



Presentation

Hartford Actuarial Club

Global Healthcare Trends

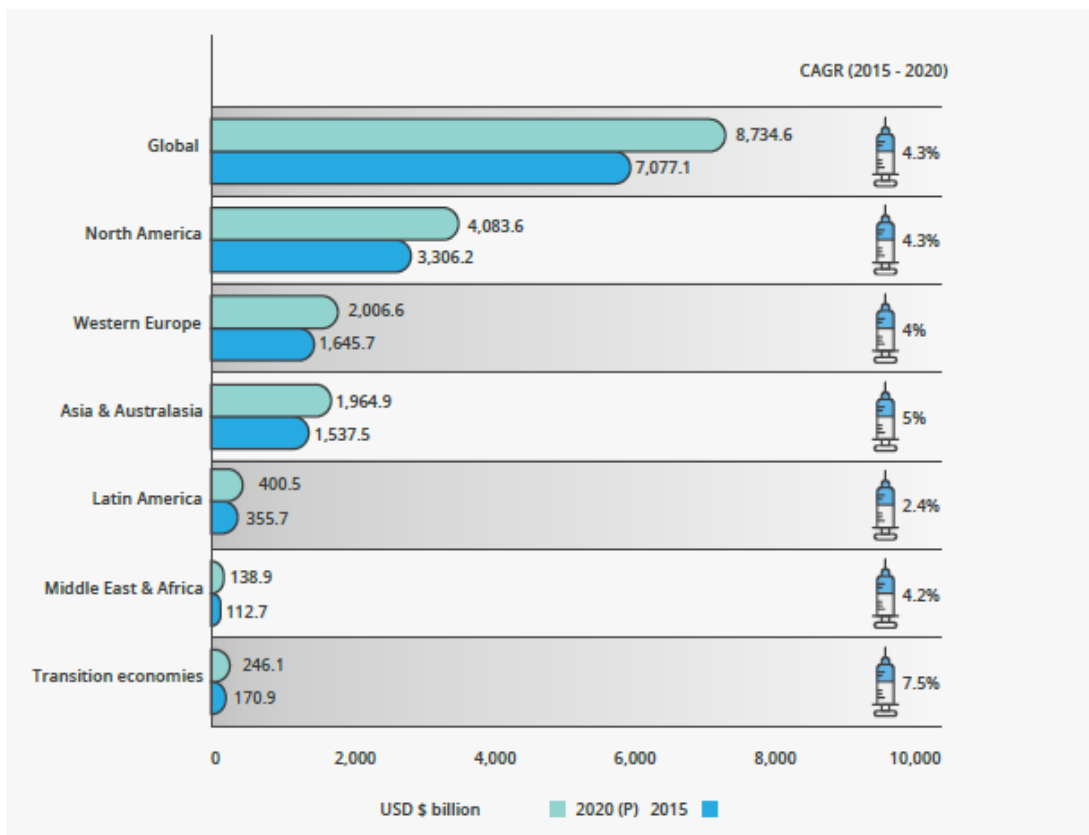
WIL GAITAN, FCA, ASA, MAAA, EA – GLOBAL CONSULTING ACTUARY

Agenda

Our focus: Employer-provided Healthcare

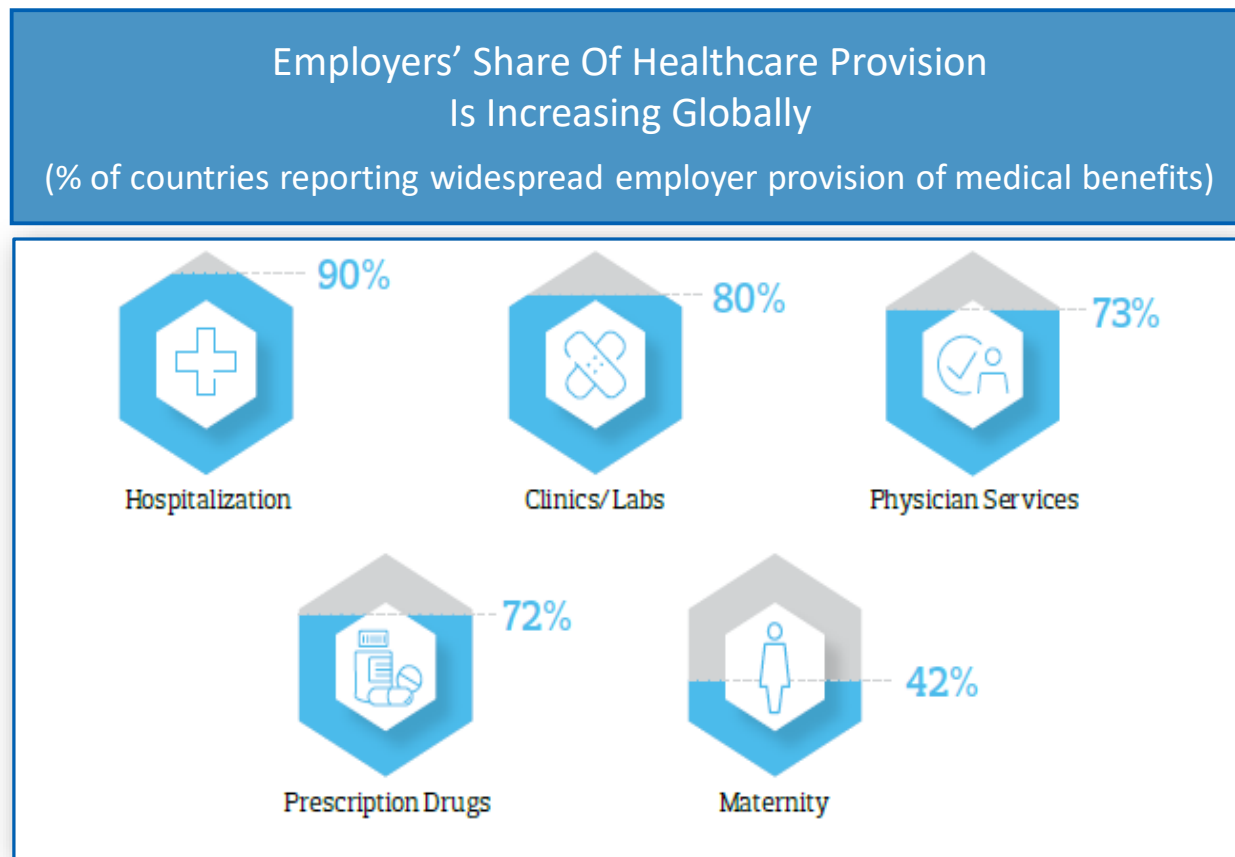
- Critical Factors Driving Employer Healthcare Costs Around the World
 - Global
 - Country specific
 - Plan specific
- Summary of Aon 2019 Global Medical Trend Rates Report
 - Regional Summaries
 - Global Risk Factors
 - Common Mitigation Initiatives
 - Global Wellness Practices
- Q&A

Healthcare Spending Rising Around The World



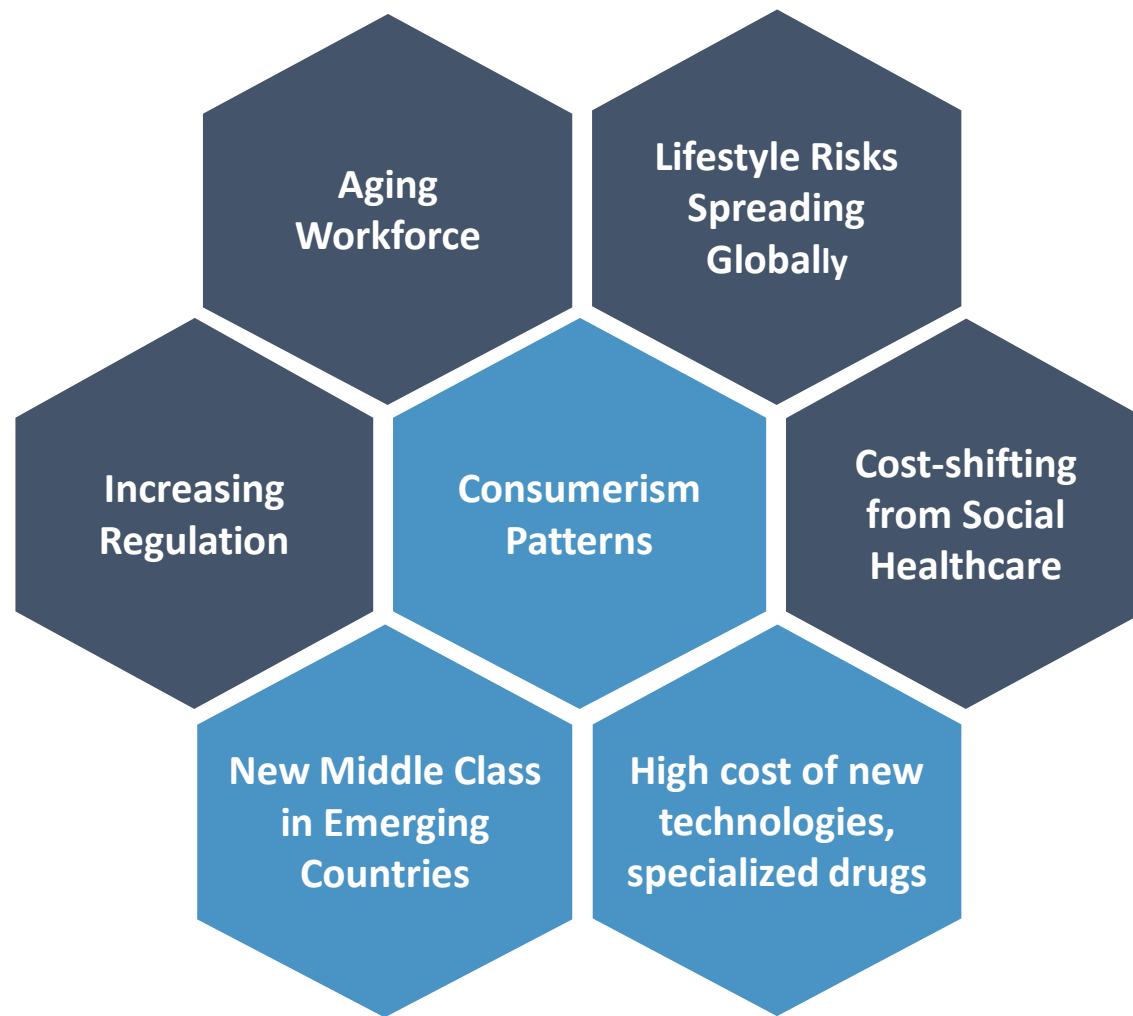
Source: World Industry Outlook, Healthcare and Pharmaceuticals, The Economic Intelligence Unit, June 2017

Source: Deloitte – 2018 Global healthcare outlook

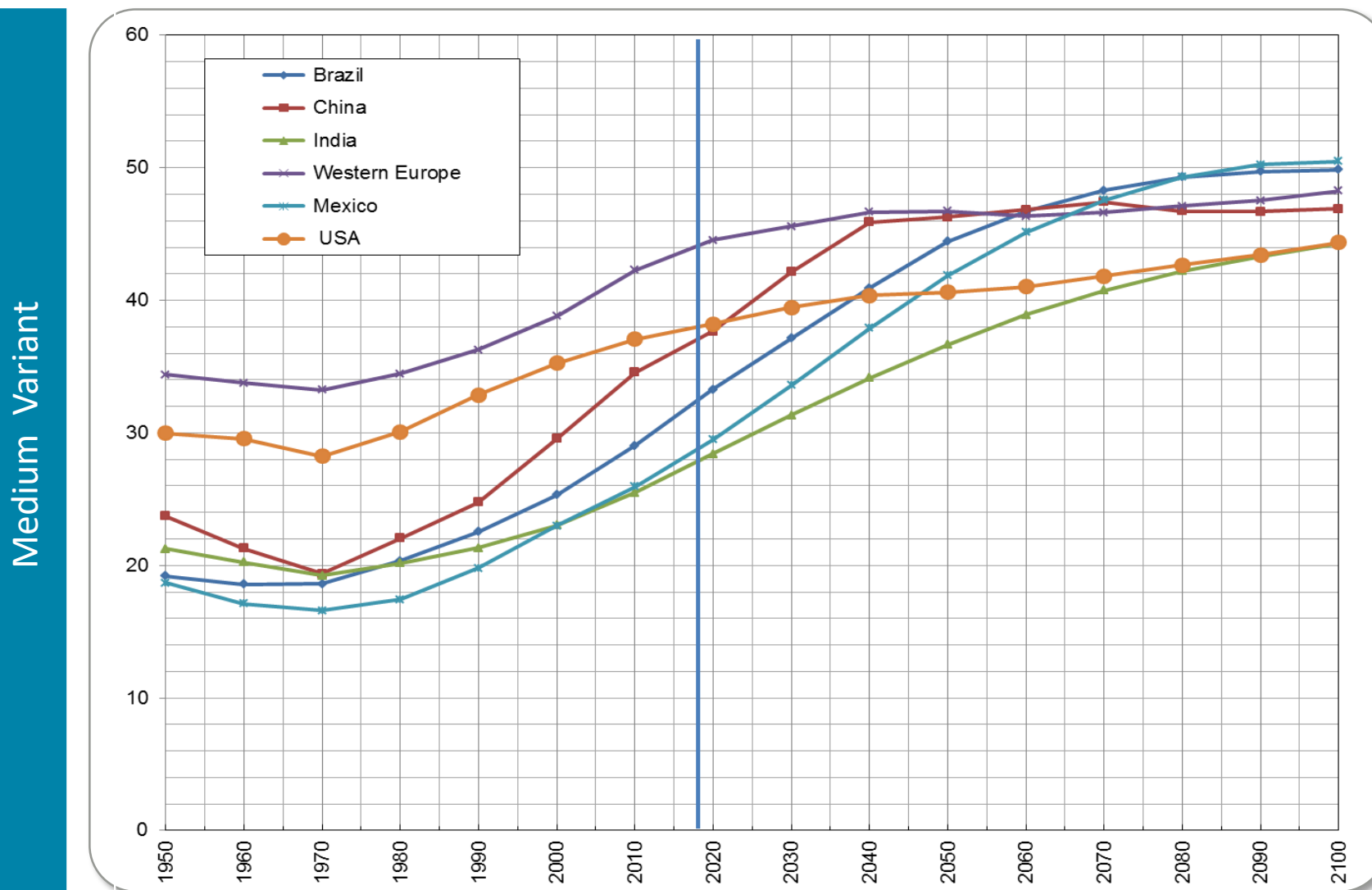


Source: Aon 2019 Global Medical Trend Rates Report

Critical Factors Driving Healthcare Cost Trends



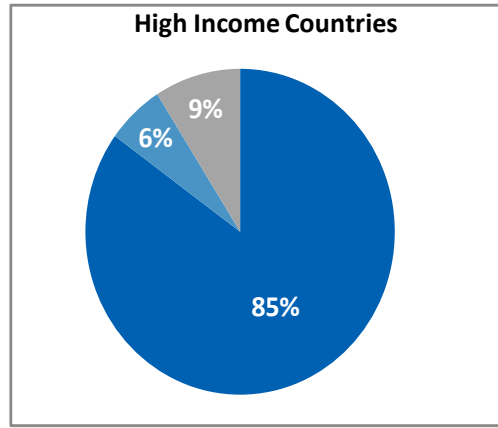
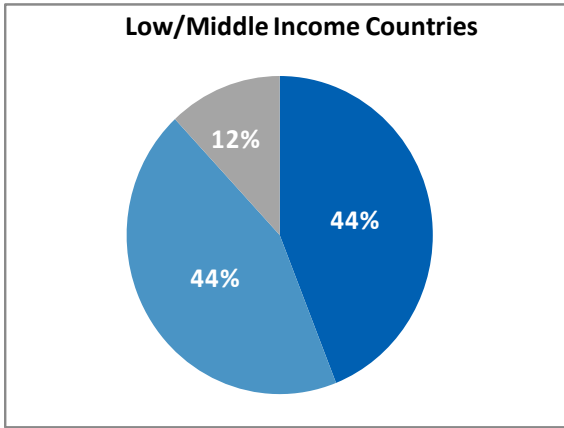
World Population Aging



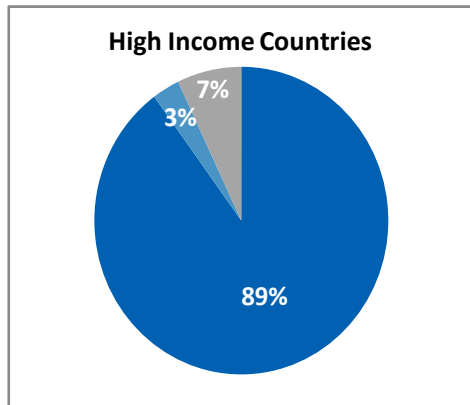
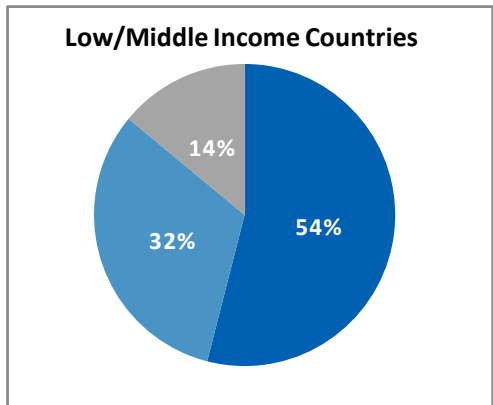
Increasing Lifestyle Risk Factors

2002

■ Non-communicable ■ Communicable ■ Injuries



2030



Source: U.S. Department of State; National Institutes of Health

Number of People with Diabetes (20–79 years old)			
Country	2011 (Millions)	Country	2030 (Millions)
1. China	90.0	1. China	129.7
2. India	61.3	2. India	101.2
3. US	23.7	3. US	29.6
4. Russia	12.6	4. Brazil	19.6
5. Brazil	12.4	5. Bangladesh	16.8
6. Japan	10.7	6. Mexico	16.4
7. Mexico	10.3	7. Russia	14.1
8. Bangladesh	8.4	8. Egypt	12.4
9. Egypt	7.3	9. Indonesia	11.8
10. Indonesia	7.3	10. Pakistan	11.4

Source: International Diabetes Federation

Social Program Cost-shifting

Employer medical plans interact with the country's social healthcare program in various ways:

- **Primary:** Employer financed medical plans operated by the private sector are the primary vehicle to cover the employee
- **Complementary:** Employer medical plan complements the social healthcare benefits
- **Alternative:** employer plan is an option to social program
- **Supplementary:** employer plan fills small gaps in social program coverage or provides upgrades in quality and/or convenience
- **Hybrid approaches**

Primary Models – United States

Key Characteristics of model

- Employer finances medical that provides main source of healthcare coverage to employees
- Program often mandated by government on employers or by employer contracting out of government operated social programs
- Implemented in the private sector via insurance or subscription in health care entities designated for this purpose

Estimated Healthcare Costs of Employment

Healthcare Plan	Social	Employer Plan
Estimated Cost	% of Pay	
Employer	1.45%	14.5%
Employee	1.45% ¹	7.5%
Average Income (USD)	Combined Contributions (USD PEPPY)	
50,000	1,450	11,000

¹ Individuals with income exceeding \$200K pay an additional 0.9%

Healthcare Program Coverage for the Indicated Groups

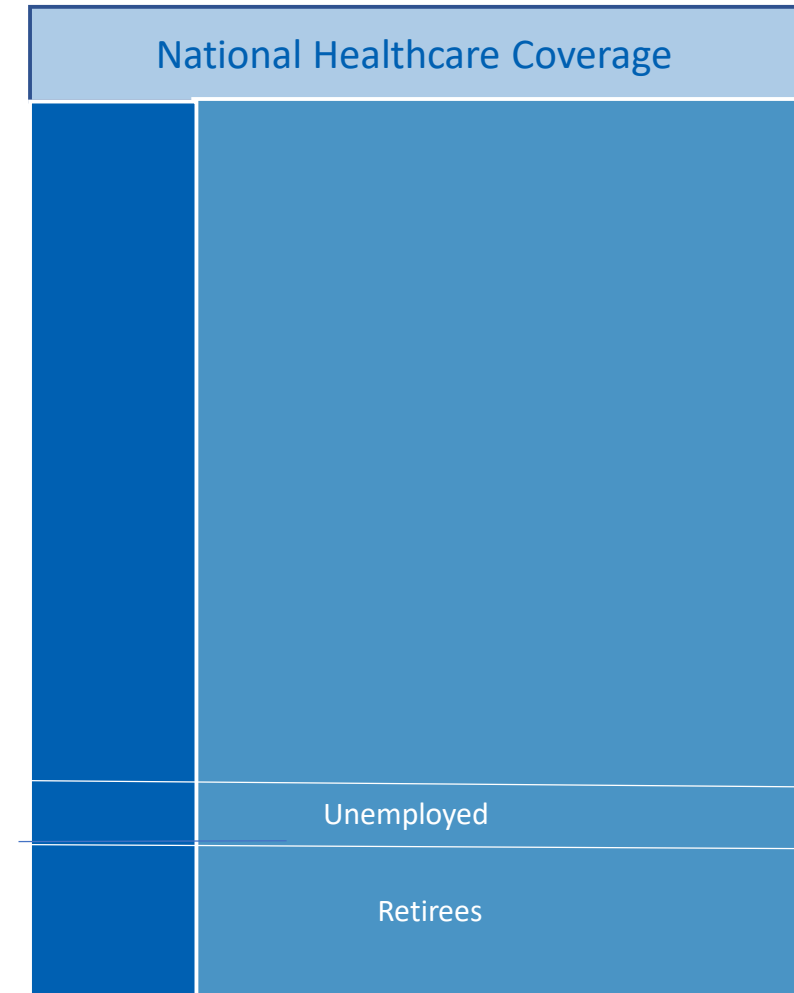
Actives	Individual Insurance	Employer Plans	Medicaid	Uninsured
Early Retirees				
Retirees	Medicare + Medicare Supplemental Insurance		Medicare and/or Medicaid	

Alternative Models - UK

Key Characteristics of model

- Government operates a universal healthcare infrastructure (NHS)
- Weaknesses in delivery of some NHS services prompts an alternative system in the private sector that runs in parallel with the social program
- Social program and employer plan services and costs are not explicitly coordinated

Estimated Healthcare Costs of Employment		
Healthcare Plan	Social	Employer Plan
Estimated Cost	% of Pay	
Employer*	0%	1.30%
Employee*	0%	0%
Illustrative annual pay (USD p.a.)	Combined Contribution PEPY (USD)	
50,000	0	650
<p><i>*National Insurance Contributions are assessed but not as a payroll tax</i></p> <p><i>Employer-paid medical premiums imputed as taxable income.</i></p> <p><i>Employee incurs small OOP + personal PMI costs</i></p>		



■ National Health Service (NHS)

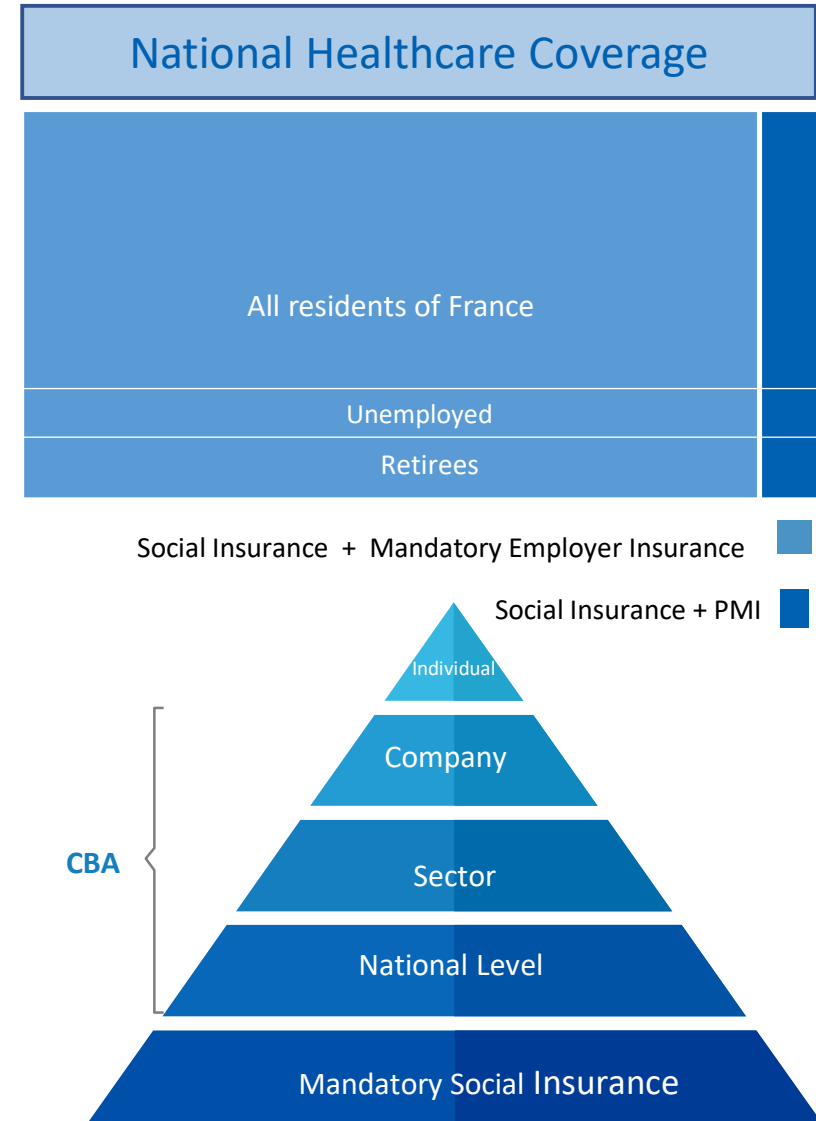
■ NHS + PMI

Complementary Models - France

Key Characteristics and Issues:

- Social program covers a substantial portion of medical claims
- Private insurance mandated on employers covers a substantial portion of gap
- Individual insurance covers any remaining holes

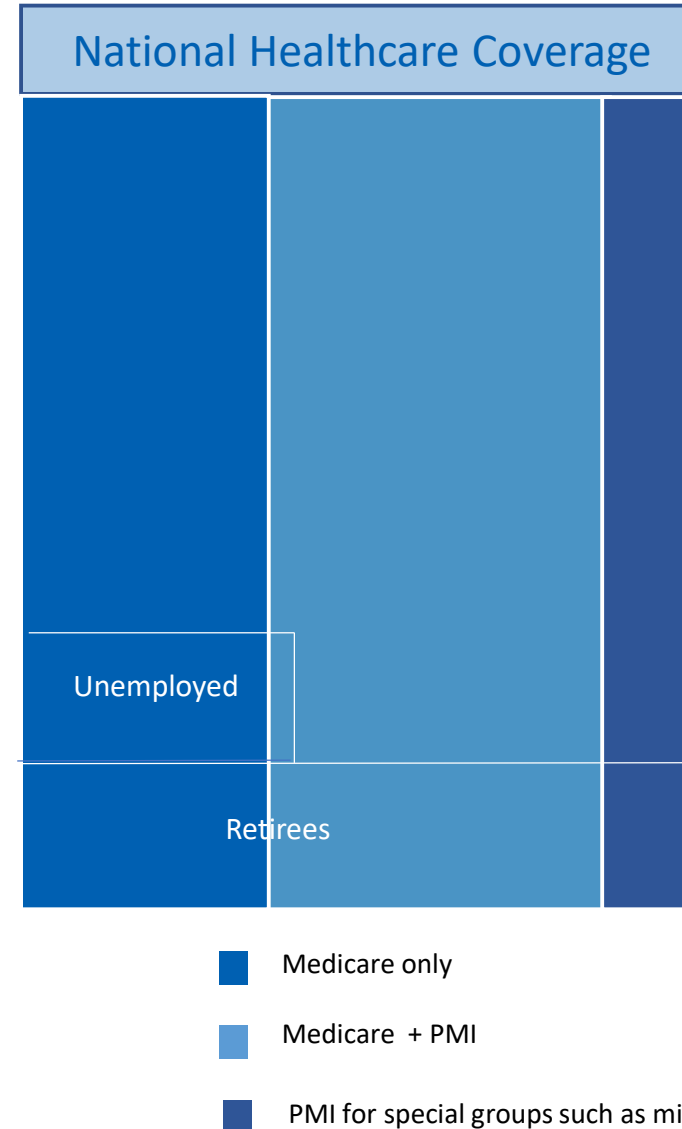
Estimated Healthcare Costs of Employment		
Healthcare Plan	Social	Private Plans
Payroll Taxes	(% of Pay)	
Employer	13.1%	1.95%
Employee	0.75%	1.3%
Illustrative annual pay (USD p.a.)	Combined Contributions PEPY (USD)	
50,000	6,925	1,625
*Employer-paid medical premiums imputed as taxable income for individual income tax. Employee incurs small OOP costs		



Supplementary Models – Canada

Key Characteristics of model

- Employer plan provides supplemental or upgraded coverage to the very comprehensive social healthcare program (Medicare)
- Main social program gap is in pharmacy
- In Canada, private plans (PMI) cannot provide any coverage that is provided by Medicare



Estimated Healthcare Costs of Employment		
Healthcare Plan	Social	Employer Plan
Estimated Cost	% of Pay	
Employer*	1.95%	5.1%
Employee*	1.23%	2.7%
Illustrative Salary (USD)	Combined Contributions (USD PEPY)	
\$ 50,000	1,590	3,900
* <i>Varies by Province</i>		

Medical Plan Regulation



Common Developments

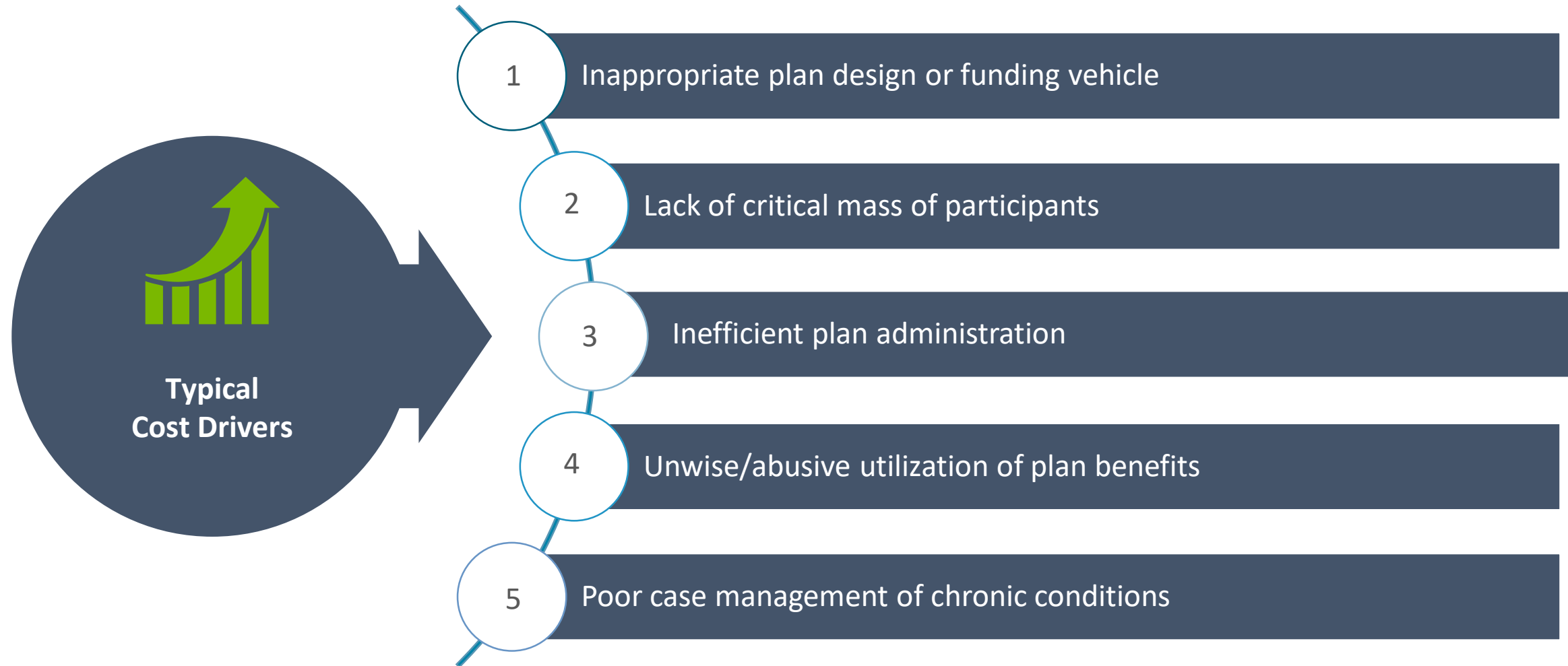
- Curtailment in social healthcare programs
- Enhanced mandated medical benefits
- Improved eligibility conditions for coverage
- Adverse taxation of employer medical benefits
- High compliance costs

Typical Country Factors



- Curtailments on local social healthcare system
- New regulations on employer medical plans
- Reliance on imported medical equipment, prescription drugs and medical supplies
- Inadequate social wellness and health prevention provision
- Private healthcare provider cartels, fixed tariff fees
- Fragmented approach to purchasing medical services
- Country/community wide premium increases

Plan-Specific Factors



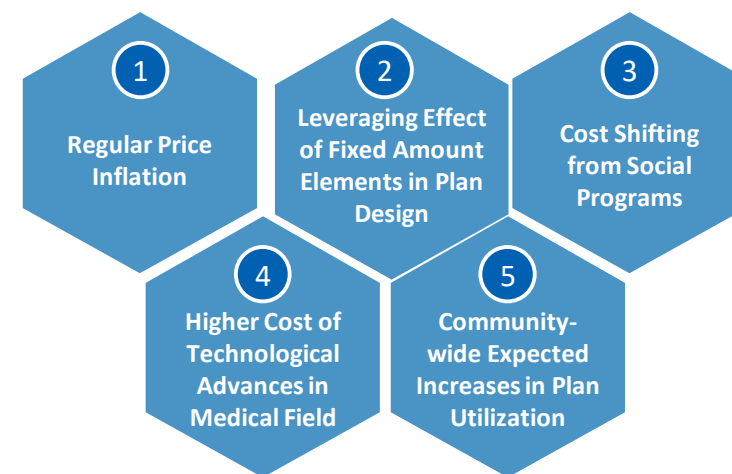
Case Study – Brazil



- Social health program is very good but long waiting lines and spotty coverage in rural areas
- Supplementary plans designed to:
 - Allow quick access to medical care
 - Provide more comfort (better room types)
 - Close a few gaps in social system benefits
- Medical plans are the most important benefit demanded by employees - over 99% of employers provide them
- Heavily regulated medical plan environment:
 - Broad-based eligibility
 - Minimum benefits – All ICD 10 procedures must be covered
 - Uncapped claims
 - Mandatory voluntary option for (subsidized) post-retirement continuation under contributory plans
- Frequent misuse of employer plan
- Protective labor laws and judicial system
- Cost-containment features (deductibles and copays) not popular

Aon 2019 Global Medical Trend Rates Study – Methodology

- Study conducted in fall of 2018
- Report covers 103 countries
- Based on analysis of the portfolios of group medical plans handled by Aon in each country
- The trend rates apply to unit costs of medical plans in local currency
- The 2019 trend rates were prepared based on 2019 general inflation projections published by the IMF World Economic Outlook Database in April 2018
- Trend rates do not consider any mitigation initiatives by plan sponsors
- **Two sets of medical trend rates are presented**
 - Trend rates gross of domestic general inflation
 - Trend rates net of domestic general inflation



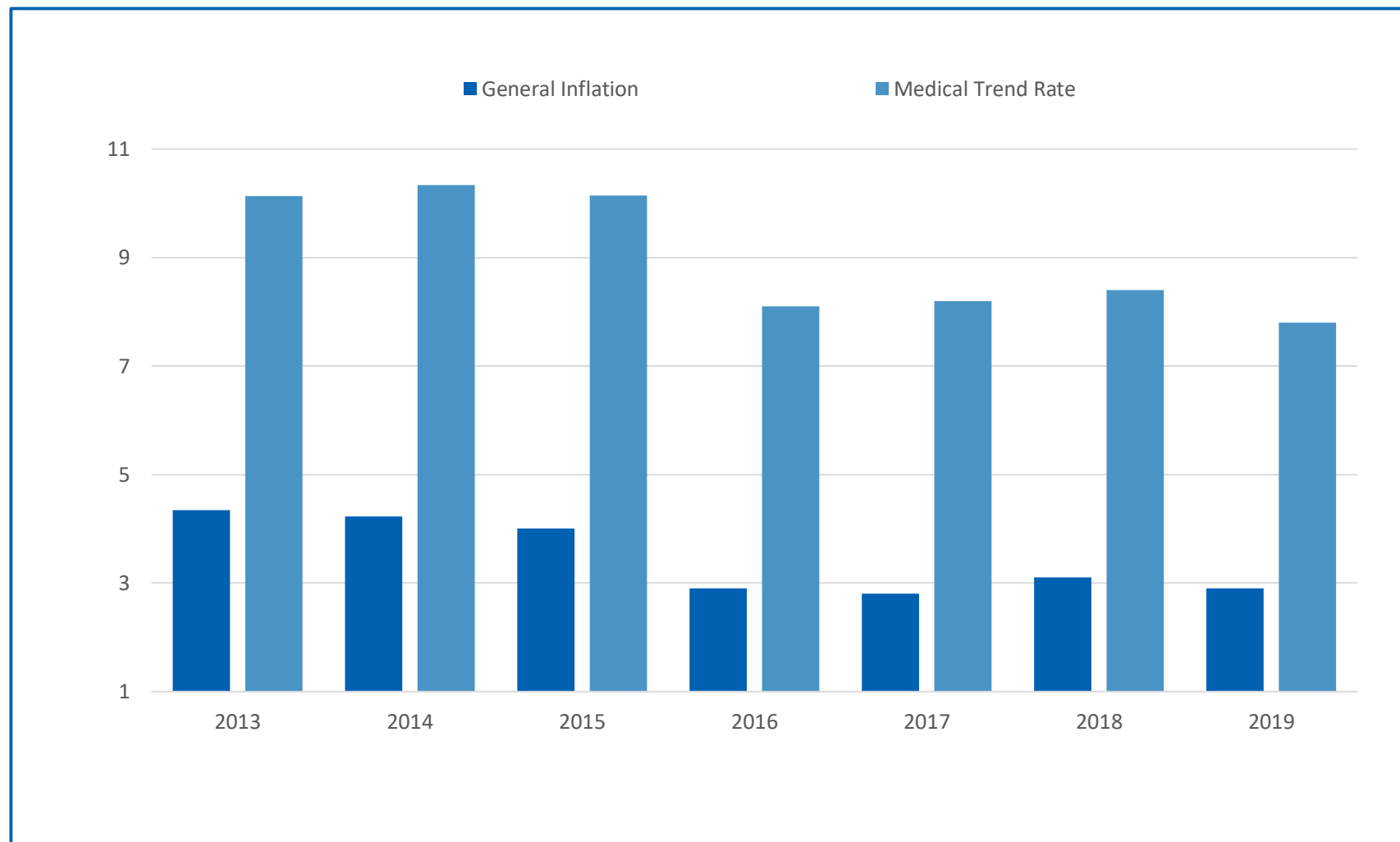
Global Healthcare Cost Trend Rates

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

Global & Regional Averages	2019		
	Annual General Inflation Rate	Annual Medical Trend Rates	
		Gross	Net
Global	2.9	7.8	4.9
North America	2.4	6.4	4.0
APAC	2.8	8.6	5.8
Europe	2.1	5.1	3.0
LAC	4.7	13.2	8.5
MEA	6.1	13.7	7.6

Source: Aon 2019 Global Medical Trend Rates Report

Global Healthcare Cost Trend Rates over Time



Source: Aon 2019 Global Medical Trend Rates Report

Plan Financing Practices

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

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

North America



**Aging
Workforce**



**Lifestyle
Risks**



**Social Health
Changes**



**Prescriptions
Drugs**



Technology

Country	Annual Average Medical Premium (USD)	2019 Projected General Inflation (%)	2019 Gross Medical Trend Rate (%)
USA	12,000	2.4	6.5
Canada	1,183	2.2	6.0

Europe



**Aging
Workforce**



**Lifestyle
Risks**



**Social Security
Changes**



**Increasing
Healthcare Costs**



Technology

Country	Annual Average Medical Premium (USD)	2019 Projected General Inflation (%)	2019 Gross Medical Trend Rate (%)
UK	1,152	2.2	6.0
France	1,647	1.6	3.5
Ireland	2,590	1.3	0.0

Source: Aon 2019 Global Medical Trend Rates Report, Aon Data

Asia - Pacific



**Aging
Workforce**



**Lifestyle
Risks**



Regulation



**Increasing
Healthcare Costs**



**Staff Attraction &
Retention**

Country	Annual Average Medical Premium (USD)	2019 Projected General Inflation (%)	2019 Gross Medical Trend Rate (%)
China	279	2.6	6.0
India	224	5.0	9.0
South Korea	154	1.9	9.0

Source: Aon 2019 Global Medical Trend Rates Report, Aon Data

Latin America and Caribbean



**Lifestyle & Natural
Disasters**



High Inflation



Regulation



**Currency Erosion
Against Hard
Currencies**



**Inadequate Social
Healthcare Systems**

Country	Annual Average Medical Premium (USD)	2019 Projected General Inflation (%)	2019 Gross Medical Trend Rate (%)
Brazil	3,500	4.2	17.0
Mexico	470	3.1	13.0
Puerto Rico	4,520	0.8	1.0

Source: Aon 2019 Global Medical Trend Rates Report, Aon Data

Middle East and Africa



**Imported
Workforce**



**Oil
Economics**



Regulation



**Attraction &
Retention Issues**



**Infectious
Diseases**

Country	Annual Average Medical Premium (USD)	2019 Projected General Inflation (%)	2019 Gross Medical Trend Rate (%)
UAE	4,400	2.5	10.5
KSA	3,400	2.0	10.0
RSA	2,800	5.3	11.0

Source: Aon 2019 Global Medical Trend Rates Report, Aon Data

Global Risk Factors

Root Causes of Adverse Medical Claim Experience

Top 3 Reported
Global Risk Factors

Top 3 Reported
Global Medical Conditions

Top 3 Most Impactful Elements
Of Global Medical Plan Costs



High Blood Pressure



High Cholesterol



Physical Inactivity



Cardiovascular



Cancer/ Tumor Growth



High Blood Pressure



Hospitalization



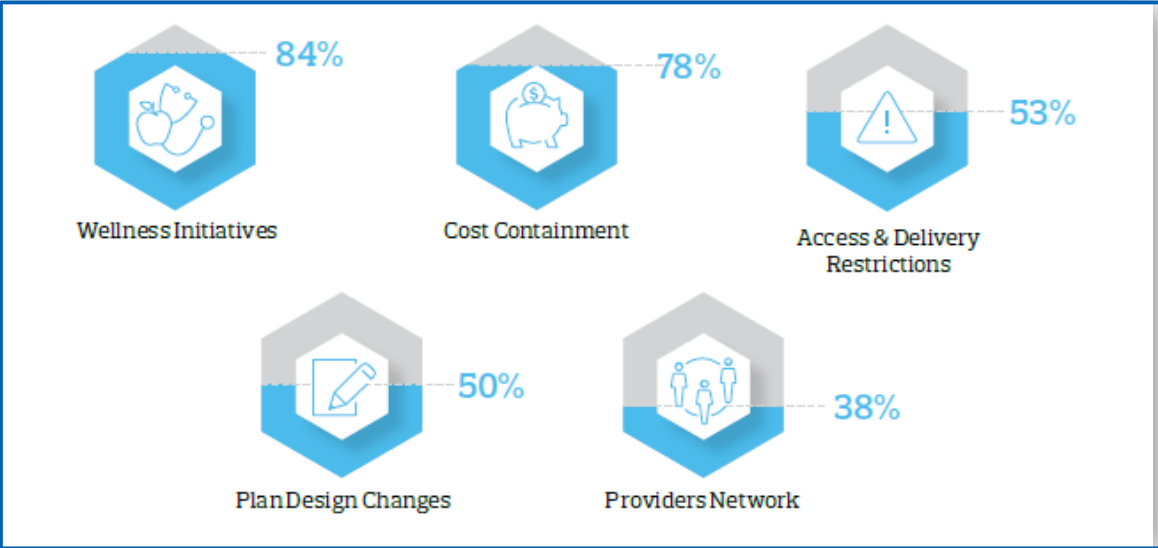
Clinics/Labs



Physician Services

Employer Mitigation Initiatives

Top 5 Global Mitigation Initiatives to Control Medical Plan Cost Escalation:

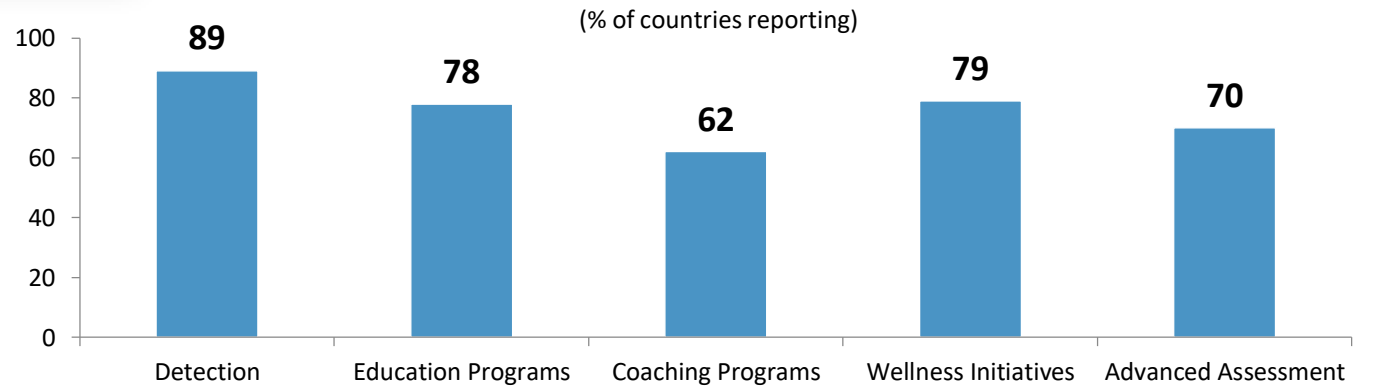


Wellness Interventions by Category

Detection	Employer Wellness	Education	Advanced Assessment
Physical check-up	Smoke cessation programs	General health communications	Heart health
Vision screening	Employer assistance programs	Web-based information	Advanced check-ups
Mammograms	Physical activity promotion	Wellness kits	Nutrition

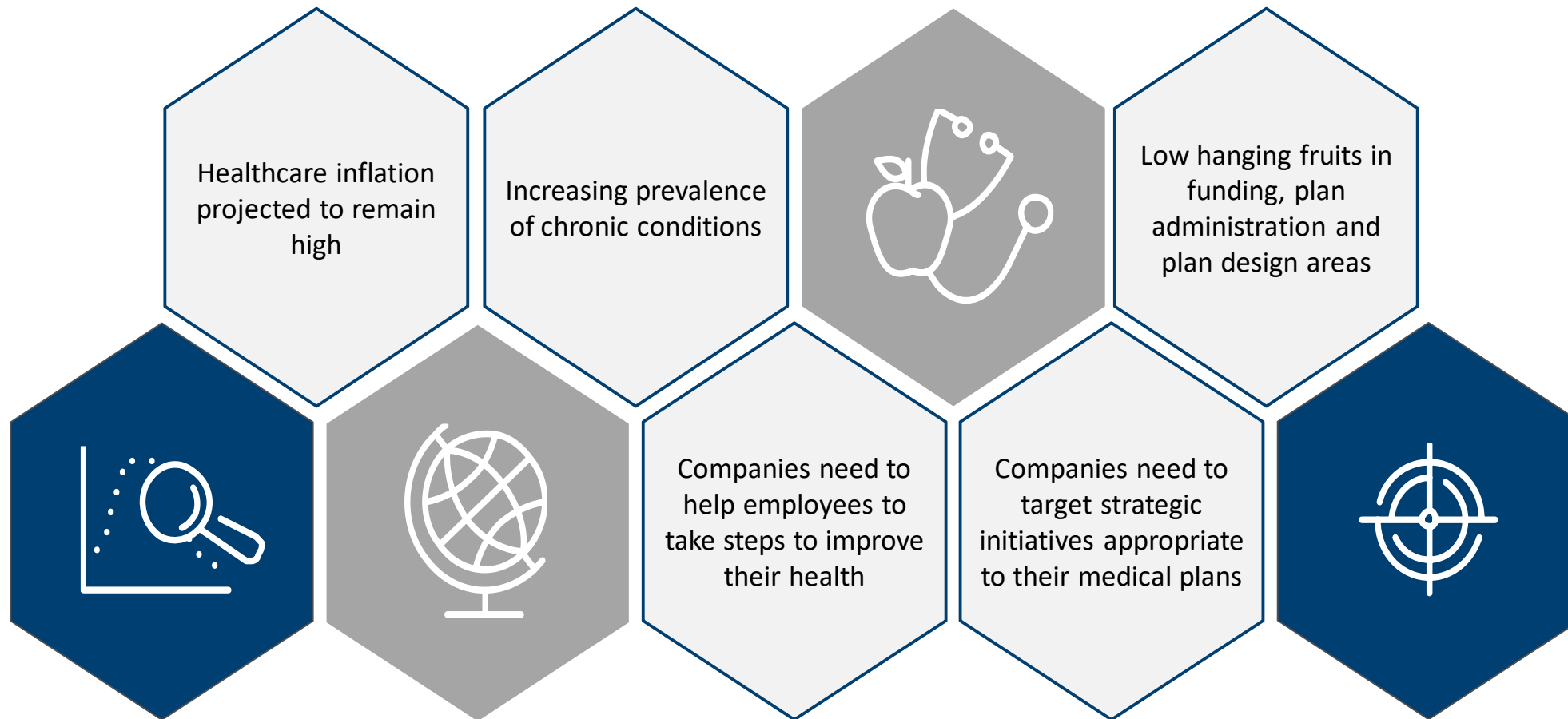


What form of Wellness programs are being implemented?



Source: Aon 2019 Global Medical Trend Rates Report

Conclusions





Q&A