



2019 Global Medical Trend Rates Report

Global Benefits

Introduction

Aon is pleased to present the results of its 2019 survey of average medical trend rates from countries around the world. The survey was conducted among Aon offices in 103 countries that broker, administer, or otherwise advise on employer-sponsored medical plans in each of the 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 potential impact of any attendant employer/broker negotiations with carriers.**

Aon has conducted this survey in order to help multinational companies:

- Budget premium costs for medical plan renewals
- Understand the factors driving medical cost increases
- Devise 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 to address projected price inflation, technology advances in the medical field, plan utilization patterns, and cost shifting from social programs to private insurance, including employer-sponsored plans, in each covered country.

Care should be taken in interpreting the information presented here. The medical trend rates provided are not meant to represent an overview of each country's health care costs as a whole. Neither are they necessarily indicative of the health care situation of each country's population overall.

This survey covers several separate themes:

- Estimated medical trend rates for 2019
- Risk factors that are driving medical cost inflation
- Principal cost elements in medical claims

- Wellness and health promotion initiatives being undertaken by employers to deal with spiraling medical cost increase trends
- The most common employer practices in each covered country around medical plan prevalence, design, funding, and administration
- Qualitative responses to provide greater context to medical plans globally

This report also provides information on the growing practice of requiring employee cost sharing in medical plan costs. The report summarizes the most typical practices in each covered country in this regard—employee sharing in medical premium costs, or in medical claim outlays.

As a reference, we have also included the projected general inflation rates for 2019 published by the International Monetary Fund (IMF) that have been adopted as a proxy for the expected domestic retail inflation level in each country for 2019.

The trend rate figures, risk factors, and cost elements in this report relate to employer-sponsored plans and their participants with aggregate premiums managed by Aon of over USD 166 billion.

The global and regional medical trend rate averages reflect the following technical procedures:

- A weighting process based on each country's average private health care insurance expenditure per person with arbitrary adjustments for some countries in order to prevent over or under weighting
- A geometric averaging mechanism

Due to the hyperinflation environment prevailing in Venezuela, we have left this country out of the regional and global medical trend rate averaging mechanism for 2019.

Aon 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 over time.

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

Key Highlights

Global Overview

The prevalence of employer-sponsored medical plans is increasing in all countries covered by the survey. Furthermore, the scope of the provisions offered by these medical plans continues to expand (e.g., covered procedures, larger maximum lifetime benefits, higher allowances for maternity benefits, fewer exclusions from plan coverage, more lenient plan participation requirements.)

All regions of the world are expected to experience lower medical trend rates in 2019 relative to 2018 with the most significant decreases in average medical trend rates in North America and Europe.

In fact, the 2019 global average nominal (gross of inflation) medical trend rate as well as the global average real (net of inflation) medical trend rate are at the lowest registered since 2013, the initial year of the Aon global medical trend rate survey.

The drop in medical trend rates is due to lower rates of projected inflation worldwide as well as the result of employer cost containment measures and tighter medical goods and services procurement initiatives. Despite the drop, medical trend rates continue to grow over general inflation.

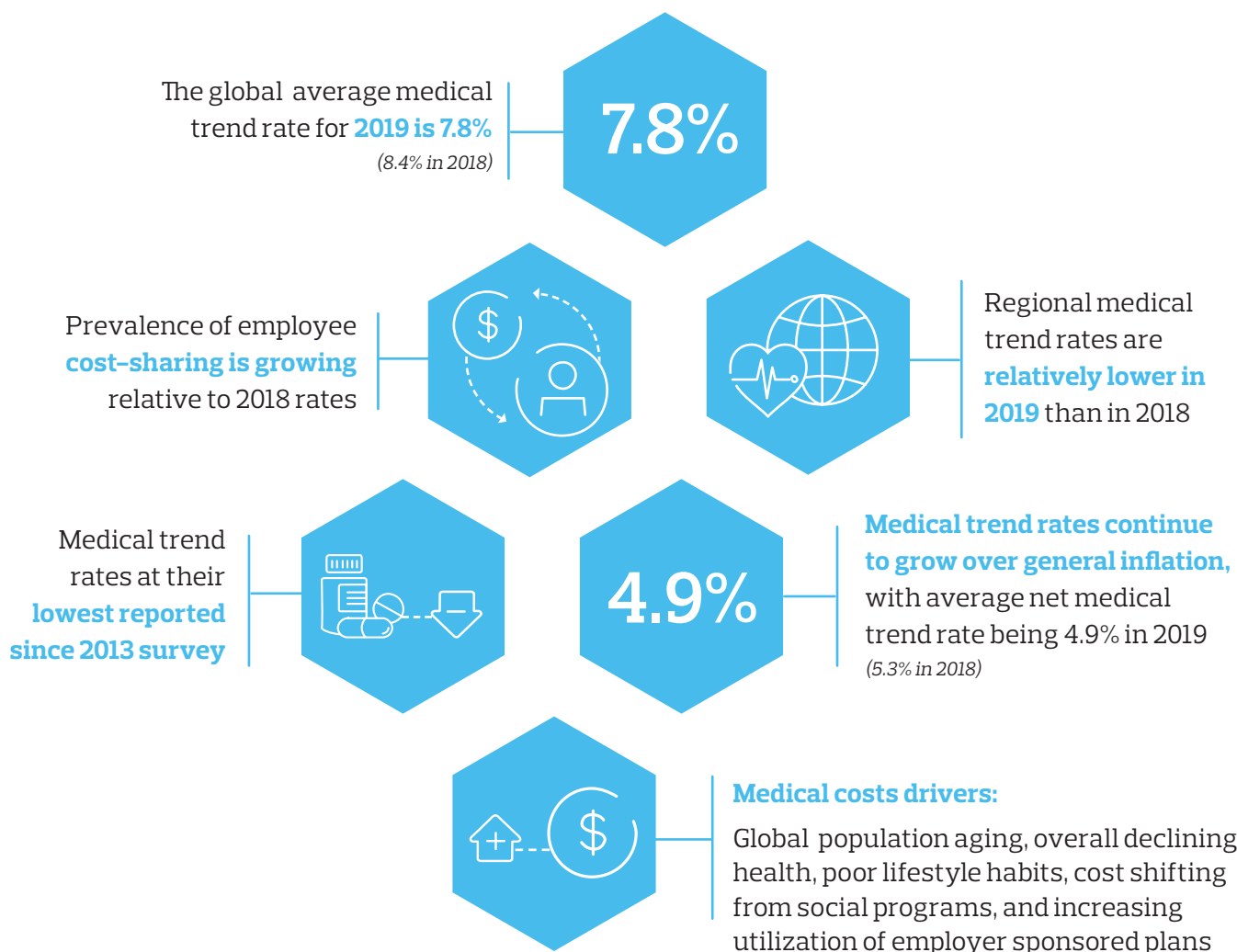


Exhibit 1: Double-digit margins between 2019 medical trend rates and domestic inflation levels were found in the following countries:



¹ 2019 projected inflation from IMF World Economic Outlook Database April 2018

² 2018 projected inflation from IMF World Economic Outlook Database April 2017

The 2019 average global nominal and real medical trend rates are significantly lower than the corresponding 2018 average global medical trend rates:

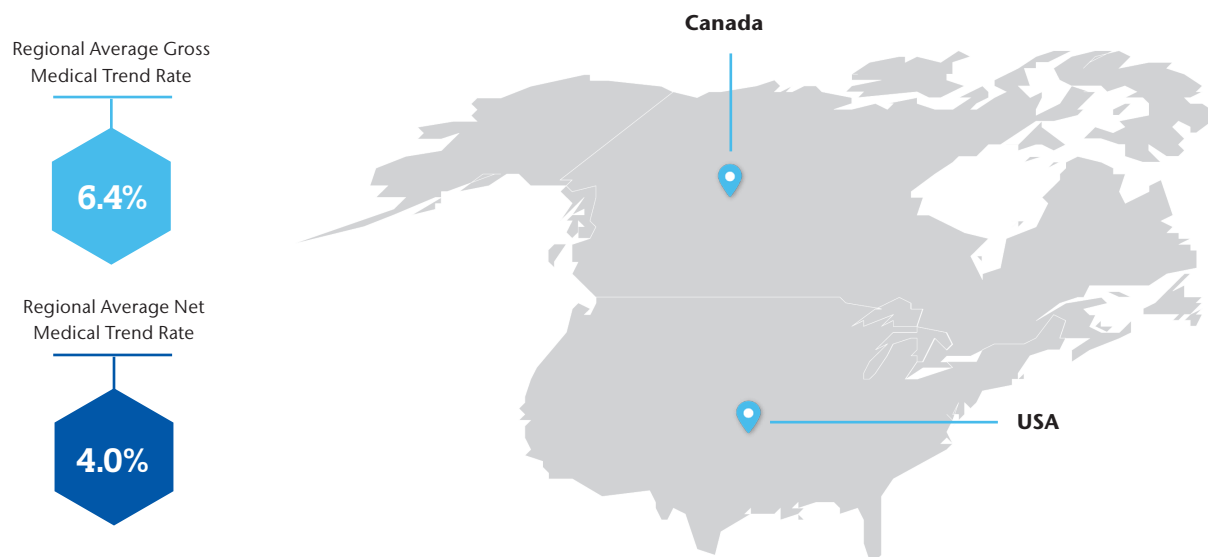
- **For 2019**, the global average **medical trend rate was 7.8%** and the average **general inflation rate was 2.8%**¹
- **In 2018**, the global average **medical trend rate was 8.4%** and the average **general inflation rate was 3.1%**²

For 2019, the gap between the average global nominal medical trend rate and the global average general inflation rate is expected to decrease to 4.9% from the corresponding 5.3% figure in 2018.

Regional Commentaries

The commentaries below present brief descriptions of developments that influenced the medical trend rates in selected countries that have large medical premiums per employee:

North America (NA)



USA

While the individual health insurance marketplace continues to face an uncertain future; employers can expect slightly lower increase in costs for 2019 when compared to 2018 unit cost increases.

Key drivers of medical costs in the United States, mainly medical services and pharmacy, are being more effectively managed. Employers are utilizing a growing number of strategies to help control the cost of pharmacy and medical services including cost transparency tools, referring employees to cost-effective providers, direct contracting with vendors, prescription drug alternatives, prescription drug formulary management, accountable care organizations (ACOs), and bundled payment models.

Other factors are also at play:

- The entry of new players will likely introduce new innovations and efficiencies into the health insurance markets
- Less uncertainty in the regulatory environment of employer medical plans, including the suspension of the health insurer fee for 2019 for fully insured plans, will also contribute to the lower cost increases
- While the individual healthcare exchanges continue to struggle; employer exchanges continue to provide an effective cost management solution

Canada

Prescription drug costs are the largest single cost driver for medical plans in Canada. The federal government is taking steps to organize the purchase of pharmaceutical products at the national level which is now being performed at the provincial level with over 80 different provincial/territorial plans.

Asia-Pacific (APAC)

Regional Average Gross
Medical Trend Rate

8.6%

Regional Average Net
Medical Trend Rate

5.8%



China

The Chinese government has taken a series of measures to control medical costs:

1. Removed the 15% drug mark-ups in all public hospitals
2. Issued regulations to limit the number of intermediaries in the distribution of pharmaceutical and medical products to two; the core of the regulation is that a manufacturer (importer) sells to a distributor, and the distributor sells directly to the hospital; a second distributor or local dealer is no longer permitted; this policy will help lower medical product costs
3. Started a pilot program on innovative but expensive medicines that were outside the National Formulary
4. Promoted the research and availability of generic drugs and the improvement of their quality

These developments are expected to have a tempering effect on medical trend rates.

Hong Kong

General population aging, increasing levels of stress, and respiratory infections are core contributors to rising use of company plans in recent years. These factors have led to higher gross and net medical trend rates in 2019 relative to 2018 despite lower general inflation projections for 2019.

India

The gross medical trend rate will be the same as last year's despite a modest decrease in expected general inflation which was offset by recent requirements for insurers to set premium rates based on portfolio claim experience and avoid artificially low medical premiums for competitive advantage. Additionally, employers in general will be concentrating on initiatives aimed at medical plan cost shifting to employees.

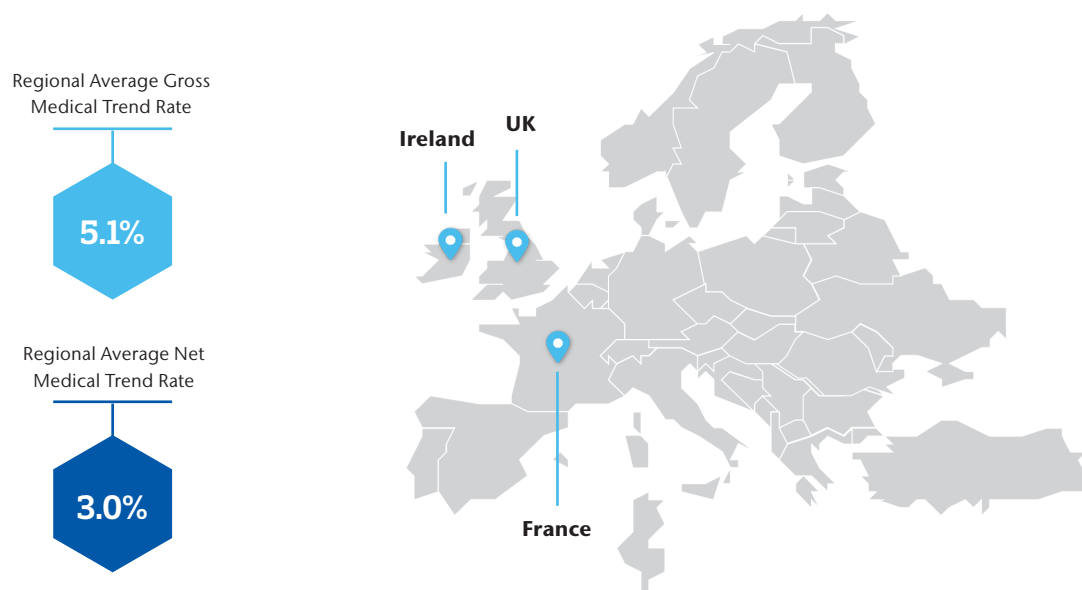
Singapore

The gross medical trend rate for 2019 remains high despite lower projected general inflation in 2019. This situation will need to be closely monitored as there is increasing traction from employers and insurers taking a pro-active approach with health intervention initiatives. However, there is a great deal of uncertainty as to whether the ROI from these measures will materialize in the short term.

South Korea

Decreases in medical trend rates for 2019 are mainly driven by regulation changes on 3 non-statutory medical coverages: (1) Chiropractic procedures, (2) Injections, and (3) MRI exams. Additionally, the typical coinsurance rates have increased from 20% to 30%.

Europe



France

Medical trend rates for 2019 anticipate higher physician fees due to nationwide negotiations with doctors and dentists. Additionally, we estimate that the upward direction of medical trend rates will continue over the 2020-2021 period, given the “100% Medical” reform which will impose full coverage of dental, optical and audio prosthetics related costs by medical insurance plans. This reform will have a stronger impact on lower-level schemes which will have to be upgraded accordingly.

Ireland

We anticipate that premium rates will remain flat in 2019 medical plan renewals due to lower general inflation, a soft carrier market in a community-rated premium-pricing environment (same price for all for a specific plan at a specific point in time) and improvements in efficiency in the public healthcare sector services.

United Kingdom

With continued deterioration in the social healthcare system (NHS) along with high incidence of large claims (especially in the area of oncology) medical trend rates remain at a relatively high level relative to other industrialized countries with insurer focus on claims and cost management minimizing the impact of these.

Latin America and Caribbean (LAC)



Brazil

The 2019 medical trend rate reflects the impact of expansion in the minimum provisions mandated on approved employer-sponsored medical plans (e.g., additional testing procedures, new prescription drugs and radiation treatments) as well as expectations from the top four carriers in regard to lower adjustments to premium rates and clients reducing the reach of their geographic coverage to their state or region.

Mexico

Higher gross and net medical trend rates are anticipated for 2019 despite lower projected general inflation levels in 2019 relative to 2018 due to anticipated currency erosion against hard currencies for imported medical products and further cost shifting from the social healthcare program.

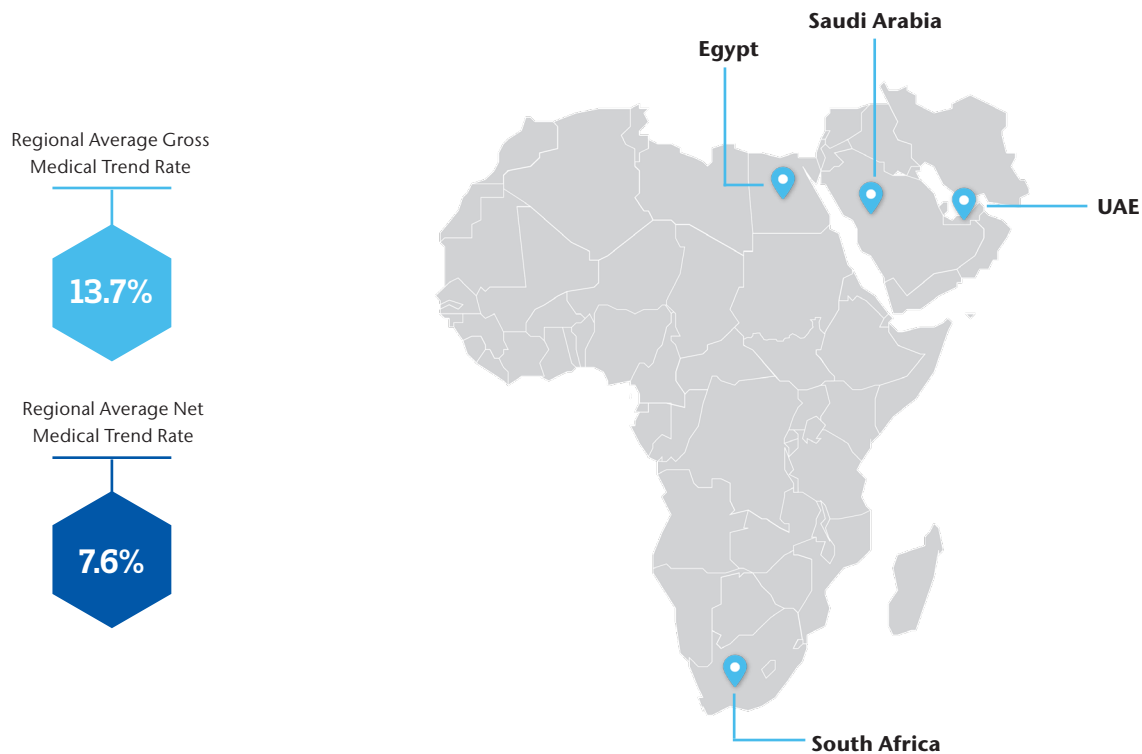
Puerto Rico

The 2019 gross and net medical trend rates will experience severe drops as a result of challenges from a macro-economic standpoint, and the impact of Hurricane María. Medical service providers are making exceptional concessions and insurance carriers are working on creating discount networks, reviewing pharmacy benefit contracts, among other strategies, to drive savings, all in order to help the population through a lingering socioeconomic crisis. Furthermore, we also expect lower enrollment levels and changes in plan utilization which may drive gross premium reductions.

Venezuela

The Venezuela economy continues to spiral out of control, constantly breaking inflation rate records. Spending on company medical plans has taken a secondary priority behind maintaining employment in a contracting economy. Consequently, we have once again excluded Venezuela from the regional and global averages.

Middle East Africa (MEA)



Egypt:

Over the last 12 months, several reforms have been implemented by the government that have resulted in a steady decline of medical inflation levels which we expect will continue over the next 2 years.

Saudi Arabia:

Despite the lower expected general inflation in 2019, the 2019 net medical trend rate remains at a high level due to the impact of the implementation of VAT taxes and the new regulatory mandated enhancements in health insurance policies.

South Africa:

The medical trend rates for 2019 are higher than the corresponding 2018 figures despite slightly lower projected general inflation levels due to higher expected levels of utilization of company medical plans, increases in hospital costs and increases in VAT taxes from 14% to 15%.

United Arab Emirates:

The UAE is expected to see higher healthcare spending fueled mainly by rising incidence of chronic diseases. Health Insurance is now becoming the second largest cost for employers in UAE apart from salaries. Sedentary lifestyle patterns and the shift from traditional diets to fast food have led to higher incidence of hypertension, obesity, cancer and heart conditions.

Call to Action

While the 2019 medical trend rates are at their lowest compared to prior years, their levels in nominal and real terms are still extremely high. Aon expects continued medical plan cost escalation due to global population aging, overall declining health, poor lifestyle habits becoming pervasive in emerging countries, continuing cost shifting patterns from social programs, and heavy utilization of employer-sponsored plans.

Rising costs and the increased prevalence of chronic conditions are global phenomena. Employers will continue to face the prospect of added organizational cost and employee productivity losses unless the controllable factors contributing to these patterns are effectively addressed.

A good place for employers to start addressing these challenges is the optimization of the plan design, financial strategy and delivery mechanisms of their medical plans around the world.

However, once these initiatives have been properly executed, they will have a diminishing incremental improvement on the business.

The structural solution for the long term involves the active promotion of a healthy workforce, beginning with a robust health care benefits offering for all company employees and their families aimed at:

- Providing quality health care treatment when needed
- Facilitating the management of chronic health conditions
- Preventing/reducing the risk of accidents and illness
- Helping employees understand their own health risks and educating them on steps to improve their health
- Encouraging healthy behaviors

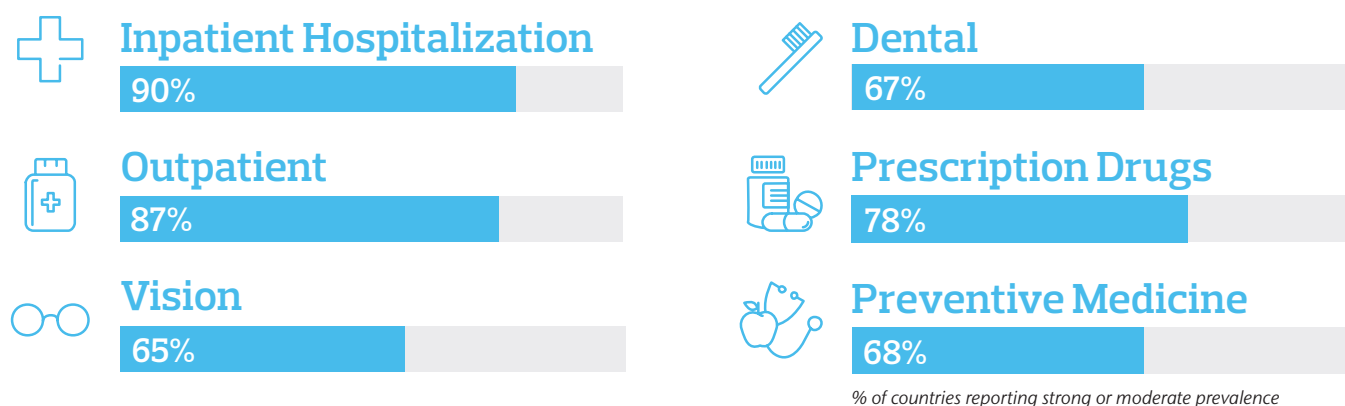
The summaries on global practices in this report should be useful in understanding wellness and cost mitigation efforts being undertaken by employers worldwide. However, the report shows that the underlying causes of illness and risk factors vary greatly by region, country, company sector, etc. It is therefore important to carefully target employer initiatives to the specific situation surrounding each medical plan.

Results Summary

Medical Plan Features

This year we surveyed our offices to canvass the prevalence of medical programs in each country. A summary of the replies is as follows:

Exhibit 2: Global Medical Plan Features



Medical Plan Financing Approaches

Below are the most commonly used medical plan financing approaches reported in the indicated region.

Exhibit 3: Prevalence of Financing Approaches

North America		APAC	Europe	LAC	MEA
United States	Canada				
Self-Insurance	Insurance	Insurance	Insurance	Insurance	Insurance
Insurance	Mixed	Self Insurance	Self-Insurance, Mixed	Self-Insurance	Self-Insurance
Mixed	Self-Insurance	Mixed	Company Owned/ Contracted Facilities	Mixed	Pre-paid Subscription Service (e.g., HMO, Mutual Company), Mixed

Medical Plan Employee Cost Sharing

As employee cost sharing is often a very important element of a company's medical cost mitigation strategy, we have investigated the prevalence of employee cost sharing general practices in each country covered from two perspectives:

- Employees sharing the cost of medical premiums
- Employees sharing in claim outlays, such as deductible, copay and coinsurance

The figures below represent the percentages of Aon offices reporting countrywide most common practices in employee cost sharing in the medical plan premiums and claims in their respective regions.

Exhibit 4: Employee Cost Sharing

	Global	APAC	Europe	LAC	MEA
Share of Medical Premium	78	68	94	91	56
Contributions to Employee Premium	45	32	42	70	33
Contributions Toward Spouse Premium	78	67	93	91	56
Contributions Toward Children Premium	77	67	93	91	52

% of countries responding per indicated region

	Global	APAC	Europe	LAC	MEA
Share of Medical Claims	93	89	84	96	100
Deductible	48	28	42	74	41
Copays	45	42	35	55	48
Coinsurance	66	68	42	86	74
Payments of Medical Costs Above Limits	52	70	64	32	47

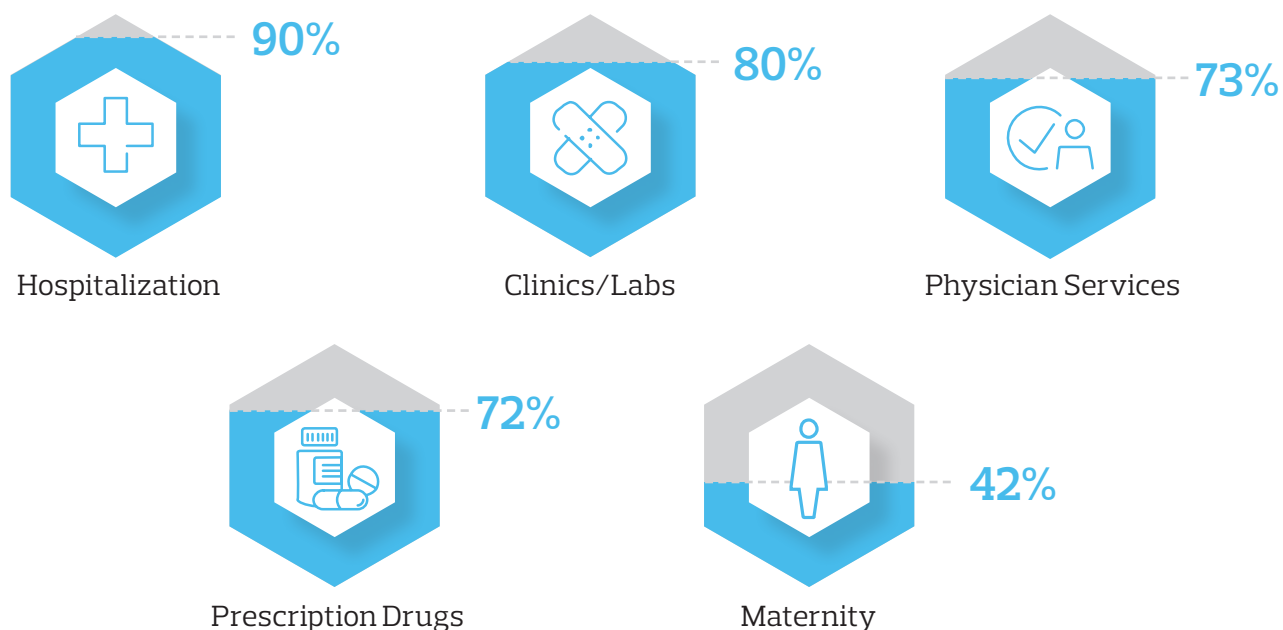
% of countries responding per indicated region

Most Important Elements of Medical Plan Cost

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

Exhibit 5: Top Global Cost Elements

% of countries responding



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

Exhibit 6: Indicated Cost Elements In Respective Regions

North America		APAC		Europe		LAC		MEA	
United States	Canada								
Hospitalization	Prescription Drugs	Hospitalization	94	Hospitalization	90	Hospitalization	92	Clinics/Labs	89
Physician Services	Dental	Clinics/Labs	83	Clinics/Labs	76	Prescription Drugs	92	Hospitalization	89
Prescription Drugs	Preventative Care	Physician Services	83	Physician Services	69	Clinics/Labs	79	Prescription Drugs	81
Clinics/Labs	Biologic Immunomodulators	Prescription Drugs	83	Dental	41	Physician Services	75	Physician Services	70
Outpatient Services/ Surgeries	Vision	Maternity	33	Prescription Drugs	38	Maternity	42	Maternity	63

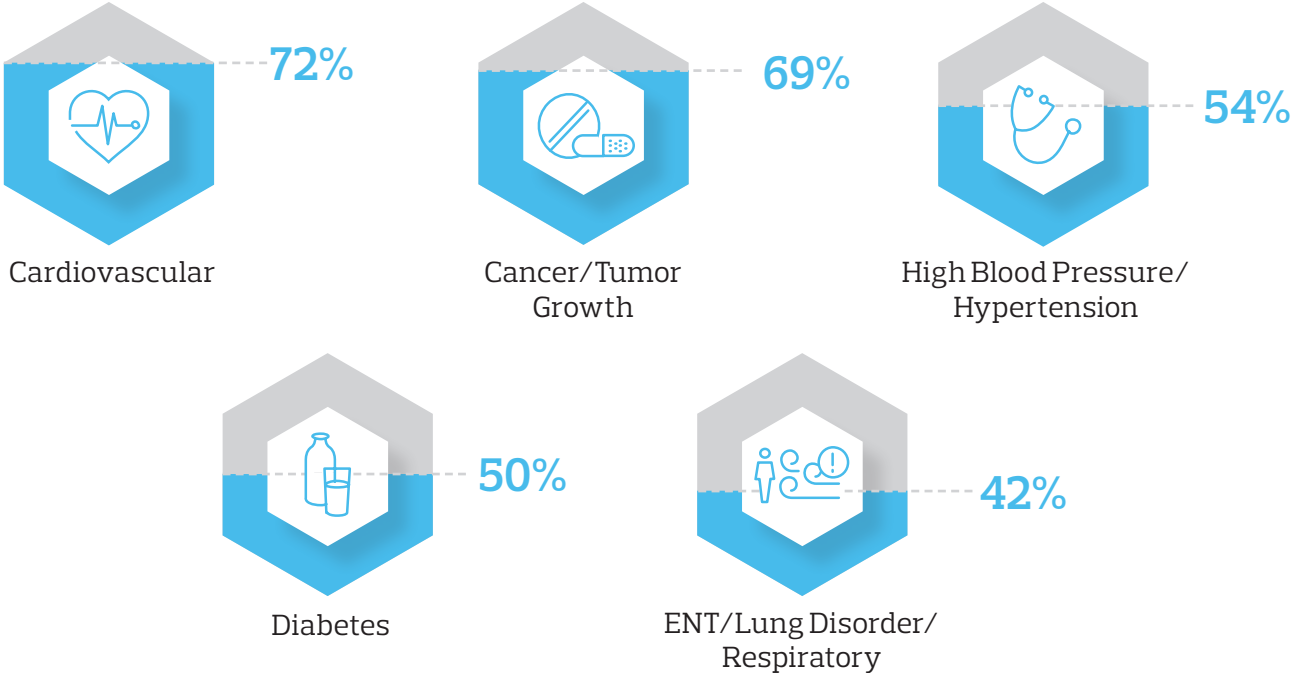
% of countries responding per indicated region

Key Conditions Driving Adverse Medical Claim Experience

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

Exhibit 7: Top Global Medical Conditions Driving Medical Plan Costs

% of countries responding



The leading medical conditions per region as reported by Aon offices were:

Exhibit 8: Leading Medical Conditions Per Region

North America		APAC	Europe	LAC	MEA
United States	Canada				
Musculoskeletal/ Back	Cardiovascular	Cardiovascular 95	Cancer/Tumor Growth 77	Cancer/Tumor Growth 88	High Blood Pressure/Hypertension 59
Cardiovascular	Mental Health	Cancer/Tumor Growth 74	Cardiovascular 68	Cardiovascular 75	Cardiovascular 56
Diabetes	Musculoskeletal/ Back	Gastrointestinal 47	High Blood Pressure/Hypertension 52	High Blood Pressure/Hypertension 75	ENT/Lung Disorder/Respiratory 56
Cancer/Tumor Growth	Diabetes	Diabetes 42	Musculoskeletal/ Back 52	Diabetes 71	Diabetes 52
High Blood Pressure/Hypertension	Gastrointestinal	ENT/Lung Disorder/Respiratory 42	Diabetes 35	ENT/Lung Disorder/Respiratory 42	Cancer/Tumor Growth 41

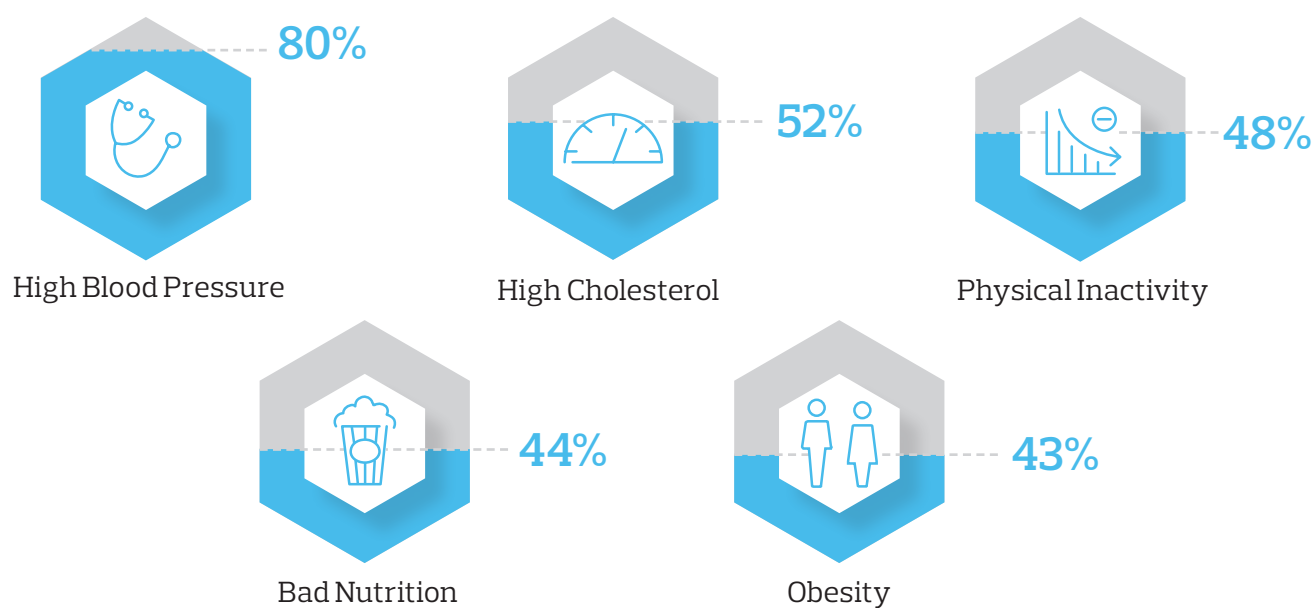
% of countries responding per indicated region

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.

Exhibit 9: Top Global Risk Factors

% of countries responding



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

Exhibit 10: Indicated Risk Factors in Respective Regions

North America		APAC	Europe	LAC	MEA
United States	Canada				
Physical Inactivity	Ageing	High Blood Pressure 74	High Blood Pressure 83	High Blood Pressure 88	High Blood Pressure 81
Bad Nutrition	Physical Inactivity	Obesity 53	Physical Inactivity 57	Bad Nutrition 75	High Cholesterol 56
Obesity	Bad Nutrition	Physical Inactivity 53	Poor Stress Management 57	High Cholesterol 71	High Blood Glucose 52
Poor Stress Management	Obesity	Bad Nutrition 42	Smoking 53	High Blood Glucose 54	Lack of Health Screening 33
Ageing	Poor Stress Management	High Cholesterol 42	High Cholesterol 43	Obesity 50	Unsafe water, sanitation, hygiene 33

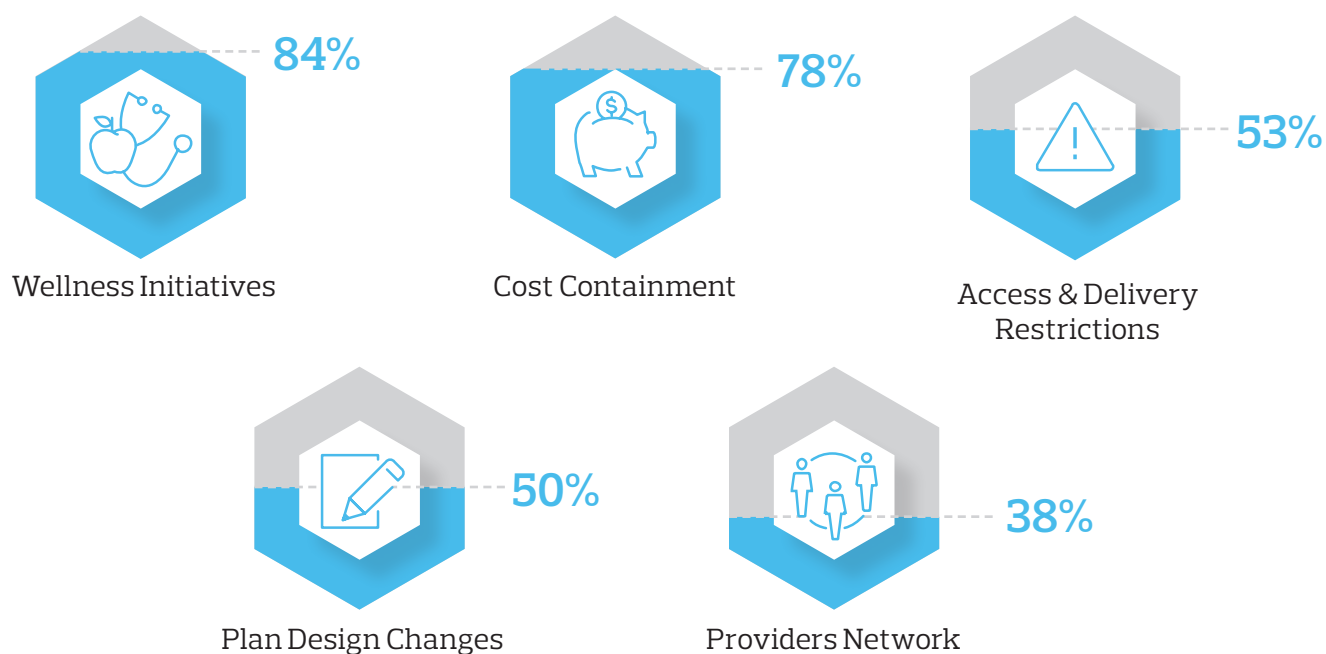
% of countries responding per indicated region

Mitigation Initiatives to Control Medical Plan Cost Escalation

The figures below represent the percentages of responses from Aon offices that reported the methods that aim to best mitigate the increase in costs of a medical plan.

Exhibit 11: Top Global Mitigation Methods

% of countries responding



The figures below represent the percentages of Aon offices reporting the risk mitigation methods in their respective region.

Exhibit 12: Risk Mitigation Methods in Respective Regions

North America		APAC		Europe		LAC		MEA	
United States	Canada								
Cost Containment	Cost Containment	Wellness Initiatives	95	Wellness Initiatives	83	Wellness Initiatives	83	Cost Containment	77
Wellness Initiatives	Flexible Benefit Plans to Cap Overall Benefit Costs	Cost Containment	89	Cost Containment	76	Cost Containment	71	Access & Delivery Restrictions	77
Changes in Funding	Wellness Initiatives	Access & Delivery Restrictions	53	Plan Design Changes	55	Plan Design Changes	50	Wellness Initiatives	77
Access & Delivery Restrictions	Plan Design Changes	Changes in Funding	47	Flexible Benefit Plans to Cap Overall Benefit Costs	48	Access & Delivery Restrictions	46	Plan Design Changes	50
Plan Design Changes	Changes in Funding	Provided Network	37	Providers Network	45	Flexible Benefit Plans to Cap Overall Benefit Costs	42	Providers Network	35

% of countries responding per indicated region

Average Medical Trend Rate Table

Exhibit 13: Region (Avg%)

Global & Regional Averages	2018		
	Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net
Global	3.1	8.4	5.3
North America	2.4	6.9	4.5
APAC	3.0	8.9	5.9
Europe	2.0	5.8	3.8
LAC	5.2	13.9	8.7
MEA	7.6	15.3	7.7

2019		
Annual General Inflation Rate	Annual Medical Trend Rates	
	Gross	Net
2.9	7.8	4.9
2.4	6.4	4.0
2.8	8.6	5.8
2.1	5.1	3.0
4.7	13.2	8.5
6.1	13.7	7.6

Exhibit 14: Region/Country (Avg%)

Regional & Country Averages	2018		
	Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net
North America	2.4	6.9	4.5
Canada	2.1	6.0	3.9
United States	2.4	7.0	4.6

2019		
Annual General Inflation Rate	Annual Medical Trend Rates	
	Gross	Net
2.4	6.4	4.0
2.2	6.0	3.8
2.4	6.5	4.1

APAC	2018		
	Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net
3.0	8.9	5.9	
Australia	2.4	5.3	2.9
Bangladesh	5.8	7.4	1.6
China	2.3	5.5	3.2
Hong Kong	2.7	6.2	3.5
India	5.1	9.0	3.9
Indonesia	4.5	15.0	10.5
Japan	0.6	0.7	0.1
Kazakhstan	7.2	7.2	0.0

2019		
Annual General Inflation Rate	Annual Medical Trend Rates	
	Gross	Net
2.8	8.6	5.8
2.4	3.8	1.4
6.0	7.7	1.7
2.6	6.0	3.4
2.1	8.3	6.2
5.0	9.0	4.0
3.4	13.0	9.6
1.1	2.7	1.6
5.6	11.7	6.1

Exhibit 14 (continued): Region/Country (Avg%)

Regional & Country Averages	2018			2019		
	Annual General Inflation Rate	Annual Medical Trend Rates		Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net		Gross	Net
APAC (continued)						
Malaysia	2.9	15.3	12.4	2.4	16.0	13.6
Mongolia	5.1	6.5	1.4	6.8	11.9	5.1
New Zealand	2.0	6.0	4.0	2.1	6.5	4.4
Pakistan	5.0	16.8	11.8	5.2	16.5	11.3
Papua New Guinea	6.5	7.0	0.5	2.5	4.0	1.5
Philippines	3.3	10.0	6.7	3.8	10.0	6.2
Singapore	1.8	10.0	8.2	1.0	10.0	9.0
South Korea	1.9	11.0	9.1	1.9	9.0	7.1
Taiwan	1.3	8.0	6.7	1.3	8.0	6.7
Thailand	1.5	8.5	7.0	0.7	9.0	8.3
Vietnam	5.0	23.2	18.2	4.0	12.0	8.0

Europe	2.0	5.8	3.8
Austria	1.8	2.3	0.5
Belgium	1.7	3.8	2.1
Bulgaria	1.8	10.1	8.3
Croatia	1.1	1.2	0.1
Cyprus	1.4	1.5	0.1
Czech Republic	1.8	3.6	1.8
Denmark	1.1	1.3	0.2
Finland	1.6	5.0	3.4
France	1.2	3.0	1.8
Germany	1.7	10.0	8.3
Greece	1.4	6.0	4.6

2.1	5.1	3.0
2.2	3.0	0.8
1.8	3.8	2.0
2.1	10.3	8.2
1.5	1.5	0.0
1.6	1.6	0.0
2.0	5.0	3.0
1.7	4.0	2.3
1.7	4.0	2.3
1.6	3.5	1.9
1.7	5.0	3.3
1.1	5.0	3.9

Exhibit 14 (continued): Region/Country (Avg%)

Regional & Country Averages	2018			2019		
	Annual General Inflation Rate	Annual Medical Trend Rates		Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net		Gross	Net
Europe (continued)						
Hungary	3.3	4.0	0.7	3.3	7.0	3.7
Ireland	2.4	8.0	5.6	1.3	0.0	(1.3)
Italy	1.3	4.0	2.7	1.3	4.0	2.7
Latvia	2.5	8.0	5.5	2.5	10.0	7.5
Lithuania	2.0	15.0	13.0	2.2	15.0	12.8
Luxembourg	1.3	1.9	0.6	1.8	1.8	0.0
Norway	2.5	7.0	4.5	2.0	5.0	3.0
Poland	2.3	5.0	2.7	2.5	8.0	5.5
Portugal	1.4	4.0	2.6	1.6	3.5	1.9
Romania	3.2	5.0	1.8	3.1	8.0	4.9
Russia	4.2	12.0	7.8	3.8	11.0	7.2
Serbia	3.0	8.0	5.0	3.0	12.0	9.0
Slovakia	1.5	20.0	18.5	1.9	4.9	3.0
Slovenia	2.0	2.6	0.6	2.0	1.7	(0.3)
Spain	1.4	2.9	1.5	1.6	5.0	3.4
Sweden	1.6	1.7	0.1	1.6	1.6	0.0
Switzerland	0.7	4.0	3.3	1.0	4.0	3.0
The Netherlands	1.4	4.0	2.6	2.2	5.5	3.3
Turkey	9.1	13.0	3.9	10.5	15.0	4.5
Ukraine	9.5	12.0	2.5	8.0	11.0	3.0
United Kingdom	2.6	8.0	5.4	2.2	6.0	3.8

Exhibit 14 (continued): Region/Country (Avg%)

Regional & Country Averages	2018		
	Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net
LAC	5.2	13.9	8.7
Argentina	18.7	25.0	6.3
Bahamas	1.5	10.0	8.5
Barbados	n/a	n/a	n/a
Bermuda	n/a	n/a	n/a
Bolivia	5.0	10.0	5.0
Brazil	4.3	19.0	14.7
Chile	3.0	6.5	3.5
Colombia	3.2	6.8	3.6
Costa Rica	3.0	14.0	11.0
Dominican Republic	4.2	6.0	1.8
Ecuador	0.6	10.0	9.4
El Salvador	2.3	10.0	7.7
Grenada	n/a	n/a	n/a
Guatemala	4.0	10.0	6.0
Honduras	4.5	15.0	10.5
Jamaica	5.3	10.0	4.7
Mexico	3.2	11.8	8.6
Nicaragua	7.4	12.0	4.6
Panama	2.3	12.0	9.7
Peru	2.6	7.0	4.4
Puerto Rico	0.5	7.2	6.7
Trinidad & Tobago	2.4	10.0	7.6
Uruguay	7.5	8.8	1.3
Venezuela	2,068.5	1,000.0	(1,068.5)
MEA	7.6	15.3	7.7
Angola	17.8	25.0	7.2
Bahrain	3.4	13.0	9.6
Botswana	4.2	8.7	4.5

2019		
Annual General Inflation Rate	Annual Medical Trend Rates	
	Gross	Net
4.7	13.2	8.5
15.4	25.0	9.6
2.5	8.0	5.5
2.9	10.0	7.1
2.2	8.0	5.8
4.5	8.0	3.5
4.2	17.0	12.8
3.0	7.0	4.0
3.4	7.4	4.0
3.0	14.0	11.0
3.5	5.5	2.0
1.4	10.0	8.6
1.9	10.0	8.1
1.8	1.8	0.0
3.7	10.0	6.3
4.5	13.0	8.5
5.0	10.0	5.0
3.1	13.0	9.9
7.2	13.0	5.8
2.5	13.0	10.5
2.0	8.5	6.5
0.8	1.0	0.2
2.1	10	7.9
6.1	7.1	1.0
12,874.6	100,000.0	87,125.4
6.1	13.7	7.6
17.0	20.0	3.0
4.9	13.0	8.1
3.8	8.0	4.2

Exhibit 14 (continued): Region/Country (Avg%)

Regional & Country Averages	2018			2019		
	Annual General Inflation Rate	Annual Medical Trend Rates		Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net		Gross	Net
MEA (continued)						
Democratic Republic of the Congo	10.0	12.0	2.0	13.7	13.7	0.0
Egypt	16.9	35.0	18.1	13.0	25.0	12.0
Ethiopia	7.5	12.5	5.0	8.6	9.0	0.4
Ghana	9.0	15.0	6.0	8.0	16.0	8.0
Israel	n/a	n/a	n/a	1.3	6.5	5.2
Ivory Coast	2.0	9.0	7.0	2.0	18.0	16.0
Jordan	n/a	n/a	n/a	2.5	13.0	10.5
Kenya	2.4	12.0	9.6	5.0	12.5	7.5
Kuwait	3.6	12.0	8.4	3.7	10.0	6.3
Lebanon	2.0	16.0	14.0	3.0	15.0	12.0
Malawi	10.6	14.0	3.4	7.6	20	12.4
Nigeria	17.5	22.5	5.0	14.8	19.8	5.0
Qatar	5.7	15.0	9.3	3.5	12.5	9.0
Saudi Arabia	5.1	13.5	8.4	2.0	10.0	8.0
Senegal	2.0	0.5	(1.5)	1.5	2.5	1.0
Sierra Leone	8.5	10.0	1.5	11.2	15.0	3.8
South Africa	5.5	10.4	4.9	5.3	11.0	5.7
Sultanate of Oman	3.0	7.5	4.5	3.5	7.5	4.0
Tunisia	3.8	8.0	4.2	6.1	10.5	4.4
Uganda	6.0	15.0	9.0	4.3	20.0	15.7
United Arab Emirates	3.7	10.0	6.3	2.5	10.5	8.0
Zambia	8.0	10.0	2.0	8.0	10.0	2.0
Zimbabwe	6.6	12.0	5.4	6.3	15.0	8.7

Notes:

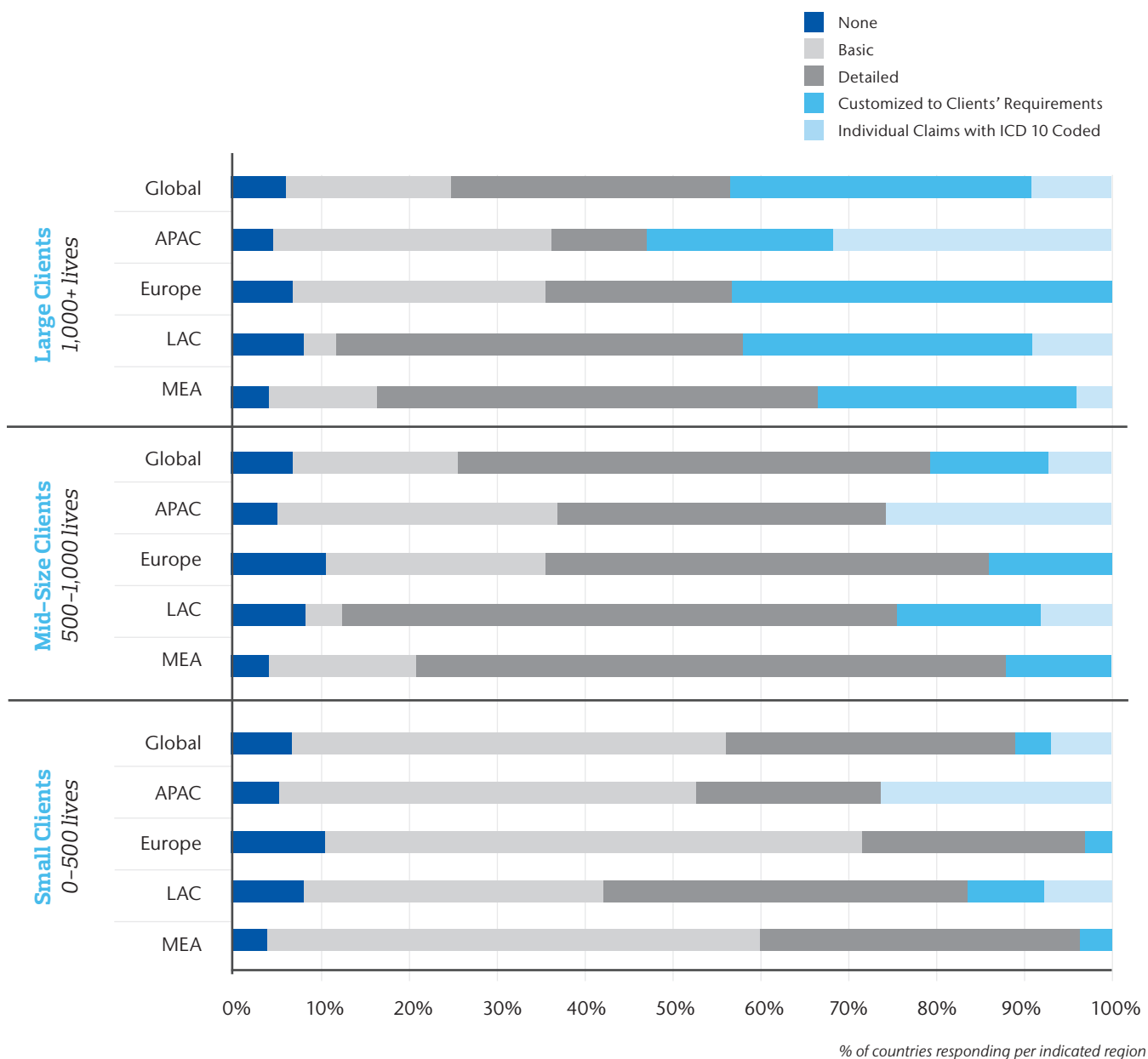
- “Net” indicates medical trend rates net of domestic general inflation rates.
- The 2019 medical trend rate for the United States was obtained from Aon’s Health Value Initiative database as applicable to PPO plans and adjusted to reflect expected increases prior to any plan, program, or carrier changes for cost containment.
- Venezuela has been excluded from region and global averages in both the 2018 and 2019 figures.

Other Survey Results

Level of Claims Information Available from Carriers

A deep understanding of the specific factors driving a company’s medical plan cost is fundamental for the development of a sound mitigation strategy. The figures below represent the prevalence and level of claims information available by client size reported by Aon offices in their respective region.

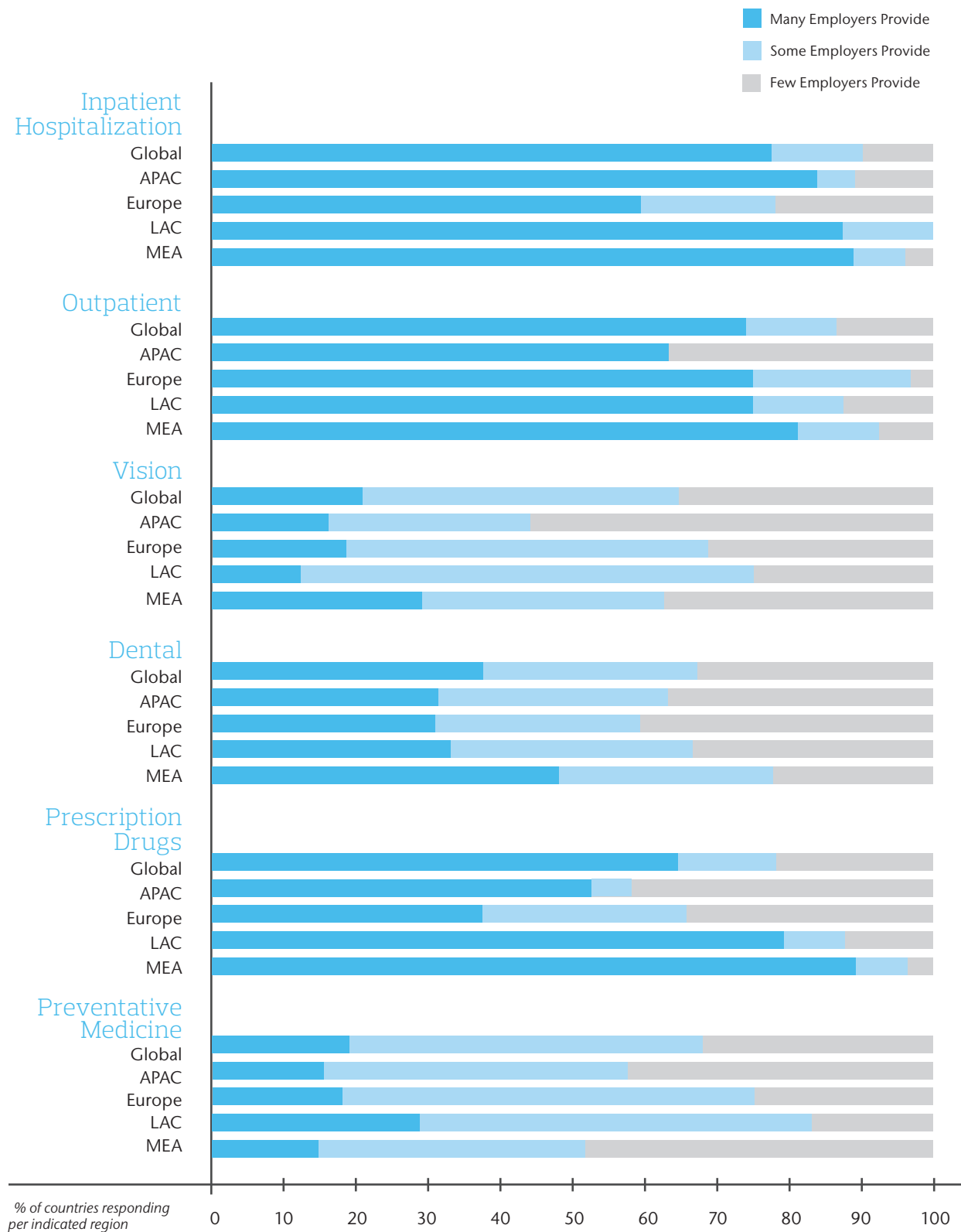
Exhibit 15: Level of Claims Information Available



Prevalence of Medical Plan Features and Derivative Benefits

The surveyed countries reported on typical medical benefit provision practices. The main results are summarized in the following tables:

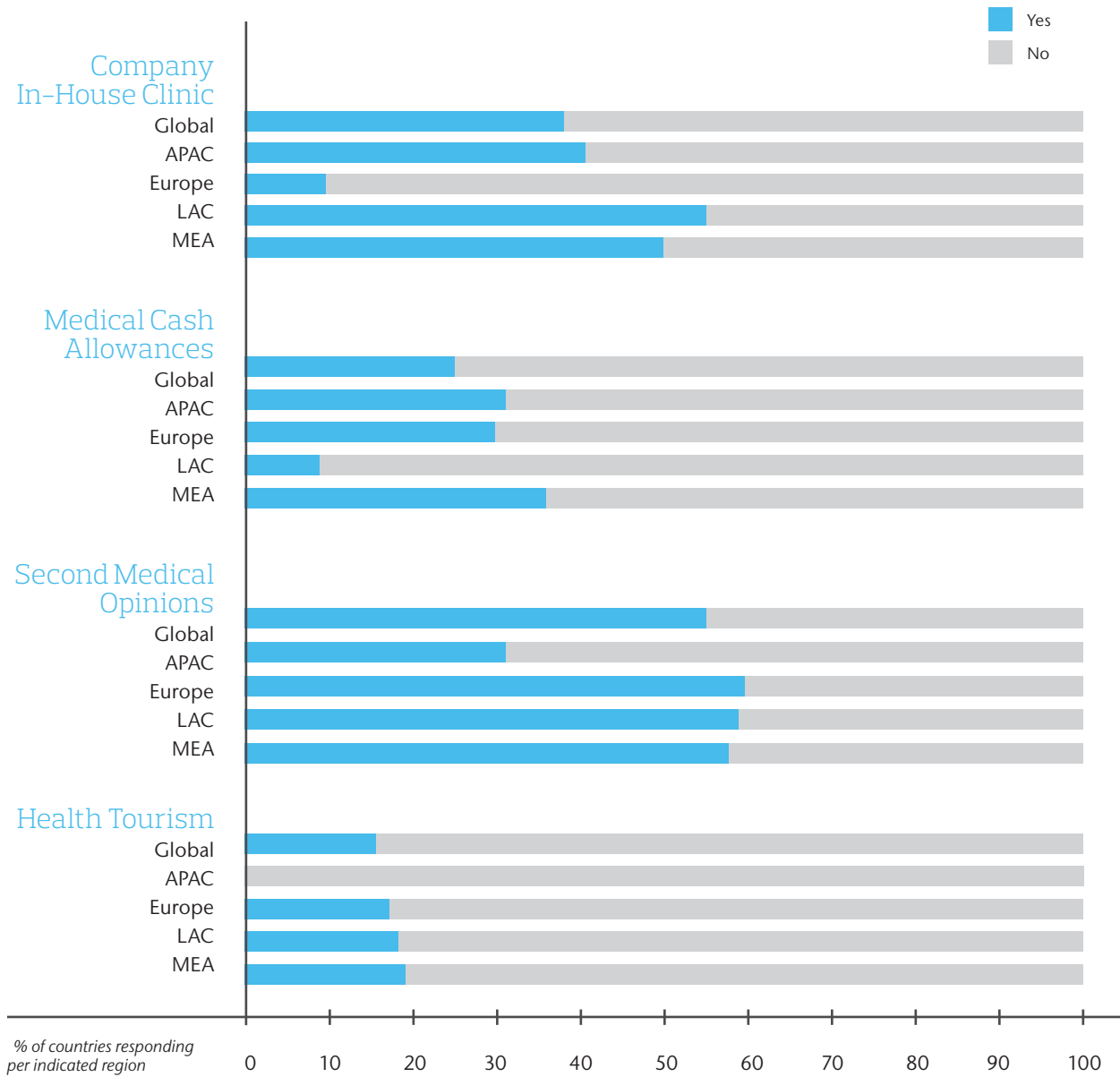
Exhibit 16: Employer Provided Benefits (%)



Alternative/Innovative Delivery Mechanisms

Aon offices reported prevalence of the following delivery mechanisms supporting medical benefit plans:

Exhibit 17: Delivery Mechanisms Supporting Medical Benefits Plans (%)



Regional Summary of Practices on Employee Cost Sharing on Premiums

The table below shows the prevalence of most common practices in terms of required employee contributions under the typical medical plan in each country in regard to premiums assessed to cover the employee, spouse and/or dependents.

Exhibit 18: Offices Reporting Most Common Practices

	Global	APAC	Europe	LAC	MEA
EE Only	2	5	3	0	0
Spouse Only	0	0	0	0	0
Children Only	0	0	0	0	0
EE + Spouse Only	1	0	0	0	4
EE + Children Only	0	0	0	0	0
Spouse + Children Only	33	37	52	22	22
All-EE + Spouse + Children	42	26	39	69	30
Plan requires some form of premium contribution from employees	78	68	94	91	56

% of countries responding per indicated region

Regional Summary of Country Practices on Employee Cost Sharing on Claim Outlays *(Please refer to Glossary of Terms for definition of indicated element.)*

The table below shows the most common practices per country reported by Aon offices in regard to financial contributions required of employees toward meeting the costs of claims incurred.

Exhibit 19: Offices Reporting Indicated Plan Design Element

	Global	APAC	Europe	LAC	MEA
Deductible Only	8	0	19	9	0
Copay Only	6	0	10	0	11
Coinsurance Only	17	21	19	9	19
Deductible + Copay Only	3	5	6	0	0
Deductible + Coinsurance Only	14	11	3	22	19
Copay + Coinsurance Only	13	26	6	9	15
All-Deductible + Copay + Coinsurance	23	11	13	43	22
Plan requires some form of employee contribution toward claims*	93	89	84	96	100

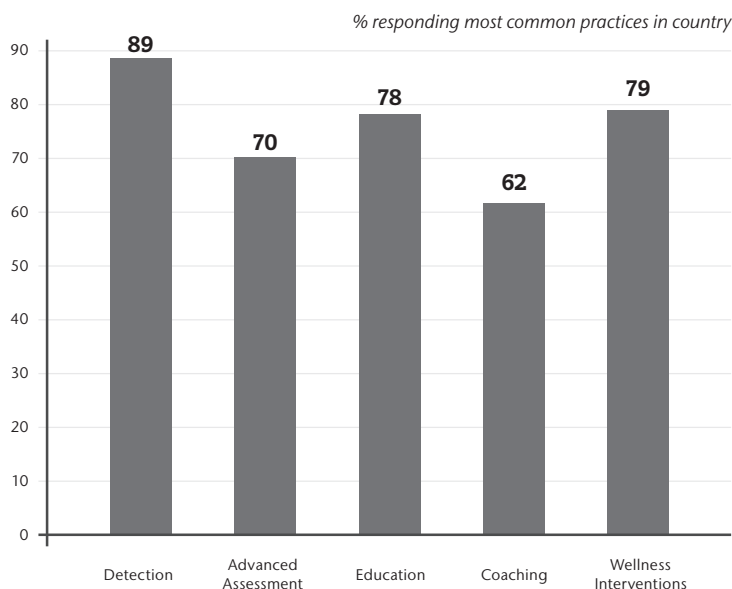
*Includes respondents that reported employee contribution toward medical expenses above allowable limits.

% of countries responding per indicated region

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 by employers in their respective countries.

Exhibit 20: Wellness Programs Reported as Commonly Provided



Detection

Vision Screening	67
Hearing Screening	45
Mammograms	55
Physical Check-ups	84

% of countries responding

Advanced Assessment

Advanced Check-ups	39
Heart Health	51
Nutrition	38
Substance Use	23
Level of Fitness	37

% of countries responding

Education

Communication Materials on Wellness	72
Wellness Kits	62
Informational Web Services	57
Fitness Education	49

% of countries responding

Coaching

Health Specialist	31
Health Coaching Management System	23
Incentive Programs	56

% of countries responding

Wellness Interventions

Healthy Eating	63
Quitting Smoking/Tobacco Use	52
Physical Activity	63
Healthy Weight	51
Back Care	40
Reducing Risk for Heart Disease	46
Employee Assistance Program	49

% of countries responding

Exhibit 21: Asia Pacific

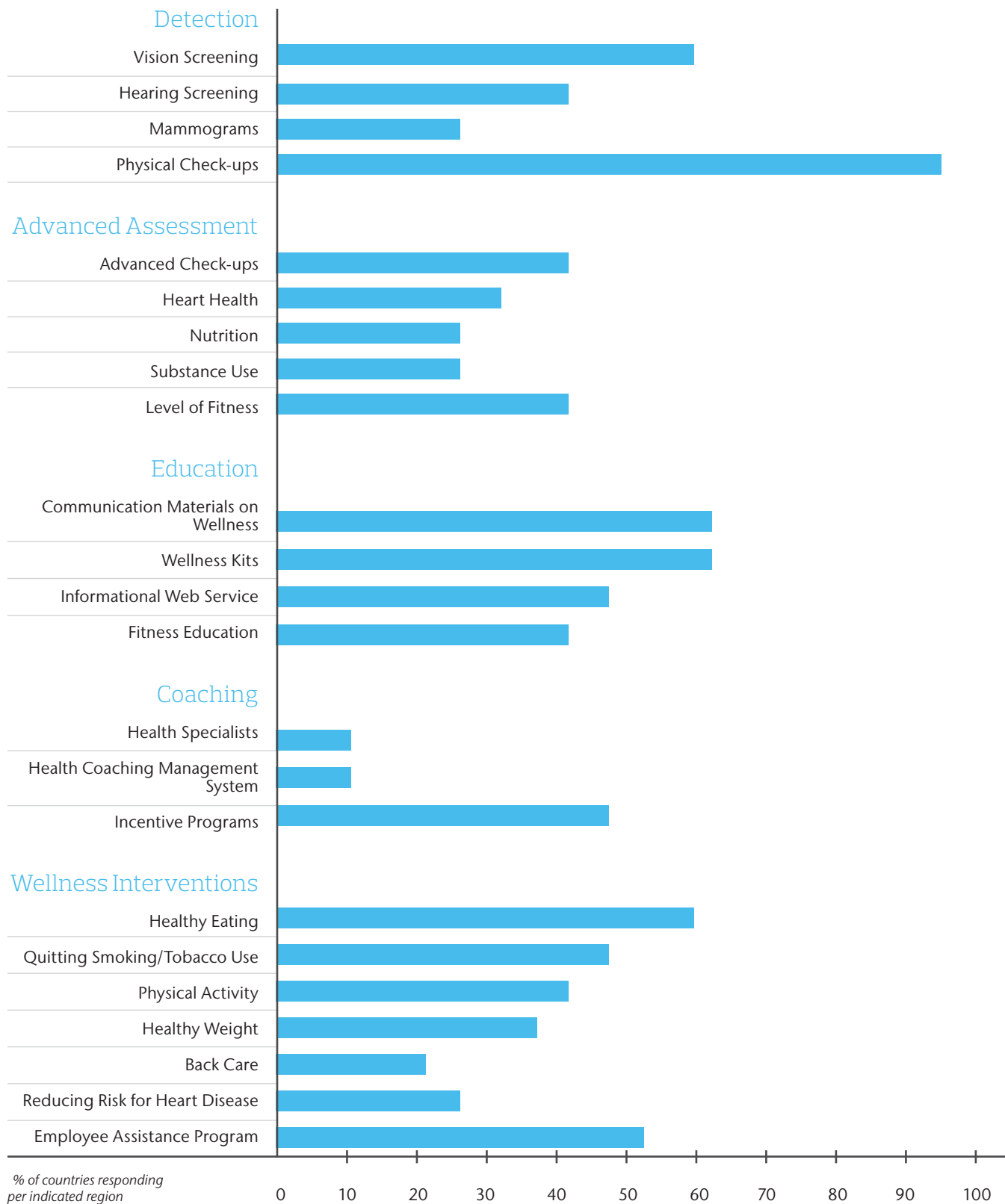
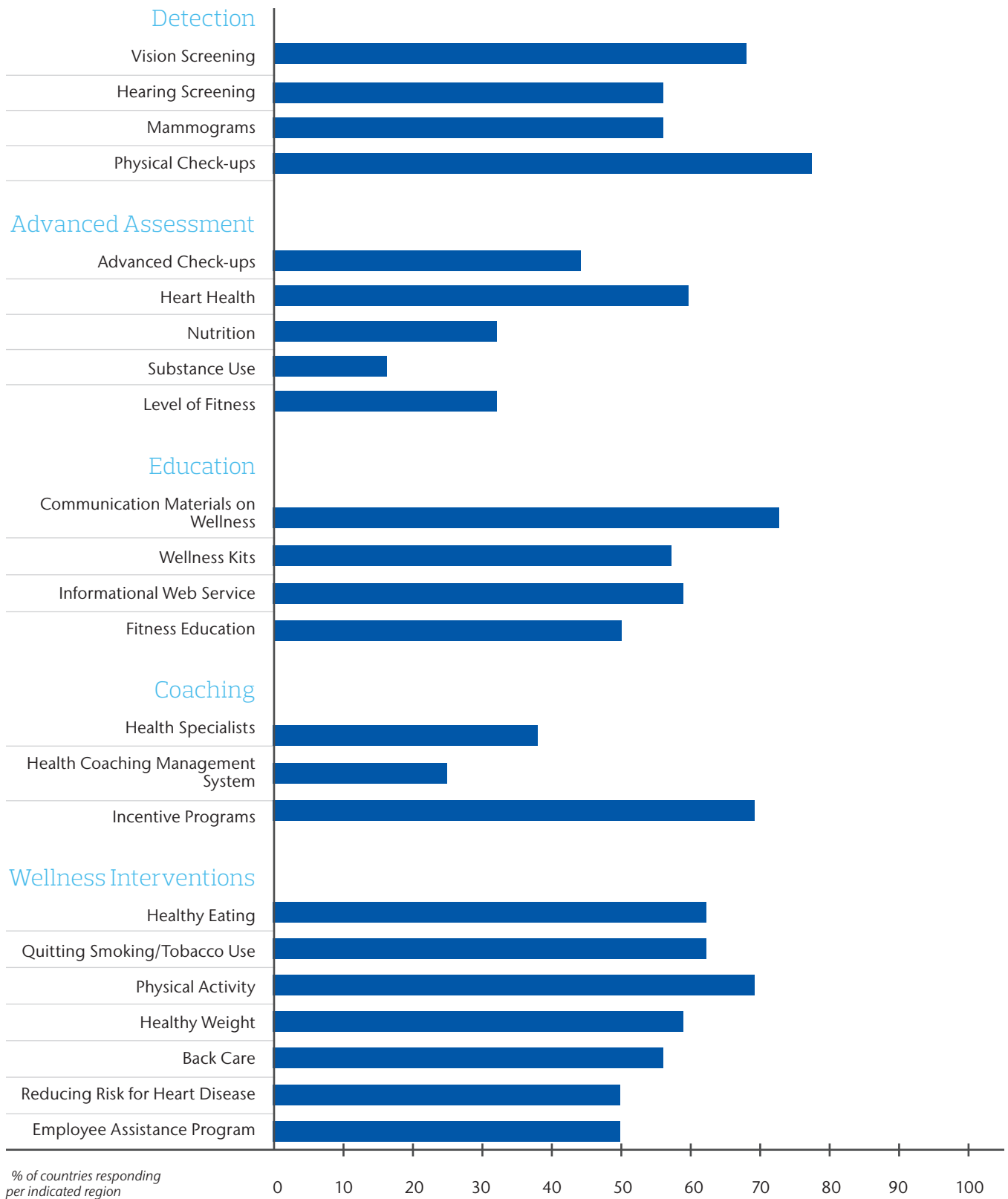


Exhibit 22: Europe



% of countries responding per indicated region

Exhibit 23: Latin America & Caribbean

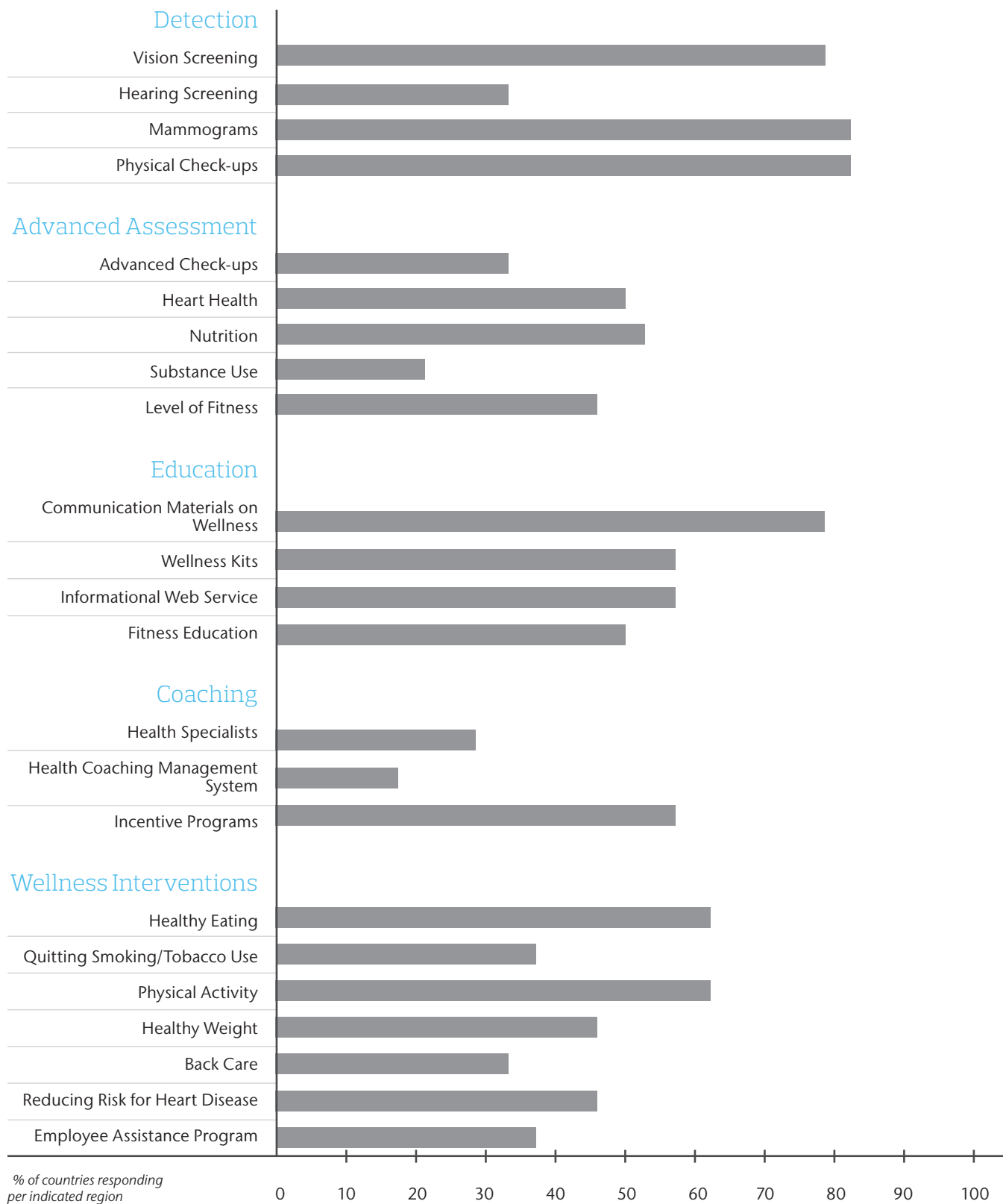
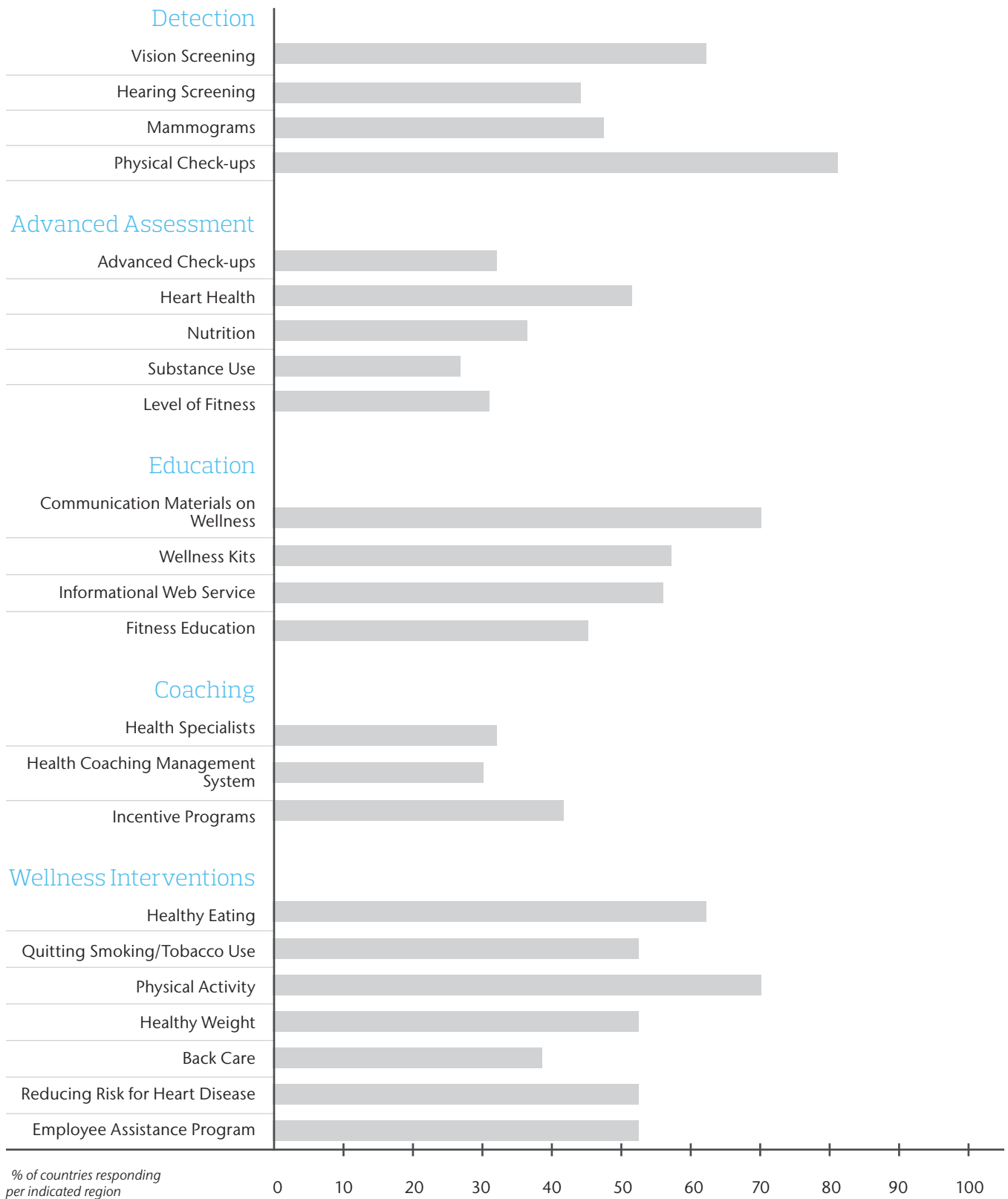


Exhibit 24: Middle Eastern Africa



% of countries responding per indicated region

Exhibit 25: Wellness Programs

Reported as Commonly Provided by Geographical Regions

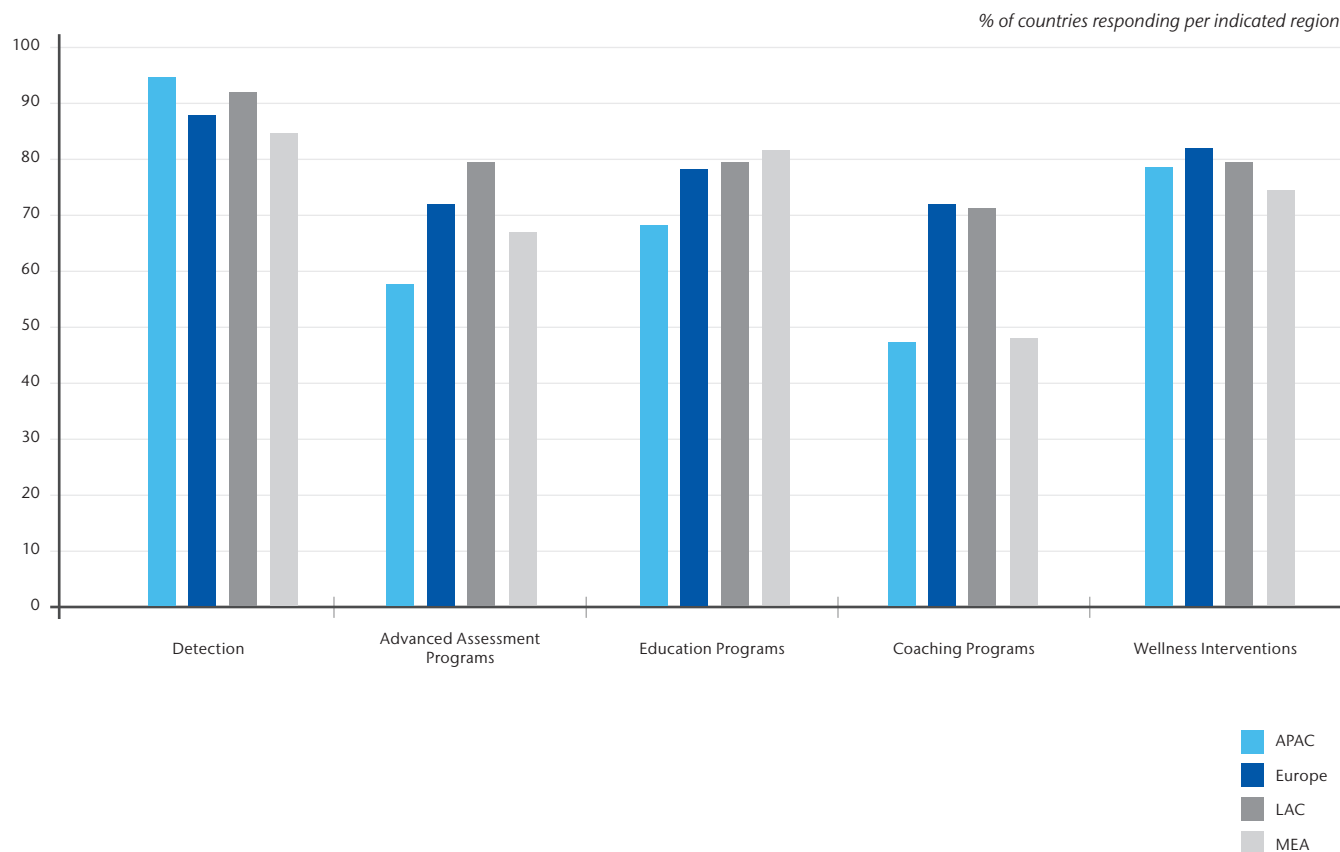


Exhibit 26: Detection Programs

Reported as Commonly Provided by Geographical Region

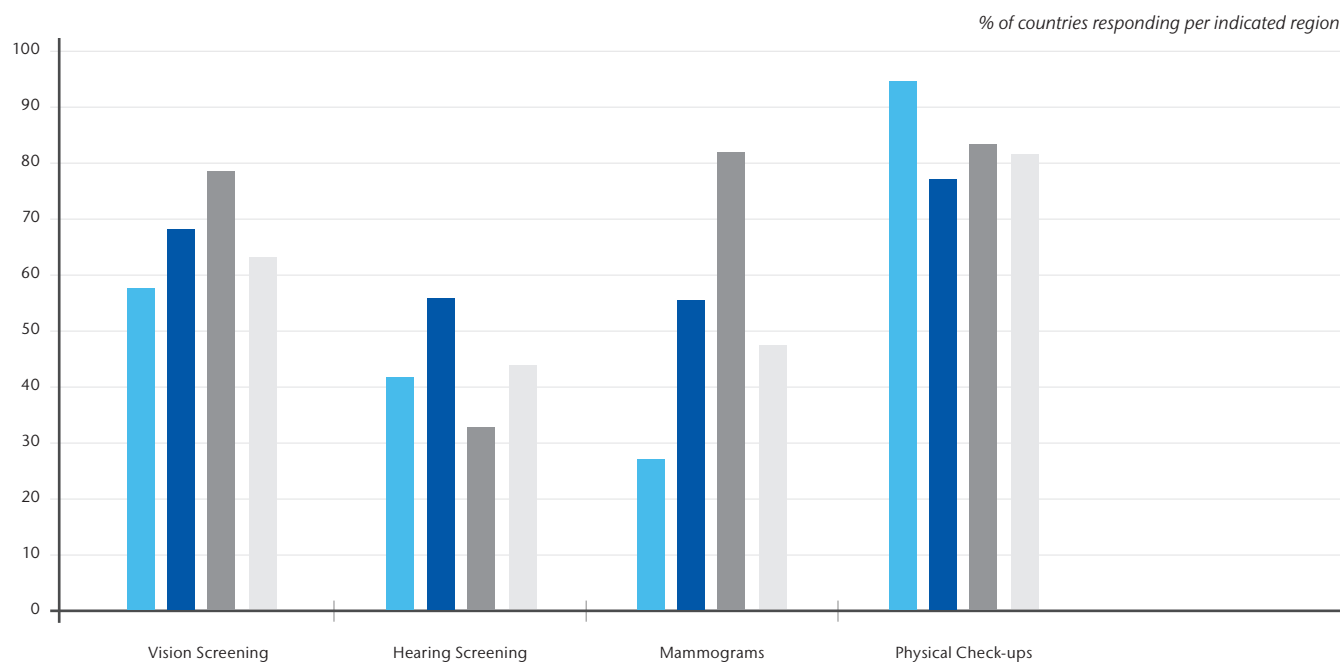


Exhibit 27: Advanced Assessment Programs

Reported as Commonly Provided by Geographical Region

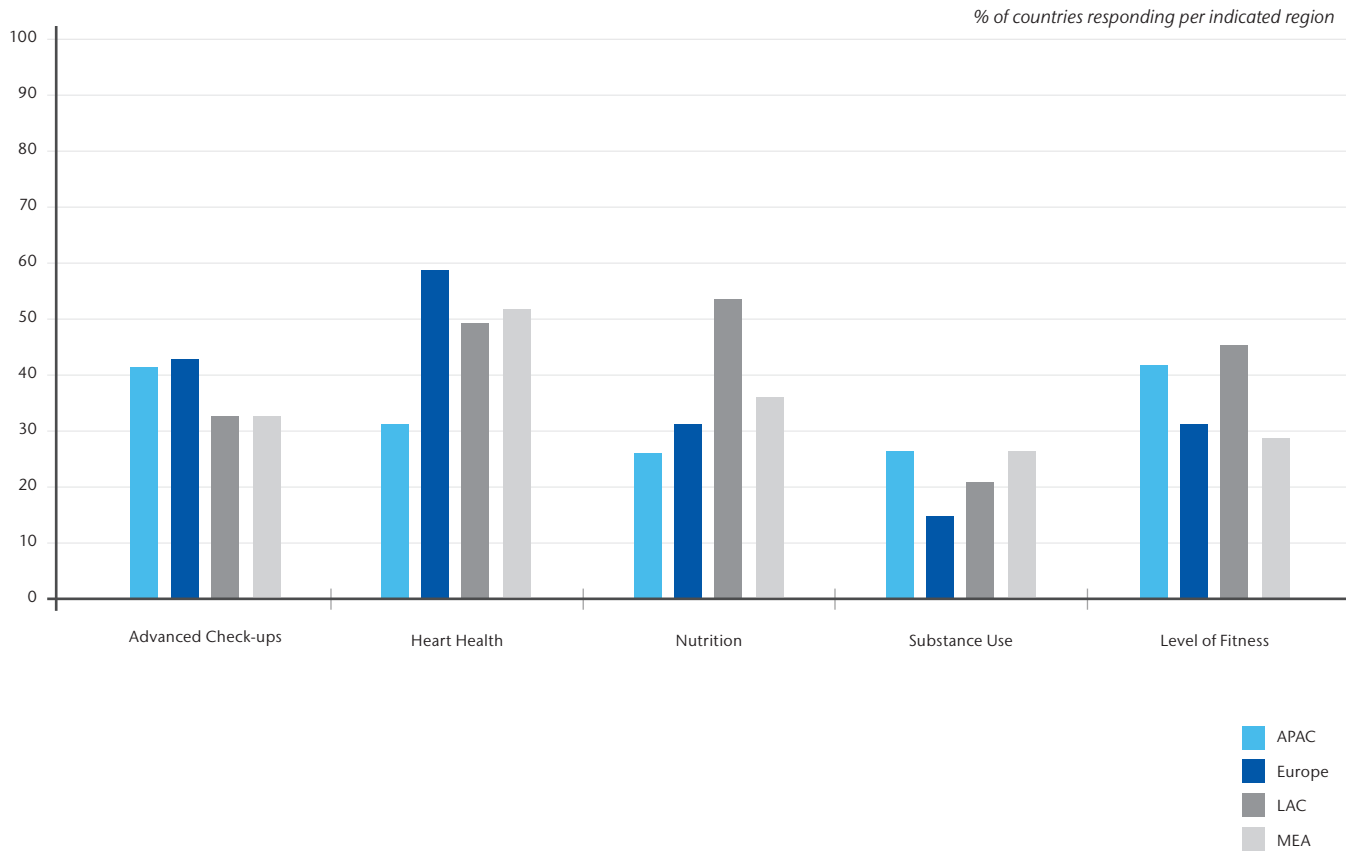


Exhibit 28: Education Programs

Reported as Commonly Provided by Geographical Region

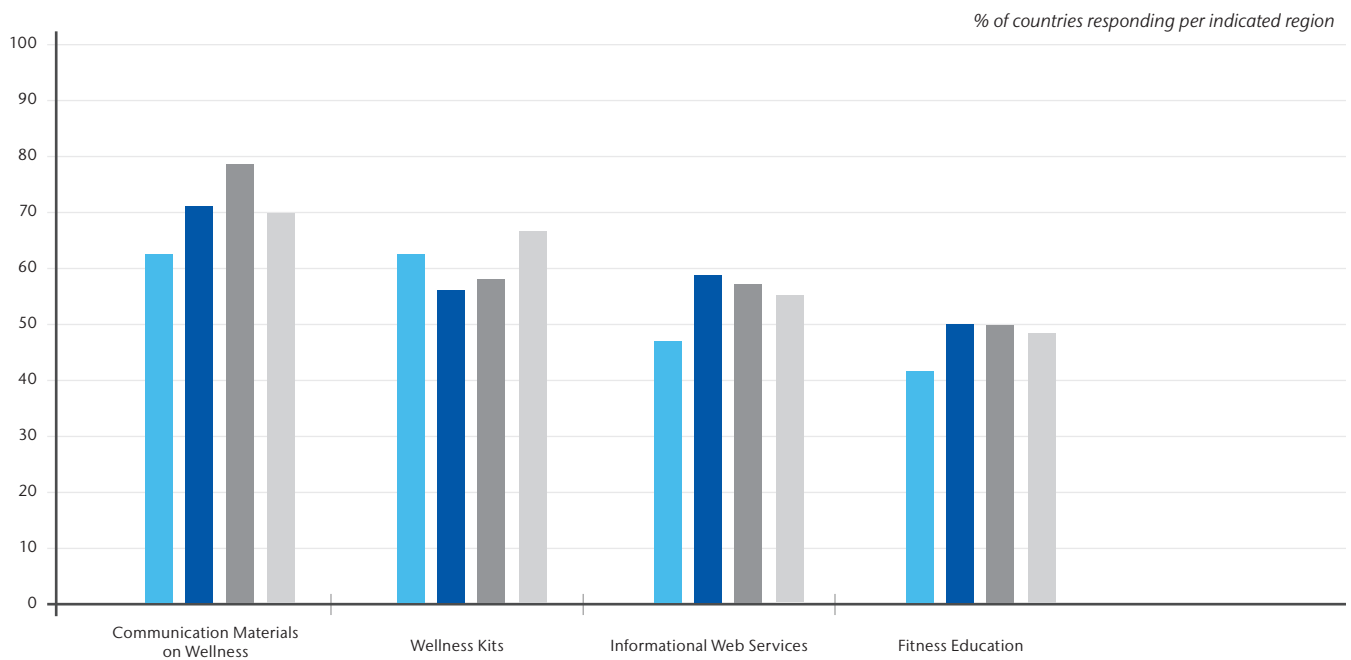


Exhibit 29: Coaching Programs

Reported as Commonly Provided by Geographical Region

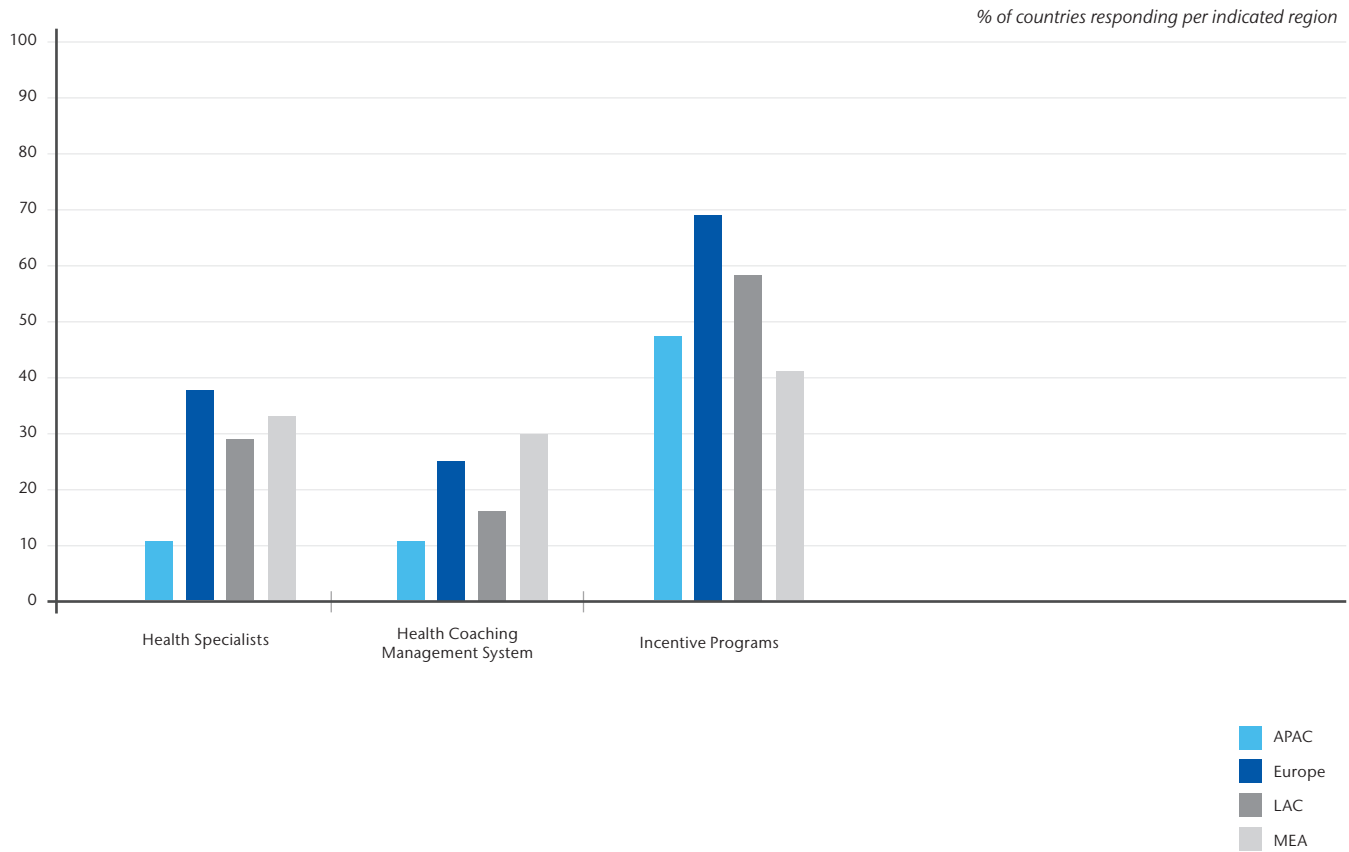
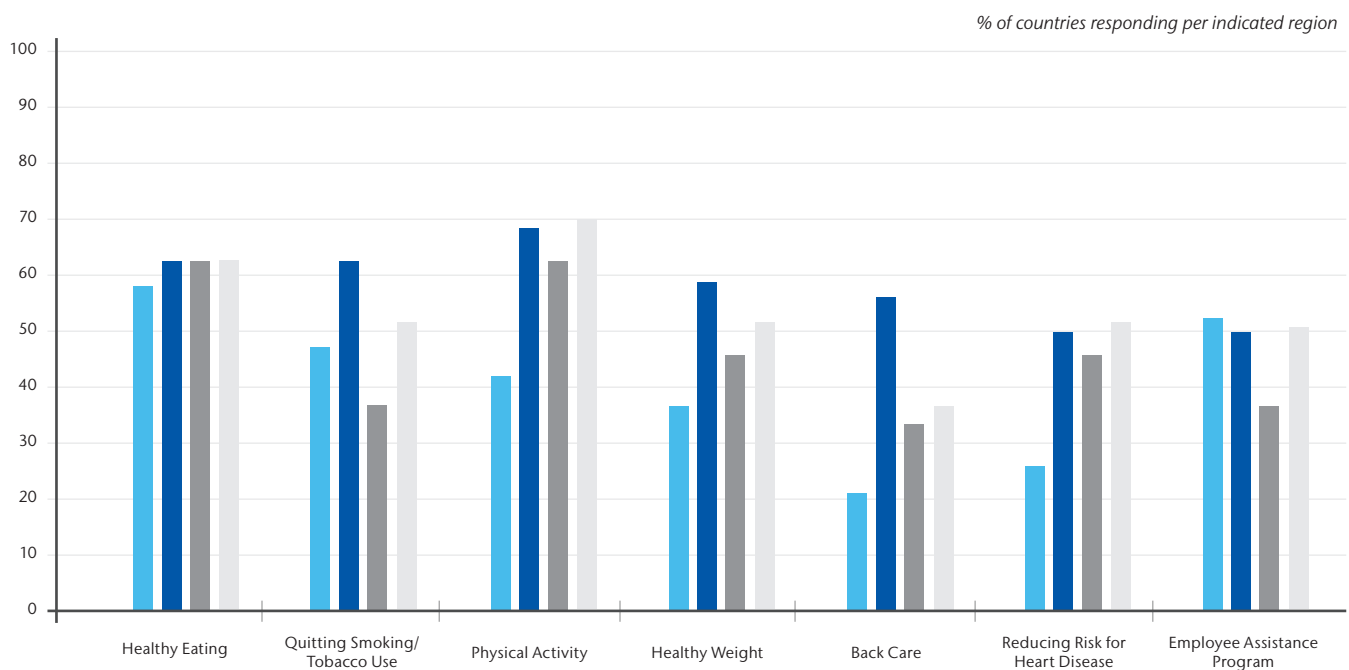


Exhibit 30: Wellness Interventions Programs

Reported as Commonly Provided by Geographical Region



Glossary of Terms

Coinsurance: A form of medical cost sharing in a health insurance plan that requires an insured person to pay a stated percentage of medical expenses after the deductible amount, if any, was paid. In health insurance, an equivalent term is “percentage participation.”

Copayment (Copay): A form of medical cost sharing in a health insurance plan that requires an insured person to pay a fixed dollar amount when a medical service is received. The insurer is responsible for the rest of the reimbursement. There may be separate copayments for different services. Some plans require that a deductible first be met for some specific services before a copayment applies.

Access & Delivery Restrictions: Measures designed to incentivize plan members to seek care in a cost-effective manner (e.g., restrictions on the use of expensive hospitals, mandated use of general physicians prior to using specialists, avoidance of emergency rooms for non-emergency situations, etc.)

Cost Containment Measures: Initiatives aimed at reducing or controlling over-utilization such as introduction of deductible, copays, coinsurance in plan design, required use of referrals for expensive surgeries, limitations on reimbursement per type of expense or medical service.

Deductible: A fixed dollar amount during the benefit period - usually a year - that an insured person pays before the insurer starts to make payments for covered medical services. Plans may have both per individual and family deductibles. Some plans may have separate deductibles for specific services.

Preferred Provider Organization (PPO) (Medical Provider Network):

An indemnity medical plan where coverage is provided to participants through a network of selected health care providers (such as hospitals and physicians). The plan participants may go outside the network, but would incur larger costs in the form of higher deductibles, higher coinsurance rates, or non-discounted charges from the providers.

Self-Insured Plan: A plan offered by employers who directly assume the major cost of health insurance for their employees. Some self-insured plans bear the entire risk. Some self-insured employers insure against large claims by purchasing stop-loss coverage. Some self-insured employers contract with insurance carriers or third party administrators (TPA) for claims processing and other administrative services; other self-insured plans are self-administered.

Stop Loss: A type of reinsurance designed to transfer the loss from the ceding company to the reinsurer at a given point. A provision in a policy designed to cut off the insurance company's loss at a given point. Aggregate benefits and maximum benefits are an example.

Third Party Administrator (TPA): An individual or firm hired by an employer to handle claims processing, pay providers, and manage other functions related to the operation of health insurance. The TPA is not the policyholder or the insurer.

Mitigate: To make less severe; steps to eliminate further damage after a loss occurs.

Appendix

Technical Note

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 the percentage of change in the cost of health care prior to any cost containment measure undertaken by plan sponsors.

The components of health care trends 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 deductible, 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.

About Aon

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

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