



Longevity Governance in the United Kingdom

United Kingdom of Great Britain and Northern Ireland



General metrics

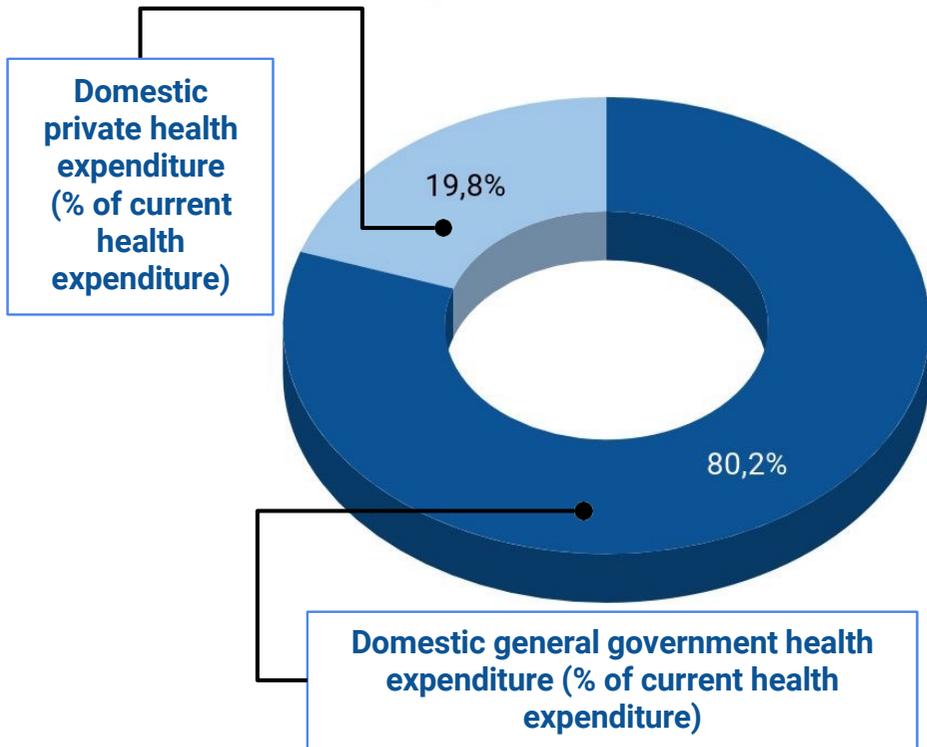
HALE	Both Sexes HALE (2016)	71.9 years
	HALE/Life Expectancy Difference 2016	9.2
Economy	GDP per Capita, Current Prices (2016)	40.54 thousand (\$)
	Annual GDP Growth (2016)	1.8 %
Healthcare	Current Health Expenditure per Capita (2016)	3.96 thousand (\$)
	Public Health Care Expenditure 2016	9.76 % of GDP
Retirement	Age Dependency Ratio 2016	56
	Population over 65, 2016	18.4 %
	Number of WHO Age Friendly Cities and Communities	24
General Health Status	Alcohol Consumption per Capita (Litres of Pure Alcohol) 2016	11.5
	Annual Cigarette Consumption (Units per Capita) 2016	827
	Prevalence of Overweight among Adults 2016 (Age-Standardized Estimate)	63.7 % of adults

Longevity-Related Indices

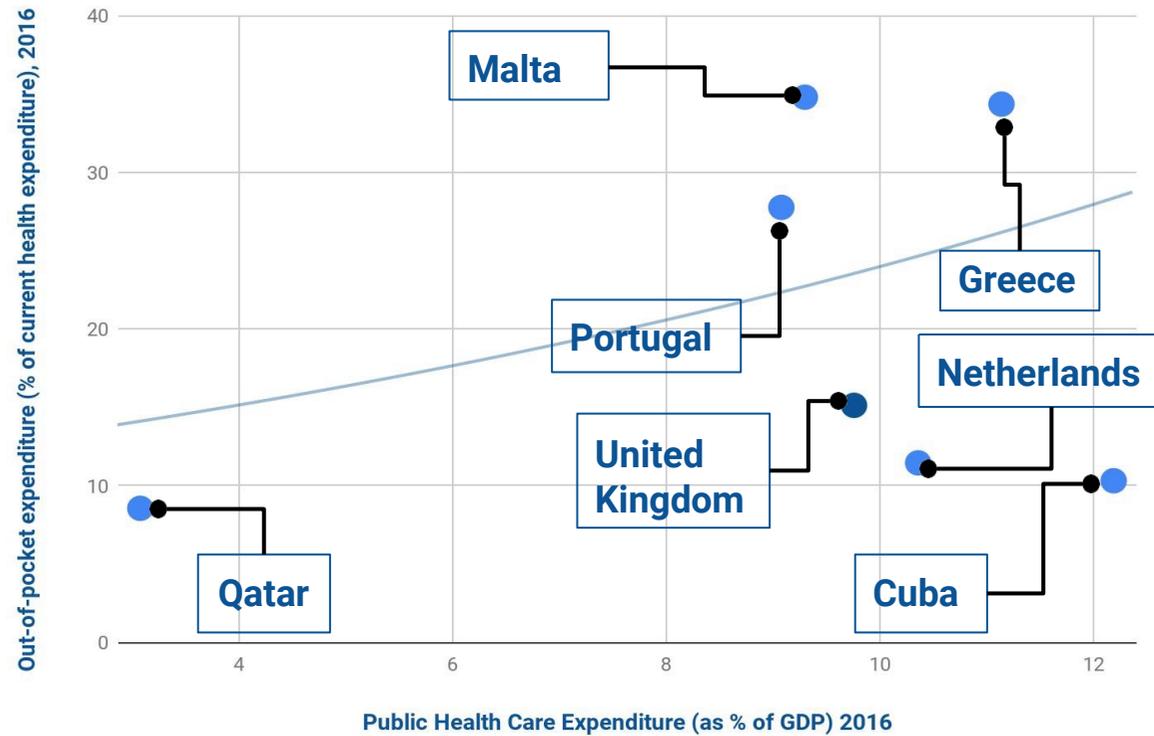


- The Healthcare Access and Quality Index -2016: **90**
- Human Development Index 2016: **0.92**
- E-Government Development Index 2016: **0.92**
- Corruption Perceptions Index 2016: **81**
- Global Gender Gap Index 2016: **0.75**
- Democracy Index 2016: **8.36**

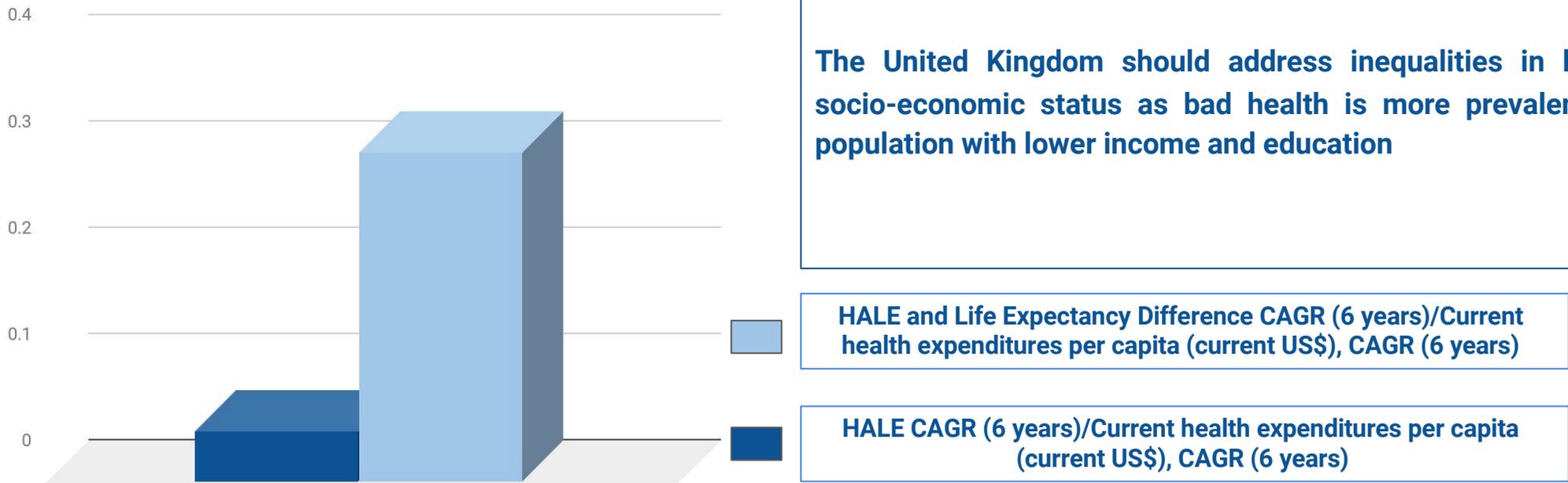
Current Healthcare Expenditure



Countries with Medium HALE and Life Expectancy and Medium Gap

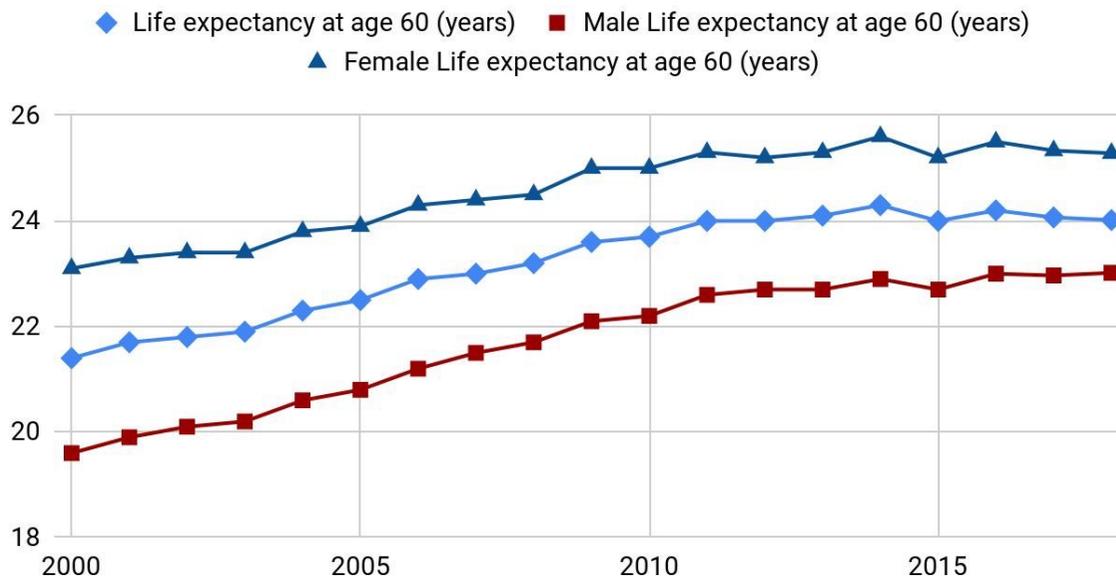
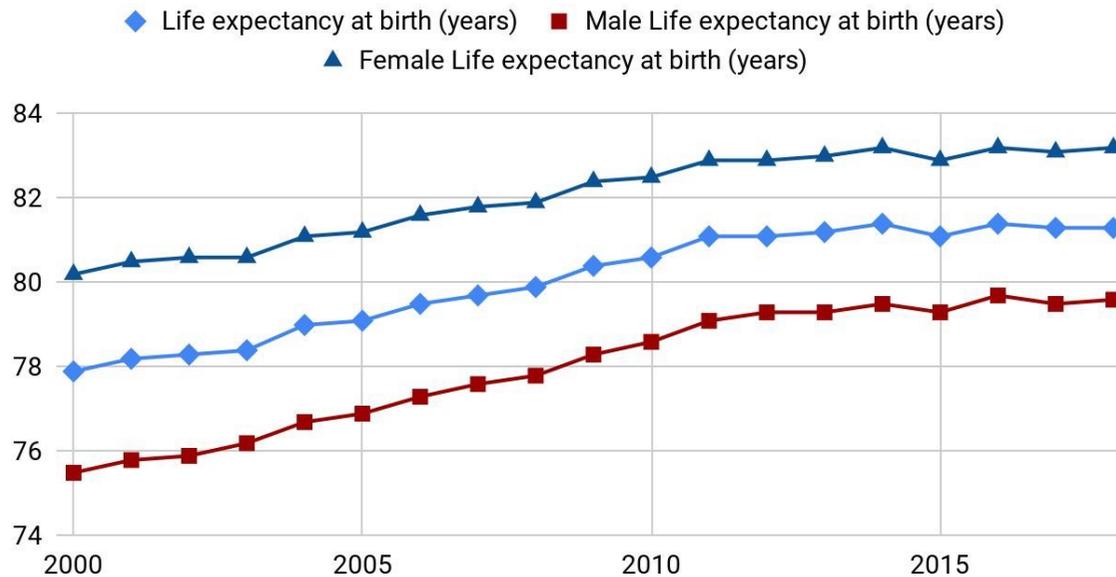


Effectiveness ratios



The United Kingdom should address inequalities in health by socio-economic status as bad health is more prevalent among population with lower income and education

Life Expectancy Slowdown in the United Kingdom



The 20th century saw dramatic improvements in life expectancy resulting from public health measures such as childhood immunisations, the introduction of universal health care, medical advances (such as in treatment of heart disease and cancer) and lifestyle changes, including a decline in smoking. By 2018 life expectancy at birth in England had increased to 79.6 years for males and 83.2 years for females.

The gender gap has narrowed since 2000, with mortality falling faster in males than females as a result of decreases in the high rates of smoking and mortality from cardiovascular diseases among men.

In recent years we observe the slowdown in life expectancy improvements both for male and female population. First of all such a trend is caused by the slowdown in mortality improvements. Stopped improvement in mortality is a result of a constellation of demographic factors such as ageing population and burden of age-related disease. It signals about exhausted demographic potential of the United Kingdom to further quantity improvements in life expectancy.

Health Status in the United Kingdom

Rank	Males	% of all deaths	Females	% of all deaths
	Cause		Cause	
1	Heart disease	13.6%	Dementia and Alzheimer's disease	16.6%
2	Dementia and Alzheimer's disease	8.9%	Heart disease	8.1%
3	Lung cancer	6.2%	Stroke	6.7%
4	Chronic lower respiratory diseases	6.1%	Chronic lower respiratory diseases	5.9%
5	Stroke	5.2%	Influenza and pneumonia	5.5%
6	Influenza and pneumonia	4.7%	Lung cancer	5.1%
7	Prostate cancer	4.1%	Breast cancer	3.7%
8	Colorectal and anal cancer	3.1%	Colorectal and anal cancer	2.5%
9	Leukaemia and lymphomas	2.6%	Leukaemia and lymphomas	1.9%
10	Cirrhosis and other diseases of liver	2.0%	Kidney disease and other diseases of the urinary system	1.8%

The leading causes of death for both female and male population are age-related diseases, they are heart diseases and brain dysfunctions, such as dementia and alzheimer's disease.

Among other risks of death are factors that associate with winter and cold weather. There has been a substantial shift in the age structure of the population in recent decades: the number and proportion of people at older ages has increased. There are likely to be more people living with dementia and other long-term conditions that may make them particularly vulnerable to the effects of flu and other winter risk factors, and who may be particularly reliant on health and social care services.

Main Factors Contributing to the Slowdown in Life Expectancy in the United Kingdom

1. Inequalities in life expectancy

People living in more affluent areas live significantly longer than people living in deprived areas. In 2015–17. Much of this inequality is caused by higher mortality from heart and respiratory disease, and lung cancer, in more deprived areas. The gap in healthy life expectancy at birth is even greater – about 19 years for both males and females, and those living in the most deprived areas spend nearly a third of their lives in poor health, compared with only about a sixth for those in the least deprived areas. Socio-economic inequalities in life expectancy are also widening in both sexes as a result of greater gains in life expectancy in less deprived populations. Between 2012–14 and 2015–17, the difference in life expectancy between the most and least deprived widened by 0.3 years among males and 0.5 years among females. Among females living in the most deprived areas life expectancy fell by 100 days over this period, in contrast to the gain of 84 days among females living in the least deprived areas.

2. A slowdown in improvement in mortality rates for heart disease and stroke

Reductions in mortality from heart disease and stroke, which are leading causes of death, have historically driven improvements in life expectancy. Since 2011, there has been a slowdown in improvement in mortality rates for these causes which has therefore had a large impact on the trend in life expectancy. Up to 80% of these premature heart attacks and strokes are avoidable and this highlights the importance of focusing on preventative interventions such as stopping smoking, getting more physically active and lowering blood pressure and cholesterol levels. Stepping up efforts to reduce the risk of heart disease and stroke will also mean addressing the underlying wider determinants of health.

3. No improvement in death rates in young adults

While flu, heart disease and stroke have partly determined the trend in mortality rates in older adults, other causes of death have influenced the trend in younger people. Mortality rates among younger adults made almost no positive contribution to trends in life expectancy between 2011 and 2016, despite making small positive contributions in earlier years. The cause of death that had the biggest negative impact was accidental poisoning, with 70% of these deaths due to drug misuse and 10% due to alcohol. In the age group 20 to 34 years the leading causes of death are suicide & injury or poisoning of undetermined intent, accidental poisoning, transport accidents.

SWOT Analysis of Healthcare in the United Kingdom



STRENGTHS

- Healthcare in the United Kingdom is publicly funded, generally paid for by taxation. However, the UK also has a private healthcare sector, in which healthcare is acquired by means of private health insurance.
- Accessibility and affordability of healthcare services: everybody has access to exactly the same health care. Universal health care does not discriminate on any basis.
- Information on patients is shared between medical establishments in the form of electronic health care records.



WEAKNESSES

- The most common causes of premature death in 2016 are similar the UK: heart disease; lung cancer; stroke. Deaths due to dementia and Alzheimer disease increased again in 2017 and it remained the leading cause of death in England and Wales, accounting for 12.7% of all deaths registered.
- High level of cancer incidence. UK incidence is ranked higher than 90% of the world.
- The long waiting times becomes the main problem in other universal health care.



OPPORTUNITIES

- The digital transformation of the health and social care system. It is part of the ongoing commitment to introducing new technologies into the NHS in order to reduce the burden on clinicians and to enable staff to provide enhanced levels of care.
- Growing longevity economy. The ageing market is increasingly significant. In the UK alone, consumers aged 50+ spend over £500bn each year. This market segment is also growing faster than any other – both in absolute terms, as the number of older people rises, and as a proportion of total consumer spending.



THREATS

- An ageing population: health inequality is growing, the population is ageing and the NHS will need to adapt.
- Evolving healthcare needs that lead to increase in healthcare costs, such as the increase in cases of obesity and diabetes, antibiotic resistance, high level of cancer incidence.
- Estimated costs of progress in medical technology equal at least an extra £10bn a year.

Analysis of Strengths and Weaknesses of Healthcare in the United Kingdom



- Health care system is government-sponsored, and it is dependent on need to be cured, not ability to pay. Government through legislation initiatives protects people from the heavy financial costs of healthcare.
- Access to care is generally good. The health service provision is with relatively low administrative costs using cheaper generic medicines.
- It performs well in managing certain long-term health problems such as diabetes.
- Out-of-pocket payments are low, and few people report skipping consultations due to the cost of care (4.2% compared to an average of 10.5% among 17 OECD countries with comparable data).
- More than half of the English population successfully met the government guideline of five portions of fruit and vegetables per day. As well as maintaining a healthy diet, the government recommends at least 150 minutes of moderate intensity physical activity per week.



- Their active government's role in healthcare weakens the functionality of market mechanisms.
- The tight control undertaken by government in regards to medical expenses has resulted in a lack of medical resources, such as equipment, doctors and nurses in public hospitals.
- Although the gap has closed over the last decade for stroke and several forms of cancer, the mortality rate in the UK among people treated for some of the biggest causes of death, including cancer, heart attacks and stroke, is higher than average among comparable countries. The UK also has high rates of child mortality around birth.
- Unhealthy lifestyles are reducing the quality of life for many British adults and adolescents. Smoking and alcohol consumption among adults have declined over time, but drunkenness among adolescents remains an important concern. Among 15-year olds, 30.5% have been drunk at least twice in their life. Prevalence of obesity in the UK is 27%, the sixth highest in OECD countries and the highest in Western Europe. A further 36% of the population are overweight but not obese.

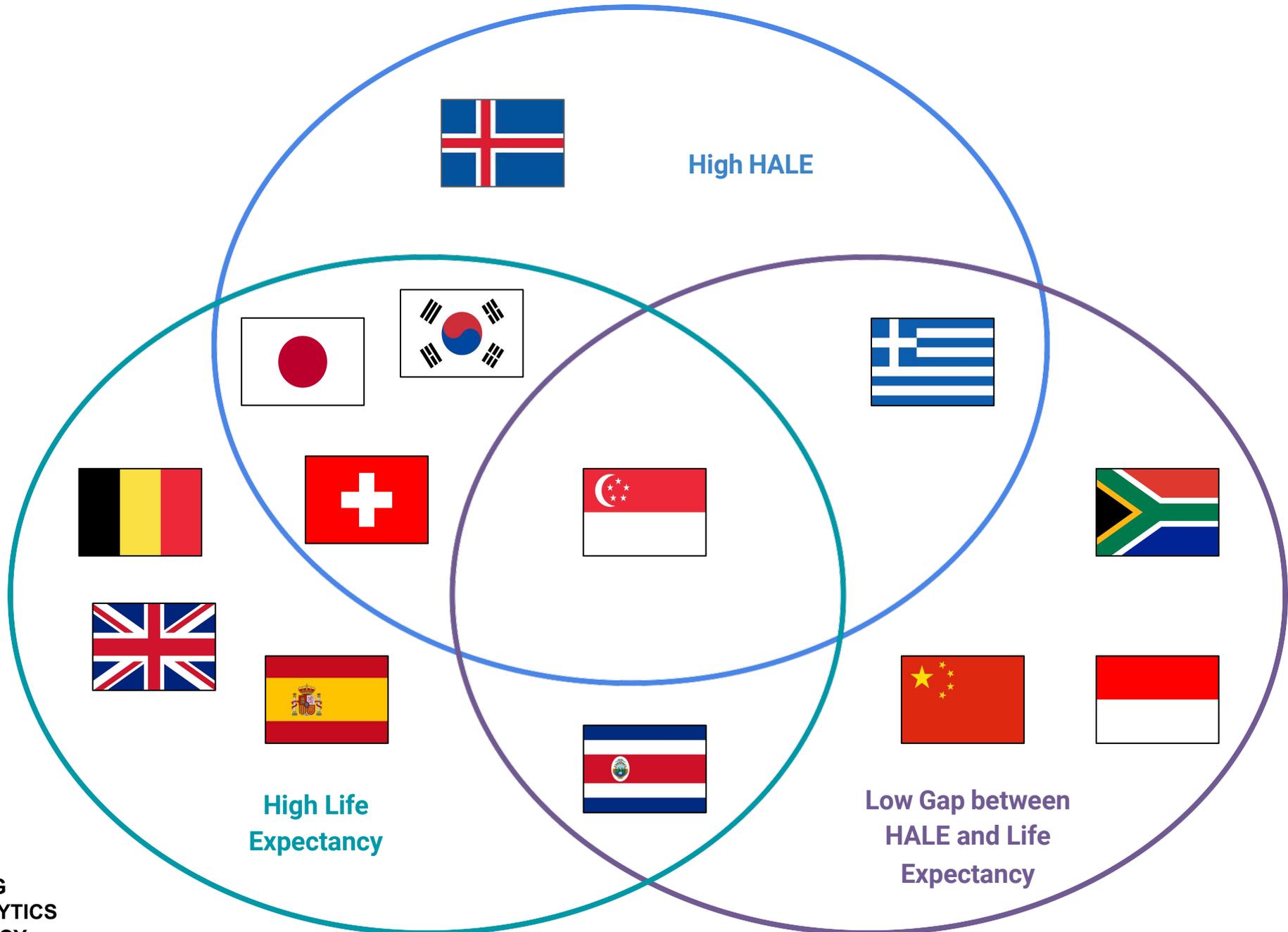
Recommendations for the United Kingdom

- **Implement more widely and deeply approaches to monitoring and improving health care quality.** [OECD reports](#) that many quality of care indicators are close to or just below the OECD average. Avoidable hospital admissions are also high.
- **Modifying or avoiding key risk factors, including tobacco use, unhealthy diet and physical activity.** Initiate strategies to improve the health of the nation, promote the importance of focusing on socio-demographic factors to ensure delivery of healthy newborns and decrease the burden of behavioral factors.
- **Improving the quality of care and reducing waste elsewhere in the system.** From drugs and pharmaceutical waste to biological and radioactive materials, healthcare waste demands expert disposal.
- **Undertake sustained effort to reduce risk factors** such as high body mass index, high fasting glucose, high blood pressure and high cholesterol that increases with ageing population.
- **Initiate more education and training programmes to to sustain improvements in health services.** The knowledge and skills of the health and public health workforce needs to be kept up to date and developed.
- **Promote research and initiate wider utilization of Artificial Intelligence for preventive medicine.** Research is vital in providing the knowledge needed to improve health outcomes and reduce inequalities.
- **Dealing with regional inequality.** The north of England generally suffers much poorer health than the rest of England, with lower life expectancy and earlier onset of chronic illness and disability. There is a need for economic development and regeneration of poorer parts of the country, and for high-quality health improvement programmes and care services in these areas.
- **Health records and linkage to survey data should be used more extensively** to refine disease prevalence estimates, and provide more reliable data to guide policy and programmes to address these causes of ill health.

The image features a dark blue background with a faint, light blue pattern of leaves and stems. Centered on the page is the text "Infographic Summary" in a bold, white, sans-serif font. This text is enclosed within a yellow frame consisting of four L-shaped corner brackets, one in each corner, pointing towards the center.

Infographic Summary

Health-Adjusted Life Expectancy Specification Framework



Global Healthy Longevity Landscape Overview

50 Countries:
 High HALE and Life Expectancy - 17
 Medium HALE and Life Expectancy - 18
 Low HALE and Life Expectancy - 15

Health-Adjusted Life Expectancy (HALE), used here as a measure of Healthy Longevity, is the average number of years an individual can expect to live free of chronic age-related disease



High HALE and Life Expectancy

Medium HALE and Life Expectancy

Low HALE and Life Expectancy

Global Healthy Longevity Landscape Overview

50 Countries:
 Big Gap between HALE and LE - 23
 Medium Gap between HALE and LE - 18
 Small Gap between HALE and LE - 9

Health-Adjusted Life Expectancy (HALE), used here as a measure of Healthy Longevity, is the average number of years an individual can expect to live free of chronic age-related disease



Small Gap between HALE and Life Expectancy

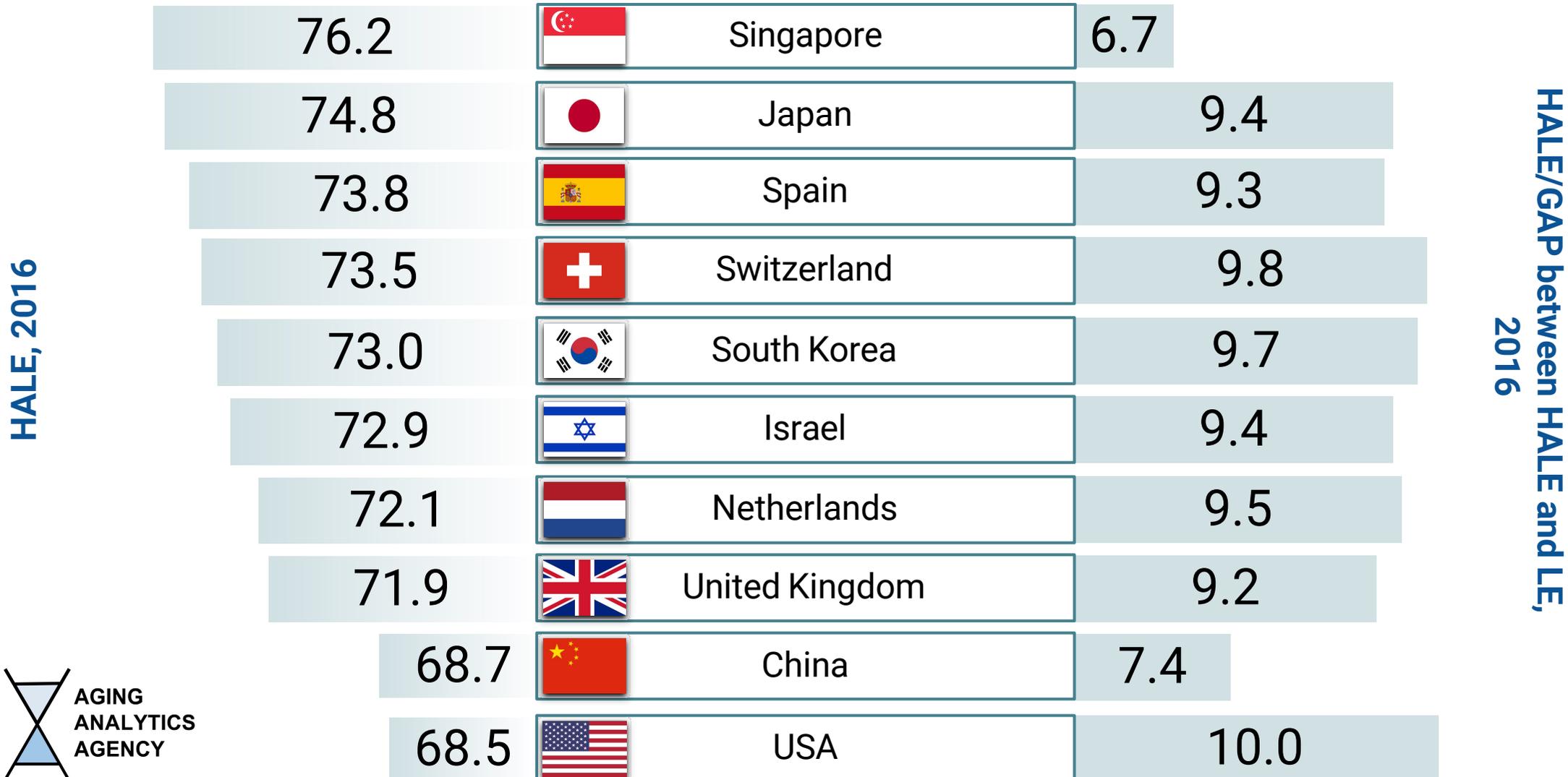
Medium Gap between HALE and Life Expectancy

Big Gap between HALE and Life Expectancy

HALE and Life Expectancy

Health-Adjusted Life Expectancy (HALE), used here as a measure of Healthy Longevity, is the average number of years an individual can expect to live free of chronic age-related disease.

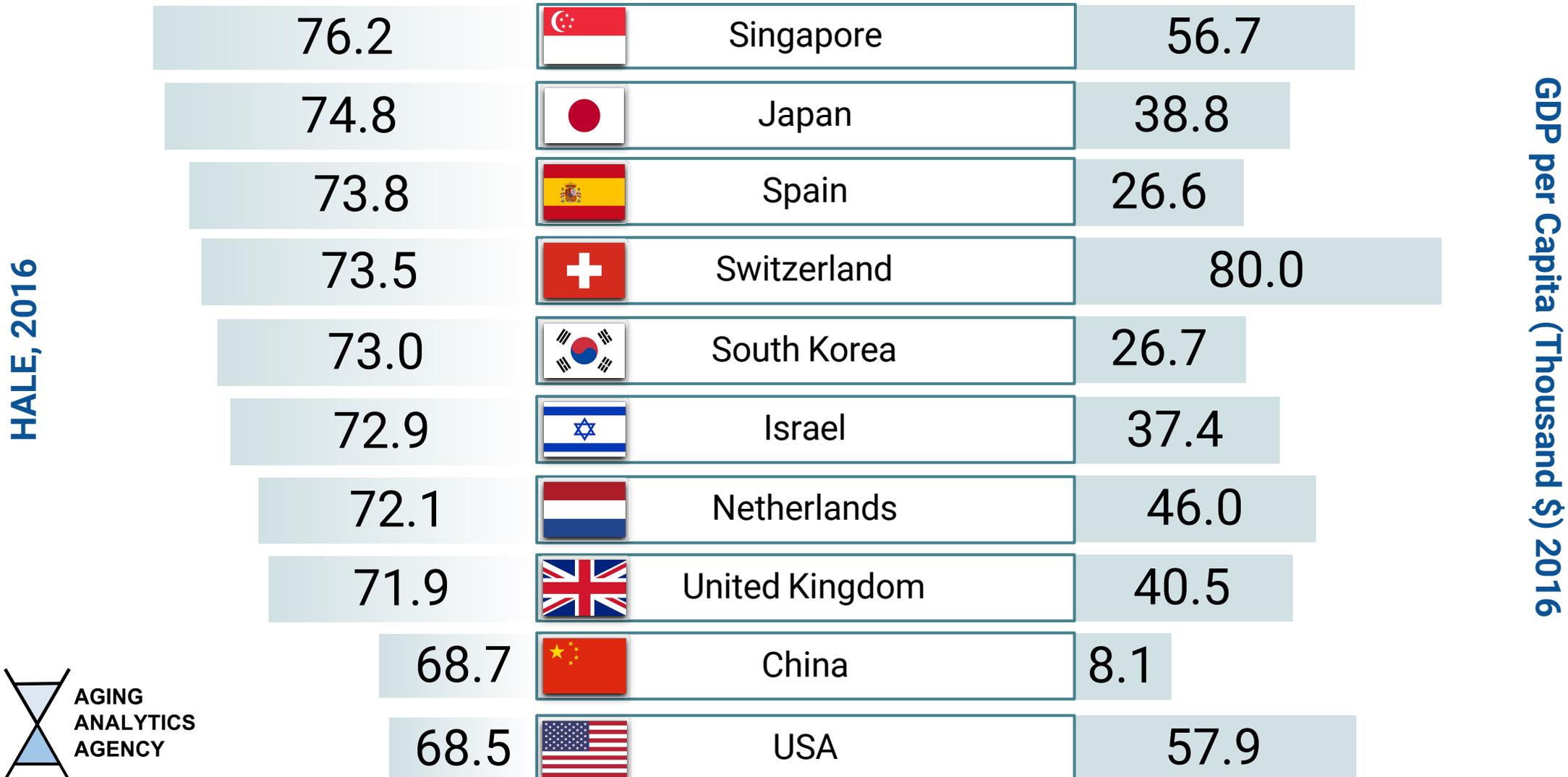
Life expectancy (LE) at birth reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups in a given year – children and adolescents, adults and the elderly.



HALE and GDP

Health-Adjusted Life Expectancy (HALE), used here as a measure of Healthy Longevity, is the average number of years an individual can expect to live free of chronic age-related disease.

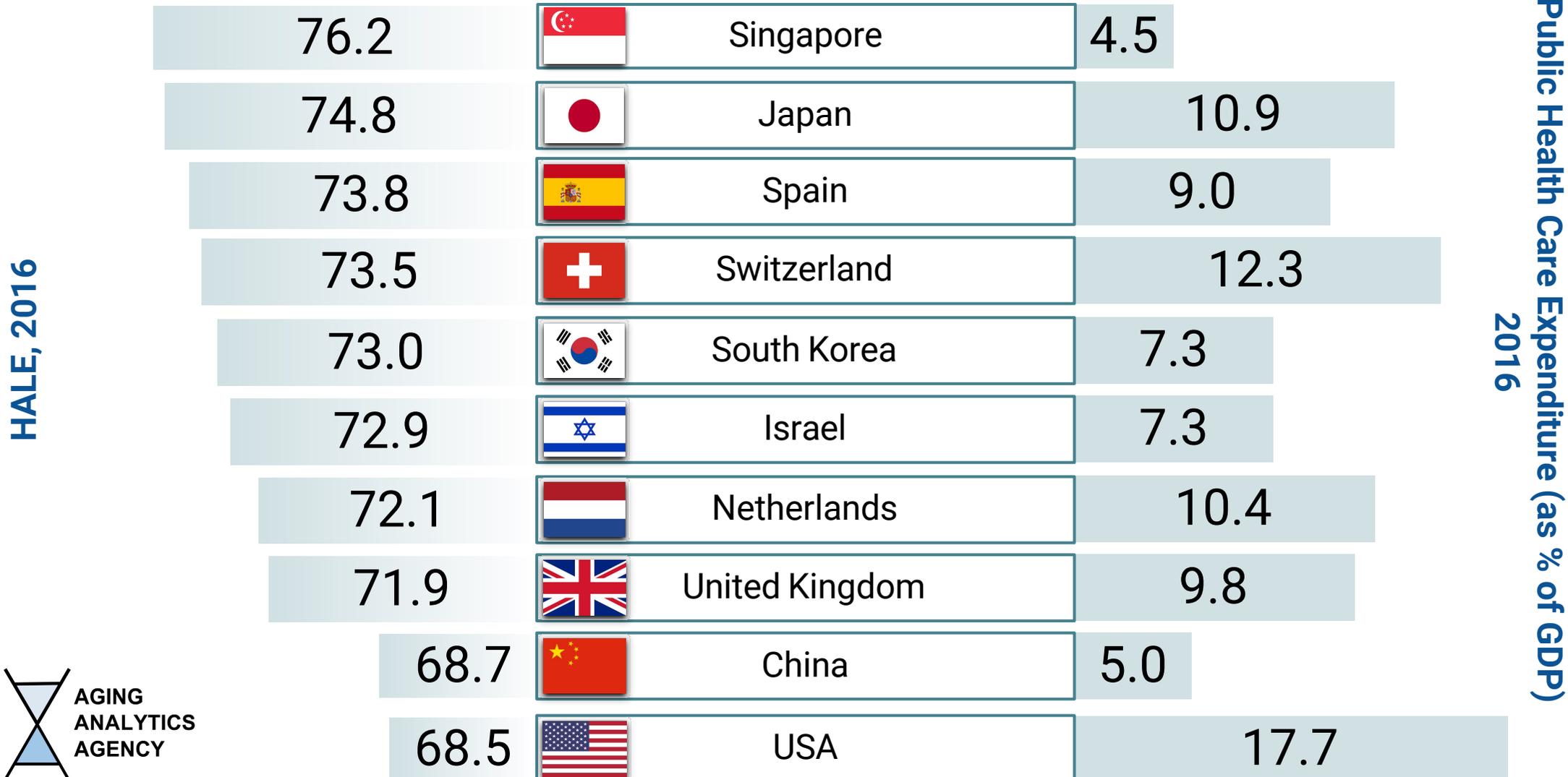
Gross domestic product (GDP) per capita is a measure of a country's economic output that accounts for its number of people. It divides the country's gross domestic product by its total population. That makes it the best measurement of a country's standard of living.



HALE and Public Health Care Expenditure

Health-Adjusted Life Expectancy (HALE), used here as a measure of Healthy Longevity, is the average number of years an individual can expect to live free of chronic age-related disease.

Public health care expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.



Current Health Expenditure and Healthcare Efficiency Score

Current health expenditure estimates of current health expenditures include healthcare goods and services consumed during each year.

The Bloomberg index calculates an efficiency score based off a nation's life expectancy along with relative and absolute health expenditures.

Current Health Expenditure per Capita
(Thousand \$) 2016

Bloomberg Healthcare Efficiency Index, 2016

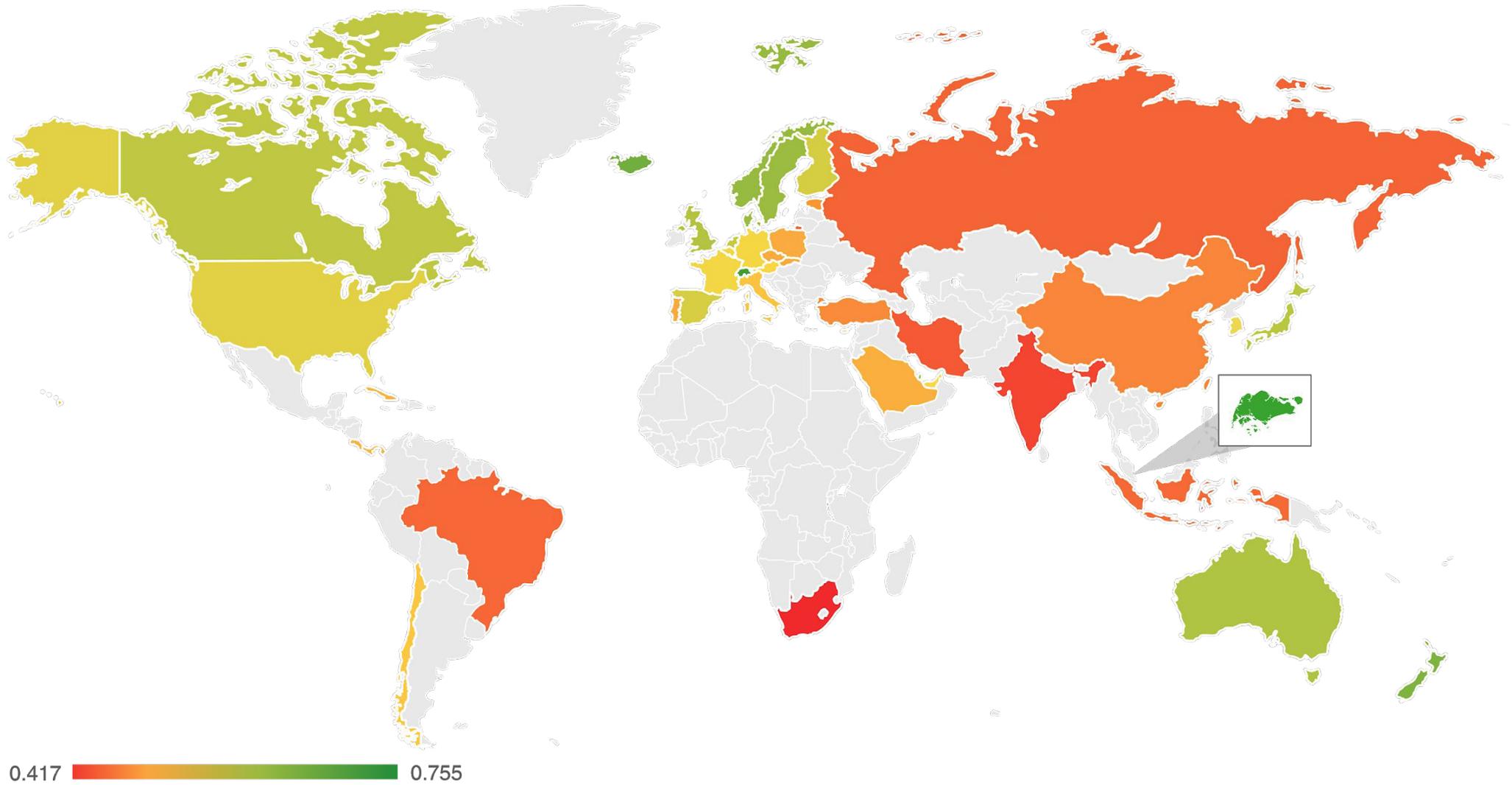
9.87		USA	29.6
9.84		Switzerland	57.8
4.74		Netherlands	48.3
4.23		Japan	68.2
3.96		United Kingdom	52.9
2.84		Israel	66.8
2.46		Singapore	84.2
2.39		Spain	72.2
2.04		South Korea	71.5
0.4		China	54.3

Source:

[WHO](#)

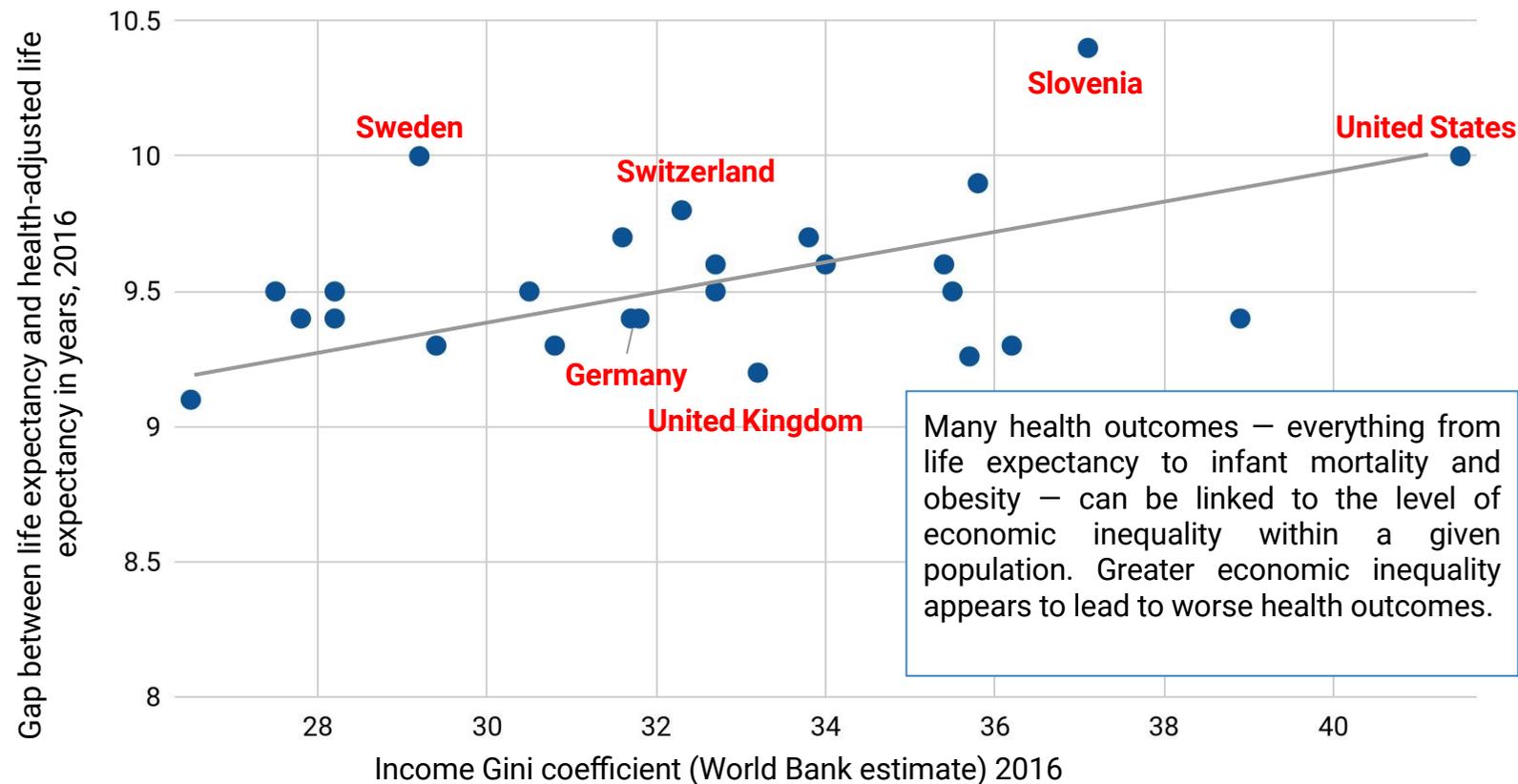
[Bloomberg](#)

Final Rankings of the Level of HALE and Gap



Health-Adjusted Life Expectancy (HALE), used here as a measure of Healthy Longevity, is the average number of years an individual can expect to live free of chronic age-related disease.

Socio-Economic Inequality and Gap between Life Expectancy and HALE



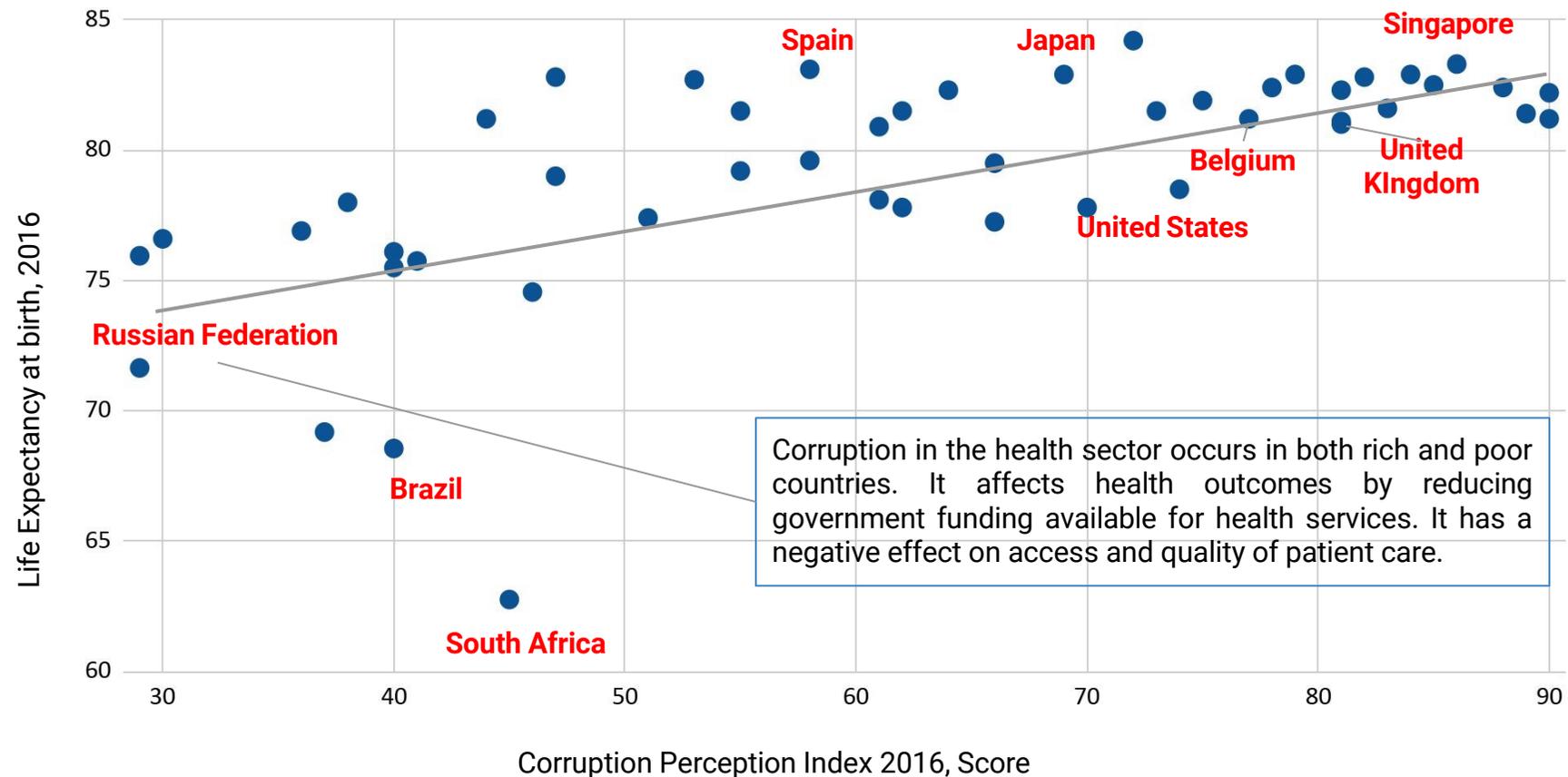
The populations of comparably sizable and wealthy countries are aging more rapidly, with larger percentages of their populations over the age of 65. Life expectancy can be influenced by a number of factors, including those within the domain of the health system (e.g., quality of care, access to preventive health services) as well economic, behavioral, and environmental factors that may be outside the control of the health system (e.g. poverty, lifestyle, violence, and accidents). Among developed countries the U.S. has a higher degree of income inequality than any comparably wealthy and sizable country. People who are lower income are less likely than people with higher incomes to report being in good health, and there is a growing disparity in the life expectancies of low and high income.

Source:

[World Bank](#)

[WHO](#)

Life Expectancy and Corruption Perception



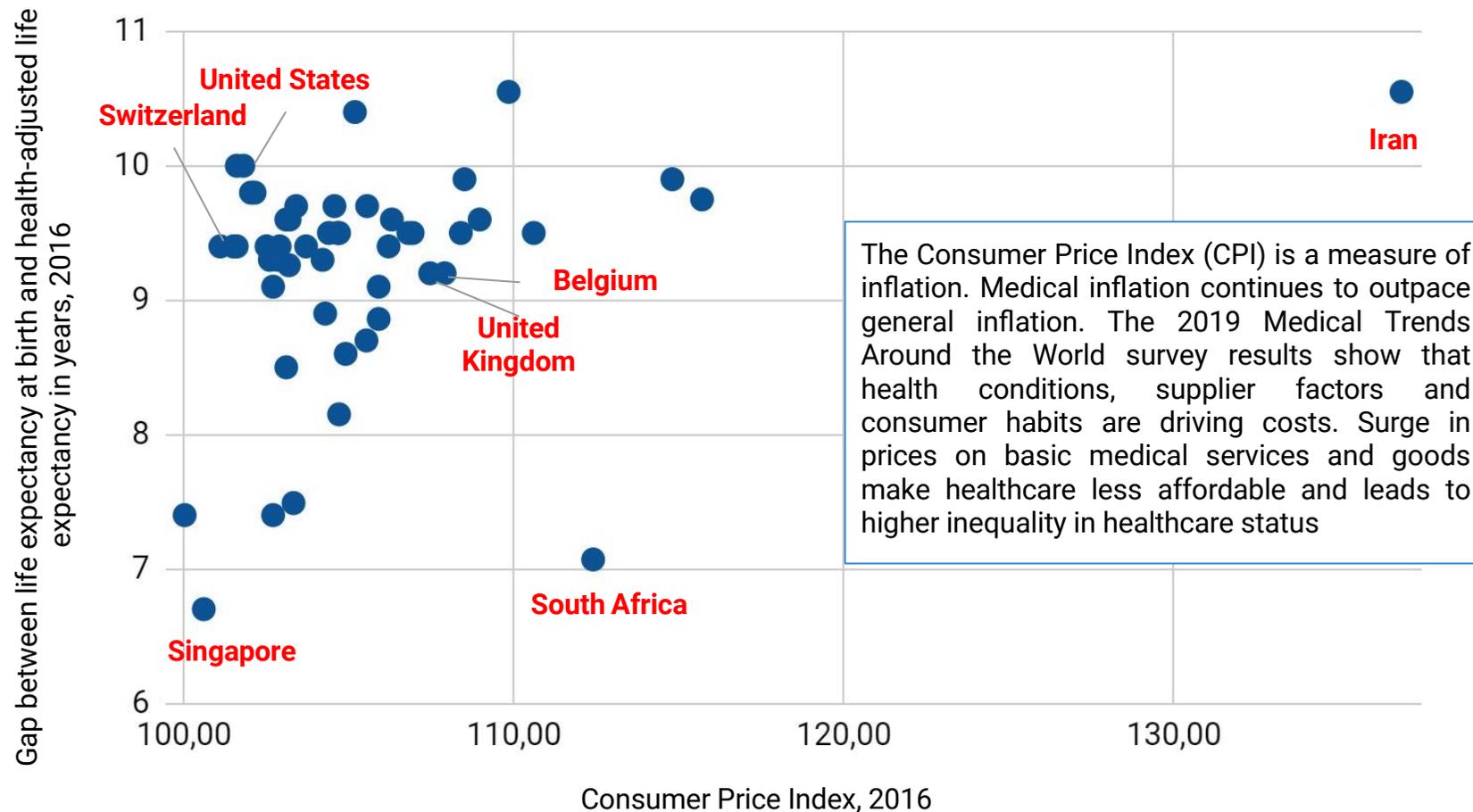
Life expectancy at birth steady increases with reduction of corruption level across countries. The problem of corruption in healthcare is of a multidimensional nature. Corruption may be involved, for example, in construction of health centres/hospitals, purchase of instruments, supply of medicines and goods, overbilling in insurance claims and even appointment of healthcare professionals. High level of corruption corresponds to wasteful spendings in healthcare, low efficiency and high administrative costs. Corruption leads to large waiting time and unaffordability of preventive services for population.

Source:

[WHO](#)

[Transparency International](#)

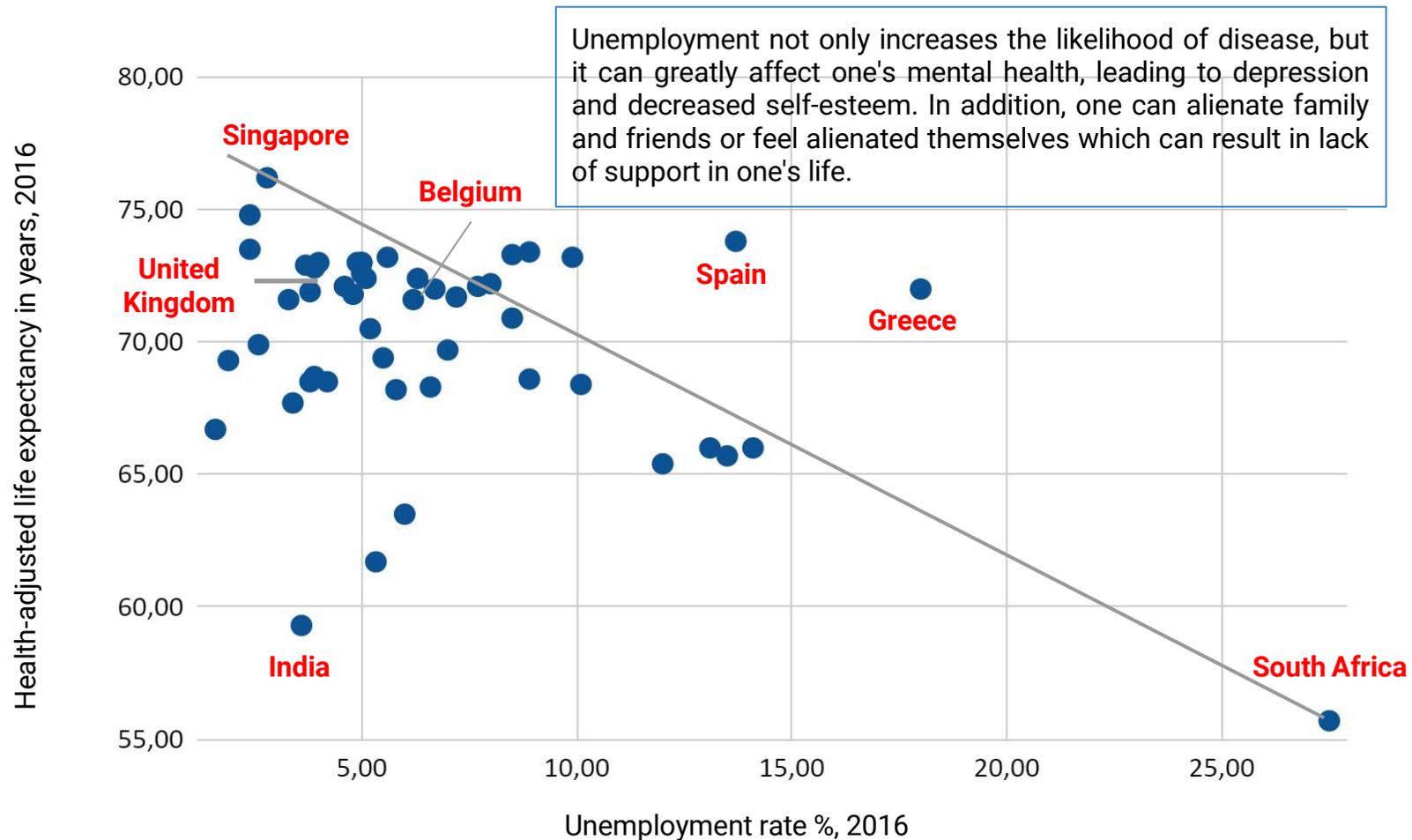
Economic Instability and Gap between HALE and Life Expectancy



The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by consumers for a market basket of consumer goods and services. CPI characterises prices instability and economic instability in general as rapid inflation indicates recession or systemic crises.

The graph shows that increase of CPI contributes to increase in gap between life expectancy at birth and HALE. The lowest level of CPI in 2016 was observed in Singapore and the highest was in Iran.

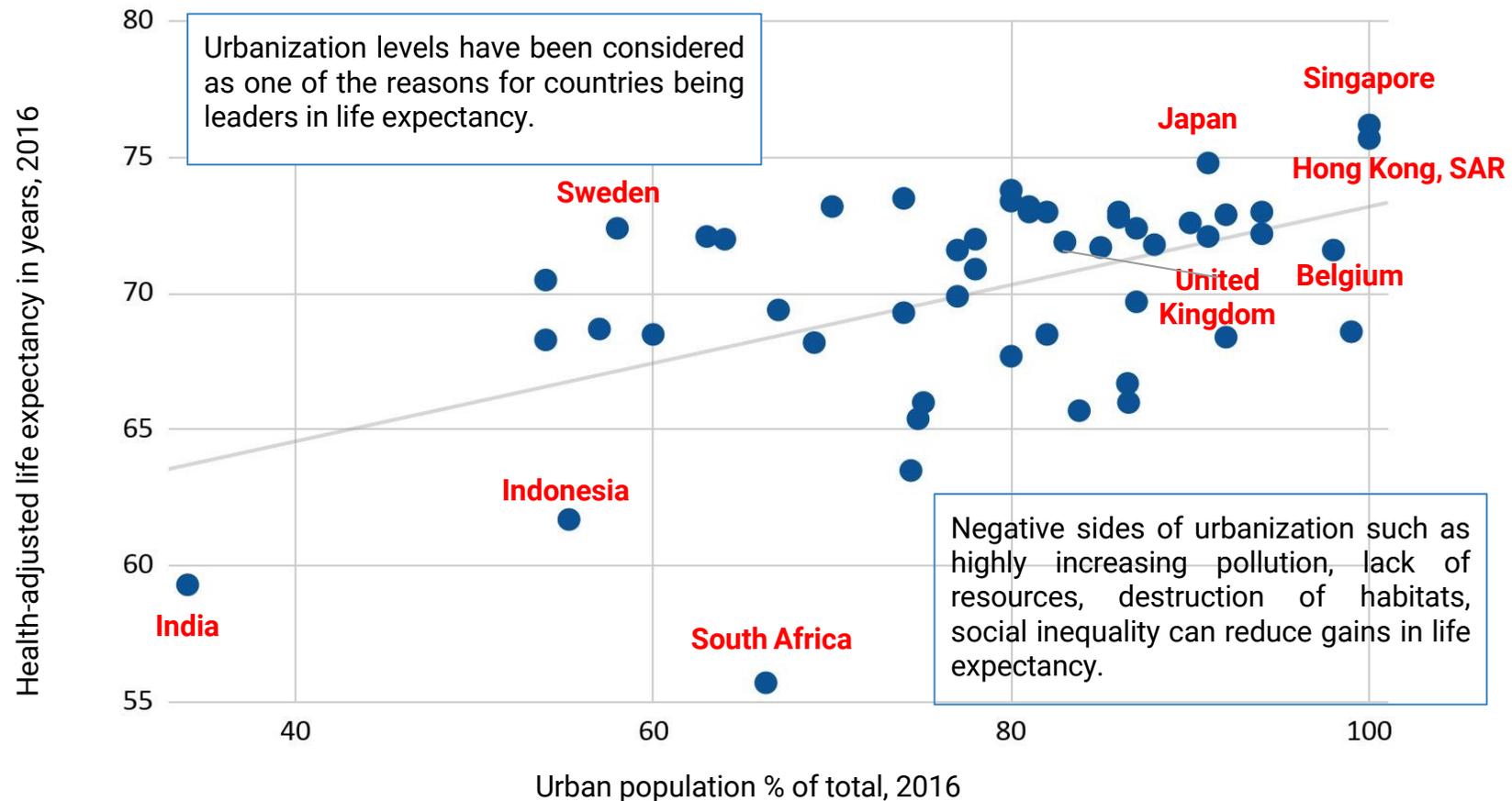
Unemployment and Healthy Longevity



High unemployment leads to reduction of health-adjusted life expectancy. Countries with low unemployment (close to natural level of unemployment) have higher HALE. High unemployment rate leads to social disproportions and unaffordability of basic basket of goods and services.

But calculations also show that increase in unemployment leads to decrease in gap. Such inverse relations can be explained parameters. Both life expectancy and HALE are modeled indicators, but HALE is inertial by nature and has lower elasticity comparing to life expectancy.

Urbanization and Healthy Longevity



Researchers discovered a significant difference between the life expectancy of those living in the big cities and those in other regions. In such countries as India, Indonesia, South Africa, Russian Federation, Brazil, China, people living in rural and remote areas suffer from lack of medical facilities and effective healthcare provision.

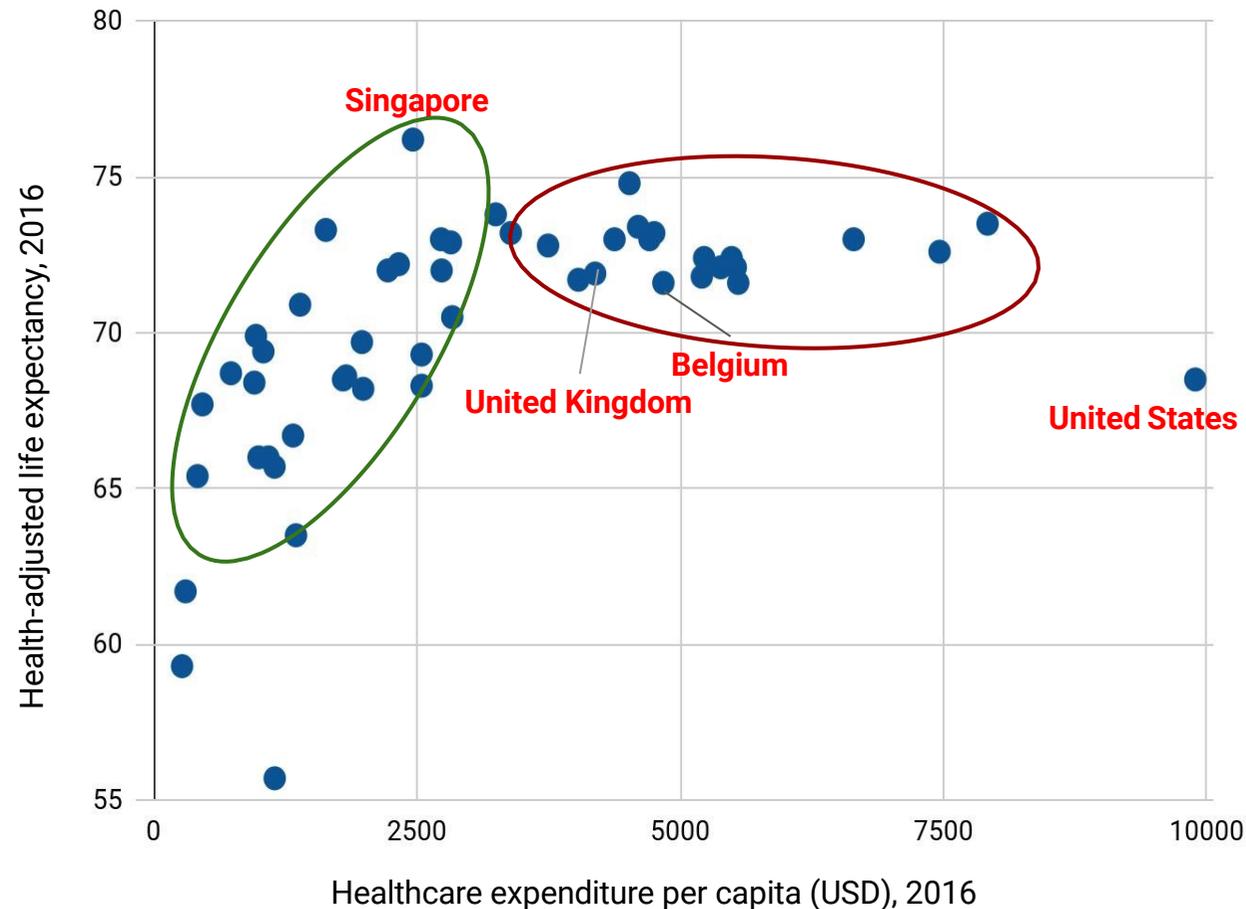
But urbanization leads and to reversal impact on life expectancy and HALE. Different emissions and wastes cause negative have harmful impact on people health. So, developed countries, such as Sweden and France, where level of urbanisation varies from 55-70%, proves that government policies should be focused on all territories to provide equal quality of and access to medical care.

Source:

[World Bank](#)

[WHO](#)

Healthcare Spending and Health-adjusted Life Expectancy



This chart collection takes a look at how spending on healthcare are correlated with Health – Adjusted Life Expectancy. The analysis looks at 2016 health data from OECD and World Health Organization.

As we can see there is no linear relationship between the life expectancy and healthcare expenditures. It means that more public expenditures on healthcare do not guarantee healthier and longer life.

The graph we could divide into two main groups. The first group include developing countries, such as India, Brazil, Russian Federation, Argentina. There increase in public spending contributes to increase in healthy life.

The second group is developed countries. Wealthy countries spend more per person on health care and related expenses than lower income countries which does not lead to increase in life expectancy.

The most evident difference in effectiveness of government expenditures on healthcare is between United States and Singapore. These countries are approximately of the same level of wealth, GDP per capita equals 57 904,2 and 56 724,2 USD respectively in 2016, but lower healthcare spending per capita in Singapore contribute to higher Health Adjusted Life Expectancy (HALE) comparing to United States.

Source:

[OECD](#)

[WHO](#)

Strategic Consulting of Longevity Governance

In Q2 2019, following the appointment of Eric Kihlstrom (former Director of the **government-led £98 million Healthy Ageing Industrial Strategy Challenge Fund**) as its new Director, and becoming the main source of data and analytics for the UK **All-Party Parliamentary Group for Longevity**, Aging Analytics Agency began expanding the scope and focus of its efforts relating to deep industry analytics on the emerging front of the benchmarking and strategic consulting services relating to **government-led Longevity Industry** development and national policy efforts of various countries.

In early 2019, Aging Analytics Agency began shifting increasingly large proportions of its resources away from open-source landscape overviews and special case studies of the Longevity industries of various nations and towards **benchmarking** and **ranking** of the strength, relevance and proactivity of various entities including companies, investors, financial institutions and government initiatives within the Longevity sphere, leveraging the very broad and deep understanding of the global Longevity industry created through the production of tens of thousands of pages of global and regional landscape overviews from 2013 - 2018. in order to begin conducting **deeper**, more **targeted analytics**. Aging Analytics Agency is currently cooperating with a number of government departments and public sector bodies and authorities in the **UK, Singapore, Switzerland, Israel** and the **US** to create **advanced IT solutions, deep analytics, special case studies and composite sets of tangible recommendations and development plans for national industrial strategies**, science and technology policy, modernization and reforms in healthcare, frontier-technology sectors including Longevity, AI and Precision Health, and financial reforms relating to pension systems and insurance companies looking to transform the problem of ageing population into the opportunity of Healthy Longevity.

As per the example of the Singapore and the USA analysis below, which serves as an example of the scope and depth of our Longevity Policy analytical capabilities, Aging Analytics Agency is open to establishing strategic collaboration and consulting contracts with governments of progressive countries on projects and initiatives related to Longevity.

Longevity Governance	Recommendation Packs	Industrial Strategies	Precision Health
	Advanced IT Solutions	Analytics & Benchmarking	Modernization



**AGING
ANALYTICS
AGENCY**

Link to the Report: <https://www.aginganalytics.com/global-longevity-governance>

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