

October 2022



Nicole Papassavvas Senior Sustainability Analyst

a time of the year when health services will again face significant pressure. This coincides with a cost of living crisis and looming recession, where hard choices are being forced upon consumers, some of which could add to these pressures. Solutions are needed to address the rising complexity and costs of healthcare, deriving from an ageing population and higher incidence of multimorbidity. This topic is evolving quickly and the implications for modern society and the economy may be far reaching – we explore ways investors could direct capital to products, services and solutions in the healthcare sector.

Key takeaways

- We believe there is urgency to address a steadily growing health crisis. Climate and planetary changes could accelerate its impacts
- The COVID-19 pandemic has reminded us not only of the scale of healthcare challenges but also the breadth of the healthcare divide. While finding solutions to emerging healthcare threats, we need to ensure broader and more equitable access to medicine, intensive care and vaccines
- Climate Change risks further stretching resources as we contend with heatwaves, respiratory illnesses due to higher pollution and broader transmission of diseases like Dengue and West Nile fever¹
- In addition to the human costs, the financial burden is expected to continue rising. Over 10% of GDP is spent on healthcare in many countries and investments in key enablers could present exciting opportunities in new medicines, solutions and services to help meet existing and future needs
- The topic extends into biodiversity and natural capital, where healthy biological diversity creates a natural defence against the spread of certain diseases²



AllianzGI framework for Inclusive Capitalism



Inclusive Capitalism

Healthcare is part of our Sustainability Research Theme of Inclusive Capitalism³ at AllianzGI. Inclusive Capitalism aims to reduce inequality. We define access to healthcare as a life essential, as it is core to existence, alongside food, water, clean air, energy, safety and housing.

Did you know?

- In 1994, the Centers for Disease Control and Prevention declared that diabetes had reached epidemic proportions and should be considered a major public health problem. It is estimated that ca. half a billion people have diabetes worldwide. This number is expected to increase by around 50% to 783 million by 2045.4
- The geographical range of the Dengue virus is expected to further expand due to ongoing global phenomena including climate change and urbanization. It is estimated that more than 6 billion people will be at risk for dengue by 2080, an increase of 2.25 billion compared to 2015.5
- The US is the only developed country whose average life expectancy stopped increasing after 2014.6

Turning COVID-19 response into structural positioning

The COVID-19 crisis underscored underinvestment in protecting against pandemics, but also highlighted how a targeted and collaborative global approach could be effective. In a relatively short period of time, vaccinations were developed, rolled out and strategies put in place to minimise the global impact.

There is a risk of rising incidence of pandemics with rising populations, loss of biodiversity and resource constraints in healthcare systems.

Underscoring the evident healthcare divide

Despite the ability to mobilise at the company and government level, this does not translate into broader availability or reach of healthcare.

There is a significant divide in COVID-19 vaccination rates between the West and developing economies – while in early 2022 just under 60% of the global population has received at least one vaccine dose, it was only 9.5% in low-income countries.⁷ There is a strong link between a country's wealth and its vaccination rates. Delayed vaccinations are set to impact the global economy by trillions in GDP, but will be particularly impactful in developing economies.8

COVID-19 is not an exception

While very evident in COVID-19, it would be a mistake to view this an exceptional case of healthcare inequality. Access to quality healthcare is often a function of wealth at the sovereign or individual levels.

Long term impacts of this virus could still arise over time. For example, Long Covid is becoming better understood and could become relevant for the longer-term labor market and productivity trends.

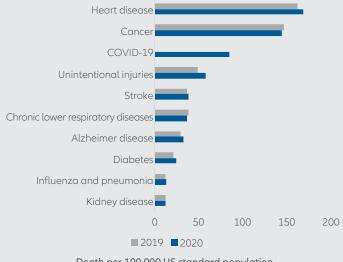
In addition to the direct impact of COVID-19, lockdowns impact mass vaccination campaigns for measles, polio, meningitis and other deadly but preventable diseases.9 More recently, rising cases of monkeypox in an increasing number of countries can be linked to routine smallpox vaccinations having stopped.

Healthcare is a rising problem in developed regions

Separate but possibly aligned to wealth, is education, especially in the developed world. Chronic diseases¹⁰ such as heart disease, cancer and diabetes remain among the leading causes of disability and death in US.¹¹ – while these occur more frequently in an aging population, they are correlated with the level of education. 12

A combination of both education and wealth lead into lifestyle choices, and these can play a major role, especially from an early age. Lifestyle factors can include nutrition, exposure to alcohol and tobacco and physical activity, which can have meaningful implications for both physical and mental welfare.¹³

Leading causes of death in the US in 2020 and 2019:



Death per 100,000 US standard population

Source: Products - Data Briefs - Number 427 - December 2021 (cdc.gov)

The link to Climate and Planetary Boundaries

There is a real risk that climate change and reduced biodiversity could worsen the problem. Emissions and pollution could raise the incidence of respiratory diseases, heavy rains and higher temperatures could raise occurrence of fevers (e.g. Dengue, West Nile), while challenges to food availability and affordability could impact healthy nutrition.

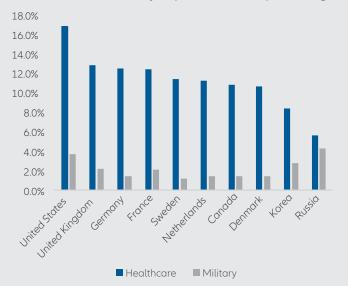
Healthcare costs are escalating quickly as multimorbidity worsens

Historically there has been a focus on the link between health and mortality, but there is now a heightened awareness of multimorbidity which is defined as the presence of two or more long-term health conditions. Multimorbidity is a major contribution of the sustained increase in healthcare costs as a share of GDP in OECD countries. Among OECD Member countries, the United States has the highest percentage of GDP spent on healthcare – 16.8% in 2020. For context, US Military expenditure was 3.7% of GDP in the same year. While lower than US, the figures for UK, France and Germany are still above 12%.¹⁴

While life expectancy has risen in recent decades, this has not been aligned to higher life quality or health, but an ability to address or delay terminal disease. Age is a driver of health spending which is partly due to the prevalence of multimorbidity also rising with age.¹⁵

A combination of an ageing population and an increase in long-term conditions means multimorbidity is set to rise. Costs increase significantly with each additional condition and a near exponential relationship between the number of conditions and costs will play out.¹⁶

Healthcare and military expenditure as a percentage



of GDP in select countries worldwide in 2020

Source: Healthcare vs military expenditure comparison select countries 2020 | Statista

The role of pharmaceuticals and the funding of healthcare

According to the OECD, pharmaceuticals are the third largest healthcare expenditure item after in-patient and out-patient care, accounting for 16% of average health spend, even before including in-hospital pharmaceuticals costs¹⁷. These are costs predominantly covered by government financing or compulsory insurance schemes. However, the WHO estimates that over 800 million people are spending over 10% of household budgets on health for themselves, a sick child or family member – these can result in "catastrophic expenses" that can lead to severe poverty.¹⁸

The situation is particularly acute for innovative remedies and solutions. A survey by our Grassroots Research® team showed around 40% of US diabetes educators surveyed highlighted that new oral (not injected) diabetes drug were very attractive but could be prohibitively expensive without insurance.

The UK is an example of where private health insurance is not standard due to its broad and free access to healthcare. However, the UK Healthcare system is underfunded, preventing every new therapy being supported and a divide has developed where those with better financial means can go externally for better or quicker treatment.

Investing in Health

Investors could play a critical role by contributing to Inclusive Capitalism via investing in health. In the US alone health spending is projected to grow at an average annual rate of 5.4 percent for 2019-28 and to reach USD 6.2 trillion by 2028.¹⁹

1. For investors there are potential opportunities to invest in health via the following themes:

- Biotechnology and Pharmaceutical companies could provide innovative drugs to treat diseases like diabetes, HIV and heart diseases for example to improve life quality and life expectancy
- Medical technology with companies providing pacemakers, stents or dental implants
- Health tech and data driven solutions with examples being telemedicine to contact doctors via a video conference or apps to address diseases like obesity and depression; digital tools are able to serve a greater number of patients more effectively and at lower cost
- High-quality and affordable nutrition with low fat and sugar
- Solutions to provide education on health and wellbeing to a broad population

2. Materiality of non-financial information

For investors seeking unconstrained universes, it will be important to identify evolving material ESG risks relating to

the healthcare companies, including:

- Drug price transparency the issue of democratisation of healthcare and affordability of medicine; companies' disclosures of year-on-year changes in drug prices for their product portfolio are crucial to assessing whether they do not take advantage of high drug price inflation
- Information to patients information and education about usage, compliance and side effects of medicine and devices – while effective by increasing life quality drugs can come with harmful side effects

UN Sustainable Development Goals (SDGs):

Over 190 countries adopted the UN Sustainable Development Goals (SDGs) in 2015 which aim to achieve a better and more sustainable future for all. The goals relate to poverty, income, employment and good health; education; environment (including climate, water, oceans and biodiversity); reducing inequalities, including gender; and peace, security and cooperation.²⁰ In aligning with the SDGs not only nations but also companies can contribute to solving part of these issues with their products and services.

 Health regulation – health issues are rising concerns for patients, politicians and regulators alike. As healthcare costs rise, companies could be at risk from new regulations, labelling requirements and rejections form insurers for reimbursement

3. Impact-focused investing

Healthcare companies play an important role in helping to achieve targets included in the UN SDG Goal 3 - Good Health and Well-being – and there is a high interdependence of Good Health with Quality Education (SDG 4), Zero Hunger implying Nutritious Food (SDG 2) and Climate Action (SDG 13):

- Poor nutrition increasingly leads to diabetes and addiction, abuse of alcohol and tobacco can lead to several weaknesses of the organs and to early death
- A lack of physical activity, which was strengthened by lockdowns due to COVID-19, can also lead to abuse of substances, obesity and depression
- People who are better educated are less likely to have chronic diseases
- Heat waves pose challenges to health and increase mortality
- Extreme weather incidents force large groups of people to shelter or evacuate, increasing the risk of COVID-19 transmission²¹

Endnotes

- 1. Extreme temperatures and health European Environment Agency (europa.eu)
- 2. More species means less disease | Nature
- 3. Unlocking the "S" in capitalism (allianzgi.com)
- 4. IDF_Atlas_10th_Edition_2021.pdf (diabetesatlas.org)
- 5. Microsoft PowerPoint 02 Dengue Adams Oct 2022 (updated)_to post (cdc.gov)
- 6. The Role of Alcohol, Drugs, and Deaths of Despair in the U.S.'s Falling Life Expectancy PMC (nih.gov)
- 7. Coronavirus (COVID-19) Vaccinations Our World in Data. Pandemic exposes a world of healthcare inequalities | Financial Times (ft.com)
- 8. Delayed vaccination timelines will cost the global economy US\$2.3trn Economist Intelligence Unit (eiu.com)
- 9. How COVID hurt the fight against other dangerous diseases (nature.com)
- 10. Chronic diseases are defined broadly as conditions that last one year or more and require ongoing medical attention or limit activities of daily living or both (About Chronic Diseases | CDC)
- 11. About Chronic Diseases | CDC
- 12. Health Disparities | DASH | CDC
- 13. Global Risks Report 2022 | World Economic Forum (weforum.org)
- 14. Health expenditure as share of GDP by country | Statista
- 15. Ageing and health expenditure UK Health Security Agency (blog.gov.uk)
- 16. The health and social care costs of a selection of health conditions and multi-morbidities (publishing.service.gov.uk)
- 17. Home | OECD iLibrary (oecd-ilibrary.org)
- 18. World Bank and WHO: Half the world lacks access to essential health services, 100 million still pushed into extreme poverty because of health expenses
- 19. NHE Fact Sheet | CMS
- $20. \, {\sf Take \, Action \, for \, the \, Sustainable \, Development \, Goals \, {\sf \, United \, Nations \, Sustainable \, Development \, Control \, Control$
- 21. The climate crisis and COVID-19—A major threat to the pandemic response C-CHANGE | Harvard T.H. Chan School of Public Health

Allianz Global Investors is a leading active asset manager with over 600 investment professionals in over 20 offices worldwide and managing EUR 578 billion in assets. We invest for the long term and seek to generate value for clients every step of the way. We do this by being active – in how we partner with clients and anticipate their changing needs, and build solutions based on capabilities across public and private markets. Our focus on protecting and enhancing our clients' assets leads naturally to a commitment to sustainability to drive positive change. Our goal is to elevate the investment experience for clients, whatever their location or objectives.

Active is: Allianz Global Investors

Data as at 30 June 2022. On 25 July 2022, AllianzGI completed the transfer of investment teams (including 87 Investment Professionals) and USD 101bn of assets they manage to Voya Investment Management as part of a strategic partnership. Two thirds of the assets continue to be managed on behalf of AllianzGI clients outside of the US.

Investing involves risk. The value of an investment and the income from it will fluctuate and investors may not get back the principal invested. Past performance is not indicative of future performance. This is a marketing communication. It is for informational purposes only. This document does not constitute investment advice or a recommendation to buy, sell or hold any security and shall not be deemed an offer to sell or a solicitation of an offer to buy any security.

The views and opinions expressed herein, which are subject to change without notice, are those of the issuer or its affiliated companies at the time of publication. Certain data used are derived from various sources believed to be reliable, but the accuracy or completeness of the data is not guaranteed and no liability is assumed for any direct or consequential losses arising from their use. The duplication, publication, extraction or transmission of the contents, irrespective of the form, is not permitted.

This material has not been reviewed by any regulatory authorities. In mainland China, it is for Qualified Domestic Institutional Investors scheme pursuant to applicable rules and regulations and is for information purpose only. This document does not constitute a public offer by virtue of Act Number 26.831 of the Argentine Republic and General Resolution No. 622/2013 of the NSC. This communication's sole purpose is to inform and does not under any circumstance constitute promotion or publicity of Allianz Global Investors products and/or services in Colombia or to Colombian residents pursuant to part 4 of Decree 2555 of 2010. This communication does not in any way aim to directly or indirectly initiate the purchase of a product or the provision of a service offered by Allianz Global Investors. Via reception of his document, each resident in Colombia acknowledges and accepts to have contacted Allianz Global Investors via their own initiative and that the communication under no circumstances does not arise from any promotional or marketing activities carried out by Allianz Global Investors. Colombian residents accept that accessing any type of social network page of Allianz Global Investors is done under their own responsibility and initiative and are aware that they may access specific information on the products and services of Allianz Global Investors. This communication is strictly private and confidential and may not be reproduced. This communication does not constitute a public offer of securities in Colombia pursuant to the public offer regulation set forth in Decree 2555 of 2010. This communication and the information provided herein should not be considered a solicitation or an offer by Allianz Global Investors or its affiliates to provide any financial products in Brazil, Panama, Peru, and Uruguay. In Australia, this material is presented by Allianz Global Investors Asia Pacific Limited ("AllianzGI AP") and is intended for the use of investment consultants and other institutional /professional investors only, and is not directed to the public or individual retail investors. AllianzGI AP is not licensed to provide financial services to retail clients in Australia. AllianzGI AP is exempt from the requirement to hold an Australian Foreign Financial Service License under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order (CO 03/1103) with respect to the provision of financial services to wholesale clients only. AllianzGI AP is licensed and regulated by Hong Kong Securities and Futures Commission under Hong Kong laws, which differ from Australian laws.

This document is being distributed by the following Allianz Global Investors companies: Allianz Global Investors U.S. LLC, an investment adviser registered with the U.S. Securities and Exchange Commission; Allianz Global Investors Distributors LLC, distributor registered with FINRA, is affiliated with Allianz Global Investors U.S. LLC; Allianz Global Investors GmbH, an investment company in Germany, authorized by the German Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin); Allianz Global Investors (Schweiz) AG; in HK, by Allianz Global Investors Asia Pacific Ltd., licensed by the Hong Kong Securities and Futures Commission; in Singapore, by Allianz Global Investors Singapore Ltd., regulated by the Monetary Authority of Singapore [Company Registration No. 1999071692]; in Japan, by Allianz Global Investors Japan Co., Ltd., registered in Japan as a Financial Instruments Business Operator [Registered No. The Director of Kanto Local Finance Bureau (Financial Instruments Business Operator), No. 424], Member of Japan Investment Advisers Association, the Investment Trust Association, Japan and Type II Financial Instruments Firms Association; in Taiwan, by Allianz Global Investors Taiwan Ltd., licensed by Financial Supervisory Commission in Taiwan; and in Indonesia, by PT. Allianz Global Investors Asset Management Indonesia licensed by Indonesia Financial Services Authority (OJK).

© 2022 Allianz Global Investors. 2562700 | LDS-220320