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Confronting the Investment Gap in Non-Communicable Disease Treatment and Care

Financing Solutions for Low- and Middle-Income Countries

September 2018

Executive Summary

This report aims to provide an analysis of the gap in investment in NCD treatment and care in low- and middle-income countries. We identify major factors driving the gap and hindering investment, suggest potential solutions to increase the flow of new and sustainable funding to the sector, and provide recommendations for specific actions to be taken by the global community to drive increased financing for NCD treatment and care.

This report finds that return-seeking investors offer a critical new stream of funding for NCD treatment and care, but new approaches and partnerships will be required to structure current health programs and priorities into “investable opportunities” and mitigate the risk/return profiles of investments in healthcare providers that reach target populations. Overcoming the barriers to private investment – through mechanisms that will drive solutions for all patients, especially those from low-income households – will be critical to unlocking a fresh flow of capital.



Conclusions

- A significant financing gap exists for NCD treatment and care in LMICs, particularly for patients from low- and middle-income households. While the growing NCD burden drives demand for greater investment, current funding falls far short of meeting the need. Finding solutions to close the investment gap will be critical to providing sustainable, equitable, and quality NCD treatment and care.
- Attracting adequate capital will require new approaches and targeted interventions that support governments and healthcare actors to implement sustainable financing mechanisms and multi-sectoral partnerships, and build a pipeline of investable opportunities that reach all patients, especially those from low- and middle-income households.
- All sectors have a role to play in driving new investment in NCD treatment and care. This report aims to serve as a call to action for all actors with a stake in the development of NCD healthcare in low- and middle-income countries. Whether through direct investment, technical assistance, or convening efforts, all must contribute to achieve decisive and lasting impact.

The Global Burden of NCDs

Non-communicable diseases (NCDs) including cardiovascular disease, diabetes, chronic respiratory disease, and cancers kill 40 million people each year, accounting for approximately 70% of all deaths globally, making NCDs the leading cause of global mortality.¹ Of those deaths, approximately 15 million are among people aged 30–69 years and more than 80% of these premature deaths occur in low-income and

middle-income countries.² In addition, chronic diseases and the complex care required to treat them creates a significant economic burden, with escalating costs among populations with co-morbidities. Over the last 20 years, global NCD mortality has increased; however the rates of increase vary significantly by country, household income level, and type of NCD.





Types of Financing

Contributing to NCD

Healthcare Investment

The investment required for NCD healthcare can be obtained from a range of sources. Throughout the report, we refer to distinct categories of financing, all of which have the potential to drive investment in the NCD healthcare sector. For the purposes of this report, they are defined as:

1. Non-Return Seeking Capital

- 1.1 Public funding:** Provided by a national or local government. The funds are raised either through direct or indirect taxation (e.g. tobacco taxes), non-tax revenue, or external borrowing.³
- 1.2 Official development assistance (ODA)** in the form of grants and concessional lending, provided by donors, including multilateral development institutions (MDIs) and donor government agencies. Grant funding does not require repayment, while concessional lending (e.g. World Bank loans) typically consists of loans with a close-to-zero interest rate and long grace periods and maturities.
- 1.3 Philanthropic grants** provided by private foundations and corporate donors. Resources are provided either as financing (e.g. technical assistance grants) or as in-kind transfers of goods and services (e.g. medical equipment, medicines).

- 2. Return-seeking capital** provided by investors seeking commercial returns. These funds are not necessarily backed by public finances and therefore do not include the external borrowing referenced above. In this report we distinguish between two types of return-seeking capital:

- 2.1 Investment from development finance institutions (DFIs),** backed by donor governments. DFIs typically have social impact objectives and are often willing to accept lower financial returns for investments that improve social outcomes.
- 2.2 Private equity investment:** Private equity investors require varying levels of financial returns, often at or above the average market rate of return, depending on their mandate.

This report does not address lending from financial institutions (e.g. local and international banks) as this type of debt financing currently makes up a small fraction of overall health sector financing in low- and middle-income countries.



Defining Blended

Finance

Blended finance is a frequently used term in the global NCD financing discussion which refers to the use of both non-return-seeking capital (i.e. public funds, ODA, philanthropic grants) and return-seeking capital (i.e. DFI and private equity investments) within a single investment vehicle or “deal.” The aim is to attract private capital towards socially impactful investments that would otherwise have weak risk-return profiles. To achieve this outcome, public funds and philanthropic grants are used to de-risk investments so that they become more attractive to private investors. The types of tools used in blended finance include:

- **Technical Assistance Grants:** Pools of non-return-seeking capital that are typically used to facilitate knowledge transfers and provide capacity building for businesses or organisations facing challenges to achieve sufficient scale, efficiency, or profitability. In the context of blended finance, technical assistance grants are typically used as a mechanism to reduce the risk profile of a potential investment (i.e. if an investee receives technical assistance, it is presumably more likely to achieve financial sustainability). In turn, this helps attract return-seeking investors who would otherwise not invest due to concerns over capacities and long-term sustainability. Technical assistance grants are usually provided by governments, philanthropic donors, and multilateral development institutions.
- **Guarantees:** These instruments protect return-seeking investors from the risks associated with an investment. For example, if an investor faces financial losses due to an investee defaulting on a loan, the institution providing the guarantee will cover the loss. As in the case of technical assistance grants, the purpose of guarantees is to attract investors that would otherwise not invest in a business or organisation. The terms of guarantee agreements vary depending on the type and scope of risk that the guarantor is willing to cover. Guarantees are typically offered by governments, bilateral development agencies, and multilateral development institutions.
- **First-loss Agreements:** Philanthropic donors can agree to make investments in which they are the most junior investor. In this case, they take on the first loss if the investment fails to generate the expected returns. By taking on the first loss, the donor reduces the risk for other investors. Donors who take on first-loss agreements typically agree with the other investors on how much of a potential loss they would accept before it is also passed on to the other investors. The purpose of this type of arrangement is to attract return-seeking investors who would otherwise not invest in the project due to its un-favourable risk-return profile.

Understanding the NCD

Financing Gap

The Cost of NCD Treatment and Care

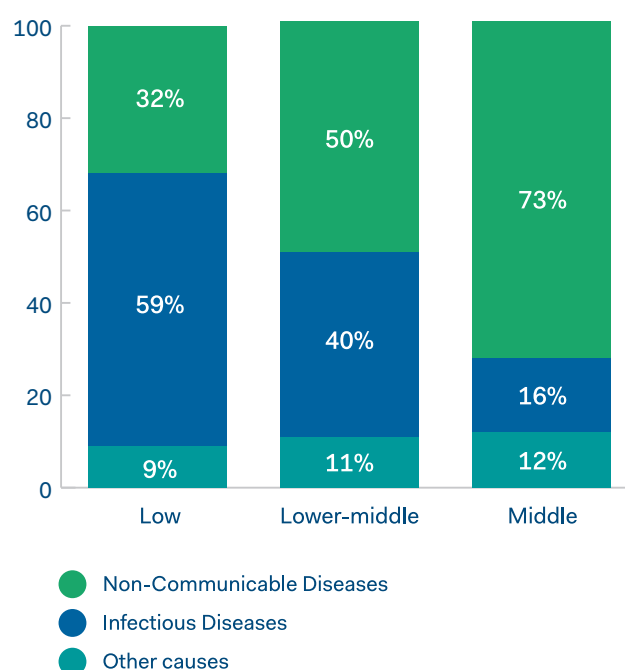
In 2017, the WHO estimated that achieving the Sustainable Development Goals' (SDGs) health targets would require increased investment in health of up to \$371 billion by 2030, with approximately 75% of those investments focused on strengthening health systems, including the building and operating of new clinics, hospitals and laboratories, purchasing of essential medical equipment, and building up the national health workforce.⁴

The rising NCD burden in low- and middle-income countries is driving demand for increased investment in treatment and care. However, current funding for NCDs falls far short of what is required to deliver these global targets and meet the needs of patients from across the income spectrum, particularly those from low-income households who are currently underserved and lack access to quality, and affordable care.

The cost of continued underinvestment in NCD services has been estimated at US\$47 trillion in lost gross domestic product globally from 2011 to 2025, posing a major threat to sustainable economic growth, particularly in low- and middle-income countries.⁵ In addition to these economic consequences, if substantial investments are not made now, the expected increase in premature mortality from NCDs will jeopardise progress toward the 2025 Global NCD Targets and SDG 3.4, which calls for a one-third reduction in premature mortality from NCDs by 2030.

Figure 1.

Share of DALYs by disease type and country SDI category (2016)

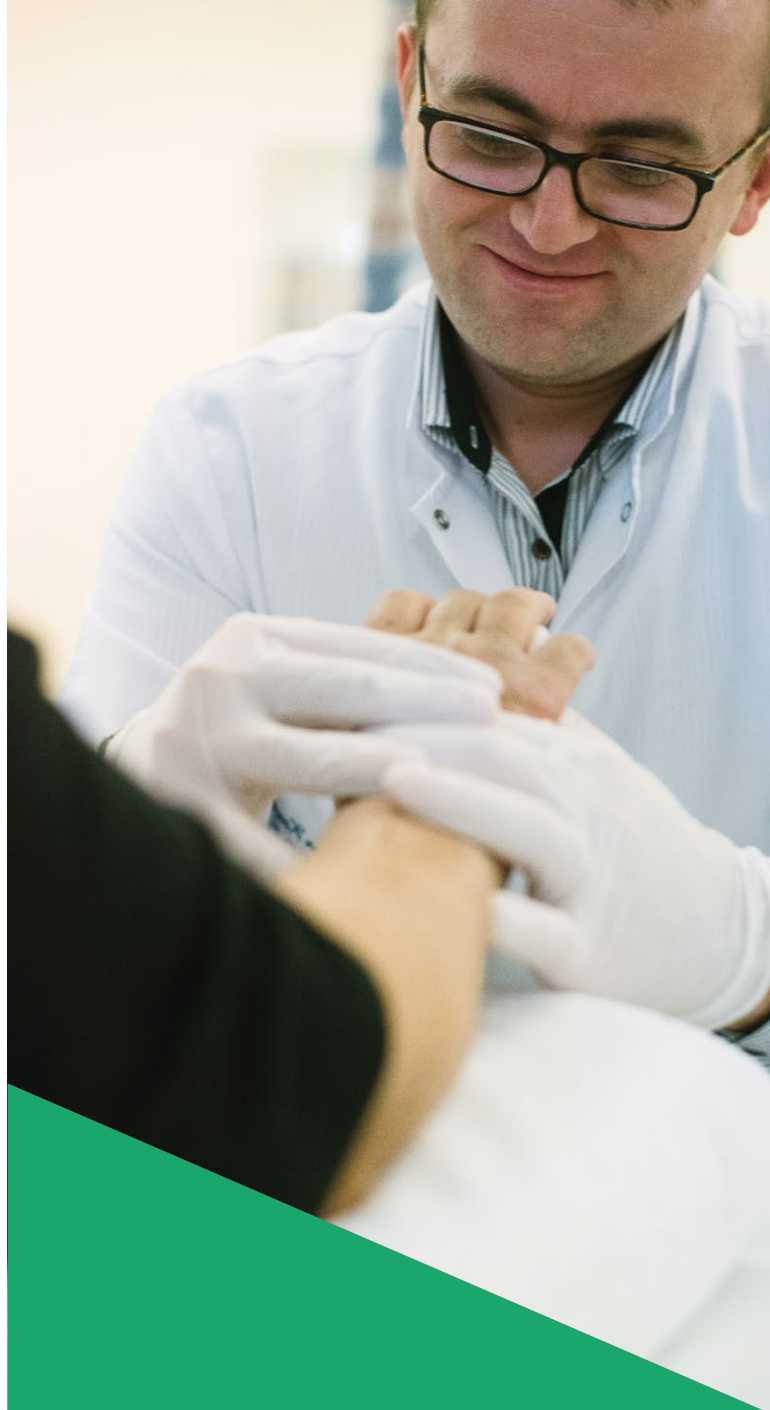


Domestic Spending on NCDs

Approximately 90% of annual investment in healthcare in low- and lower-middle-income countries comes from national governments and overseas development assistance (ODA).⁶ Yet many governments are challenged to prioritize adequate investment.

Furthermore, limited public finance capacity can impact government creditworthiness, which in turn restricts governments' ability to access funds internationally for investment in the development of essential services. As a result, NCDs tend to be funded at levels significantly lower than what is required to tackle the growing scale of the burden. Given the dependence on domestic financing to address NCDs, increasing fiscal space in national budgets will be critical. The most commonly advocated mechanisms for this purpose, such as taxation on tobacco, alcohol, and sugar-sweetened beverages, offer an effective and proven way to improve health outcomes and are a critical component of public health policy.⁷ However, they are unlikely to raise revenue to the level required for governments to comprehensively address NCDs.

Some governments in low- and lower-middle-income countries also face specific challenges relating to ODA funding, which they rely on to supplement domestic funds and finance public health investments. For example, the World Bank adjusts a country's funding envelope partly depending on the country's level of GDP per capita, among other factors. While gradual reductions in ODA assistance are normal for emerging economies, a year-on-year drop in ODA financing due to a change in classification (e.g. from low- to lower-middle-income status) can have a significant impact on government financing of healthcare, particularly for priorities which require a long time-horizon to deliver impact such as NCD care.



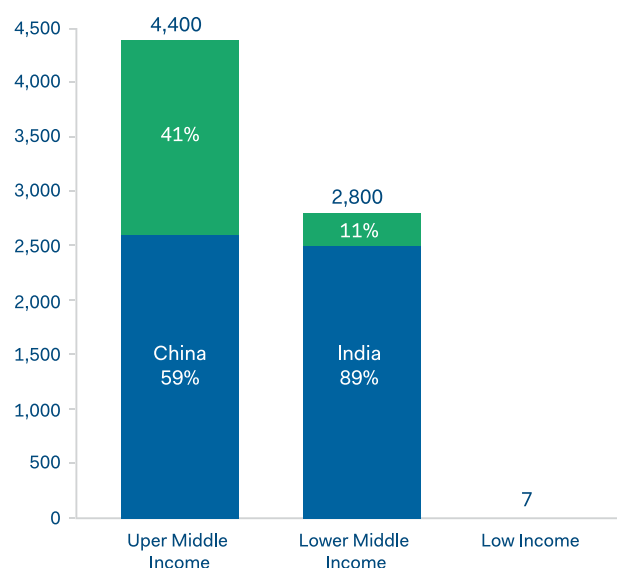
Private Sector Financing

While adequate government financing for NCDs will be critical to long term impact and UHC, new solutions will be required to fill the current gap. Private sector investment has the potential to be an important source of additional capital to help fill the financing gap for quality NCD care, given the strain on domestic spending and limited availability of ODA. Annually, approximately \$500 million is provided by DFIs and private equity and impact investors place between \$1-1.5 billion in health system investments. However, despite the availability of funding, private sector investment currently accounts for only 5% of annual health infrastructure investment in low- and middle-income countries⁸. In addition, private investors usually target private providers of high-cost care that is largely unaffordable for the majority of the population. Consequently, private sector investors primarily serve middle-to-high income patients. From 2008 to 2017, private equity funds active in emerging and frontier markets invested \$7.2 billion in health providers and medical device manufacturers. Of those investments, roughly \$4.4 billion (or 61%) were in upper-middle-income countries with \$2.6 billion in China alone. Of the remaining \$2.8 billion, India received \$2.5 billion. Only \$300 million was invested in other lower-middle-income countries, while low-income countries received almost no private equity capital.⁹ (See Figure 2.)

DFI investments are also mostly directed towards upper-middle-income countries and also focus on private providers targeting middle- to high-income patients. For example, the International Finance Corporate (IFC) invests \$750 million of their \$1.1 billion health infrastructure portfolio in upper-middle-income countries such as China, Brazil, and Turkey. The remaining balance has mostly been invested in lower-middle-income countries, including India and Nigeria, while only one deal was made in a low-income country (Chad).¹⁰

Figure 2.

Private equity health infrastructure investments in low- and middle-income countries (2008-2017)



Barriers to Private Investment

Private investment has the potential to deliver a critical new flow of capital for NCD treatment and care in low- and middle-income countries. Yet current investments in emerging markets are limited and are not structured to drive meaningful change in access to services for the broader patient population which will be required to address the global NCD financing gap.

A key factor driving this is that few investment opportunities meet return-seeking investors' risk-return expectations. Four barriers that hinder investment in NCD treatment and care for low- and middle-income populations are:

1

- NCD healthcare projects that target low- and middle-income patients tend to show returns that are below the requirements of most investors. Return-seeking investors normally require a 5-15% internal rate of return over multiple years, which is often out of reach for businesses focused on low- and middle-income patients.¹¹

2

- Health providers in low- and lower-middle-income countries are seen as higher risk investments and many struggle, or are perceived to be struggling, with limited human resources and capacity. Healthcare operators often face shortages of trained physicians, qualified healthcare management teams, and experienced infrastructure developers. This diminishes their ability to generate returns and become sustainable which, from an investors' perspective, raises the risk profile of potential investments.

3

- Investment opportunities are often perceived as carrying high transaction costs, which leads investors to seek larger investments that most NCD healthcare businesses and organizations cannot sustain. Large investors interviewed as part of this market assessment indicated that, given the high-risk and high transaction costs associated with investing in low-cost NCD healthcare, they normally prefer investment deals larger than \$10 million, which is larger than the typical size of investment needed for healthcare businesses targeting low- and middle-income populations.¹²

4

- Macroeconomic risks discourage investors from seeking opportunities in the low and lower-middle-income countries. Shocks, including political instability and local currency fluctuations, are cited as significant concerns among investors.



Recommended

Interventions

The financing gap for treatment and care of NCDs in low- and middle-income countries is a critical barrier to achieving global health, NCD, and UHC targets. In the public sector, scarce resources limit government spending on quality NCD care. In the private sector, a lack of opportunities that provide sufficient return on investment while serving low- and middle-income patients hinders meaningful investment.

Addressing the NCD financing gap will require solutions at multiple levels to enable approaches that will attract new types of investors, including return-seeking investors.



Targeted interventions that 1) ***Support governments and healthcare actors to implement innovative financing mechanisms and multisectoral partnerships to attract new sources of capital***, and 2) ***Build a pipeline of investable opportunities that reach all patients***, will be necessary to address the financing gap.



Targeted

Interventions

- 1 **Support governments and healthcare actors to implement new sustainable financing mechanisms and multisectoral partnerships that can help attract new sources of capital from across sectors**
 - **Governments can be supported in designing blended finance solutions and brokering PPPs that help raise additional capital.** To fund comprehensive NCD healthcare ecosystems, governments should explore opportunities to attract capital from across the financing landscape, including DFIs, foundations, and private investors. Supporting governments to assess blended financing options and source potential investors is critical to boosting their capacity to attract investment. Governments should be empowered to lead the development of NCD plans that drive coordinated efforts between stakeholders from public and private sectors, as well as civil society.
 - **Brokering agreements with philanthropic donors and MDBs to set up blended finance facilities would reduce the risks associated with investing in emerging- and frontier-market healthcare.** Private investors ranging from private equity firms to impact investment funds consistently voice concerns about the political, macroeconomic, and currency risks they face in entering these markets. Structuring deals that include instruments such as donor-funded technical assistance, first-loss agreements, guarantees, and currency hedging, could reduce risk perceptions and catalyze private investment.¹³
 - **Governments can raise municipal bonds to finance city-level NCD plans.** Although relatively untested in the health space, governments could adopt successful practices from other fields, such as the environmental community's use of "green bonds," to raise municipal bonds to finance city-level NCD plans. As new and innovative mechanisms are explored, the health community and local governments should work together to ensure approaches drive toward the goal of improved quality, sustainability, and equitable access to NCD treatment and care.
 - **New investments can be facilitated by consolidating the pipeline of opportunities across a common "deal sourcing" platform.** Few investors have the internal capacity and expertise to seek out potential deals across a range of low- and middle-income countries, particularly small-ticket yet impactful models that form a key part of an ecosystem approach. Investment management facilities specialized the sector and engaged at the sub-regional level could be set up to offer a reliable source of vetted investment opportunities, making it easier for investors to place their capital in low and middle income countries.
- 2 **Build a pipeline of investable opportunities that reach all patients**
 - **Support NCD care providers to improve the efficiency, operational strength, and sustainability of their operational models.** NCD healthcare providers often lack the human resource capacity to scale up services and achieve financial sustainability. They typically require greater project development capabilities, as well as improved patient and financial management practices. The financial efficiency and sustainability of a potential investee is a key criterion for return-seeking investors evaluating a potential investment, as it ensures the ability to generate both impact and returns over time. Capacity building support such as strengthening aspects of management capability, technology upgrades, improved data repositories and billing systems, and process innovations can help providers maximize affordability, resource efficiency, and impact.
 - **Cultivate NCD care ecosystems¹⁴ by fostering the growth of non-provider health actors, as well as brick-and-mortar NCD care providers.** Supporting complementary services could advance more effective utilization across the healthcare system and better health outcomes. In addition, regional and local governments across low- and middle-income countries could benefit from greater internal capacity to develop and manage health infrastructure projects that are driven at the sub-national level, including public-private partnerships (PPPs).

The Role of Global Actors

Beyond national governments and return-seeking investors, many actors across the global community have a stake in improving NCD care and can drive greater investment by contributing to the success of the recommended interventions. Depending on their expertise and areas of influence, different stakeholders can leverage their respective capabilities to drive progress. Four types of stakeholders which can contribute to addressing the financing gap are:

1. **Donors and concessional lenders** have a significant role to play to strengthen government investment capacity and attract private investors
 - **MDBs and donor government development agencies** can provide i) expertise and funding to set up de-risking instruments; ii) low-interest rate financing for public health infrastructure projects; and iii) grant-funding for technical assistance to strengthen both government investment capacity and the investable pipeline of private providers.
 - **Private Foundations** can identify opportunities for philanthropic commitments that catalyze greater private investment, including through first-loss agreements and funding for technical assistance. Foundations can also expand beyond traditional grant financing to explore impact investment and patient capital approaches.
2. **Civil society organizations** can leverage partner networks to build bridges and foster dialogue between local stakeholders and potential investors, the donor community, governments, and the health and finance sectors. As a neutral actor in the coordination of cross-sectoral partnerships, civil society has a critical role to play as advocates for investment in NCDs and ensuring accountability to commitments.
3. **Impact-focused fund managers** can attract investors by setting up financing vehicles offering effective deal sourcing, advocating for a “patient capital” approach, and the adoption of an “ecosystem-development” investment strategy, which supports a broad network of businesses and organizations that drive comprehensive and sustainable NCD healthcare.
4. **Multinational health sector corporations**, many of which have a commercial stake in the development of the NCD healthcare sector in emerging economies, can fund interventions that support investees directly, particularly those aimed at encouraging the adoption of low-cost care models and strengthening health management practices.

Conclusion

- A significant financing gap exists for NCD treatment and care in LMICs, particularly for patients from low- and middle-income households. While the growing NCD burden drives demand for greater investment, current funding falls far short of meeting the need. Finding solutions to close the investment gap will be critical to providing sustainable, equitable, and quality NCD treatment and care.
- Attracting adequate capital will require new approaches and targeted interventions that support governments and healthcare actors to implement sustainable financing mechanisms and multi-sectoral partnerships, and build a pipeline of investable opportunities that reach all patients, especially those from low- and middle-income households.
- All sectors have a role to play in driving new investment in NCD treatment and care. This report aims to serve as a call to action for all actors with a stake in the development of NCD healthcare in low- and middle-income countries. Whether through direct investment, technical assistance, or convening efforts, all must contribute to achieve decisive and lasting impact.





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Abbreviations

DALY	Disability-adjusted life years
DFI	Development finance institution
EMPEA	Emerging Markets Private Equity Association
IFC	International Finance Corporation
MDB	Multilateral Development Bank
MDI	Multilateral Development Institution
NCDs	Non-communicable diseases
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
PPP	Public Private Partnership
SDI	Socio-Demographic Index
SDGs	Sustainable Development Goals
UHC	Universal Health Coverage
WHO	World Health Organization

Sources

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2. Ghebreyesus, T.A. (April 2018). Acting on NCDs: Counting the Costs. The Lancet. [online] Available at [http://dx.doi.org/10.1016/S01406736\(18\)30675-5](http://dx.doi.org/10.1016/S01406736(18)30675-5) [Accessed 06 April 2018].
3. Given firm creditworthiness requirements, not all low- and middle-income countries have access to international loans. Local governments often struggle to raise financing in international markets due to limited public finances.
4. Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries Stenberg, Karin et al. The Lancet Global Health, Volume 5, Issue 9, e875 - e887.
5. Bloom DE, Cafiero ET, Jané-Llopis E, et al. The global economic burden of non-communicable diseases. Geneva: World Economic Forum, 2011 (<http://www.weforum.org/reports/global-economicburden-noncommunicable-diseases>).
6. Government expenditure in health infrastructure is calculated using on the health sector gross fixed capital formation (GFCF). GFCF estimates as % of GDP are 0.11, 0.09, and 0.07 for UMICs, LMICs, and LICs, respectively. Data sources include World Development Indicators and the OECD. ODA investment was calculated by summing up concessional loans made by the World Bank and other forms of donor funding. Data sources include the World Bank projects portal and the OECD.
7. Equity impacts of price policies to promote healthy behaviours. Sassi, Franco et al. The Lancet.
8. These figures are high-level estimates for 2015 healthcare infrastructure investment. They were reached using a combination of sources including the World Development Indicators, data from IFC, African Development Bank, PROPARCO, Dutch Cancer Society, and EMPEA. The analysis excludes financing from commercial banks, Inter-American Development Bank, and Asian Development Bank
9. Based on EMPEA private equity statistics from 2008-2017. Source: Emerging Markets Health Care Equipment & Services Investments, 2008-2017. EMPEA. (2017)
10. Data sourced from the IFC portfolio database at <http://www.ifc.org>
11. Of the 35 "notable exits" (i.e. investments with exit multiples ranging from 1.5x to 3.5x) registered by the Emerging Markets Private Equity Association (EMPEA) across all emerging market healthcare investments for the period 2008 to 2016, only four were in low- and lower-middle income countries, two of which were in India. Emerging Markets Health Care Equipment & Services Investments, 2008-2017. EMPEA. (2017).
12. Depending on the type of treatment offered (e.g. cataract surgery, kidney dialysis, or diabetes care), the up-front cost of starting a new health centre is estimated between \$1-\$20 million in low- and middle-income countries. The cost of upgrading existing facilities ranges between \$100,000 and \$10 million. Given the limited overlap between funding needs of healthcare providers and the preference for larger deals from investors, there are limited opportunities for investment in low cost healthcare. New cancer treatment centres can cost up to \$50 million, but private providers are typically unable to serve low-income patients and offer the required rate of return to attract private investors.
13. The Danish Ministry of Foreign Affairs' Investment Fund for Developing Countries (IFU) is an example of a blended financing facility. The IFU aims to directly invest \$ 200-300 million per year (across multiple sectors), with which it aims to de-risk investments to mobilize an additional \$ 1,400 - 2,100 million – seven times its direct investment. Source: The Ministry of Foreign Affairs' Strategy for The Investment Fund for Developing Countries (IFU) 2017-2021, 2017, Danish MFA. Available here <http://um.dk/~media/UM/English-site/Documents/Danida/About-Danida/Danida%20transparency/Consultations/2017/IFU%20Strategy.pdf>
14. For the purposes of this report, the "NCD Care Ecosystem" refers to the network of businesses and organizations that contribute towards successful and sustainable NCD healthcare. These core operators are supported by more peripheral (but still essential) businesses such as health insurance firms, payment systems providers, technology firms (e.g. patient registration and tracking systems providers), training firms, medical device manufacturers, developers, and technicians, and others.



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