

Measuring the Social and Economic Impact of Increased Access to Private Healthcare in Brazil

Healthcare in Brazil

Access to public healthcare is a constitutional right in Brazil. However, the combination of low public healthcare expenditure and universal coverage has led to an overburdened public system. Therefore many Brazilians seek better services in the private system; 53% of healthcare expenditure in the country is private.¹

While private care has historically been too expensive for low-income Brazilians, HealthTech companies such as [dr.consulta](#) are changing the landscape. [dr.consulta](#) is a multi-channel HealthTech that offers accessible, affordable, quality healthcare through a network of 29 owned clinics next to and with easy access to underserved communities in São Paulo. Besides telemedicine, its platform focuses on preventative care, offering over 3,000 services and 60 specialties, with same-day or week appointments serving more than 3.5 million patients.

For people in low-income communities, gaining access to affordable private healthcare close to home can be life changing. Beyond individual benefits, how can we measure the broader social and economic impacts of improved access to private healthcare? For multilateral development banks and impact investors, the answer to this question can help inform decisions about investing in HealthTech companies such as [dr.consulta](#).

Estimating the impact of healthcare investments

In 2023, IDB Invest made a \$10 million equity investment in [dr.consulta](#) to support the company's expansion to serve an additional 1.2 million patients in São Paulo from 2023-2030.²

As part of our end-to-end [Impact Management Framework](#), IDB Invest estimates the costs and benefits for society of every investment we finance, which in turn factors into our impact rating and decision-making process. In the case of [dr.consulta](#), our analysis included measuring the broader social and economic impacts of the improved access to private healthcare that would be provided through the investment.

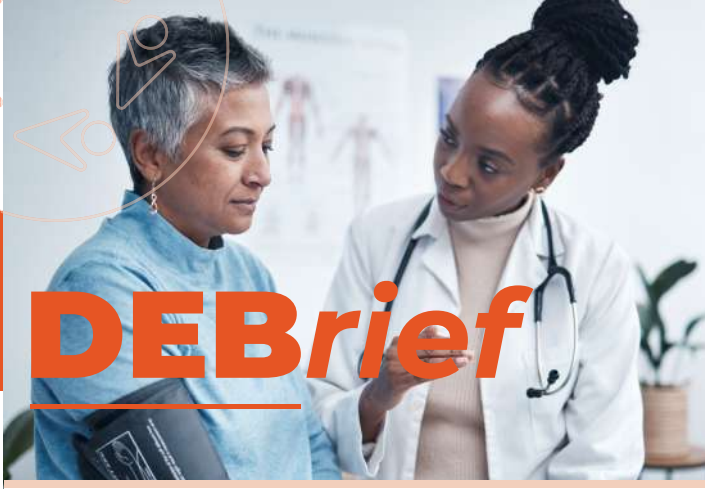
In addition to identifying key metrics to track the results of our investment, such as the number of healthcare facilities built or upgraded, health services produced, and patients receiving health services, estimating the broader health outcomes provides a deeper view of the investment's potential impact. It also allows us to estimate the counterfactual scenario, or the health and economic impacts that could be missed in the absence of the investment.

Using the DALY metric to assess health interventions

One way to assess the social and economic benefits of increased access to private healthcare is by translating a metric commonly used in global health research to the private sector: Disability-Adjusted Life Years (DALYs).

DALYs represent the total number of years lost due to ill health, disability, or premature death.³ One DALY can be thought of as one lost year of "healthy" life. The total number of DALYs represents both the years lost due to premature death and years lived with disability, adjusted for the severity of the disability. To calculate DALYs, several factors are considered such as the duration of illness, the age at which the illness occurs, the expected remaining lifespan at that age, the severity of the disease's impact on daily life, and disability weight ranging from perfect health (0) to maximum disability or death (1).

This measure is particularly useful for comparing the impact of different diseases and conditions across populations and time, as it encompasses both the mortality and morbidity associated with diseases.⁴ In essence, DALYs provide a comprehensive view of health outcomes by integrating the quantity and quality of life into a single metric.



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SUSTAINABLE DEVELOPMENT GOALS



- **Estimating the broader social and economic impacts** of improved access to private healthcare can help inform investor decision-making in the health sector.
- One way to do so is by translating a metric commonly used in the global health space to the private sector: **Disability-Adjusted Life Years (DALYs)**.
- In 2023, IDB Invest **made a \$10 million equity investment in the Brazilian HealthTech company, dr.consulta.**
- As part of its end-to-end **Impact Management Framework**, IDB Invest estimates the costs and benefits for society of each investment. In the case of [dr.consulta](#), we used the concept of DALYs to estimate and monetize the potential impact of the company's planned expansion to new areas of São Paulo.
- **This analysis leveraged the work of IDB public sector specialists in Brazil** to quantify the DALYs for 23 health interventions associated with preventing or treating different diseases, such as cancer and diabetes.
- **Our findings show that by expanding access to private healthcare services through dr.consulta,** society could gain thousands of healthy life years and millions of dollars in economic well-being.



1. Associação Nacional de Hospitais Privados (ANAHP). *Observatorio 2022*.
 2. *IDB Invest and dr.consulta Will Increase Access to Affordable Health Services in Brazil*.
 3. World Health Organization (WHO) *Global Health Observatory*.
 4. See Alvis y Valenzuela (2010), Mathers et al. (2001) and WHO et al. (2003).

In the context of global health, DALYs serve a crucial role in guiding health strategies and interventions. By quantifying how diseases and health conditions affect populations, public health agencies and policymakers can prioritize efforts where the potential to improve health and extend life is greatest. For instance, the Global Burden of Disease Study, which incorporates DALYs in its assessments, offers valuable insights into the prevalence and impact of diseases worldwide, influencing international health policies and funding decisions.⁵

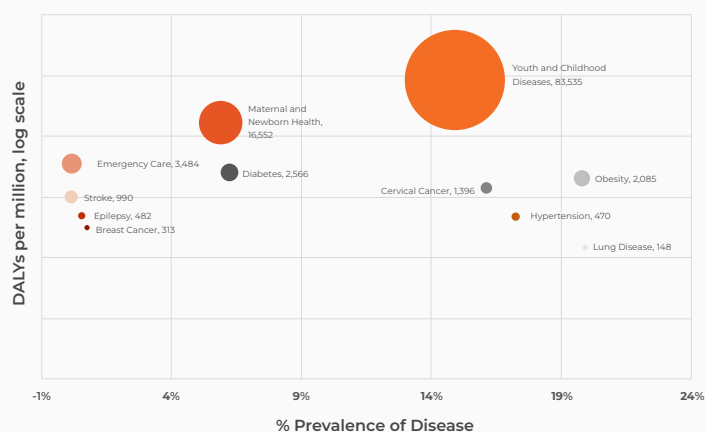
DALYs can also be converted into economic impact using measures such as annual GDP per capita.

Estimating the impact of dr.consulta's expansion

In the case of IDB Invest's investment with dr.consulta, our objective was to estimate and monetize the potential impact in terms of years of healthy life gained (or DALYs averted) by treating more people for specific diseases through dr.consulta's planned expansion to new areas of São Paulo, aiming to serve an additional 1.2 million patients over the next seven years.

We leveraged work already done by the IDB's public sector specialists in Brazil that quantified the DALYs for 23 health interventions associated with preventing or treating different diseases, such as cancer and diabetes.⁶ Their analysis used estimates available in international literature to calculate the DALYs, such as the World Health Organization's CHOICE program (2015) which estimates the effect of the gradual inclusion of health interventions in a package of services on incidence, remission, and mortality.⁷ Figure 1 presents the total benefits in DALYs averted per million inhabitants through interventions to prevent or treat various health conditions. Figure 1 presents the total benefits in DALYs averted per million inhabitants through interventions to prevent or treat various health conditions, estimated for the period 2023-2030.

Figure 1: DALYs (per million people) for Health Interventions by Incidence of Disease (%) – City of São Paulo



Source: Own calculations based on IDB, 2022, Análisis Económico, BR-L1583. Programa de fortalecimiento de las redes de inclusión social y atención a la salud-PROREDES Sergipe. Note: Bubble size represents the relative prevalence or burden of each disease in terms of DALYs. The total DALYs associated with each disease and with emergency care are listed next to each bubble.

Take cervical/uterine cancer as one example. In São Paulo, this type of cancer affects about 10.5 out of every 100,000 women,⁸ and the disease is associated with 1,396 years of healthy life lost (DALYs) per million people. In other words, by implementing interventions to mitigate and treat this type of cancer among women aged 25-65—who represent about one-third of the city's 12 million people—such as screening for early detection, HPV vaccination, and expanding cancer treatment care, society would gain 1,396 healthy years per million people.

Going back to dr.consulta, statistically, about 400,000 of the company's new patients will be women aged 25-65 who could benefit from screening and other interventions to prevent and treat cervical/uterine cancer. By expanding women's access to these services, we estimate that society would gain 368 healthy years.

And like this, we estimated the number of healthy years gained (or DALYs averted) for 23 health conditions to be treated by dr.consulta to assess the potential depth of impact of our investment, reaching a total of 18,645 healthy years.

How much is better health worth?

Next, we translated these health impacts into economic impacts using annual GDP per capita projections for the city of São Paulo.⁹ After all, poor health is costly, causing people to miss school and work and be less productive in their prime working years. On the flipside, healthier people are more productive, a plus for economic growth.¹⁰ We multiplied the identified DALYs per year for the different health interventions by the expected productivity of these healthy years gained because of the IDB Invest project.

Considering all 23 health conditions, we found that our operation with dr.consulta would generate an average societal benefit of approximately US\$43 million/year from 2023-2030. This means a total potential benefit of US\$301 million. Even if only half of dr.consulta's new patients receive the interventions needed to become healthier and reduce the disease burden, society would still gain an average of US\$22 million annually in improved economic well-being.

Put another way, for every dollar invested by IDB Invest in the company, the return to society due to a healthier, more productive population would be up to \$30.10 (\$15.04 under a more conservative scenario).

CONCLUSION

Investing in expanding private healthcare to underserved communities has many benefits. For multilateral development banks and impact investors, being able to measure and monetize these benefits for individuals and society more broadly is critical for understanding the impact potential, and ultimately, the effectiveness of these private investments.



Additional Information

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This DEBrief summarizes how IDB Invest used the DALY metric to estimate and monetize the potential impact of its investment in the Brazilian HealthTech company dr.consulta, building on analysis carried out by the IDB's Social Protection and Health Division.

Photos: Shutterstock

Design: Greta Design

The views expressed here are those of the authors and do not necessarily reflect the views of the IDB Group, its respective Boards of Directors, or the countries they represent.

5. *Global Burden of Disease Study.*

6. IDB, 2022. *Análisis Económico, BR-L1583. Programa de fortalecimiento de las redes de inclusión social y atención a la salud-PROREDES Sergipe.*

7. World Health Organization Choosing Interventions that are Cost-Effective (*WHO-CHOICE*) is a global leader in the field of economic evaluation, specifically cost-effectiveness analysis.

8. *National Cancer Institute (INCA)*, data for the state of São Paulo, September 2022.

9. Brazil GDP data from *WEO database, October 2022*; São Paulo GDP per capita data from the Instituto Brasileiro de Geografia e Estatística, *Gross Domestic Product of Municipalities, Tables*

2020, *2010-2020 Database.*

10. Schultz, T. P. (2005).