Willis Towers Watson IIIIIII

2019 Global Medical Trends Survey Report



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Executive summary

While global medical trend continues to show some modest increases around the globe, the overall rate of increase remains relatively stable. For 2019, the projected global, weighted medical trend is 7.6%, which continues to outstrip general inflation by a factor of more than 2:1 on a global basis. However, this value is just 0.5% higher than the reported value for 2018, with no increase at all expected in Europe. Despite the relative global stability, it is concerning to see how the trend continues to edge upward in some of the larger, more significant medical markets such as Brazil, China, India, Mexico and the U.A.E. The largest increases are expected to be seen in the Middle East and Africa where the regional trend increased from 8.5% to 9.9% in 2018 and is projected to rise to 12.4% in 2019.

Other regions show closely guarded optimism, with most predicting either medical trends will stay the same or increase by conservative amounts. There are continuing concerns about the manner in which treatment is provided, with fears that it is not being directed on the basis of strict medical need. Respondents also expressed misgivings about reliance on pharmacy services and the cost implications of innovative future treatments.

To further darken prospects for the future, there are several conditions that are projected to represent significant sources of claims. Alongside circulatory conditions and cancer, which There are continuing concerns about the manner in which treatment is provided, with fears that it is not being directed on the basis of strict medical need.

are illnesses that most industry experts would expect to appear, are mental and behavioral disorders. The cost of mental conditions is already rising steeply. A paper presented at the World Economic Forum estimated costs at £2.5 trillion in 2010 and projected them to rise to six trillion by 2030, an increase of 240%.¹ This suggests that cost may increase worldwide as more employees rely on their health insurance to help them manage new diagnoses.

Key findings

Europe continues to have the lowest level of gross medical trend increase for private medical insurance, substantially due to the existence of socialized medicine and the integration of treatment with private plans. While this helps manage costs in some of the largest countries such as France, Spain and the U.K., it is not universal across all of Europe. For some countries, such as Hungary, we continue to see a public health care system under much greater strain, which results in more patients utilizing the private sector.

¹Patricio V. Marquez, ScM., and Shekhar Saxena, Ph.D., "Making Mental Health a Global Priority," National Center for Biotechnology Information, U.S. National Library of Medicine. (July 1, 2016). Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5198754/

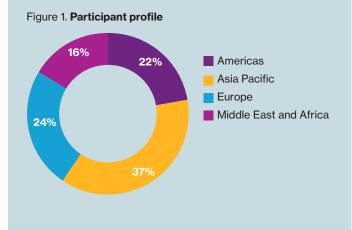
- Insurers are predicting that pharmacy costs will become an increasingly significant part of medical expenses over the next five years. Sixty-six percent of insurers in the Americas foresee a moderate increase in pharmacy expenses in the next year, while 52% of insurers in Asia Pacific agree.
- Overuse of services and care are identified as being the top two factors driving medical costs per person. Seventy percent of insurers worldwide identified an overuse of care due to medical practitioners recommending too many services, while 52% of insured members were seen to be overusing available care.
- The high cost of new medical technologies is increasing medical costs. Sixty-five percent of insurers thought this was among the three most significant causes, with a further 48% identifying profit motive of providers as a main cause. While there is fear about the rising incidence of large scale claims affecting the insurance industry, only 15% identified it as among the three leading causes of higher costs.
- Few surprises come with the identification of the top three conditions that cause the highest incidence of claims and the highest cost of claims in medical client portfolios. Circulatory, musculoskeletal and cancer are the leading causes, with 54% of respondents worldwide identifying circulatory conditions as the leading cause and 49% identifying musculoskeletal conditions as the leading cause – a dramatic rise from preceding years. Cancer was identified by 42% of respondents as causing the most claims.
- Cancer continues to be the most expensive condition in each of the four regions. The lowest figure was the 68% of insurers in the Americas who placed it among the top three conditions and the highest was 82% for the Middle East and Africa, in excess of the figures for circulatory conditions, the second placed in the hierarchy. There were 67% of insurers in the Asia Pacific region who rated circulatory conditions among the top three most costly conditions, the highest total for non-cancer related illnesses.
- While cardiovascular conditions and cancer are generally expected to cause the highest incidence of claims around the world, excluding maternity, the incidence of mental and behavioral disorders are expected to increase over the next five years. In Europe, 44% of

insurers identified mental disorders as being among the top three conditions in the next five years, with 33% of insurers globally agreeing. This perhaps reflects that symptoms are not yet widely recognized by medical professionals and that many insurers do not cover mental disorders.

From a cost perspective, there should be no change in the top conditions. Seventy-nine percent of insurers globally expect cancer to be the most costly health condition, with circulatory conditions somewhat behind on a global average of 59% and musculoskeletal conditions further behind at 50%.

About the survey

The Willis Towers Watson Global Medical Trends Survey was conducted from July through September 2018, with responses received from 307 leading insurers from 77 countries. Global results presented here have been weighted using GDP per capita. The U.S. medical trend data are drawn from other Willis Towers Watson research on this highly developed market with unique characteristics.



Medical trend by region and country

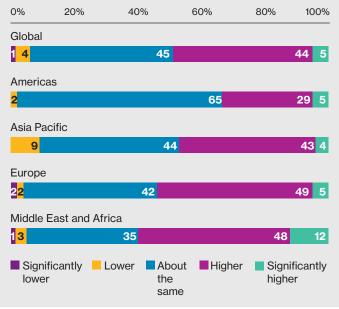
Over half of health insurers in all regions are anticipating higher or significantly higher medical trends over the next three years. The global trend is that 44% of insurers are predicting higher costs over this period and 5% are predicting significantly higher costs. In the Americas, just 34% predict higher costs, while in the Middle East and Africa this figure is altogether higher, with 60% expecting an increase – the highest total of any region, by some distance.

Asia Pacific

The region continues to see countries experiencing increases far in excess of the projected average of 7.8% for 2019.

China. While there has been a significant growth in the number of private health care providers, providing potentially more capacity and competition, this has not reduced the continued upward movement in medical trend. Indeed, many employees are reducing use of public hospitals due to lower government subsidies. The advance of medical technology, the rise of the middle class and greater health care awareness drives increased demand for treatment – all of which results in a higher average cost for that treatment. We do see increasing government intervention through better or broader health care policies; although, in the short term we expect the medical inflation trend to continue to rise, especially with the impact of increased lifestyle-related chronic conditions.

Figure 2. How do you expect the medical trend in your overall book of business to change over the next three years compared to current rates?



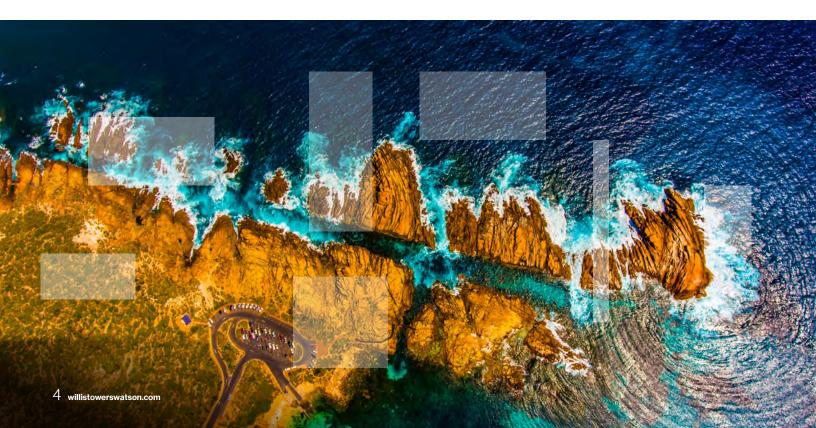


Figure 3. Global average medical trend rates by country, 2017 – 2019

		Gross cost trend			Net cost trend (net of general inflation)			
	2017	2018	2019	2017	2018	2019		
Global	6.7	7.1	7.6	4.6	4.6	5.2		
Asia Pacific	7.1	7.0	7.8	5.5	5.0	5.8		
Australia	4.9	4.6	4.6	2.9	2.4	2.2		
China*	9.0	10.1	10.7	7.5	7.6	8.1		
Hong Kong*	7.0	8.0	8.6	5.5	5.8	6.5		
India	7.6	9.2	10.6	4.0	4.2	5.6		
Indonesia*	11.1	10.9	10.8	7.3	7.4	7.4		
Malaysia*	9.0	11.4	13.1	5.2	8.2	10.7		
New Zealand	6.9	5.4	5.4	5.1	3.7	3.3		
Philippines*	8.8	10.3	11.5	5.6	6.1	7.7		
Singapore*	8.3	8.8	9.1	7.7	7.6	8.1		
South Korea*	6.0	1.4	3.4	4.1	-0.3	1.5		
Taiwan*	7.2	7.8	9.3	6.5	6.5	8.0		
Thailand*	6.4	7.0	8.5	5.7	5.6	7.9		
Vietnam*	11.0	15.0	16.3	7.5	11.2	12.3		
Europe	4.4	5.0	5.0	2.7	3.2	3.1		
Belgium	3.9	4.0	4.4	1.7	2.4	2.6		
Bulgaria	5.0	5.0	5.0	3.8	3.0	2.9		
Cyprus	10.0	10.0	5.0	9.3	9.6	3.4		
Denmark	3.9	5.5	4.3	2.7	4.1	2.6		
France*	1.9	2.5	2.5	0.7	1.0	0.9		
Germany	4.3	4.0	3.0	2.5	2.4	1.3		
Greece	4.3	4.5	4.5	3.1	3.8	3.4		
Hungary	0.0	10.0	15.0	-2.4	7.3	11.7		
Ireland	3.4	3.9	4.7	3.2	2.9	3.4		
Italy*	1.8	1.7	2.1	0.5	0.6	0.8		
Norway	5.4	5.3	6.0	3.5	3.4	4.0		
Poland	3.0	5.0	5.0	1.0	2.5	2.5		
Portugal*	3.4	2.9	3.0	1.9	1.3	1.4		
Romania	8.8	7.5	9.3	7.4	2.8	6.2		
Russia	6.3	6.7	8.0	2.7	3.9	4.3		
Serbia	10.0	10.0	8.0	6.9	7.3	5.0		
Spain*	3.0	4.0	4.0	1.1	2.2	2.4		
Switzerland	5.0	4.0	4.0	4.5	3.3	3.0		
Turkey	10.9	14.2	18.2	-0.3	2.8	7.7		
Ukraine	10.6	11.3	13.3	-3.8	0.2	5.3		
United Kingdom*	5.7	6.9	6.3	3.0	4.2	4.2		
Latin America	11.1	10.8	10.6	6.7	6.3	7.1		
Argentina	30.0	24.6	23.5	4.4	1.9	8.1		
Barbados and East Caribbean	10.0	10.0	10.0	5.6	4.6	7.1		
Brazil*	17.4	15.0	15.3	14.0	11.5	11.1		
Chile*	6.3	7.1	8.1	4.1	4.7	5.1		
Colombia*	6.6	6.8	6.5	2.3	3.3	3.0		
Costa Rica	12.0	12.0	12.0	10.4	9.2	9.0		
Dominican Republic	10.0	10.0	10.0	6.7	5.6	6.5		
Dutch Antilles	10.0	10.0	10.0	_	_	_		

Global average medical trend rates by country, 2017 - 2019 (continued)

	Gross cost trend			Net cost trend (net of general inflation)			
	2017	2018	2019	2017	2018	2019	
	12.0	15.0	12.0	11.6	14.1	10.6	
lor	10.0	10.0	10.0	9.0	8.3	8.1	
ala	10.0	10.0	10.0	5.6	5.8	6.3	
S	13.0	11.0	11.0	9.1	6.3	6.5	
	10.7	10.9	11.4	4.6	6.5	8.2	
Ia	12.0	12.0	12.0	8.1	5.8	4.8	
	15.0	12.0	12.0	14.1	9.8	9.5	
	4.6	6.4	6.6	1.8	4.8	4.6	
ico	5.2	6.6	5.8	3.3	4.4	5.0	
and Tobago	10.0	10.0	10.0	8.1	7.3	7.9	
ast and Africa	8.5	9.9	12.4	5.9	5.7	9.0	
	10.0	18.3	20.0	4.4	10.9	12.4	
	3.0	5.0	8.0	2.9	2.1	5.1	
on*	5.3	5.1	7.7	4.6	3.9	6.4	
African Republic	0.0	-10.0	0.0	-3.8	-13.5	-3.2	
Republic of)	3.0	5.0	5.0	2.5	3.5	3.4	
oire	18.5	15.0	20.0	17.7	13.3	18.0	
	23.3	14.3	11.3	-0.2	-5.8	-1.6	
	15.0	20.0	30.0	12.0	17.2	27.5	
	7.0	8.0	9.0	-5.4	-0.7	1.0	
	10.0	11.8	12.5	2.0	6.9	7.5	
scar	NR	10.0	20.0	NR	2.2	13.2	
ique	21.0	11.0	9.0	5.7	4.3	3.3	
	4.5	4.5	4.5	2.1	0.6	2.5	
	18.5	17.5	13.5	2.0	3.5	-1.3	
	5.5	7.0	9.0	3.9	4.5	5.5	
abia	4.0	10.0	15.0	4.9	6.3	13.0	
	9.0	4.5	7.0	7.6	3.0	5.5	
rica*	7.6	7.7	7.4	2.4	2.5	2.1	
	13.1	6.8	13.1	13.9	6.4	11.9	
	5.0	5.0	5.0	-0.6	1.4	0.7	
rab Emirates	9.7	10.3	11.0	7.7	6.2	8.5	
	14.0	11.0	9.0	7.4	2.8	1.0	
ve	3.0	2.0	3.0	1.7	-3.2	-3.3	
merica	11.0	11.4	11.1	9.2	9.1	8.9	
	12.7	12.7	12.7	11.1	10.5	10.5	
	3.0 11.0	2.0 11.4	3.0 11.1	1.7 9.2		-3.2 9.1	

*Countries with significant participation

**U.S. data are from various years of the Willis Towers Watson National Trend Survey.

Notes: Global and regional trend rates are weighted averages based on GDP per capita. No response is indicated by NR.

India. The increase in chronic illness and lifestyle-related conditions continue to drive the use of medical facilities and services. These factors, along with a lack of access to treatment as well as delays in receiving service, result in the rise in medical trend. Insurers are striving to improve underwriting and pricing controls for medical policies, which is helping to correct some claim loss ratios. But in many instances we still see an underpricing of medical programs in relation to the actual loss ratios.

Malaysia. The availability and adoption of new medical technologies and equipment is part of the reason for medical cost being driven upward to 11.4% in 2018, and a projected 13% in 2019. We continue to observe medical service providers recommending potentially unnecessary treatment/diagnostic procedures resulting in higher overall bills. In addition, while we see some interest in corporate wellness programs, the focus remains on curing or alleviating conditions rather than using preventive measures and effective wellbeing initiatives.

Philippines. Private health insurance in the Philippines is dominated by health maintenance organizations (HMOs). A typical plan covers 100% of inpatient and outpatient care within the HMO's network, up to a maximum plan limit. However, many plan designs lack consumerism elements such as deductibles and copays discouraging responsible use. This, combined with poor triaging in hospitals nationwide, fuels annual cost increases. In fact, general inflation this year hit 6.8% in September, a record high over the past decade. This may drive medical inflation to over 10%.



Singapore. The aging population, coupled with the costs of more sophisticated medical equipment and treatments, continue to drive higher medical inflation. There is also a shortage of medical facilities and capacity, which is not helped by the popularity of Singapore as a regional destination for medical tourism. The introduction of medical fee benchmarking by the government, as well as planned future investments in more hospital facilities, will help to moderate some of the increasing medical costs.

Europe

While Europe has the lowest level of gross medical trend increase for private medical insurance, the statistics for individual countries can still be adversely affected by numerous factors – high inflation is one of them.

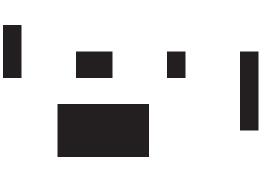
France. With the country's social security system paying for more than 75% of the total health costs in France (all employer plans are fully integrated with social security), medical trend is heavily influenced by the government. Similar to prior years, controlling health care spending remains a priority, with a focus on cutting costs for hospital care and medicines. In 2017, this government policy reduced the increase in medical consumption to 1.3%, according to Ministry of Health figures. This helps keep medical trend at a relatively low level in France, and the increase is projected to be just 2.5% in 2019 by insurers.

Spain. Medical trend also remains relatively low and consistent in Spain at around 4%. This is largely due to the integration of health care with the social security system, where major medical expenses are realized and private insurance is predominantly used for minor medical procedures. Since there are less issues surrounding access to care in the Spanish public health care system for major medical procedures (like surgery), it is common for members to use the public system, which helps reduce medical trend.

Turkey. This country shows the highest rate of medical trend in Europe, with a projected 18% in 2019, rising from 14% in 2018. A significant driver in this is the increased general inflation (10.5%) and the weakening Turkish lira, which impacts the cost of imported medical devices and supplies.

U.K. We continue to see various initiatives from insurers and medical plan administrators to manage medical inflation and mitigate cost increases, which have the effect of keeping the medical trend at a steady 6% to 7%, even though increased Insurance Premiums Tax doubled from 6% to 12% in less than two years. Most U.K. providers are continuing the roll out and promotion of their directional plans, whereby the insurer chooses/directs to the relevant clinician and hospital group rather than the individual patient or their general practitioner. This allows insurers to direct their members through smaller numbers of hospitals and treating clinicians – securing more favorable macro-deals but also managing the episode more closely and eliminating any excess costs.

Providers are also actively promoting softer directional models through condition-specific self-referral pathways for conditions such as musculoskeletal, mental health issues and cancer. We anticipate continuing challenges in accessing prompt treatment within the state-sponsored National Health Service (NHS), which will continue to drive demand and cost within the private health care market. We also expect to see a continuing shift of some therapies and treatments, such as cancer drugs and therapies, from the NHS to the individual and, ultimately, private health insurance.





Middle East and Africa

The projected average rise in the Middle East and Africa is 12.4% for 2019, which represents a large jump from previous years. Many African locations are reporting double-digit increases – the norm in major private medical markets such as Nigeria and Kenya. We are also seeing double-digit increases in the major Middle East medical markets of the U.A.E., Saudi Arabia and Egypt.

Saudi Arabia. The double-digit trend continues, driven by the introduction of enhanced benefits as part of the mandated health insurance regulation (CCHI) as well as significant price increases in some hospitals. Hospital closures in key locations such as the Eastern Province have reduced competition and choice, allowing other facilities to raise their rates.

South Africa. Medical rates have been impacted by the Value Added Tax (VAT) increase, which was effective as of April 2018. While medical schemes initially absorbed this increase in 2018, they now need to pass on the rate hike in 2019, so total costs will increase by 1% in 2019. Without this VAT increase, we may have seen even lower increases in 2019 compared to 2018.

United Arab Emirates. The U.A.E. remains one of most expensive locations for medical care in this region with double-digit medical trend allied to a projected 11% increase in 2019. With the increased capability of the health care sector to treat complex medical conditions such as organ transplants and oncology, we are seeing continued increases in cost and utilization. There is a possibility of some price

correction with increased competition to gain market share during the rollout of mandatory insurance. Additionally, we are seeing cost-containment initiatives to manage cost through government-driven pharmacy benefit management. The promotion of generic pharmaceuticals in Abu Dhabi is an example of this, as is insurer focus on controlling waste and abuse, including fraudulent claims.

The Americas

Trend rates are projected to remain at 11% on a combined basis, much of which is driven by the larger medical markets of the Americas.

Brazil. Medical trend is nearly four times the rate of general inflation at a projected rate of 15.3% for 2019. The key factors behind this include unnecessary treatments, incorporation of costly new technologies and expansion of mandatory procedures to be covered by private medical plans under the national regulatory (ANS) ruling. We are also seeing insurer loss ratios worsen, with an average reported loss ratio of 83% (as reported by the ANS) versus a typical break-even level of 70% in Brazil. Given this, we are seeing significant steps taken in cost containment by employers - including the exclusion of obstetric coverage for new hires for their first 12 months of employment - increasing levels of coinsurance depending on the type of procedure or type of medical provider and mandating a higher coinsurance with higher cost vendors. Employers are also looking at the use of more restricted provider networks or a lower level of reimbursements.

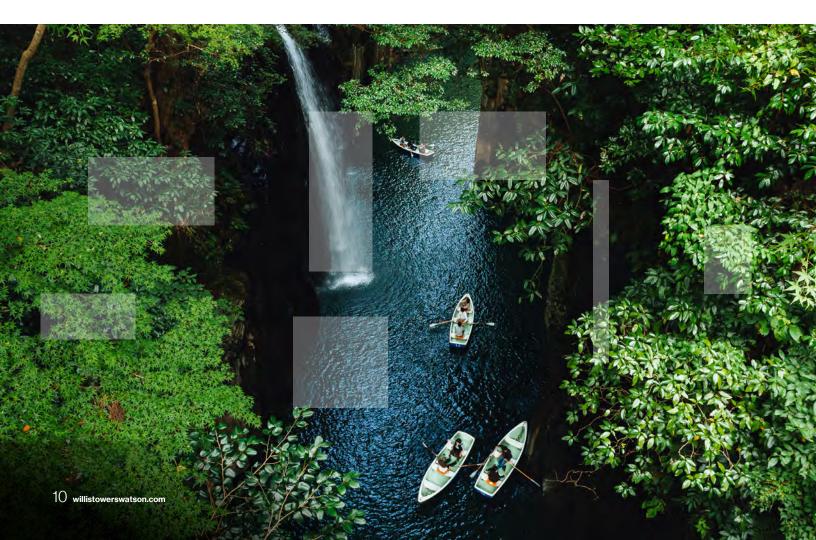
Colombia. Medical trend remains at a lower level than the rest of the Americas, projected to be 6.5% for 2019, in line with prior years. The deceleration of the economy has led to a moderation in general spending, which has driven employers to look for lower cost and reduced coverage medical plan alternatives. In addition, the government has implemented a price control policy on prescription medications, which has also helped manage the level of medical trend.

Mexico. Despite a slight estimated increase to 11.4% for 2019, the value of the medical trend in Mexico has been rather stable during the last years, further supported by the recent stability in the exchange rate of the peso, which has kept the costs of imported medical devices and hospital supplies under control. However we have seen an increase in the morbidity of diseases such as neoplasia, leukemia, sclerosis and conditions related to the circulatory system, which has produced an average cost increase of 15%. Prescription drugs have also seen an increase of 5%, in line with general inflation.

What is driving cost?

There are two main concerns about the cost of medical care in the future: pharmacy costs and medical practitioners overprescribing or recommending that policyholders use too many services. Asked to identify the three most significant factors behind rising medical costs, 70% of respondents cited the overuse of care due to practitioners recommending too many services. Second place is equally revealing: While it is 18 percentage points behind, the overuse of care by insured members is another contributing factor.

Further questions elicit more data as to the services involved in the increase. Most dramatic was that 66% of respondents in the Americas saw pharmacy services as being responsible for a moderate increase in changes over the next five years, with a further 14% seeing the increase as significant. While 45% of respondents in the Middle East and Africa foresee a moderate rise in pharmacy costs, a further 21% expect to see a significant increase.



Europe is the lowest in each of the categories in which it appears, with the exception of behavioral and mental health problems including substance abuse. Here, there are 41% who see these conditions as being responsible for a moderate increase in health costs, with a further 9% seeing them as potentially responsible for a significant increase.

A similar ratio applies in the Americas and Asia Pacific, but in the Middle East and Africa, steep increases are predicted from a low baseline. While 21% see these conditions as responsible for a significant increase, there are 17% who think behavioral and mental health problems may be responsible for a significant increase, suggesting that this is an area which will need much closer attention. The highest rate of projected, significant increase was also seen in the same region - 25% for hospital and inpatient care. Figure 4. What are the three most significant factors driving medical costs per person (employee/provider behavior)? 0% 20% 40% 60% 80% Overuse of care due to medical practitioners recommending too many services 70 Overuse of care by insured members 52 Insured member's poor health habits 36 Underuse of preventive services 34 Poor quality or misuse of care because primary, specialty and facility care are not integrated 24 Poor employee understanding of how to use the plan 14 No information available 5

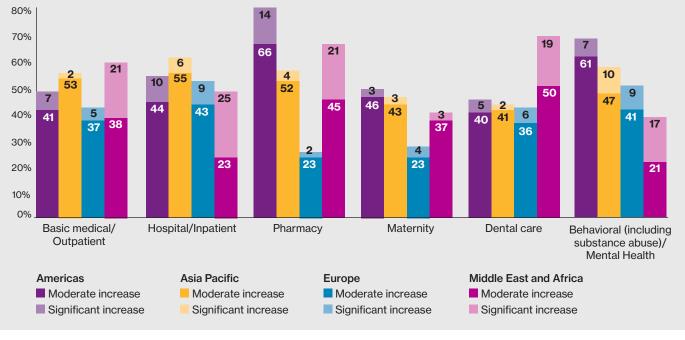


Figure 5. How do you expect costs related to the following service categories to change over the next five years?



Top three conditions globally

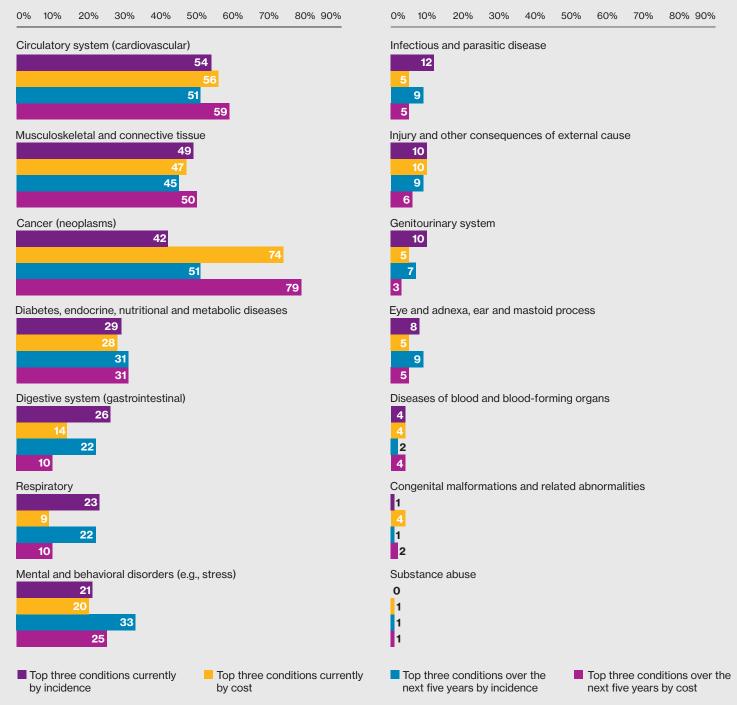
While circulatory, musculoskeletal conditions and cancer are the top three conditions, there are some regional variations behind the averages. Seventy-two percent of respondents in the Americas placed circulatory conditions among their top three conditions, excluding maternity, causing the greatest number of claims; 54% did in Europe, while just 48% did in the Middle East and Africa.

Similar divergence occurred with musculoskeletal conditions. Just 24% of respondents in the Americas placed them in the top three most prevalent conditions, but 66% of European respondents indicated the same. And although cancer was placed in the top three by 54% of respondents in the Americas, just 32% of the respondents from Asia Pacific agreed. Such wide statistical variations may reflect culinary habits, other lifestyle factors, speed of diagnosis and efficiency of treatment.

There will be no change in the hierarchy of these illnesses over the next five years, according to those who responded to the survey, although there are signs that other conditions may become increasingly important. The 35% figure of European respondents who would place mental and behavioral disorders in their top three conditions by cost suggests it may be a growing area of concern, which could be seen more widely in years to come.



Figure 6. Excluding maternity, what are the top three conditions currently causing the highest incidence (most common) and the highest cost of claims in your medical client portfolio?



Diabetes – a sleeper condition?

This year's survey revealed some ominous trends about the incidence and cost of claims arising from diabetes, endocrine, nutritional and metabolic diseases. While circulatory and musculoskeletal conditions, as well as cancer, remain in the top three, diabetes and other similar conditions are responsible for the high incidence and the high costs of claims in the Americas as well as the Middle East and Africa, in particular.

In the survey, 56% of respondents from the Middle East and Africa identified diabetes as being among the top three conditions, a total that exceeded that of circulatory, musculoskeletal and cancer-related conditions in that region. While the Americas as a whole was lower, with 45% of respondents identifying diabetes in the top three conditions, the total was much greater than the 24% who selected musculoskeletal conditions, a top three global condition (49%). The World Health Organization's (WHO's) research suggests diabetes is the second highest cause of death in Mexico, for instance, just behind cardiovascular disease, and affects over 10% of the population.²

Perhaps more alarming is the number of respondents who expect the incidence of diabetes to increase over the next five years. Again, the Americas and the Middle East and Africa were particularly high. Sixty-four percent of respondents in the Middle East and Africa placed it in the top three of conditions that would increase in importance – the highest of any condition. The closest was cancer, which was 59%. In the Americas, 60% of respondents expect diabetes to increase in incidence second only to circulatory conditions (80%).

There is a significant cost implication here as well. Over the next five years, 35% of respondents in the Middle East and Africa expect diabetes to place highest in the top three conditions in terms of cost. There is a further 67% of respondents in the Americas who expect the same. To add some perspective, this is second only to the 71% who saw cancer as the most significant.

Diabetes and prediabetic conditions are difficult to track as they tend to be handled as outpatient claims for much of their trajectory. In many countries, outpatient services may not be included in the main medical insurance plan. It is only when a severe side effect occurs – such as neuropathy, kidney disease or eye problems – that the condition starts to show in the claim statistics. This is why diabetes could be described as a "sleeper" condition, since it demonstrates the business case for offering employees outpatient and preventive care services now to avoid the higher-cost claims coming through later.

Indeed evidence suggests that many people do not know they have diabetes or prediabetes.

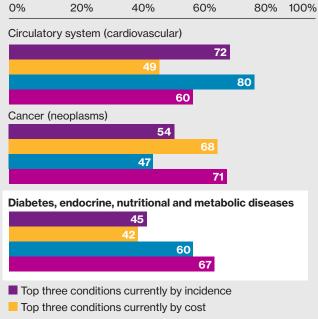


Indeed evidence suggests that many people do not know they have diabetes or prediabetes. In the U.S., a country for which solid, reliable data exist, 84 million Americans (one in three) have prediabetes and 90% are unaware of it.³ Engaging with a program sponsored by the Center for Disease Control could reportedly lower their risk of developing type 2 diabetes by 58%, or 71% for people over 60. Where insurers and, by association, employers do not provide preventive care or a contribution to outpatient services, some money is being saved in the short term; however, more money will be spent in the longer term when the condition can no longer be prevented but will need to be managed.

Exactly what the implications might be is suggested by four countries in which the WHO notes the rate of diabetes is steeply increasing. India is known informally as "the diabetes capital of the world," reportedly having over 50 million people with the condition and a predicted increase to 87 million by 2030.^{4,5} Other countries are not far behind: China has a higher population and a proportionately greater problem. By 2030, 129 million people could have diabetes – over 12% of the population. Prediabetes in China is already at epidemic levels, with 15.5% of the population or 148.2 million adults with the condition.^{6,7}

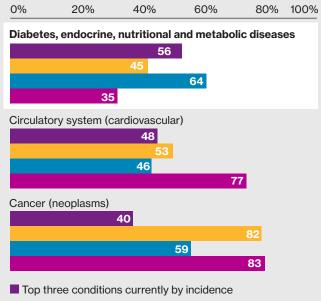
Both the U.A.E. and Mexico may not have the same population as China or India, but they are seeing some dramatic increases. In the U.A.E., WHO data suggest the incidence of diabetes was already at around 10% of the population in 1980, a much higher baseline than either China or India, and increased still further to over 15% by 2014.⁸ Mexico is less dramatic but more disquieting – a gradual but definite increase from 5% in 1980 to just over 10% by 2014; however, diabetes accounts for 14% of deaths, the highest of any of the four countries. Measures are already being taken to control costs in these regions. Around 50% of insurers in the Americas have specific diabetes programs, with 4% of those planning to extend them in the future. In the Middle East and Africa, just 21% have specific programs but 40% plan to provide them in the future, which suggests that there will be fairly rapid change. The pace of this change is somewhat slower in Asia Pacific, where 21% of insurers provide a program now and 25% plan to do so in the future. All three regions have a high incidence of education programs around diabetes and related conditions, but there are signs that more direct measures are being taken. Forty-six percent of insurers in the Americas and 52% of insurers in Asia Pacific have implemented spending limits and other restrictions for medications related specifically to diabetes. By contrast, European insurers do not plan similar initiatives, perhaps because socialized medicine absorbs the costs. In all cases, irrespective of the region, early diagnosis along with condition management may hold the answers to keeping costs down.

Figure 7. Americas: top three conditions (excluding maternity) today and in the next five years currently causing the highest incidence and cost of claims



- Top three conditions over the next five years by incidence
- Top three conditions over the next five years by cost

Figure 8. Middle East and Africa: top three conditions (excluding maternity) today and in the next five years currently causing the highest incidence and cost of claims



- Top three conditions currently by cost
- Top three conditions over the next five years by incidence
- Top three conditions over the next five years by cost

 ⁶²"Mexico: Diabetes Country Profile," World Health Organization, (2016). Retrieved from http://www.who.int/diabetes/country-profiles/mex_en.pdf
 ³⁰"Campaign Fact Sheet: Prediabetes Awareness," AD Council, (June 2017). Retrieved from http://prediabetes.adcouncilkit.org/wp-content/uploads/sites/6/2017/07/ AdCouncilCampaignFactSheet.pdf

4"India: Diabetes Country Profile," World Health Organization. Retrieved from https://www.who.int/diabetes/country-profiles/ind_en.pdf?ua=1

⁵ Rakesh Malik, "India is the diabetes capital of the world!" *Entertainment Times*, (January 28, 2016). Retrieved from https://timesofindia.indiatimes.com/life-style/ health-fitness/health-news/India-is-the-diabetes-capital-of-the-world/articleshow/50753461.cms

"China: Diabetes Country Profile," World Health Organization, (2016). Retrieved from https://www.who.int/diabetes/country-profiles/chn_en.pdf?ua=1
""Diabetes: The Situation in China," World Health Organization, (2010). Retrieved from http://www.wpro.who.int/china/mediacentre/factsheets/diabetes/en/
""United Arab Emirates: Diabetes Country Profile," World Health Organization, (2016). Retrieved from http://www.wpro.who.int/diabetes/country-profiles/are_en.pdf

Managing medical trend: cost sharing and cost management

Previous Global Medical Trends Surveys note that member coinsurance remains the most popular cost-sharing approach around the world. Europe remains the exception to this as insurance plans are more heavily integrated with government programs.

Figures show that member coinsurance is considered typical across the Americas, with 43% of the respondents from this region reporting such systems are very typical and 38% saying they were typical. This trend was reported in the other regions, albeit not as emphatically. In the Middle East and Africa, while just 18% of insurers saw member coinsurance as very typical, 40% saw it as typical.

Other cost-sharing approaches were less universally popular. Member copays, involving a single, flat fee were popular in Asia Pacific, where 7% rated them very typical and 28% rated them typical. The same region also favored deductibles (whether per claim per service or per year), with 4% rating them very typical but 34% rating them typical. Deductibles were also popular in the Americas, where 15% rated them as very typical and a remarkable 55% saw them as typical.

The leading measure of managing costs showed significantly less regional variation. Contracted networks of providers for all treatments were universally popular. Even in Asia Pacific, where they were the least popular of the four, 60% of insurers identified them as the most effective tool for managing costs.

Figure 9. How typical are the following cost-sharing approaches for the medical products you offer?

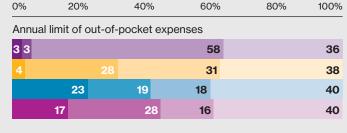
0%	2	0%		40%	. 6	60%		80	%	100%
Member	Member coinsurance (fixed percentage of services)									
				43				38	4	15
12			20					48		19
14		9				42				35
	18				40		14			28

Deductible (including per claim or per service, or per year)

	15		55		15	14
4				42		20
	19	26	25			30
4		41	23			32

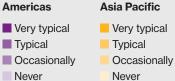
Member copays (flat fee)

	20		25		26	29
7				25		40
7	14			37		42
8		20		29		22



For group policies, premium cost sharing by insured members (including employees and/or dependents)

	18					54	15	13
2		21			43			34
	17		32			26		26
7		18		30				44





Occasionally

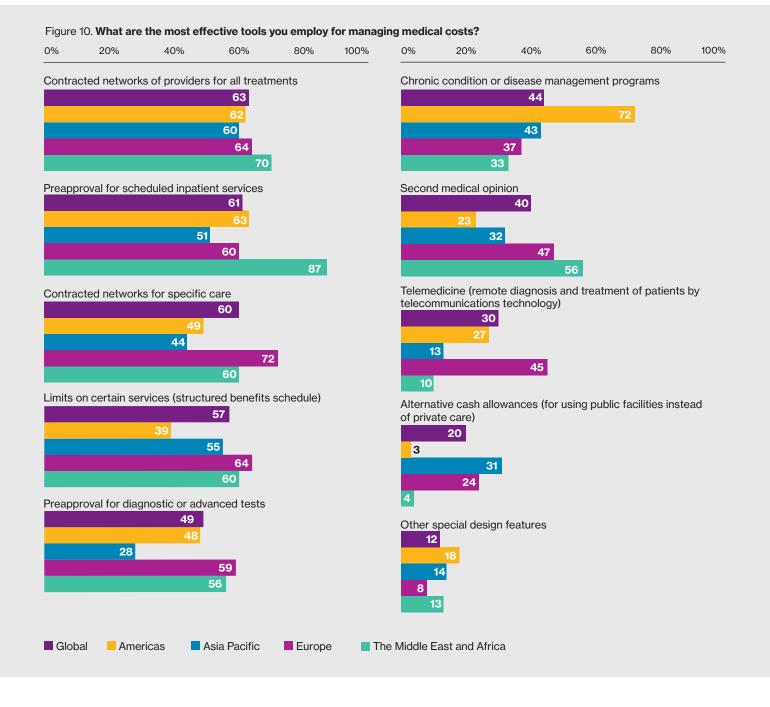
Never

The Middle East and Africa



In the Middle East and Africa, 70% found them to be most effective. In this region, 87% of insurers found preapproval for inpatient services to be most effective.

While technological advances continue to evolve in medicine, remote diagnosis and treatment of patients is not yet proving to be an effective method of cost management. It is most popular in Europe, where 45% of insurers found it effective, and least popular in the Middle East and Africa, where just 10% of insurers considered it effective. This may, however, become increasingly important as the technology that lies behind it becomes more sophisticated. Least popular were cash allowances for using public facilities instead of private care. While 31% of insurers in Asia Pacific saw this as effective, just 3% of their counterparts in the Americas agreed.





Claim analytics

Insurers are more likely to make detailed claim data available for employers with more insurable lives, but the focus is still limited to the top 10 causes of medical conditions rather than more comprehensive data. Seventy percent of respondents provide detailed data to employers with over 500 lives, whereas only 61% do so for employers with 50 to 200 lives. It falls to just 30% for employers with less than 50 lives.

The latest system of claim coding is ICD-10, based on the International Classification of Diseases published by the WHO (ICD-11 is coming in 2022). But only 40% of worldwide insurers currently use this system, which is disappointing.

ICD-9 is still being used by 14% of insurers globally, most predominately by respondents in Europe (20%). Local, country-specific coding systems are also most popular in Europe (26%). By way of contrast, 61% of respondents in the Middle East and Africa have implemented ICD-10, showing that it commands widespread support in certain locations. Only 10% of respondents in the Middle East and Africa still use local coding systems. A minority declared that they did not use any coding system at all, a position shared by 12% of respondents in Asia Pacific and just 4% of respondents in the Americas.

Fully insightful claim analytics remain a challenge in many countries due to the restrictions on data available from insurers and the lack of consistency in diagnosis coding. It is up to the policyholders to pressure the insurers for better data on their claims experience and to use it as a key criteria in selecting a suitable provider.

Figure 11. What type of claim data do you make available to your clients?

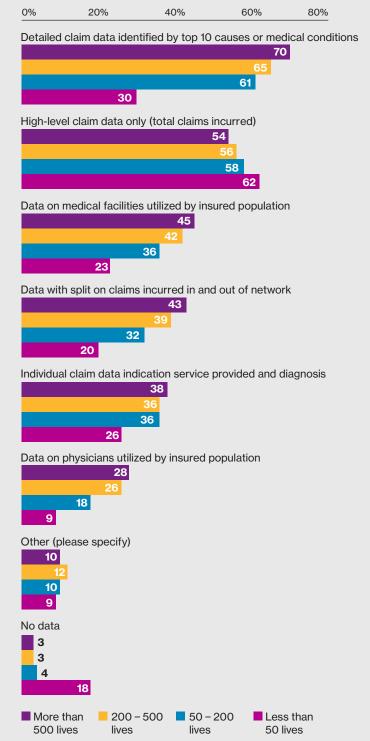


Figure 12. What claim-coding system do you use to adjudicate medical claims?

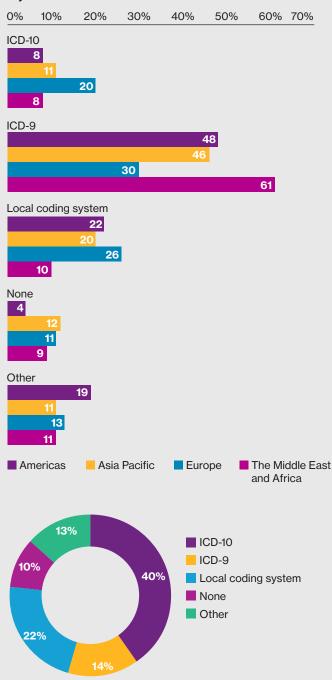
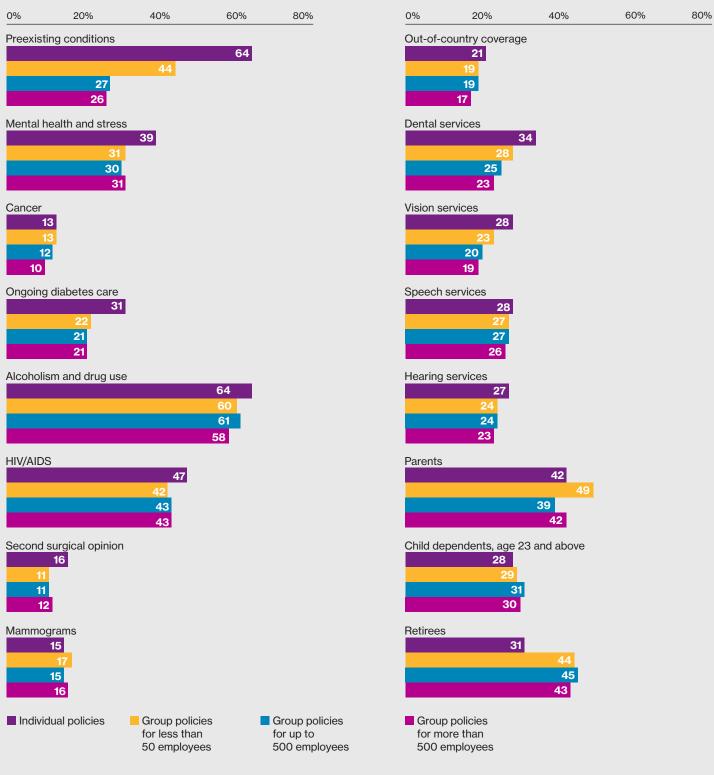


Figure 13. Do your standard (typical) medical insurance programs exclude any of the following?



Medical insurance program exclusions

Preexisting conditions are a typical reason for exclusion from small group and individual policies, although the terrain is not even. The global average for exclusion due to a preexisting condition is 44% for small groups, but the 58% exclusion rate in Asia Pacific and 51% for Europe are noteworthy. Alcoholism and drug abuse are also excluded in at least 85% of policies in the Middle East and Africa, the highest recorded total.

Scaling up to group policies with more than 500 employees makes it altogether more likely that preexisting conditions will be covered. Despite the rise in mental health and stressrelated issues, it is still concerning to see 30% of all group policies exclude this condition.

The rate at which alcoholism and drug abuse are excluded from policies is also broadly consistent. The rate for the Middle East and Africa, for instance, among people who are involved in a scheme with less than 50 participants, is 93%. For people who are involved in a scheme with over 500 members it is 85%.

Conclusion and next steps

While global medical trend remains relatively stable and is generally experiencing only modest increases, there are enough exceptions to be a source of genuine concern.

For instance, medical trend remains a particularly sensitive barometer of inflation and other currency trends. In Turkey, where inflation has increased 10.5% and the Turkish lira is currently weak, medical trends are set to increase by 18%. The same can be said of Argentina, where there is 22.7% inflation and there has been a corresponding increase of 24.6% in medical expenses/costs per covered life. The Venezuelan bolivar is set to reach 1.37 million percent inflation by the end of the year, creating such a surge in medical expenses it has not been sensible to include the figures in this report.

The reasons for this are readily understandable. Increased inflation means that medical equipment and pharmaceuticals are more expensive to import, and the cost has to manifest itself somewhere in the process. Where prices are more closely controlled and the consumer has a degree of protection, as in Europe, medical trend is lower and increases gentler.

Economic health and medical trend are inextricably linked. A country that sees ever higher medical bills is one whose economy may be experiencing trouble, but it may also be a sign that the relationship between state and private providers has been disrupted.

And while there is no change in the top three conditions by cost, what seems like stasis actually hides considerable uncertainty. Circulatory, musculoskeletal conditions and cancer are the top three global conditions, but others are increasing in prominence. One-third of insurers identified mental disorders as set to enter the top three conditions within the next five years, and then there is the worldwide occurrence of diabetes.

In India the incidence of prediabetes has been described by the WHO as an epidemic – a description which seems fitting in view of future projections. There will be 87 million Indians who are diabetic by 2030 unless there are significant lifestyle changes and prevention programs have an effect. Similar stories are seen in China, where 12% could be diabetic by 2030. But this is perhaps not as alarming as Mexico, where diabetes and related conditions presently kills 14% of the population. The increasing incidence of diabetes suggests that this figure will only increase further.

As costs rise along with the occurrence of what should be preventable conditions, it is inevitable that health care providers will start to wonder exactly which areas represent the greatest drain on finite resources. The survey suggests that pharmacy costs are important, as are medical practitioners who overprescribe from the pharmacy or suggest their patients access too many services. Seventy percent of respondents believed practitioners were causing an overuse of care, and over 50% said it was the policyholders themselves who were driving this issue. There is an increased focus on cost containment from both insurers and employers, with preferred or restricted networks now becoming much more commonplace. Deductibles and copays, which weren't common 10 years ago, are now standard practice in many countries.

This year's survey also suggests that conditions such as diabetes are becoming more important, which will pose a challenge to existing health care practices. Diabetes is cheaper to manage when the condition manifests itself as prediabetes and, even when it has been diagnosed, there are behavioral changes which can significantly lessen its impact and, by association, the costs of managing it.

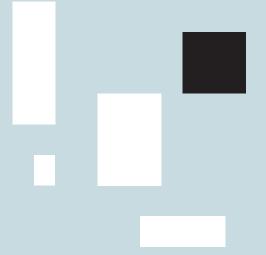
Mental health and stress continue to be rising concerns, yet one-third of all insurers say they do not cover this under their medical policies. In addition, only about 60% of insurers cover HIV/AIDS when lower cost treatments and drug regimens are readily available to reduce the cost impact of this illness.

It is appropriate to end this year's report with recommendations on how to mitigate and manage medical trend.

 Pay attention to conditions outside the top three. Cancer, musculoskeletal and circulatory conditions cause the highest incidence of claims and the highest cost of claims in medical portfolios, but that does not mean that other conditions are not significant and that treating them does not have the potential to represent significant financial outlay. Diabetes and mental health conditions in particular may enter the top three in the future, and preemptive planning now and investment in prevention or amelioration may represent a more fruitful use of resources.

- Understand your country and region. There is significant variation between regions and even between countries as to what the dominant health conditions are and the health systems used to manage them. Europe has traditionally low levels of medical inflation, but this does not mean that all countries have escaped steep rises. Similarly, some Latin American countries have high inflation, but in Mexico the peso has been more tightly controlled and there are cost-limiting measures in Colombia as well. The regional trend does not always speak for the country.
- Better claim coding and reporting is still needed. To enable employers and employees to better manage health care costs we need better data. More insurers are making claim reports available, yet just over half of insurers report using an International Classification of Diseases (ICD) coding system, which is concerning. What's more troubling is that 10% of insurers use no coding system and 35% use a home-grown or non-ICD coding system, all of which makes it challenging for employers to have transparency and consistent reporting on a country, region or global basis.





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