

2016 Global Medical Trend Rates



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Introduction

Aon Hewitt is pleased to present the results of its 2016 survey of medical trend rates from around the world. The survey was conducted among Aon Hewitt offices that broker, administer, or otherwise advise on medical plans that are established and managed by employers in each of the 90 countries covered in this report. The survey responses reflect the medical trend expectations of the Aon professionals, clients, and carriers represented in the portfolio of Aon medical plan business in each country. The trend rates presented in this report do not include any allowances for potential employer countermeasures such as cost-containment plan amendments or the impact of any attendant employer negotiations with carriers.

Aon Hewitt has conducted this survey in order to assist multinational companies in:

- Provide practical assistance with completion of paperwork
- Budgeting premium costs for medical plan renewals
- Understanding the factors that are driving medical cost increases
- Devising wellness and cost-containment initiatives to respond to the challenges

The trend rate figures shown in this report represent the percentage increases in medical plan (insured and self-insured) unit costs that are anticipated to be technically required in order to address projected price inflation, technology advances in the medical field, plan utilization patterns, and cost shifting from social programs.

This survey covers three separate themes:

- Estimated medical trend rates for 2016
- Risk factors that are expected to drive medical cost inflation in the future
- Wellness and health promotion initiatives being undertaken by employers in order to deal with spiraling medical cost trends

As a reference, we have also included the general inflation rates for 2016 published by the International Monetary Fund (IMF) which have been adopted as a proxy for the expected domestic retail inflation level in each country for 2016.

The trend rate figures and risk factors in this report relate to employer-sponsored plans and their participants. The information presented is not necessarily representative of each country's health care costs as a whole, nor of the health care situation of each country's population overall.

A methodological improvement has been introduced in this report issue - a weighting process has been used in deriving regional and global average trend rates. The weights were based on country average private healthcare insurance expenditure per person. Last year's survey results have been recalculated according to the above methodologies.

Aon Hewitt intends to issue annual survey updates in the future. We expect that as the global demand for medical plan benefits extends to more countries, the number of participating countries in our published reports will increase. In this report we are covering 90 countries, or 6 more than the 84 countries covered in our survey last year.

We hope you will find this report useful. We welcome any feedback you may wish to provide.

Key Highlights

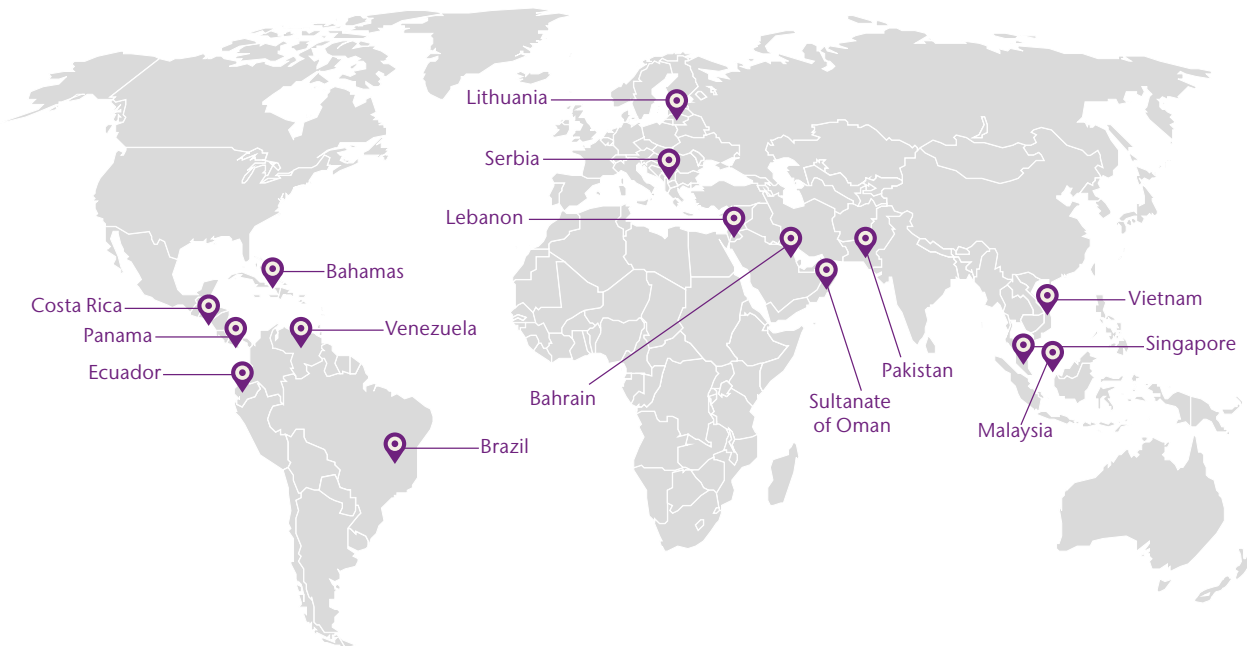
The prevalence of employer-sponsored medical plans is increasing in all countries covered by the survey. Furthermore, the scope of the provisions offered by supplementary plans is expanding (e.g. larger maximum lifetime benefits, larger allowances for maternity benefits, fewer exclusions, more procedures covered by the plan).

The medical trend rates continue to exceed local general inflation levels.

- In 2015, the global average medical trend rate of 8.75% was 5.5 percentage points higher than the average inflation rate of 3.2%¹

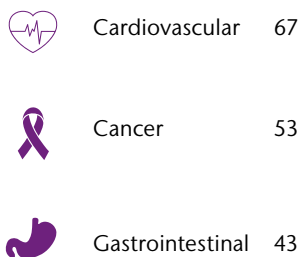
- For 2016, a difference of 5.5 percentage points between the average medical trend rate of 9.1% and the average general inflation rate of 3.6% is expected²
- Aon Hewitt expects further medical cost escalation due to global population aging, overall declining health, poor lifestyle habits becoming pervasive in emerging countries, continuing cost shifting from social programs, and increasing utilization of employer-sponsored plans

Double-digit margins between medical trend rates and domestic inflation levels were found in:



The top reported conditions giving rise to adverse claim experience around the world are:

% responding



¹IMF World Economic Outlook Database April 2014.

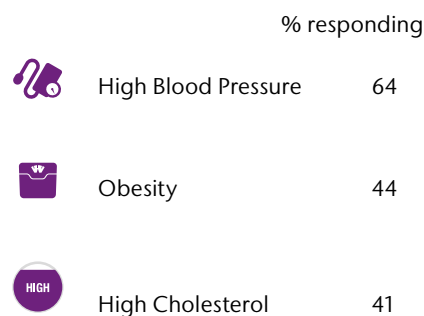
²IMF World Economic Outlook Database April 2015.

Differentials by geographic region among the primary medical conditions that were reported to generate adverse claim experience are:

Asia Pacific	Canada	Europe	Latin America	Middle East/Africa
Cardiovascular	Biologic Immunomodulators	Cardiovascular	Cancer	Respiratory
Cancer & Other	Mental Health	Cancer	Cardiovascular & Respiratory	Cardiovascular
Gastrointestinal	Cardiovascular	Diabetes	Gastrointestinal	Diabetes

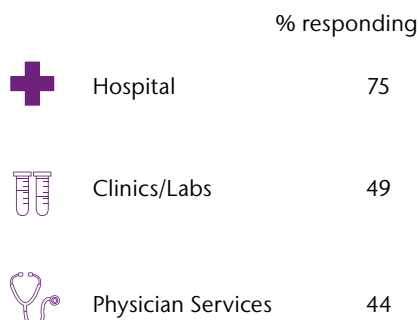
Non-communicable diseases (NCDs) are the biggest contributors to the adverse experience driving high medical inflation. NCDs are directly linked to modern lifestyles, and their incidence can be significantly reduced through modification of individual behaviors. Influencing these behaviors represents both a challenge and an opportunity for employers.

The top reported conditions giving rise to adverse claim experience around the world are:



Asia Pacific	Canada	Europe	Latin America	Middle East/Africa
High Blood Pressure	Physical Inactivity	High Blood Pressure	High Blood Pressure	High Blood Pressure
Obesity	Obesity	Smoking	Obesity	High Cholesterol
High Cholesterol & Physical Inactivity	Ageing	Poor Stress Management	Poor Stress Management	Physical Inactivity




The most impactful elements of medical plan costs around the world are:



Asia Pacific	Canada	Europe	Latin America	Middle East/Africa
Hospital	Prescription Drugs	Clinics/Labs	Hospital	Hospital
Clinics/Labs	Administration Costs	Hospital	Physician Services	Maternity & Physician Services
Physician Services	Preventive Care	Physician Services & Preventive Care	Clinics/Labs	Clinics/Labs

The most common wellness and health promotion initiatives being undertaken by progressive employers globally are:

% responding

	Detection	80
	Education Programs	71
	Coaching Programs	69

Note: “progressive employers” are defined as employers of choice in each territory. In other words, a group of employers that are known in each country to be successful in attracting and retaining top talent

Call to Action

The findings addressed in this report suggest that employers need to accelerate their efforts at helping employees to both understand their own health risks and begin to take steps to improve their health. Rising costs and the increased prevalence of chronic conditions are global phenomena—and regardless of the underlying medical insurance system, employers will experience added organizational cost and lost workforce productivity if these trends continue.

The wellness initiative summaries in this report should be useful in understanding wellness and cost mitigation efforts being undertaken by employers. However, the underlying causes of illness and risk factors vary by region and even from country to country within a region. It is therefore important to carefully target employer initiatives to the specific situation surrounding each medical plan.

Survey Results

Average Medical Trend Rate Tables

Region & Country	2015			2016		
	Annual General Inflation Rate (%)	Annual Medical Trend Rates		Annual General Inflation Rate (%)	Annual Medical Trend Rates	
		Gross (%)	Net (%)		Gross (%)	Net (%)
Global	3.2	8.7	5.5	3.6	9.1	5.5
North America	1.6	5.3	3.6	1.5	5.8	4.3
Latin America & Caribbean	6.9	16.7	9.8	11.0	20.0	9.0
Europe	1.6	5.7	4.1	1.6	5.9	4.2
Middle East & Africa	6.6	13.3	6.7	6.3	11.6	5.3
Asia	4.2	10.4	6.2	3.2	9.4	6.3

Region & Country	2015			2016		
	Annual General Inflation Rate (%)	Annual Medical Trend Rates		Annual General Inflation Rate (%)	Annual Medical Trend Rates	
		Gross (%)	Net (%)		Gross (%)	Net (%)
North America (Avg)	1.6	5.3	3.6	1.5	5.8	4.3
Canada	1.9	4.0	2.1	2.0	8.0	6.0
United States	1.6	5.3	3.7	1.5	5.7	4.2
Latin America & Caribbean (Avg)	6.9	16.7	9.8	11.0	20.0	9.0
Argentina	12.5	30.0	17.5	23.2	30.0	6.8
Bahamas	2.6	12.0	9.5	1.6	15.0	13.4
Bolivia	5.3	10.0	4.7	5.0	8.0	3.0
Brazil	5.5	18.1	12.5	5.9	16.7	10.8
Chile	2.9	6.0	3.1	3.0	5.0	2.0
Colombia	2.9	9.0	6.1	3.0	6.0	3.0
Costa Rica	4.5	13.0	8.5	4.0	14.0	10.0
Dominican Republic	4.3	8.0	3.8	3.5	8.0	4.5
Ecuador	2.6	17.0	14.4	3.0	15.0	12.0
El Salvador	2.6	10.0	7.4	1.7	10.0	8.3
Guatemala	4.1	12.0	7.9	3.0	12.0	9.0
Honduras	6.5	20.0	13.5	5.1	15.0	9.9
Jamaica	8.3	15.0	6.8	7.1	12.0	4.9
Mexico	3.5	9.3	5.8	3.0	9.7	6.7
Nicaragua	7.0	14.0	7.0	7.0	13.0	6.0

Average Medical Trend Rate Tables

Region & Country	2015			2016		
	Annual General Inflation Rate (%)	Annual Medical Trend Rates		Annual General Inflation Rate (%)	Annual Medical Trend Rates	
		Gross (%)	Net (%)		Gross (%)	Net (%)
Panama	3.6	10.0	6.4	2.0	14.0	12.0
Peru	2.1	5.7	3.6	2.0	6.0	4.0
Puerto Rico	0.0	8.0	8.0	3.0	8.0	5.0
Trinidad and Tobago	4.0	12.0	8.0	5.7	15.0	9.3
Venezuela	38.0	55.0	17.0	83.7	120.0	36.3
Europe (Avg)	1.6	5.7	4.1	1.6	5.9	4.2
Austria	1.7	3.0	1.3	1.5	2.5	1.0
Belgium	1.1	3.0	1.9	0.9	3.0	2.1
Bulgaria	0.9	8.0	7.1	0.6	10.0	9.4
Croatia	1.1	1.0	(0.1)	0.9	1.1	0.2
Cyprus	1.4	1.5	0.1	0.3	1.4	1.1
Czech Republic	1.9	5.0	3.1	1.3	4.0	2.7
Denmark	1.8	1.5	(0.3)	1.6	1.5	(0.1)
Finland	1.5	10.0	8.5	1.6	10.0	8.4
France	1.2	6.0	4.8	0.8	3.0	2.2
Germany	1.4	5.0	3.6	1.3	8.5	7.2
Greece	0.3	4.0	3.7	0.3	7.0	6.7
Hungary	3.0	4.0	1.0	2.3	2.0	(0.3)
Ireland	1.1	9.0	7.9	1.5	5.0	3.5
Italy	1.0	3.5	2.5	0.8	4.0	3.2
Latvia	2.5	5.0	2.5	1.7	5.0	3.3
Lithuania	1.8	15.0	13.2	2.0	15.0	13.0
Norway	2.0	10.0	8.0	2.3	10.0	7.8
Poland	2.4	8.0	5.6	1.2	5.0	3.8
Portugal	1.2	4.0	2.8	1.3	4.0	2.7
Romania	3.1	5.0	1.9	2.4	5.0	2.6
Russia	5.3	12.0	6.7	9.8	15.0	5.2
Serbia	4.0	15.0	11.0	4.0	15.0	11.0
Slovakia	1.6	1.6	0.0	1.4	1.4	(0.0)
Spain	0.8	4.5	3.7	0.7	4.6	3.9
Sweden	1.6	4.5	2.9	1.1	4.0	3.0
Switzerland	0.5	4.0	3.5	(0.4)	4.0	4.4
The Netherlands	1.0	2.3	1.3	0.9	3.0	2.1
Ukraine	8.7	17.0	8.3	10.6	14.0	3.4

Average Medical Trend Rate Tables

Region & Country	2015			2016		
	Annual General Inflation Rate (%)	Annual Medical Trend Rates		Annual General Inflation Rate (%)	Annual Medical Trend Rates	
		Gross (%)	Net (%)		Gross (%)	Net (%)
United Kingdom	1.9	7.8	5.9	1.9	9.3	7.4
Middle East & Africa (Avg)	6.6	13.3	6.7	6.3	11.6	5.3
Angola	7.7	9.0	1.3	8.5	15.0	6.6
Bahrain	2.4	11.5	9.1	1.5	11.5	10.0
Democratic Republic of the Congo	4.1	n/a	n/a	3.5	5.0	1.5
Egypt	11.2	13.0	1.8	10.5	14.0	3.5
Ghana	11.1	n/a	n/a	10.2	15.0	4.8
Ivory Coast	n/a	n/a	n/a	1.5	5.0	3.5
Kenya	5.5	13.0	7.5	5.5	10.0	4.5
Kuwait	4.0	12.0	8.0	3.6	12.0	8.4
Lebanon	2.0	16.0	14.0	2.8	15.0	12.3
Malawi	6.9	n/a	n/a	10.0	11.0	1.0
Morocco	2.5	n/a	n/a	2.0	0.0	(2.0)
Nigeria	7.0	n/a	n/a	10.7	12.0	1.3
Qatar	3.5	10.0	6.5	2.7	10.0	7.3
Saudi Arabia	3.2	17.0	13.8	2.5	12.0	9.5
Senegal	1.5	n/a	n/a	1.4	5.0	3.6
South Africa	5.6	6.3	0.7	5.6	9.5	3.9
Sultanate of Oman	3.1	15.0	11.9	2.6	14.5	11.9
Turkey	6.5	15.0	8.5	6.5	12.0	5.5
Uganda	6.3	10.0	3.7	4.8	10.0	5.2
United Arab Emirates	2.5	12.5	10.0	2.3	12.0	9.7
Zimbabwe	1.7	n/a	n/a	0.0	0.0	(0.0)
Asia (Avg)	4.2	10.4	6.2	3.2	9.4	6.3
Australia	2.4	7.5	5.1	2.3	6.0	3.7
Bangladesh	6.7	7.5	0.8	6.5	7.3	0.8
China	3.0	7.0	4.0	1.5	7.0	5.5
Hong Kong	3.8	8.6	4.8	3.4	7.5	4.1
India	7.5	13.0	5.5	5.7	12.5	6.8
Indonesia	5.5	15.0	9.5	5.8	15.0	9.2
Japan	1.7	4.7	3.0	0.9	2.2	1.3
Kazakhstan	7.5	7.8	0.3	5.5	7.0	1.5
Malaysia	3.9	12.0	8.1	3.0	14.0	11.0
New Zealand	2.2	7.6	5.4	2.1	5.6	3.5

Average Medical Trend Rate Tables

Region & Country	2015			2016		
	Annual General Inflation Rate (%)	Annual Medical Trend Rates		Annual General Inflation Rate (%)	Annual Medical Trend Rates	
		Gross (%)	Net (%)		Gross (%)	Net (%)
Pakistan	9.0	18.0	9.0	4.5	16.5	12.0
Philippines	3.6	8.0	4.4	2.8	8.0	5.2
Singapore	2.6	15.0	12.4	1.7	15.0	13.3
South Korea	3.0	15.0	12.0	2.5	6.0	3.5
Taiwan	2.0	10.0	8.0	1.3	10.0	8.7
Thailand	2.1	8.0	5.9	2.4	8.0	5.6
Vietnam	6.2	20.0	13.8	3.3	20.0	16.8
Global	3.2	8.7	5.5	3.6	9.1	5.5

Notes:

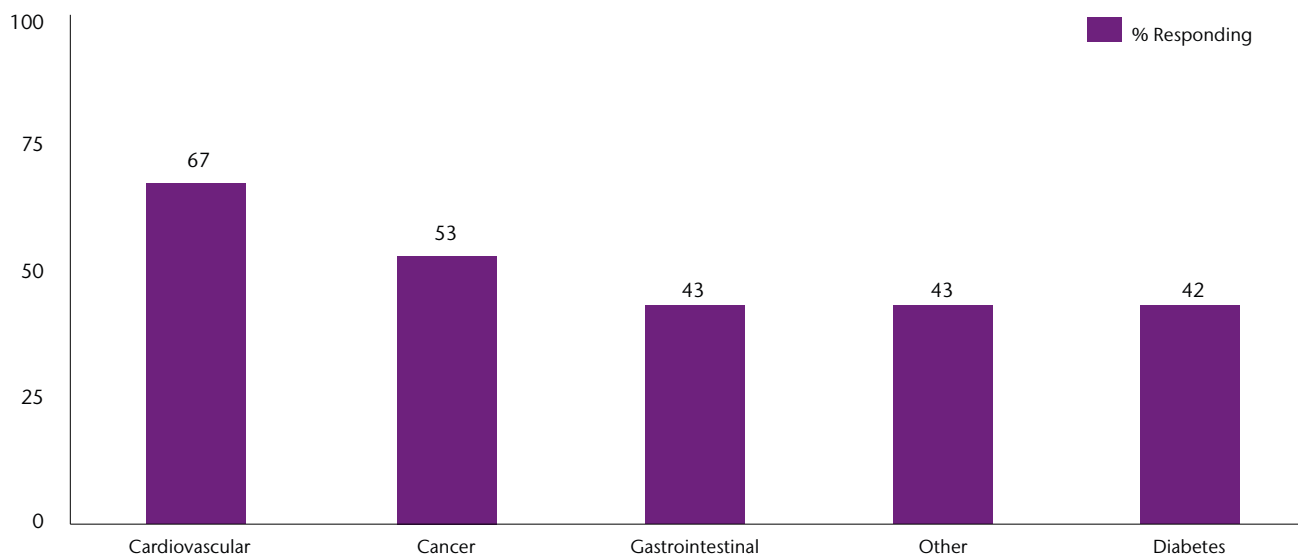
“Net” indicates medical trend rates net of domestic general inflation rates.

The U.S. trend rates are from the Aon Hewitt Health Value Initiative database, which captures health care cost and benefit data for more than 600 large U.S. employers representing 11.7 million participants.

Key Reported Causes of Adverse Medical Claim Experience

The figures below represent the percentages of responses from Aon offices that reported the indicated cause as a contributing factor in adverse claims experience in their respective countries.

Top Global Key Causes

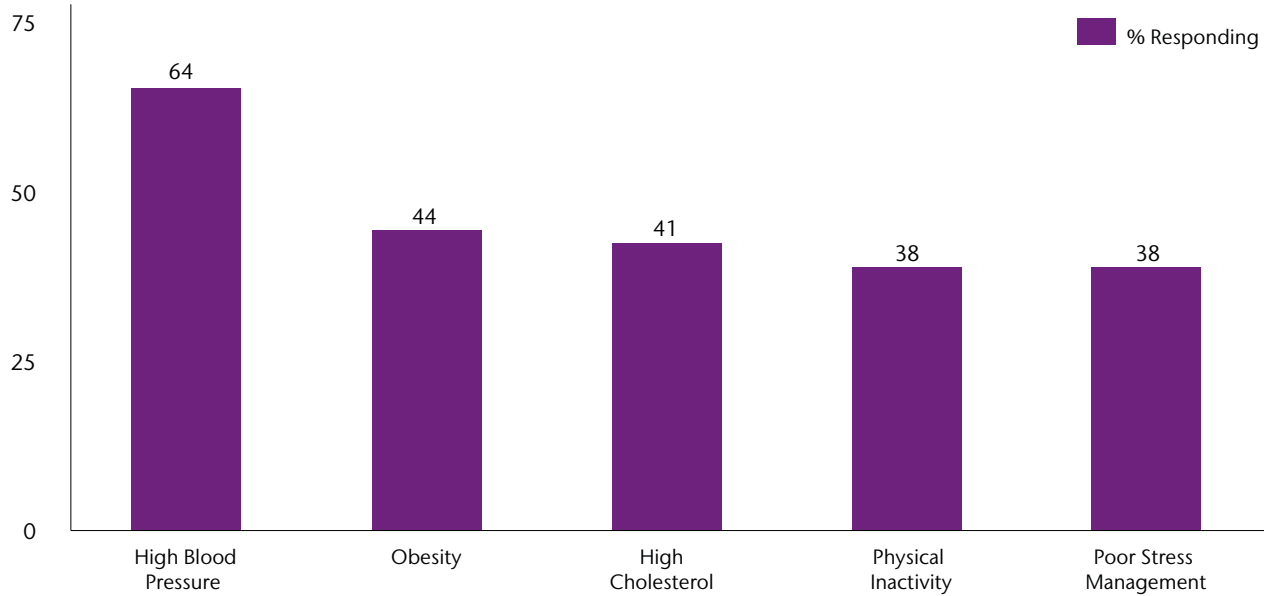


	Asia Pacific (% Responses)		Europe (% Responses)		Latin America (% Responses)		Middle East/Africa (% Responses)	
1	Cardiovascular	76	Cardiovascular	76	Cancer	67	Other	74
2	Cancer	65	Cancer	59	Cardiovascular	62	Respiratory	63
3	Other	65	Diabetes	45	Respiratory	62	Cardiovascular	47
4	Gastrointestinal	47	Other	34	Gastrointestinal	57	Gastrointestinal	42
5	High Blood Pressure	41	Gastrointestinal	34	Diabetes	48	Diabetes	42

Risk Factors Driving Supplementary Medical Plan Costs

The figures below represent the percentages of responses from Aon offices that reported the indicated risk as becoming a leading factor in future adverse claims experience in their respective countries.

Top Global Risk Factors



Risk Factors	% Responding
1 High Blood Pressure	64
2 Obesity	44
3 High Cholesterol	41
4 Physical Inactivity	38
5 Poor Stress Management	38
6 Smoking	28
7 High Blood Glucose	24
8 Ageing	18
9 Bad Nutrition	17
10 Lack of Health Screening	15
11 Air Pollution	11
12 Other	11
13 Unsafe Water, Sanitation, Hygiene	10
14 Genetics	8
15 Occupational Risks	7

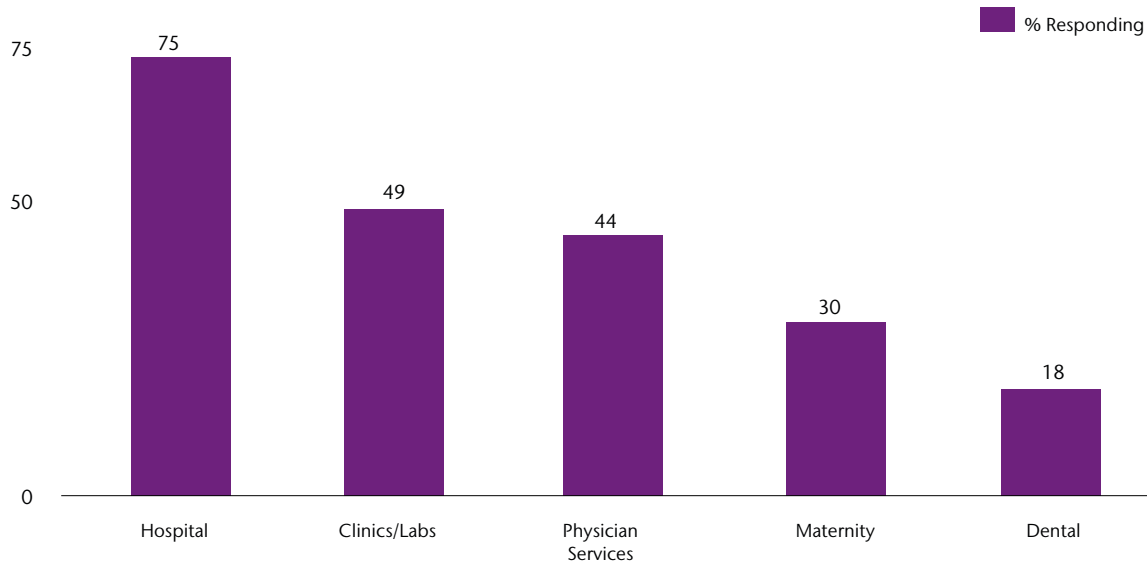
The figures below represent the percentages of Aon offices reporting the indicated risk factors in their respective regions.

	Asia Pacific (% Responding)		Europe (% Responding)		Latin America (% Responding)		Middle East/Africa (% Responding)	
1	High Blood Pressure	53	High Blood Pressure	76	High Blood Pressure	71	High Blood Pressure	56
2	Obesity	47	Smoking	55	Obesity	62	High Cholesterol	44
3	High Cholesterol	41	Poor Stress Management	45	Poor Stress Management	43	Physical Inactivity	44
4	Physical Inactivity	41	Physical Inactivity	41	High Cholesterol	38	Lack of Health Screening	33
5	Poor Stress Management	35	Obesity	38	High Blood Glucose	33	Unsafe Water, Sanitation, Hygiene	32

Most Important Elements of Medical Plan Cost

The figures below represent the percentages of responses from Aon offices that reported the indicated element as the most important element of medical plan cost in their respective countries.

Top Global Main Elements

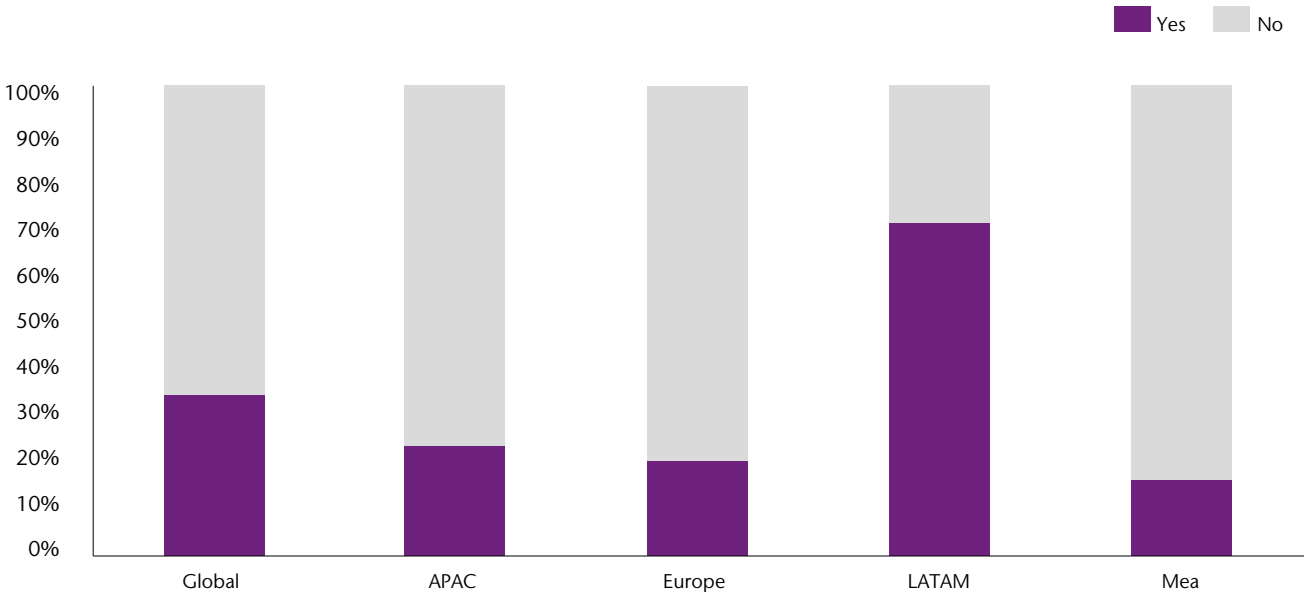


The figures below represent the percentages of Aon offices reporting the indicated cost element in their respective regions.

	Asia Pacific (% Responses)		Europe (% Responses)		Latin America (% Responses)		Middle East/Africa (% Responses)	
1	Hospital	88	Clinics/Labs	69	Hospital	81	Hospital	79
2	Clinics/Labs	59	Hospital	62	Physician Services	52	Physician Services	47
3	Physician Services	53	Physician Services	31	Clinics/Labs	33	Maternity	47
4	Maternity	29	Preventive Care	31	Maternity	24	Clinics/Labs	32
5	Other	18	Maternity	24	Dental	10	Dental	26

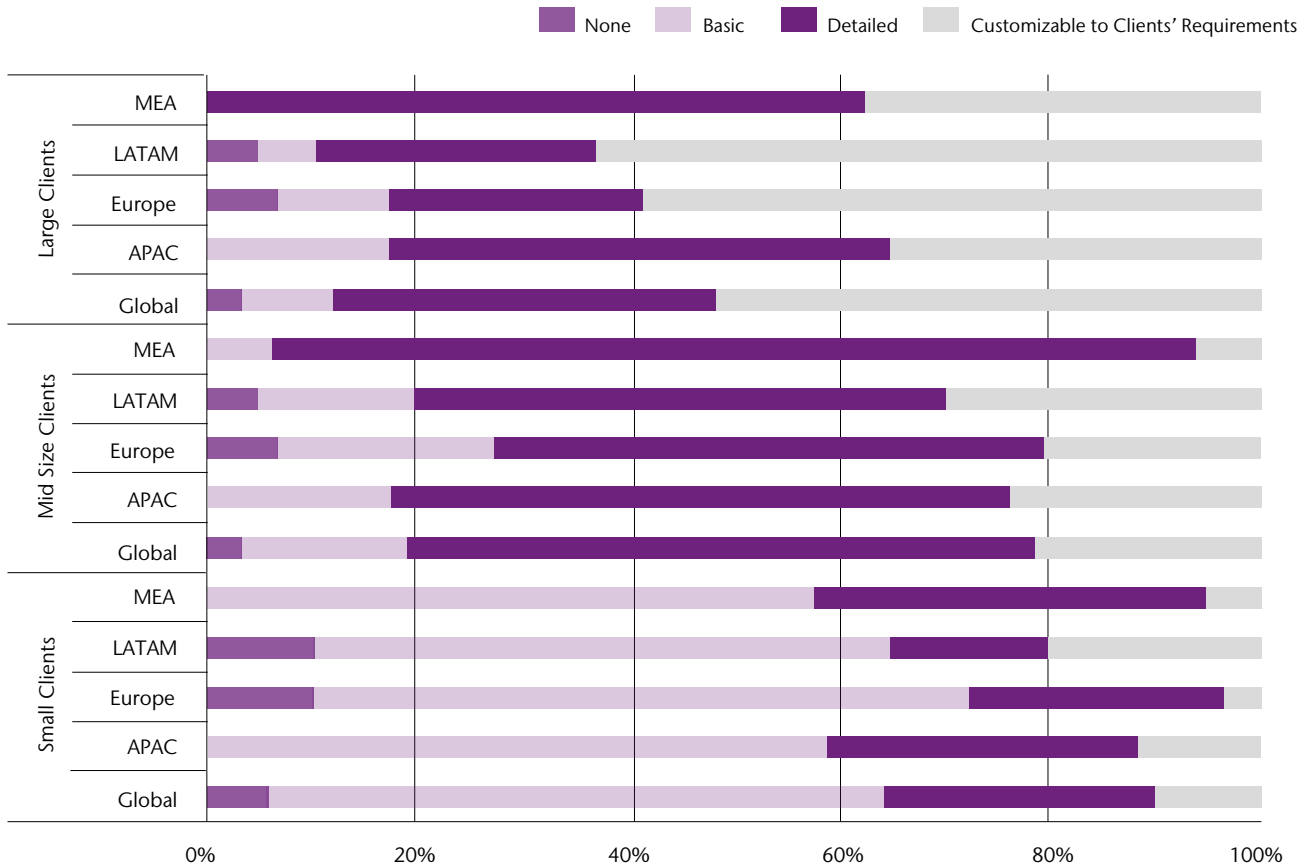
Medical Plan Employee Cost Sharing

The figures below represent the percentages of Aon offices reporting employee cost sharing in the medical plan in their respective regions.



Levels of Claims Information Available from Carriers

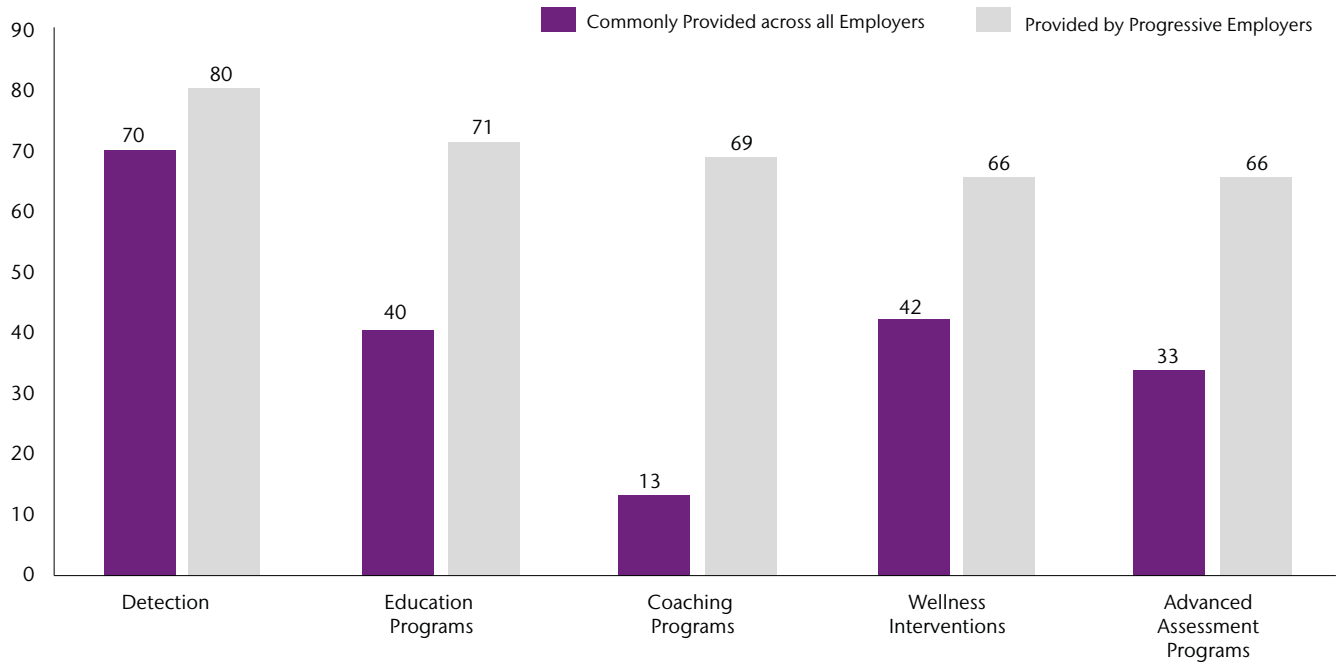
The figures below represent the percentages of Aon offices reporting availability of various levels of claims information from carriers and third party administrators for the medical plans in their respective regions.



Global Wellness and Health Promotion Initiatives

The figures below represent the percentages of responses from Aon offices that reported the indicated wellness program as commonly provided among the indicated employer groups in their respective countries.

Wellness Programs Reported as Commonly Provided (% Responding)



Education (% Responding)

	All Employers	Progressive Employers
Communication Materials on Wellness	31	52
Informational Web Service	28	44
Wellness Kits	28	47
Fitness Education	17	41

Advanced Assessments (% Responding)

	All Employers	Progressive Employers
Heart Health	26	40
Advanced Check-ups	11	41
Nutrition	14	42
Substance Use	8	28
Level of Fitness	10	30

Detection (% Responding)

	All Employers	Progressive Employers
Physical Check-ups	49	60
Vision Screening	43	42
Mammograms	33	43
Hearing Screening	23	33

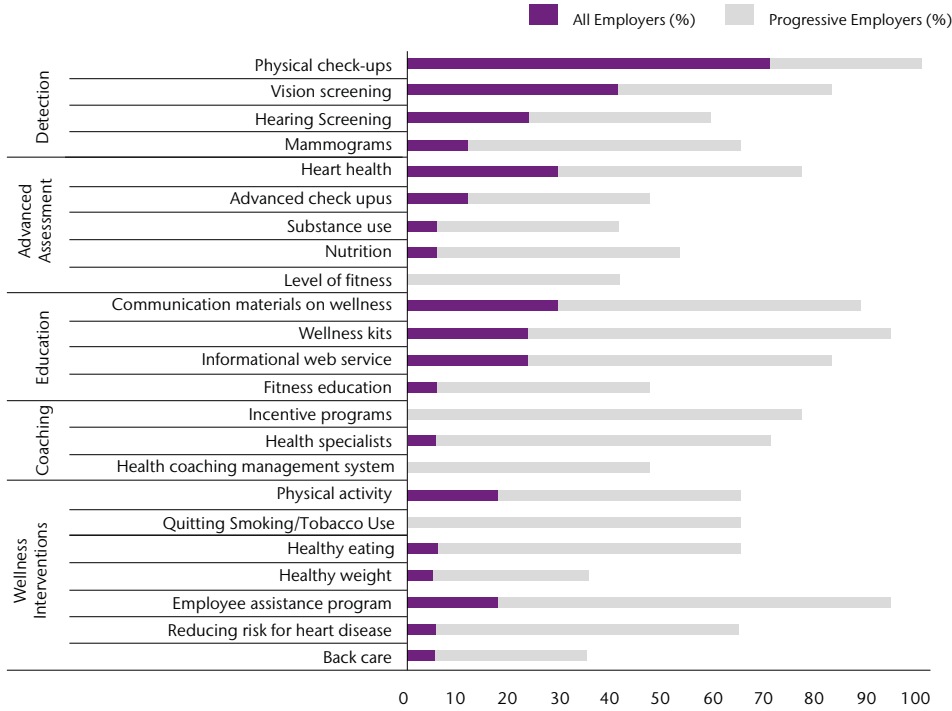
Coaching (% Responding)

	All Employers	Progressive Employers
Health Coaching Management System	4	39
Incentive Programs	9	54
Health Specialists	7	54

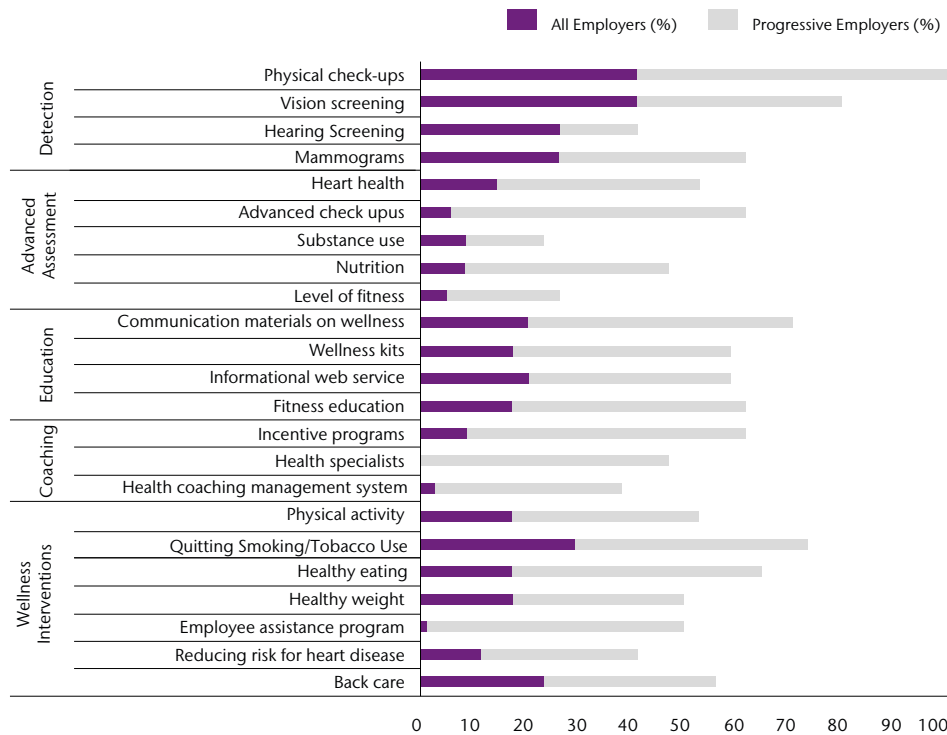
Wellness Interventions (% Responding)

	All Employers	Progressive Employers
Quitting Smoking/ Tobacco Use	22	42
Employee Assistance Program	16	46
Physical Activity	22	36
Healthy Weight	19	31
Back Care	19	30
Healthy Eating	20	43
Reducing Risk for Heart Disease	14	39

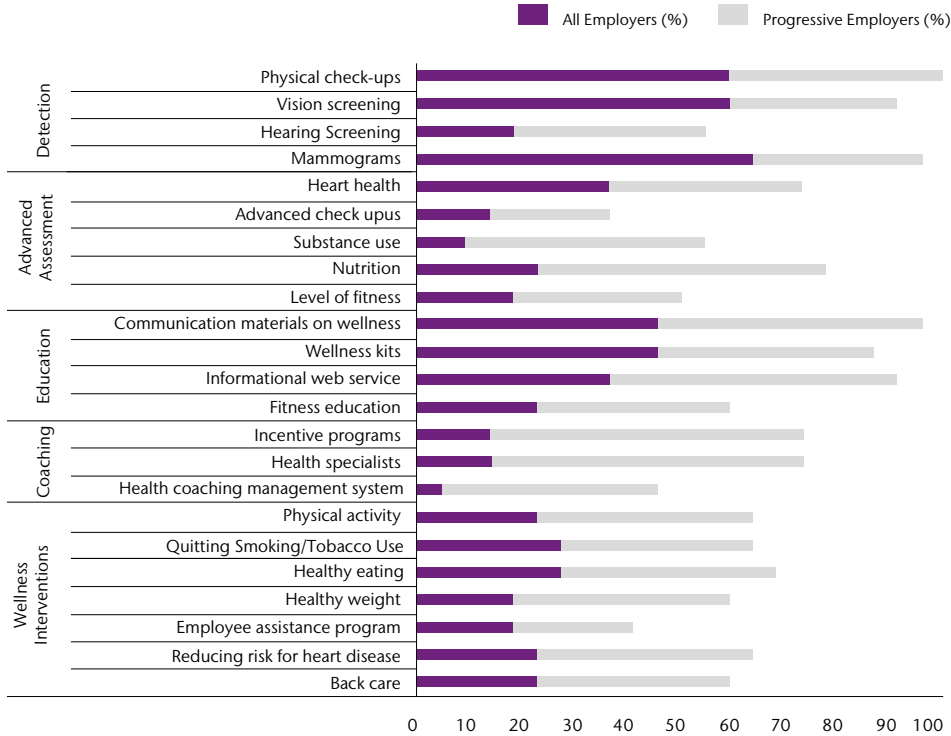
Asia Pacific



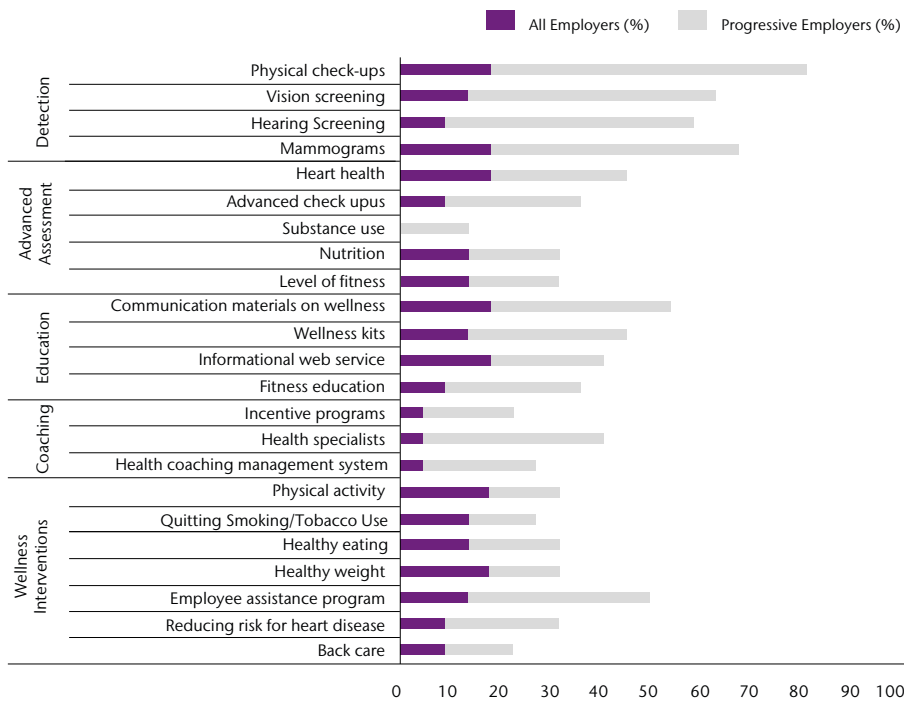
Europe



Latin America



Middle East/Africa



Appendix

Trend Rate Overview

The trend rates shown in this report represent national averages and are the predicted increase in premium costs. Trend increases for a specific company may vary significantly from these trend rates due to regional cost variations, company plan design, company demographics, and other factors. In addition, insured rate increases may be higher or lower than these trend rates based on an insurance company's profitability, the plan's claims-loss ratio, the plan design, insured demographics, and other factors. It is important to note that these trend rates might not be appropriate for other purposes.

Medical trend rate is defined as percentage of change in the cost of health care prior to any cost-containment measure undertaken by plan sponsors.

The components of health care trend that we have considered include:

- **Price inflation.** This is the projected annual change in the domestic retail consumer price index of the health care element in each country. In the absence of information on projected inflation for the medical plan component in any given country, we have used the change in the overall consumer price index.
- **Leveraging impact on fixed-amount elements of plan design.** This is the additional cost added to a health plan due to the leveraging effect of increasing expected claims on unchanging deductibles, copays, or out-of-pocket maximums.
- **Utilization.** This component reflects an increase in the demand for medical care services in response to factors such as increased access to medical services, plan design, participant age, and new medical technology and services.
- **Technology advances.** This reflects the change in cost due to new procedures, information, experience, and equipment replacing older techniques.
- **Cost shifting.** This reflects a provider of medical services such as a government social health care program transferring its cost to private-sector supplementary plans.

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About Aon Hewitt

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About Aon

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