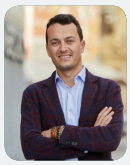
Rethinking the role of the development sector in public-private partnerships (PPPs) for cancer care in low- and middle-income countries

Mathieu Morand, Senior Manager, Digital and Health Financing, City Cancer Challenge Foundation;
Karine Bachongy, Global Sector Lead, Social Infrastructure PPP, International Finance Corporation; and
Ilaria Di Meglio, Content and Communications Manager, City Cancer Challenge Foundation


MATHIEU MORAND


KARINE BACHONGY


ILARIA DI MEGLIO

The growing global demand for improved health care in low- and middle-income countries creates an urgent need to mobilize additional resources to supplement insufficient public and donor funding. Private-Public Partnerships (PPPs) can provide a way forward, but they can be complex. This article focuses on the work of the City Cancer Challenge and the International Finance Corporation in assisting all parties to understand the issues involved, such as bringing together development partners and government, the importance of capacity building, the need for rigorous planning and the importance of PPPs in achieving the Sustainable Development Goals and Universal Health Coverage.

Health financing for cancer: The macro landscape

Noncommunicable diseases (NCDs) – namely cancer, cardiovascular and chronic respiratory diseases and diabetes – are the world's most prevalent diseases, affecting more than 20% of the global population. They are also the planet's top killer, with 74% of all deaths worldwide caused by an NCD. Of the 41 million deaths attributed to NCDs in 2020, 10 million were attributed to cancer alone *(1)*, and predictions suggest that in excess of 13 million people per year will die from cancer by 2030 *(2)*.

The rising trend in cancer deaths is of particular concern in low- and middle-income countries (LMICs), which share a disproportionate economic and cancer mortality burden. LMICs currently account for three-quarters of all cancer deaths worldwide *(3)*. This is aggravated by the fact that diseases like cancer do not just kill, they also significantly reduce a nation's human capital and labour supply – by causing morbidity and chronic disability – which has long-term devastating impacts on a household's financial wellbeing as well as a country's productivity and economic growth. Estimates suggest that the global economic cost of cancer likely exceeds US$1 trillion *(4)*, yet funding for cancer only receives 5% of global resources in LMICs *(5)*. Unlike in high-income countries, where governments cover about 70% of health-care costs, domestic financing for health in LMICs struggles to meet essential health population needs. In the last decade, health priorities have remained largely unchanged at 4–6% of government spending *(6)*.

An increased understanding of the NCD burden, particularly in LMICs, has prompted the appearance of global movements directed towards achieving Sustainable Development Goal (SDG) 3.4 – reducing premature mortality by one-third by 2030 *(7)*. Yet the costs of achieving SDG 3.4 worldwide are projected to require US$ 18 billion per year *(18)*, which would comprise a significant share of health budgets in LMICs, emphasizing the need to mobilize external resources. This urgency was recognized in the 2030 agenda for sustainable development, which stressed the need for official development assistance to developing countries *(9)*. However, development assistance for NCDs has not kept pace with the burden of these diseases and still remains unacceptably low. In the last 30 years, NCDs have accounted for less than 2% of total development assistance allocated to health *(10)*. This suggests that cancer receives a negligible share of financing, and this share is normally directed towards service delivery.

The cost of continued underinvestment is projected to be far higher than the projected cost of investment. The World Health Organization (WHO) estimates that US$ 1 spent per person per year in cost-effective prevention and control

measures for NCDs could save 7 million lives in LMICs by 2030, with an investment of US$ 1 expected to yield a return of US$ 7 by 2030 *(11)*.

The growing global demand for improved health care, coupled with insufficient funds from international development assistance and lack of domestic public resources to cover health-care needs in LMICs, makes an urgent and imperative case for faster and more comprehensive efforts to strengthen care infrastructure. LMICs face an urgent need to mobilize additional resources to fill the gap in public and donor funding, which is expected to widen due to the current global economic crisis.

An additional source that can bridge this gap is private investment. Private capital and expertise are increasingly viewed as sources that can complement and support health systems, making important contributions towards the achievement of the SDGs. At the moment, private investment is growing organically in LMICs to help close the huge gaps created by deficiencies in public health-care delivery and meet huge public needs. India and Kenya are good examples of the massive inflow of private equity to develop cancer care centres *(12,13)*. But unfortunately, those facilities are private, and treatment is unaffordable for most families, increasing inequity in access to cancer care rather than solving the needs of the majority of the population.

Private-public partnerships in health care in LMICs

There is growing interest in the private sector investing in the infrastructure required for cancer care, such as pathology laboratories, imaging, radiotherapy or comprehensive care centres. This has prompted some governments to consider expanding the role of PPPs to provide essential clinical services, which are still more common in transport and energy, to tertiary and secondary health care.

PPPs are defined as "long-term contracts between a private party and a government agency for providing a public asset or service, in which the private party bears significant risk and management responsibility" *(14)*. There are three main reasons why PPPs are attractive and why there is increased political will to adopt them. The first is that they is the opportunity to offer access to quality services without having to mobilize large amounts of capital. Indeed, public health providers do not have to invest in the upfront costs of construction, equipment, procurement, HR training and recruitment, and instead can delegate that responsibility – entirely or partially – to one or several private sector organizations. The second reason is the philosophy underpinning the financial arrangement, which is an output or outcome-based payment, based on key performance indicators that incentivise private companies to deliver a high standard of care. Finally, governments also perceive infrastructure PPPs as a way to evolve their role from that of a provider towards being a service commissioner, focusing on their policy-making and monitoring capabilities *(15)*.

Cancer care, especially at the secondary and tertiary levels, is particularly prone to the remodelling of capital investment and operational cost structures. The increasing complexity of medical equipment, the safety requirements dictating heavy infrastructure, especially in nuclear medicine and radiotherapy, and the high specialization of human resources, all lead to high upfront investment requirements and programme complexity, which can be overwhelming to the governments of LMICs. There are already significant health needs and challenges in LMICs, and cancer care must compete with numerous other priorities for scarce budgets and attention.

There is clearly increased local political will to think about and adopt PPPs as part of the health-care system. Latin America concentrates a high share of PPPs for health, as highlighted by a recent PwC report *(16)*, due to changing demographics and epidemiology profiles as well as the spread of ambitious universal health coverage (UHC) and clear PPP legislation. In countries like Uzbekistan, Georgia or Ghana, specialized PPP units within finance ministries have been created and work hand-in-hand with health ministries.

According to *IJGlobal*, there were more than 140 project finance transactions in the sector that reached tender stage or closed in the last five years. Many were related to diagnostics and cancer care, such as in Nigeria, for instance, where the Lagos University Teaching Hospital launched a PPP to develop its radiotherapy centre *(17)*. What is more, governments are not just pursuing a single model, but instead a plethora of areas of focus and structures are being implemented. For example, the International Finance Corporation has advised on several health PPPs, each designed to meet different public health sector goals and requiring different private sector interventions. The Philippines General Hospital initiated a PPP project *(18)* where the private partner will finance, build, and equip the Manila Cancer Center, as well as provide non-clinical services. In Jharkhand, India, a PPP involved the development of 25 pathology laboratories *(19)* on a "Hub and Spoke" model within existing public health facilities, aiming at bringing diagnostics closer to patients. In each of those, the role of the private sector may differ, from a managed equipment service provider role – when the choice of the government is to transfer the risk of equipment investment and maintenance only – to a medical service operating role when the objective is to let the private sector recruit, train and manage human resources while handling the operational complexity.

In the 1990s, almost every new NHS hospital in the United Kingdom was built as a PPP *(20)*, creating a first wave of such agreements across the globe, as well as highlighting a number

of associated risks with this arrangement. Since then, more and more countries have embraced the level of customization potential and uniqueness of PPP agreements in order to adjust to the local context.

Reaching the SDGs and UHC objectives will be more difficult if the private sector is not involved as a partner in delivering health services. Yet there has been an ongoing debate within the development community around whether the private sector should have a role at all, including through PPPs, given the scale of the impact NCDs are having in LMICs and the need for increased access to quality care. The question of whether PPPs should or should not be included in the tools used by governments to solve health, and more specifically cancer care, challenges must shift away from who delivers the service to how best to meet people's needs. This requires collaboration between governments, civil society, the private sector and development institutions to find the most suitable and sustainable solutions to meeting public health needs, including considering how to best deploy PPPs within specific country contexts.

The role of development partners

A key factor in the successful delivery of impactful PPPs is better planned and coordinated action between the public and the private sectors, which includes non-profit organizations and development partners.

There are pros and cons to using PPPs as a procurement tool, and critics have raised some valid concerns *(21)*. For example, PPPs do not necessarily generate additional financial resources for public authorities to take care of other challenges at the community level: the cost of designing and executing PPP transactions can be high and may not be worth it for small projects; the private partner could be recruiting cancer specialists away from the public sector, potentially generating a negative impact on the overall health-care system if not anticipated. These are all valid concerns that should be thoroughly considered when contemplating PPPs, so as to ensure a project meets public health sector objectives and delivers sustainable benefits.

The good news is that through a rigorous project preparation process – encompassing legal, technical, environment and social, and financial aspects – most risks can be mapped and addressed, informing appropriate planning and policy-making. The challenge is to convince and partner with the non-public sector (NGOs, development agencies, private sector) *(22)* to conduct such exercises before developing cancer care facilities through innovative public-private partnerships, and join forces to ensure equitable, quality service delivery, ethical practice and community partnership.

The City Cancer Challenge (C/Can) is a Geneva-based international non-profit organization catalysing local multi-stakeholder collaboration in low- and middle-income cities to advance cancer care. C/Can decided to support governments that have manifested a strong interest in a PPP for cancer care in order for them to generate real world evidence for realistic and adequate assessment and planning. As a neutral party, C/Can is not interested in expressing opinions, but in fast tracking the execution of quality data-driven analysis for cities and countries so they can make fully informed decisions *(23)*.

Another important area where local decision-makers need support is capacity development, which strengthens the institutional ability to assess, plan and monitor PPPs. In many LMICs, the ministries of health lack the human resources and available skill sets to play that role efficiently. The risk is that the asymmetry of capacity and knowledge leads to suboptimal contracts for the public authorities. Interestingly, solving these structural gaps is also fundamental to improving the public sector and framing the organic development of the private sector – a commonality between most middle-income countries, where private equity money is fuelling the growth of potentially poorly regulated private cancer hospitals or diagnostics centres.

The first process gap is usually the ability to involve end-users' needs in the infrastructure and service planning exercises of central institutions. For example, C/Can has witnessed the design of PPPs in a range of countries which did not involve the oncologist community from their inception; this leads to resistance and as a consequence, poor referrals to the new privately-run institutions, threatening the viability of the model.

Another typical area for improvement is human resource planning. Independent of the structure a PPP adopts, the adequate number of cancer-trained professionals required for setting up new laboratories, radiotherapy or imaging centres will not emerge in the country without thorough joint planning with the ministry of health, ministry of education and private providers. The WHO is now playing a pivotal role in supporting governments with localized human capacity planning for oncology, helping the human resources for health authorities to feed PPP assessment adequately *(24)*.

Furthermore, governments need to secure the participation of qualified partners with strong financial standing through transparent interactions with the market and procurement processes. In cancer care, potential partners are usually local or regional companies, with international players still cautious about expanding into emerging markets. For instance, Uzbekistan managed to attract strong international consortia through a proactive market outreach.

The topic of UHC and adequate cancer care coverage is also fundamental to the development of sound public-private

collaboration. Whenever UHC is too limited; as in Georgia where oncology diagnostics are still excluded, or poorly implemented on the ground, as in Ghana, where many female cancer patients are still paying out-of-pocket expenses for their treatment while covered in theory by the National Health Insurance Fund; the weakness of a national UHC is as a direct threat to the viability of effective integrated private health care, often relying on sufficient patient volumes *(25)*. PPPs integrating clinical services, with their contractually defined payment mechanisms, can contribute to improving access to care and strengthening public sector cancer care in support of UHC goals.

To unlock their full potential, PPPs need to be supported by a comprehensive cancer care strengthening approach. C/Can, WHO and the International Atomic Energy Agency (IAEA) *(26)*, for example, have started focused interventions in their areas of expertise, and the IFC has developed its advisory expertise over the past 20 years to ensure that all aspects of a successful PPP assessment and execution process are taken into account by governments. But the need for capacity development support for authorities willing to embrace PPPs as a pillar to health-care system strengthening must be better perceived and coordinated by the global health community.

Going forward, the development sector should focus on coordinating and scaling up its support solutions to empower local authorities to make decisions on the basis of quality data, thorough planning and rigorous assessments. Empowering an effective arbitrage between public provision and efficient collaboration with the private sector will be the key to success in finally ensuring equitable access to cancer care in countries where the incidence of cancer will rise steeply over the next few decades. ■

The C/Can and International Finance Corporation partnership

C/Can and the International Finance Corporation have a global partnership *(27)* that provides cities and countries with a dedicated platform to support and develop infrastructure planning and pre-feasibility studies for cancer care projects, giving them the tools to decide on the best procurement and operating model for their needs. The platform is currently supporting four cities in the C/Can network from different continents.

Mathieu Morand, MBA, is a Senior Manager at City Cancer Challenge, leading globally the work on digital health and health financing. He supports cities in low- and middle-income countries who are looking to strengthen their cancer care systems through innovation and private sector engagement.

Mathieu moved to C/Can directly from the world of Venture Capital & Private Equity, where he was an investment manager and board member of a dozen of tech companies. He also led operations in an Indian healthtech venture and started his career as a strategy consultant. He holds a Masters in Management with distinction from HEC Paris and an MBA from the Indian Institute of Management, Ahmedabad.

Karine Bachongy, MBA, is an Accredited Hospital Director, seconded by the French Ministry of Health to the World Bank Group. She has worked for over 20 years in the fields of health-care infrastructure and management. She is responsible for transaction advisory services globally, advising governments on structuring and implementing social infrastructure PPPs, as well as monitoring the agreements. She holds an Executive MBA with distinction from the London Business School, a Masters in Hospital Management from the Ecole des Hautes Etudes en Santé Publique, as well as a Masters from Sciences Po Paris.

Ilaria Di Meglio is a biologist and multilingual communications professional with extensive experience in scientific research and science communication. She has a research Masters in Cell Biology from University College, London and a doctorate in Molecular Biology from the University of Geneva. After years of experience in scientific research, she transitioned into science communication, specifically content creation, from writing for science specialists to facilitating knowledge transfer to the public. Ilaria joined City Cancer Challenge in 2021 as Content and Communications Manager, where she drives and supports content strategies.

References

1. Globocan 2020, Global Cancer Observatory. All Cancers Factsheet. Available at https://gco.iarc.fr/today/data/factsheets/cancers/39-All-cancers-fact-sheet.pdf
2. The Lancet. GLOBOCAN 2018: counting the toll of cancer. *Lancet*. 2018 Sep 22;392(10152):985. doi: 10.1016/S0140-6736(18)32252-9.
3. Noncommunicable diseases - WHO | World Health Organization. Retrieved from https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases
4. Knaul F, Frenk M, Shulman L. Closing the Cancer Divide: A Blueprint to Expand Access in Low and Middle Income Countries. Harvard Global Equity Initiative, Boston, MA, October 2011.
5. World Health Assembly, 70. (2017)Cancer prevention and control in the context of an integrated approach. World Health Organization. Retrieved from http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_32-en.pdf
6. WHO. Global expenditure on health: public spending on the rise?. World Health Organization. 2021. https://apps.who.int/iris/handle/10665/350560. License: CC BY-NC-SA 3.0 IGO.
7. Transforming our world: the 2030 Agenda for Sustainable Development. Retrieved from https://sdgs.un.org/2030agenda.
8. Invest to Protect: NCD financing as the foundation for healthy societies and economies. April 2022. Retrieved from https://ncdalliance.org/resources/invest-to-protect-ncd-financing-as-the-foundation-for-healthy-societies-and-economies.
9. Transforming our world: the 2030 Agenda for Sustainable Development. Retrieved from https://sdgs.un.org/2030agenda.
10. Institute for Health Metrics and Evaluation (IHME). Financing Global Health 2020: The Impact of COVID-19. Seattle, WA: IHME, 2020.
11. WHO. Saving lives, spending less: the case for investing in noncommunicable diseases. World Health Organization. 2021, https://www.who.int/publications-detail-redirect/9789240041059.
12. Mayo Clinic invests in cancer-care platform Karkinos Healthcare. 2022 May 23, Retrieved from https://www.thehindu.com/business/mayo-clinic-invests-in-cancer-care-platform-karkinos-healthcare/article65446849.ece.
13. Abdihamid O. Closing the gap in cancer care in Kenya in 2022. *Lancet*. 2022 June 01;23(6):715-716. doi: 10.1016/S1470-2045(22)00087-0
14. Independent Evaluation Group. World Bank Group Support to Public-Private Partnerships : Lessons from Experience in Client Countries, FY02-12. 2015. https://openknowledge.worldbank.org/handle/10986/22908 License: CC BY 3.0 IGO.
15. PwC Health Research Institute. Build and Beyond: The (r)evolution of healthcare PPPs. PwC. 2010 Dec. Retrieved from: https://www.pwc.se/sv/halso-sjukvard/assets/build-and-beyond-the-revolution-of-healthcare-ppps.pdf.
16. Llumpo A, Montagu D, Brashers E, Foong S, Abuzaineh N, Feachem R. Lessons from Latin America: The early landscape of healthcare public-private partnerships. The Global Health Group, Global Health Sciences and PwC. November 2015. Retrieved from https://www.pwc.com/gx/en/industries/healthcare/publications/lessons-from-latin-america.html.
17. Simeon Arau C. The current status of cancer care in Nigeria [Presentation]. Conference "Accelerating the future: Designing a Robust and Affordable Radiation Therapy Treatment System for Challenging Environments." Gaborone, Botswana. (2019, March 20-22). Retrieved from: https://indico.cern.ch/event/767986/contributions/3357238/attachments/1813272/2969805/Simeon_in_botswana_-_the_current_status_of_radiotherapy_in_nigeria-2.pdf.
18. UP Philippine General Hospital (PGH) Manila Cancer Center Project. https://ppp.gov.ph/ppp_projects/pgh-cancer-center/.
19. Public-Private Partnership Stories - Jharkhand Pathology Services PPP. International Finance Corporation. Retrieved from https://www.ifc.org/wps/wcm/connect/75bd662b-f9ef-42cc-a5ea-9e40d63dcf70/PPP+Stories_Jharkhand+Pathology+Services_January+2016_FINAL.pdf?MOD=AJPERES&CVID=IKbKjki.
20. PwC Health Research Institute. Build and Beyond: The (r)evolution of healthcare PPPs. PwC. 2010 Dec. Retrieved from: https://www.pwc.se/sv/halso-sjukvard/assets/build-and-beyond-the-revolution-of-healthcare-ppps.pdf.
21. Hall D. Partenariats Public-Privé (PPP): les raisons de leur inefficacité. Internationale des services publics. 2015. https://www.world-psi.org/sites/default/files/documents/research/rapport_fr_56pages_216x279_usa_lr.pdf.
22. Express Healthcare News Bureau. Enhancing oncology treatment through PPP. Express Healthcare. Feb 10 2015, https://www.expresshealthcare.in/clinical-research/enhancing-oncology-treatment-through-ppp/41203/.
23. Henshall S, Doria R, Adams C, Sanchia A. Cities as an Enabler for Strengthening Cancer Care. *JCO Global Oncology* 2021 :7, 896-900. doi: 10.1200/GO.20.00607.
24. WHO. Global strategy on human resources for health: Workforce 2030. World Health Organization. 2020. https://www.who.int/publications-detail-redirect/9789241511131. License: CC BY-NC-SA 3.0 IGO.
25. Ahmed W, Armstrong C, Belay T, Buckholtz A, Faustino Coelho C.M.N, Hashemi M, Kostermans C, Lim M, Loening M, Macias C, Masud T, Monteiro R, O'Farrell C, Ohno N, Oliveira T [editor] Otoo N, Sayed G, Stowell L, Taylor R, Haq I. Handshake : IFC's quarterly journal on public-private partnerships. World Bank Group. Retrieved from https://documents.worldbank.org/curated/en/972481468315320373/Handshake-IFCs-quarterly-journal-on-public-private-partnerships-3
26. Vukadinovic L. Unlocking the power of partnerships and innovative financing for improved access to cancer care. IAEA Bulletin. 2022 Feb. Retrieved from: https://www.iaea.org/bulletin/unlocking-the-power-of-partnerships-and-innovative-financing-for-improved-access-to-cancer-care.
27. IFC Partners with C/Can to Develop Scalable Cancer Care Projects. 10 May. 2022, https://citycancerchallenge.org/ifc-partners-with-city-cancer-challenge-foundation-to-develop-scalable-cancer-care-projects/.