Building Stronger Economies Through Better Health

ANDI Health Forum - Cartagena

Prof. Dr. Dennis Ostwald

18 June 2026

Agenda

1 Shifting the Narrative: Health as a Prosperity Driver

2 A Return-on-Investment Perspective on Health

3 Conclusion and Outlook

Shifting the Narrative: Health as a Prosperity Driver

Shifting Perspectives: Healthcare as a Leading Economic Sector

PAST

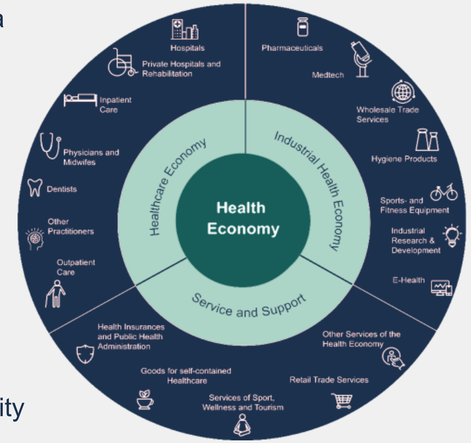
Healthcare as a cost factor

Separate silos and fragmentation | Healthcare only | Input orientation | Increasing health expenditures

STATUS QUO

The Health Economy as a driver for growth and employment

Health Economy as a diverse sector | contribution to GDP and employment



Growth sector | increasing work force | new career opportunities

Investment in health to promote growth and productivity

Better quality | more outcome oriented

Source: WifOR illustration, following Henke, Neumann, Schneider et al. (2010)..

WifOR co-launched G20 & G7 toolkit for strategic health investments at the Health20 Summit in Geneva

Source: WifOR 2025. Own illustration.

Hatice Beton

Executive Director
G20 & G7 Health and Development Partnership

Dr. Roberto Durán-Fernández

PhD, Tec de Monterrey School of Government and The Baker Institute for Public Policy, Former Member of the WHO Council for Economy for All

Prof. Dr. Rifat Atun

Professor of Global Health Systems and Director of Health Systems Innovation Lab, Harvard T.H. Chan School of Public Health

Prof. Dr. Dennis Ostwald

Founder & CEO,
WifOR Institute

WifOR’s latest paper shows how investing in health today will build tomorrow’s growth and resilience

The ROI of health is quantifiable

The health sector contributed 7.6% to the global GDP output in 2019[1] – and every dollar invested for new treatments, early interventions, and disease reductions has a measurable socioeconomic return.

Multiple areas benefit from health investments

Improved well-being boosts productivity, lowers costs, and creates fiscal space – in Germany, every $1 invested in cervical cancer prevention (Pap testing) generates almost $2 in returns within three years[2].

Global leaders can act now

Our recommendations include promoting prevention to reduce disease expenses, implementing investment frameworks, and committing to minimum fiscal and policy actions with mechanisms for bilateral consultation.

Source: WifOR 2025. Own illustration.

[1] WifOR calculations.

[2] Hernandez-Villafuerte, D. K., Schmitt, M., Fries, J. L. & Müller, M. Novel approaches assessing the value of cancer prevention in Germany.

“Health is not an expense – it is an investment in prosperity.”

Friedrich Merz, Bundeskanzler

Key facts about the healthcare industry (2024):

- €490 billion contribution to GDP (12.5% of the total economy)
  → Every eighth euro comes from this sector
- 7.7 million jobs
  → Every sixth job in Germany
- Growth since 2015: +4.9% p.a.
  → stronger than the overall economy (+4.0% p.a.)

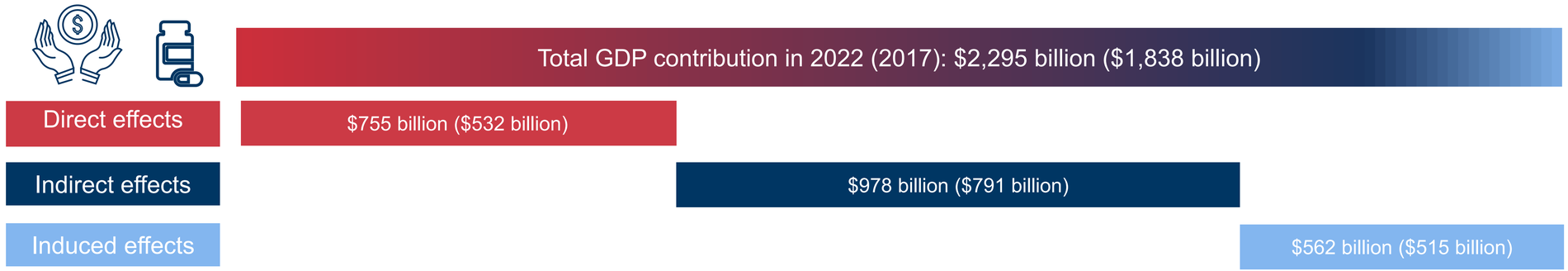
“Healthcare is the fastest growing sector of our economy. We always view healthcare policy as a cost burden, rarely or never as an opportunity to create value in our own country.”

Source: WifOR calculations; https://www.zeit.de/2025/20/friedrich-merz-bundeskanzler-donald-trump-ukraine-krieg-russland

2

A Return-on-Investment Perspective on Health

According to the WifOR study (commissioned by IFPMA), the pharmaceutical industry contributed a total GDP of $2,295 billion globally in 2022



x $

2.04

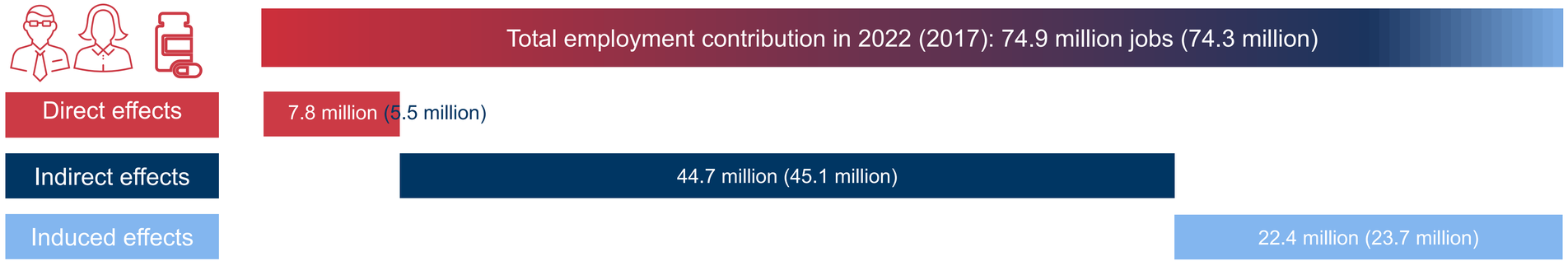
$1 of the GDP contributed directly by the pharmaceutical industry in 2022 generated **$1.29 of indirect and $0.74 of induced GDP in** the global economy.

Spillover Multipliers for other industries*

4.90	Automotive industry
1.22	Financial services industry
0.62	Utilities industry

Source: Data from National accounts, OECD, Eurostat, ADB and AfDB; data from WIOD; WifOR calculation. Deviations may occur due to rounding. *Industry multipliers calculated with global industry spend, pharmaceutical industry multipliers with pharmaceutical industry's global spend, only for scale – not for comparison. Industry multipliers are a global average. The Life Sciences industry which is made up of pharmaceutical manufacturing and Medtech industry together had a total GDP contribution of $3,219 billion in 2022.

The pharmaceutical industry supported a total employment of 75 million globally in 2022



8.54

For every worker directly employed by the pharmaceutical industry, a further **5.69 indirect** and **2.85 induced jobs** were supported due to spillover effects globally in 2022.

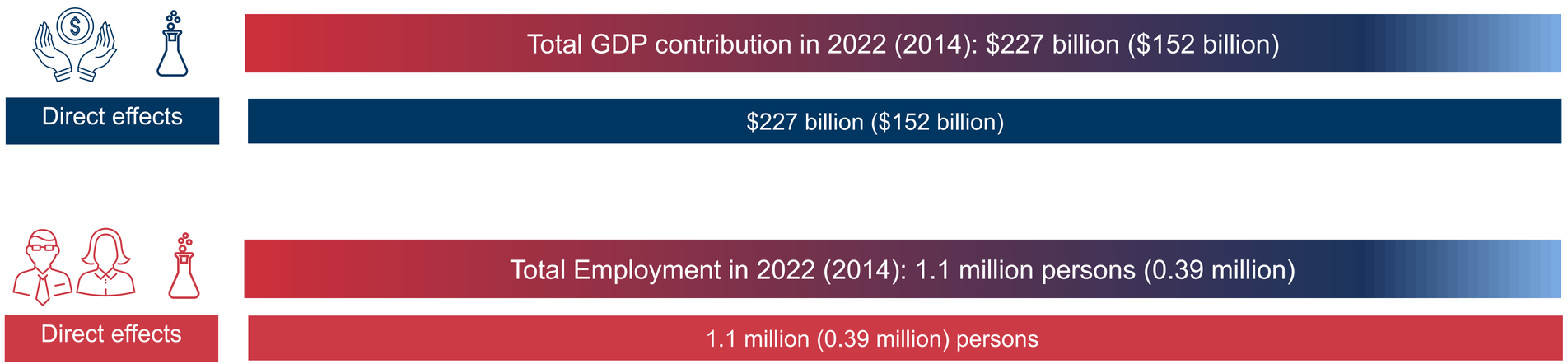
In other words: **One direct employee** of the pharmaceutical industry globally supported in **total 8.54 jobs** in the world economy in 2022.

Spillover Multipliers for other industries*

15.9	Utilities industry
6.9	Automobile industry
5.7	Financial services industry

Source: Data from Labor Force Surveys, ILO, OECD, Eurostat, and AfDB; data from WIOD; WifOR calculation. Deviations may occur due to rounding. *Industry multipliers calculated with global industry spend, pharmaceutical industry multipliers with pharmaceutical industry's global spend, only for scale – not for comparison. Industry multipliers are a global average. The Life Sciences industry which is made up of pharmaceutical manufacturing and Medtech industry together supported a total employment of 112.5 million in 2022.

Global Pharmaceutical industry's R&D activities contributed a GDP of $227 billion and employed more than 1 million people in 2022



The global pharmaceutical industry paid a **compensation of $64 billion directly** in R&D activities in 2022. **28%** of the global pharmaceutical industry's direct GDP contribution of R&D activities consists of compensation paid directly to the employees in the R&D activities.

Source: WifOR calculations. WHO (2021): Global Health Expenditure Database (accessed on 21.12.2021); Health Economy: Mexico, Colombia, Global, Brazil, Germany, Argentina: 2020; [1]Initial WifOR estimation, [2]Methodological deviation due to more detailed data. [3]Colombia, Argentina, Brazil and Peru 2019

Return on investment (ROI): 3-phase approach to quantifying investments, innovations, and disease burden

Bridging Element: Fiscal Impact

1

Quantification of the economic impact of investments

*Example: In Germany, every investment in cervical cancer prevention generates almost **double the economic return** within three years*

2

Calculation of the social impact of health innovations

*Example: The social impact of an innovative therapy for cardiovascular disease (CVD) in Germany: Compared to standard care, an estimated **109,658 life years** could be gained*

3

Measuring the socioeconomic burden (burden of disease)

*Example: Socioeconomic burden of migraine in Germany – annual average: Equivalent to **€100.4 billion in gross value added (GVA)** due to lost paid and unpaid working time*

Source: WifOR illustration and calculations.

Studies have shown the economic impact of the Health Economy in Latin America

	Peru	Mexico	Colombia	Chile	Argentina	Brazil	Global[1]	Germany[2]
Share of **health expenditures** in GDP in 2020[3]	**5.2** %	**6.2** %	**7.7** %	**9.4** %	**9.5** %	**9.6** %	**9.8** %	**12.5** %
Share of **Health Economy** in GDP in 2020	**5.8** %	**5.3** %	**7.7** %	**7.1** %	**9.1** %	**9.7** %	**7.5** %	**12.1** %
Labor force share in overall economy in 2020	**5.5** %	**5.5** %	**9.5** %	**9.4** %	**8.8** %	**7.0** %	**5.6** %	**16.5** %

Source: WifOR calculations. WHO (2021): Global Health Expenditure Database (accessed on 21.12.2021); Health Economy: Mexico, Colombia, Global, Brazil, Germany, Argentina: 2020; [1]Initial WifOR estimation, [2]Methodological deviation due to more detailed data. [3]Colombia, Argentina, Brazil and Peru 2019

The broader economic benefits of investing in prevention is measurable: The case of HPV vaccination in Commonwealth

		UK	India	Malaysia	Nigeria
Investment Million US$		**134**	**756**	**16**	**100**
		Million US$ - 2022 Prices (Thousand employees)			
GVA contribution (Labor force contribution)	**Effect inside the HE**	**107** (2)	**605** (71)	**13** (0)	**80** (6)
	Effect adjacent sectors	**62** (0)	**314** (40)	**5** (0)	**10** (0)
	Effect induced income	**78** (0)	**230** (44)	**5** (0)	**6** (0)
Country-specific ROI		**1.84**	**1.52**	**1.44**	**0.96**

Source: WifOR illustration and calculation published in Atun et al. (2025).

Calculate the social impact (SI) of medical innovations – SI makes the health and socioeconomic benefit of a medical innovation tangible

2

Health benefits

- A dynamic population model depicts prevalence and incidence developments for a specific disease
- Calculation of differences in health states between use of a medical innovation and standard of care (SoC)

Comparing health outcomes in both scenarios

Socioeconomic benefits

Socioeconomic footprint

- Establishing a link between health outcomes and productivity
- Consideration of both paid and unpaid work activities
- Monetarisation of avoided productivity loss

Assessment of avoided productivity loss

Comparison of benefits and costs

Value-Invest analysis

- Comparing the calculated benefits in monetary terms (value), against the long-term costs for the social health insurance (investment)
- Inclusion of direct medical and direct non-medical costs possible

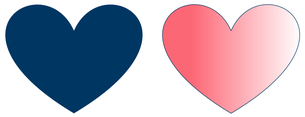
Constituting a value-invest ratio

Source: WifOR illustration.

Social Impact of heart failure therapy in Germany: 109,658 life years can be gained compared to treatment with SoC*

Health Footprint

Gained life years



1.2 years

Gained years of life per person

109,658

Gained life years up to 2030

Socioeconomic Footprint

Paid work

Direct gross value added

257 m EUR

Indirect gross value added

224 m EUR

Induced gross value added

126 m EUR

Unpaid work

Direct gross value added

735 m EUR

Indirect gross value added

503 m EUR

Induced gross value added

300 m EUR

= 2.1 bn EUR

Institutional Footprint

Paid work

- Income tax from direct, indirect and induced value added
- Social security contributions from direct, indirect and induced value added

EUR **88m**
Income tax

EUR **282m**
Social security contributions

Unpaid work

- Income tax from indirect and induced value added
- Social security contributions from indirect and induced value added

2

*in patients with reduced ejection fraction of NYHA stages II-IV, maximum of 500,000 patients eligible for heart failure therapy, study assumes that the market penetration of heart failure therapy will gradually increase after approval and reach its maximum of 25 percent after 5 years, so that after 5 years an estimated quarter of all eligible patients will be treated with heart failure therapy as SoC (Standard of Care).
Source: A Novel Treatment for Heart Failure and its Estimated Cost Effectiveness, Budget Impact, and Disease Burden Reduction in Germany

Example | Key findings of the Social Impact of Omalizumab in Japan

4 mio hours
per year

Avoided loss in paid work:	**2.5 mio hours**
Avoided loss in unpaid work:	**1.5 mio hours**

$ 120 mio GVA
per year

Avoided productivity loss:	$ **101 mio GVA**
Avoided activity loss:	$ **19 mio GVA**

Source: WifOR illustration. Own calculation, assuming an 8 hours working day and 2.9 hours of unpaid work per day.

Calculation of the socio-economic burden (SoB) of disease

Disease prevalence and health outcomes

- Describe the age- and gender-specific prevalence and incidence of a disease in Germany
- Identify relevant health outcomes and their occurrence or distribution

Quantify the health burden of a disease

Assessment of the loss of productivity due to illness

- Establishing a link between health outcomes and productivity
- Consideration of the activity characteristics of the patient population

Quantification of the socio-economic burden

Valuation of lost productive time

- How can this loss of potential for productive activities be translated into monetary value?
- Consideration of both paid and unpaid work activities

Monetization of the loss of productivity

3

Source: WifOR illustration.

Socioeconomic (SoC) burden for Colombia in 2022

Compared with the following indicators
(% of the GDP):

- Total health expenditures:
  7.6%
- Government expenditure on education:
  5.3%
- Tax revenue:
  15.3%

Note: Information from the World Bank data last year available

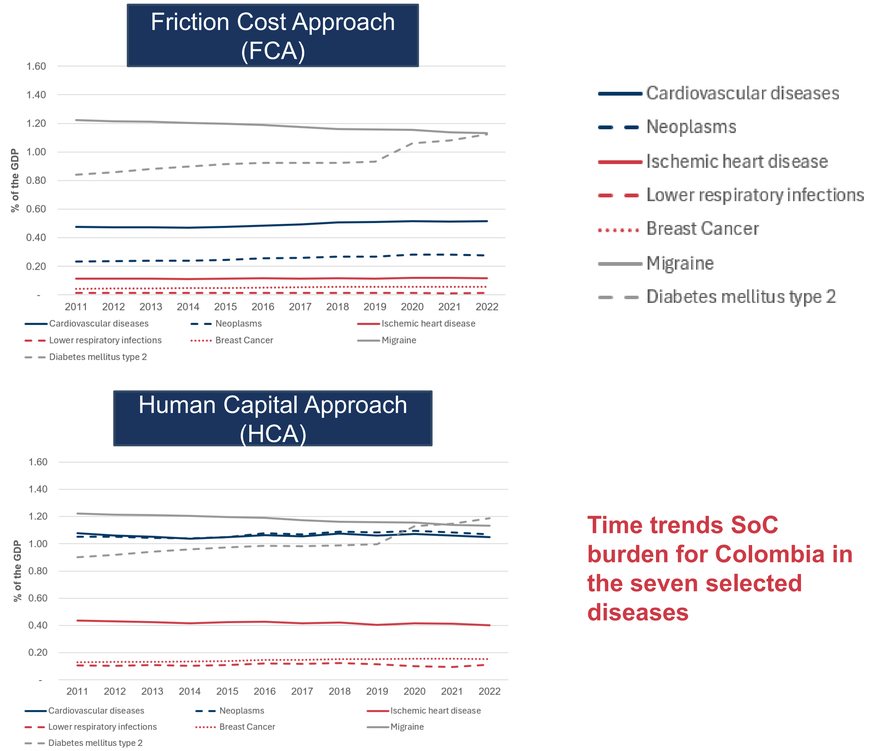
Socioeconomic burden related to the seven selected diseases

Cause		Human Capital Approach (HCA)		Friction Cost Approach (FCA)	
		*	% of the GDP	Billion US dollars*	% of the GDP
Level 2	Cardiovascular diseases	3.7	1.0	1.8	0.5
	Neoplasms	3.8	1.1	1.0	0.3
Level 3	Ischemic heart disease	1.4	0.4	0.4	0.1
	Lower respiratory infections	0.4	0.1	0.0	0.01
	Breast cancer	0.5	0.2	0.2	0.06
Level 4	Diabetes mellitus type 2	4.2	1.2	4.0	1.1
	Migraine	4.0	1.1	4.0	1.1
Monetary value of the productivity lost because of the **SEVEN DISEASES**		**16.1 Billion US dollars**	**4.5%**	**10.9 Billion US dollars**	**3.1%**

*Monetary data is comprehensively accounted for and presented at the **2015 price levels** to be consistent with the constant values supplied by the World Bank.
Source: WifOR elaboration

Socioeconomic (SoC) burden for Colombia between 2011 and 2022 (including paid and unpaid work)

- **Migraine** emerges as the leading cause of economic losses across types.
  - Only migraine shows a decrease in SoC burden over time.
- The burden of **type 2 diabetes** consistently rises over time
  - Faster growth at the beginning of the COVID pandemic: The increase in the SoC burden for disability (YLD) was higher than the increase in SoC burden for mortality (YLL).
- **Cardiovascular and neoplasms** SoC burden is higher under the non-substitution assumption (HCA)
  - Premature deaths due to these diseases adversely affect the future labor supply of the country.
- **Breast cancer and lower respiratory infections** have a comparatively lower impact on the economy than other diseases in the sample.



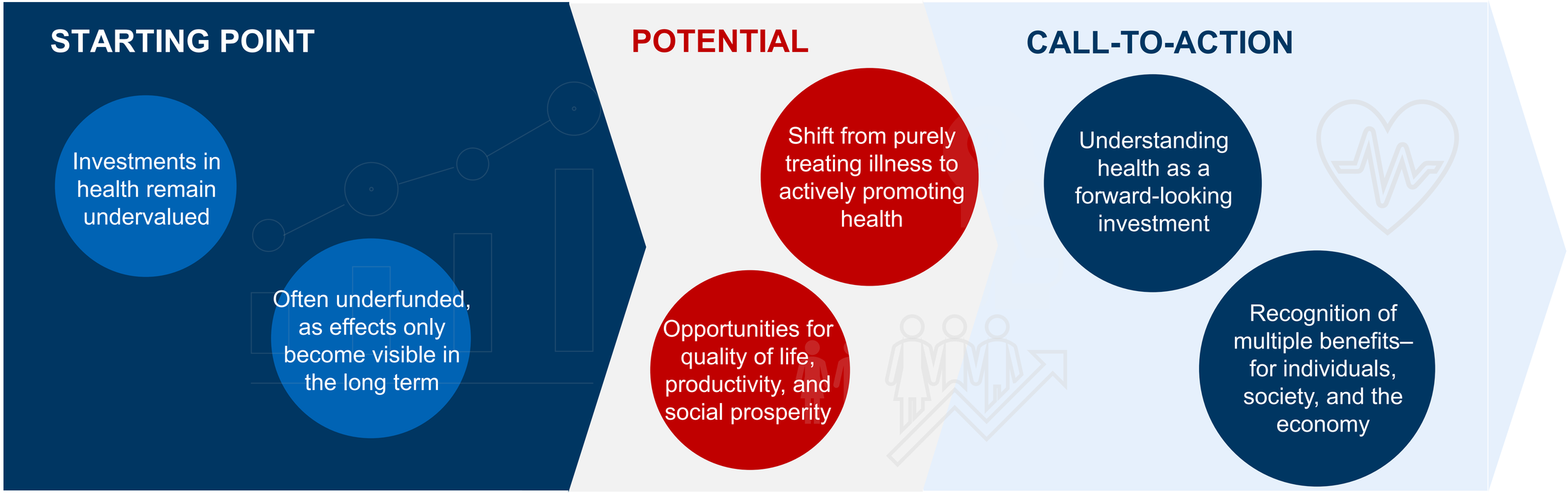
Time trends SoC burden for Colombia in the seven selected diseases

Source: WifOR elaboration.

3

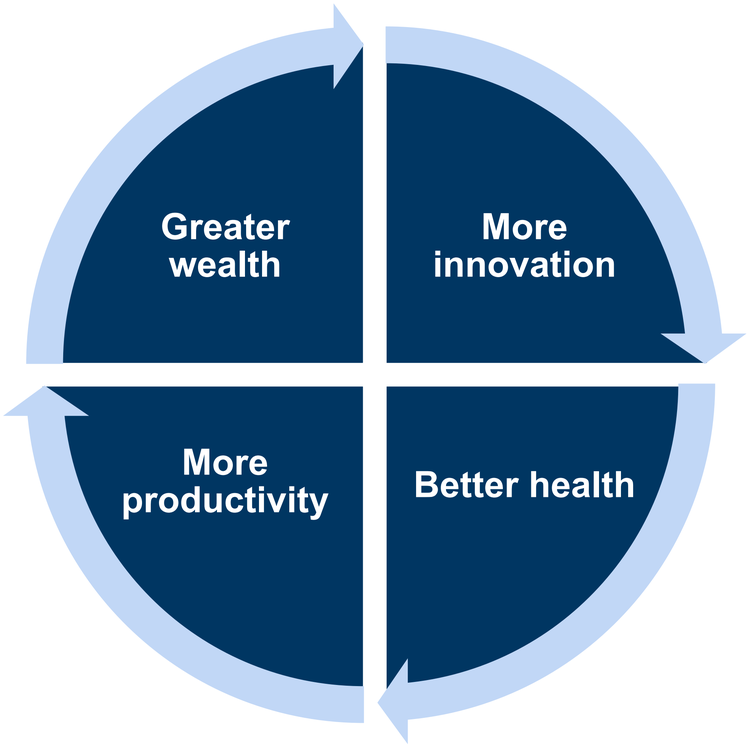
Conclusion and Outlook

Investing in health improves well-being, resilience, and prosperity



Source: WifOR 2026. Own illustration.

Health investments create a positive feedback loop



SDG GOAL 8

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

SDG GOAL 9

Build resilient infrastructure, promote sustainable industrialization and foster innovation

SDG GOAL 3

Ensure healthy lives and promote well-being for all at all ages

Source: WifOR illustration. Sustainable Development Goals (UN).

Stay in touch! Subscribe to “Shape it With Data: CEO”

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