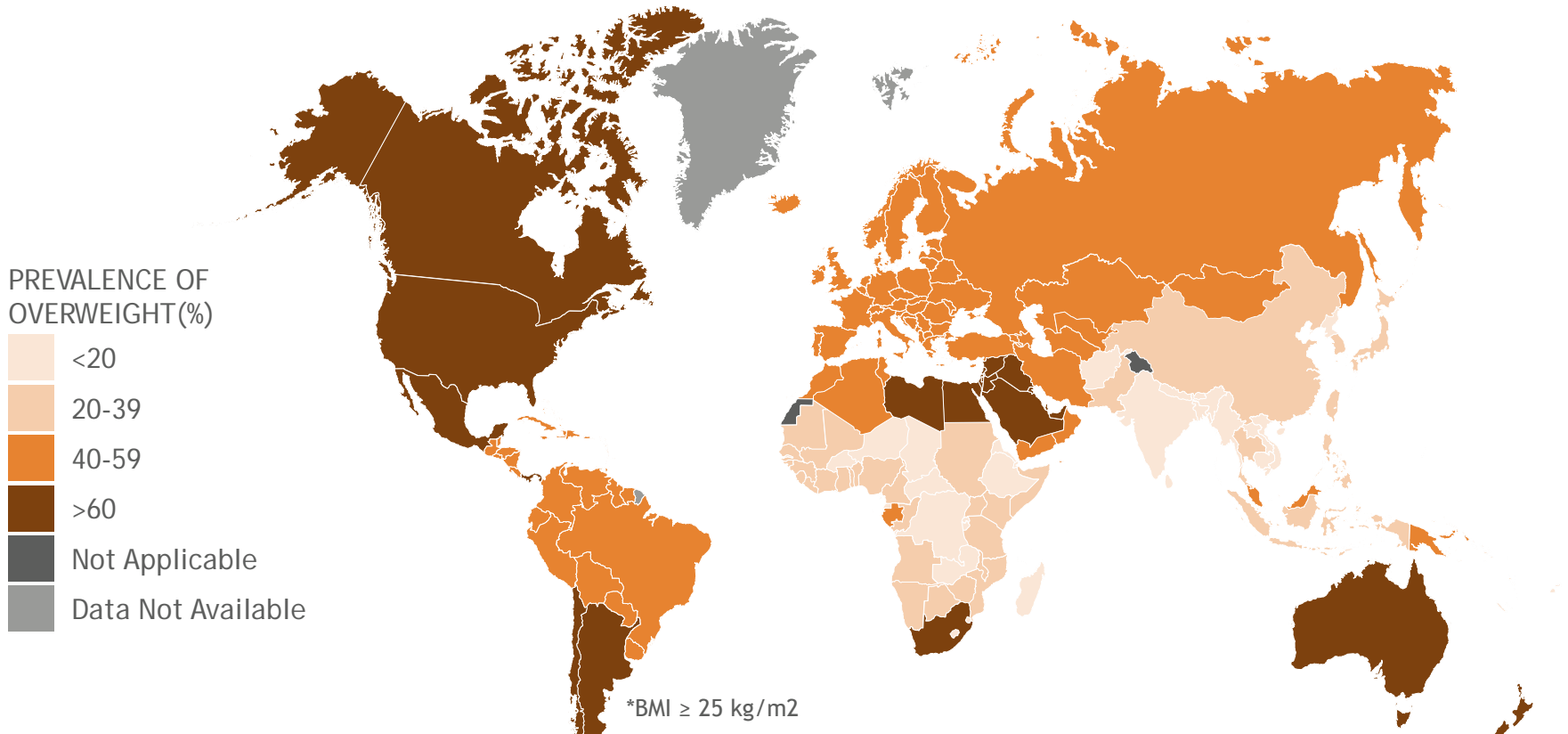
Physical inactivity is tied for the 3rd leading risk factor for global mortality, causing 6% of all deaths. Only high blood pressure (13%) and tobacco use (9%) are higher, and high blood glucose is on the same level (6%).

DATA SOURCE: World Health Organization
MAP PRODUCTION: Public Health Information and Geographic Information Systems (GIS)
World Health Organization



We are becoming increasingly overweight

PREVALENCE OF OVERWEIGHT*, AGES 20+, AGE STANDARDIZED BOTH SEXES, 2008



WE ARE INCREASINGLY OVERWEIGHT

This is a major risk factor for a number of chronic diseases, including diabetes, cardio-vascular diseases and cancer. Once a rich country's problem, prevalence is rising fast in low- and middle-income countries, particularly in urban settings.

DATA SOURCE: World Health Organization
MAP PRODUCTION: Public Health Information and Geographic Information Systems (GIS)
World Health Organization



Globally, our burden of illness is changing rapidly



Rates of non-communicable or chronic (“lifestyle”) diseases continue to increase dramatically, surpassing infections as the primary burden of illness among adults

1990 Mean rank (95% UI)

1	Lower respiratory infections
2	Diarrheal diseases
3	Preterm birth complications
4	Ischemic heart disease
5	Stroke
6	COPD
7	Malaria
8	Tuberculosis
9	Protein energy malnutrition
10	Neonatal encephalopathy
11	Road injury
12	Low back pain
13	Congenital anomalies
14	Iron-deficiency anemia
15	Major depressive disorder
16	Measles
17	Neonatal sepsis
18	Meningitis
19	Self-Harm
20	Drowning
21	Diabetes
22	Falls
23	Cirrhosis
24	Lung cancer
25	Neck pain
26	Maternal disorders
27	Asthma
28	Tetanus
29	Other musculoskeletal
30	Interpersonal violence
31	Anxiety disorders
33	HIV/AIDS
36	Migraine
39	Chronic kidney disease

2010 Mean ranks (95% UI)

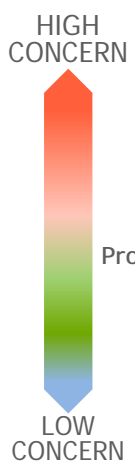
1	Ischemic heart disease
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4	Diarrheal diseases
5	HIV/AIDS
6	Malaria
7	Low back pain
8	Preterm birth complications
9	COPD
10	Road injury
11	Major depressive disorder
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13	Tuberculosis
14	Diabetes
15	Iron-deficiency anemia
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17	Congenital anomalies
18	Self-Harm
19	Falls
20	Protein-energy malnutrition
21	Neck pain
22	Lung cancer
23	Other musculoskeletal
24	Cirrhosis
25	Meningitis
26	Anxiety disorders
27	Interpersonal violence
28	Asthma
29	Chronic kidney disease
30	Migraine
32	Drowning
40	Maternal disorders
56	Measles
80	Tetanus

SOURCE: Institute for Health Metrics and Evaluation (IHME). GBD Arrow Diagram. Seattle, WA: IHME, University of Washington, 2013.



But burden of illness can differ greatly by country and region

	GLOBAL	High-income Asia Pacific	Western Europe	Australasia	High-income North America	Central Europe	Southern Latin America	Eastern Europe	East Asia	Tropical Latin America	Central Latin America	Southeast Asia	Central Asia	Andean Latin America	North Africa and Middle East	Caribbean	South Asia	Oceania	Southern Sub-Saharan Africa	Eastern Sub-Saharan Africa	Central Sub-Saharan Africa	Western Sub-Saharan Africa
Ischemic heart disease	1	3	1	1	1	1	1	1	2	1	2	3	1	3	1	2	4	5	15	21	19	20
Lower respiratory infections	2	7	21	27	21	17	6	13	15	7	6	4	2	1	5	4	1	1	2	3	4	2
Stroke	3	2	3	5	7	2	2	2	1	4	11	1	3	11	2	3	12	14	7	16	14	15
Diarrheal diseases	4	46	52	53	46	76	43	48	47	25	14	8	17	8	11	8	3	4	3	4	2	3
HIV/AIDS	5	108	59	87	34	72	33	3	39	11	13	13	31	15	57	9	17	9	1	1	5	4
Malaria	6	160	159	155	158	160	165	161	167	144	154	27	160	141	68	60	44	7	22	2	1	1
Low back pain	7	1	2	2	3	3	4	4	4	3	7	7	6	5	4	13	11	13	13	17	22	13
Preterm birth complications	8	58	43	28	25	35	11	35	28	9	9	11	8	6	8	11	2	6	6	5	6	7
COPD	9	18	7	3	2	7	7	9	3	10	16	10	11	16	13	22	5	18	9	20	20	22
Road injury	10	15	12	10	9	8	5	6	5	5	4	5	5	2	6	10	10	15	14	11	12	9
Major depressive disorder	11	12	4	4	5	6	3	5	8	6	5	6	7	4	3	7	14	12	10	13	17	19
Neonatal encephalopathy	12	84	66	50	54	65	40	40	24	20	20	12	4	9	18	15	6	19	12	8	10	10
Tuberculosis	13	42	107	122	123	53	64	17	37	44	44	2	15	21	33	17	7	3	4	7	7	12
Diabetes	14	10	10	15	8	9	10	15	9	8	3	9	12	14	9	6	16	2	8	27	28	26
Iron-deficiency anemia	15	40	85	35	117	28	27	29	32	18	18	14	13	7	10	5	9	20	11	12	11	11
Neonatal sepsis	16	119	120	111	100	114	51	81	132	29	30	35	54	18	22	14	8	24	29	9	13	5
Congenital anomalies	17	39	34	26	29	32	12	25	16	12	10	16	10	10	7	16	15	17	17	18	8	17
Self-harm	18	5	16	18	14	11	14	7	13	28	25	29	14	31	39	33	13	27	27	31	35	67
Falls	19	11	6	7	15	5	17	14	10	24	28	21	20	27	19	20	20	31	40	32	31	21
Protein-energy malnutrition	20	112	118	128	116	120	78	122	98	59	33	49	69	35	36	32	18	21	35	6	3	6
Neck pain	21	9	9	9	10	14	9	19	11	15	17	19	18	17	16	23	27	33	24	29	32	30
Lung cancer	22	6	5	8	4	4	15	10	6	30	38	24	28	47	28	26	47	58	43	92	73	95
Other musculoskeletal	23	4	8	6	6	13	8	16	14	14	15	22	19	19	21	24	30	26	26	34	33	35
Cirrhosis	24	17	19	36	16	10	16	11	21	19	12	15	9	20	15	34	22	16	37	30	27	25
Meningitis	25	90	101	91	91	80	59	77	73	51	45	36	33	37	29	29	21	8	23	10	9	8

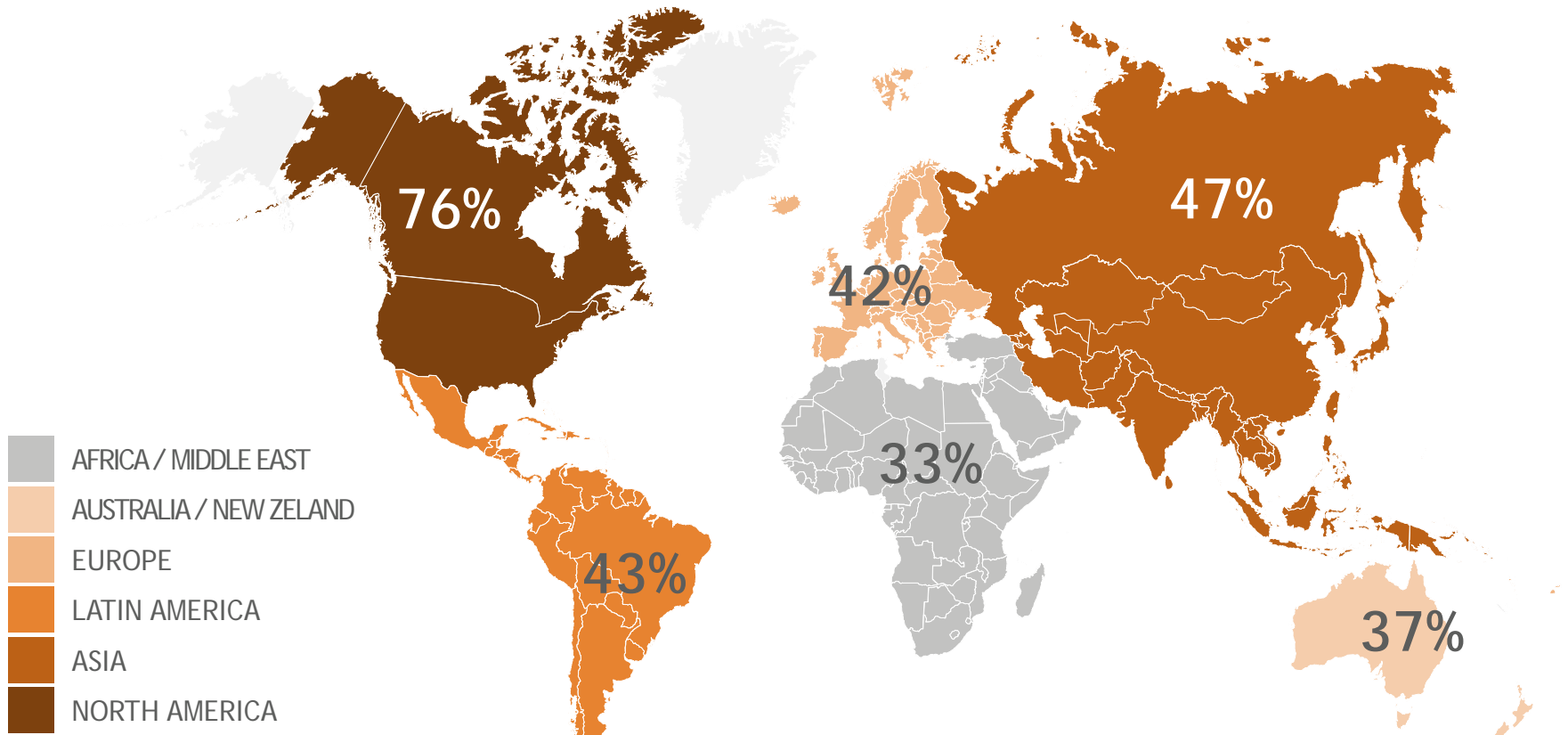


SOURCE: Institute for Health Metrics and Evaluation (IHME). GBD Heatmap. Seattle, WA: IHME, University of Washington, 2013.



What are employers doing to address these global health trends?

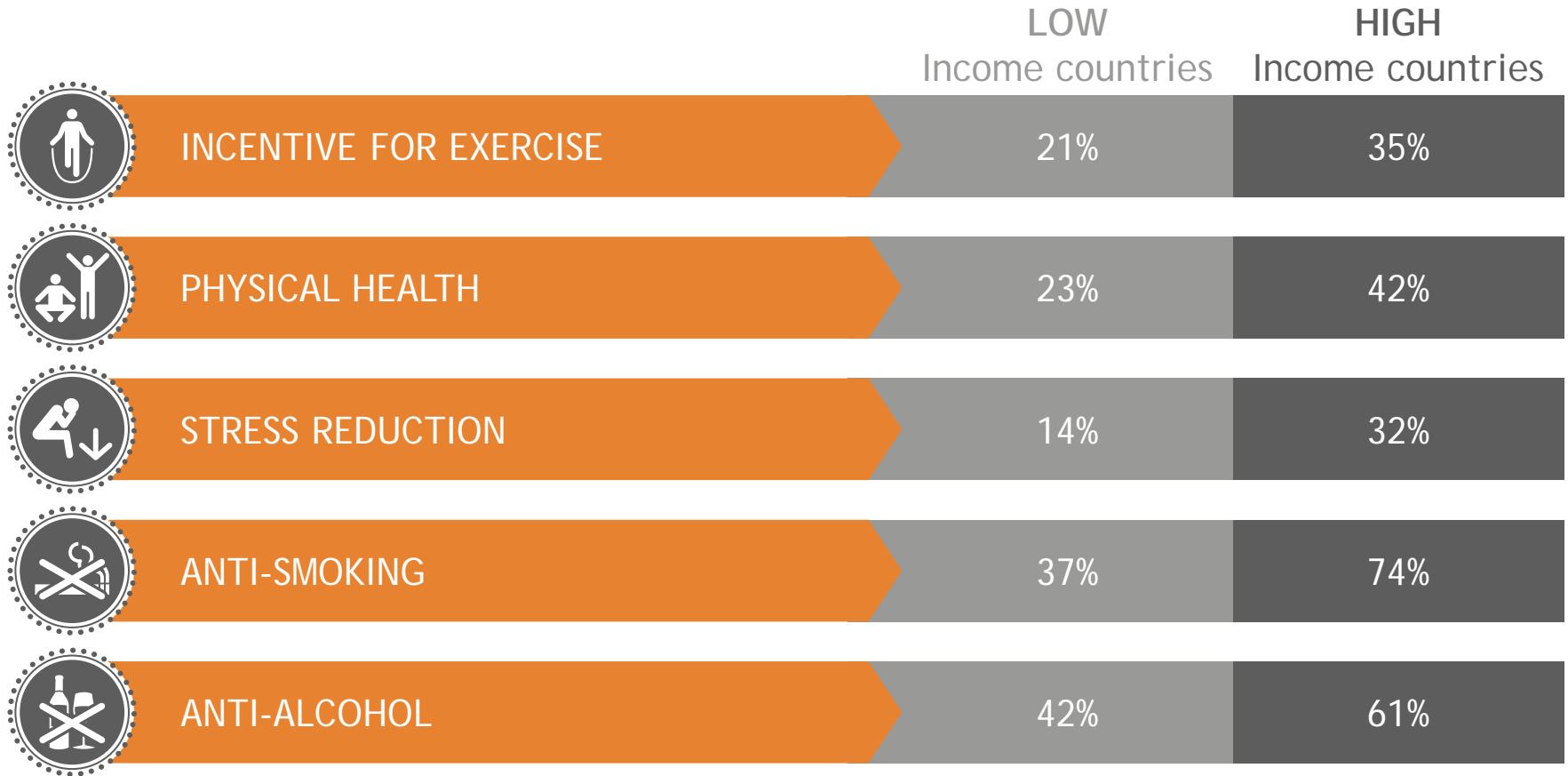
PERCENTAGE OF COMPANIES OFFERING HEALTH PROMOTION TO EMPLOYEES - BY REGION



SOURCE:
Buck Consultants 2012 Global Health Survey



What programs do employers implement to combat non-communicable diseases?



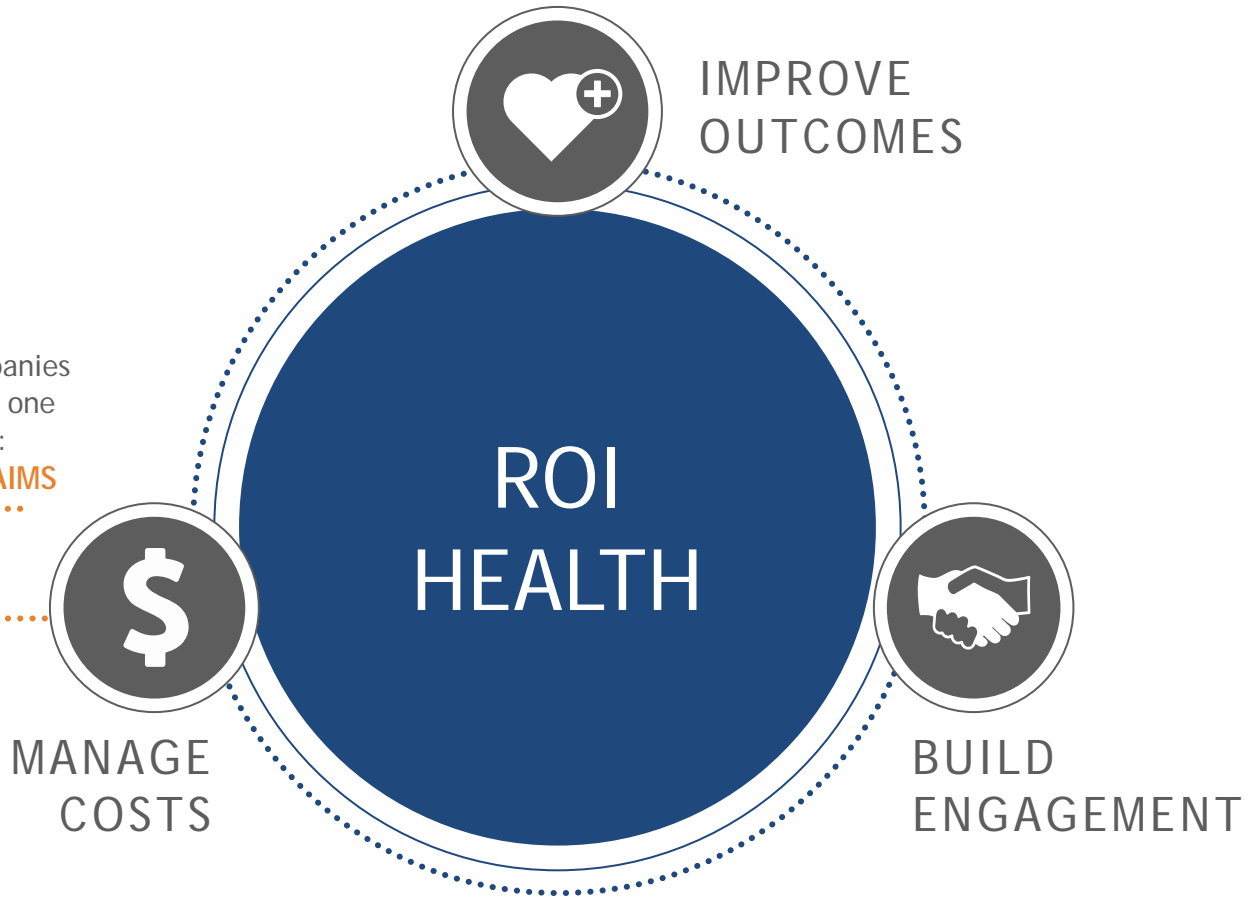
SOURCE:
The Workplace Wellness Alliance. Delivering on Health and Productivity. (2011). World Economic Forum.



What ROI formula do most employers use for these programs?

Unfortunately, many companies enter these programs with one sole measurement criteria:

REDUCING MEDICAL CLAIMS





Is Medical Claim reduction the right metric to use for measuring success?



1

Does your employee population reflect the general population that is driving the health conditions seen in public health data?

2

Is your private medical insurance paying for treatments related to the conditions identified as a concern by public health data?



Can we revisit the Medical Trend slide, and gather more insight?

INFLATION (INCREASES IN UNIT COSTS); YES, BUT ALSO:

- CHANGES IN A POPULATION'S BURDEN OF ILLNESS
- IMPROVEMENTS / ADVANCES IN TECHNOLOGY AND PHARMACEUTICALS
- INCREASES IN CONSUMER (PATIENT) DEMANDS
- CHANGES IN PHYSICIAN TREATMENT PATTERNS
- SHIFTS AWAY FROM LOCAL PUBLIC HEALTH SYSTEMS

WHAT DOES THIS REALLY MEAN?



What do we mean by “shifts away” from local public health systems?



PREVENTIVE
CARE



PRIMARY
CARE



SCHEDULED
SURGERIES



CHRONIC &
ACUTE CARE



ACCIDENTS &
TRAUMA



CRITICAL
CARE



ORGAN
TRANSPLANTS

In many parts of the world, PMI cover is very limited. Nearly everywhere is the scope of cover *evolving*, however, largely as reaction to supply / demand for private medical services.

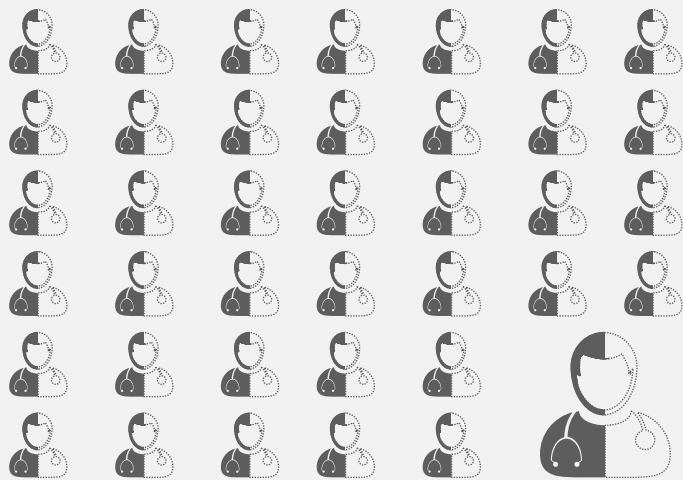
This complicates both the targeting / measuring of Wellness Programs. Depending on the scope of local cover, some programs may have little / no impact on PMI claims at all.



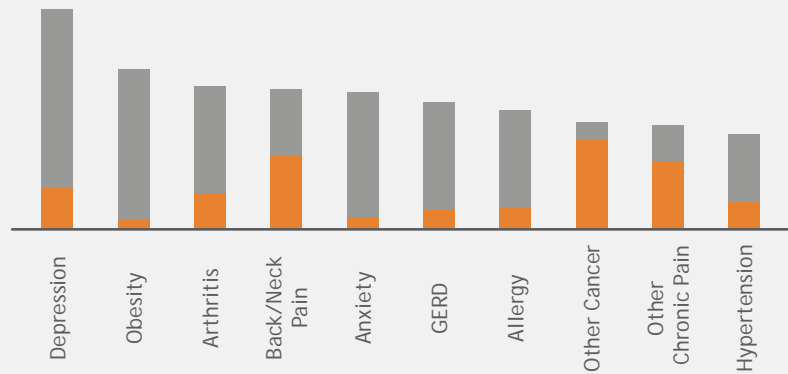
Even if comprehensive, direct PMI expenditures do not tell the whole story



DIRECT COSTS **30%** MEDICAL & DRUG PLANS



INDIRECT COSTS **70%** ABSENTEEISM & PRESENTEEISM



1. Health and Productivity as a Business Strategy: A Multiemployer Study, Journal of Occupational and Environmental Medicine • Volume 51, Number 4, April 2009



So, is reducing private medical claims the *right* metric to measure success?

A
mix of
public and
private data
is best

1

The less your population reflects the general profile seen in public data, the more you need to rely on medical claims data for *targeting* programs

2

The more limited the scope of your private medical cover, the less you can use *only* PMI claims for the *ROI analysis* of wellness programs.

How do we determine the cost drivers in private medical cover?



Figures for illustration



Four suggestions for selecting / targeting the right health programs

1



Work with your health insurer / consultant to better understand the different PMI covers you offer employees, and what data is available locally

2



Use data analytics to identify real cost drivers for *your* population, rather than relying on public data. But definitely *include* public data in your consideration.

3



Do not hesitate to implement general wellness activities like biometric screenings, health information, and worksite seminars.

4



Only implement programs that target key cost drivers seen in local data. Expand ROI definition to include engagement, absenteeism and presenteeism.

Questions?



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