A blurred photograph of a busy city street with many pedestrians walking. In the background, there are tall buildings and a large mural on a wall that says "PRESENTE NO RIO GRANDE" with a rainbow. The image is overlaid with a semi-transparent blue filter.

The Power of Partnership: Insights into a collaboration between C/Can and Roche to improve cancer care in LMICs

City Cancer Challenge Foundation | May 2024

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1. Foreword

Few challenges loom larger in the realm of global health than the battle against non-communicable diseases (NCDs) including cancer, now responsible for more than 74% of all deaths and affecting every family, everywhere. NCDs have a profound impact on societies, economies, and human development, straining every aspect of the health system. Reversing trends requires we invest in better ways of working. The NCDs and cancer agendas are too broad, too complex for any entity to manage alone.

The 2030 Agenda for Sustainable Development acknowledges the interconnected nature of development goals, and emphasises the role of global partnerships in its implementation. These principles are reinforced in the 2017 World Health Assembly resolution in cancer that mandates partnerships as part of robust cancer control strategies. Multi-sectoral engagement is not optional. Yet, to date, sustainably implementing successful multi-sectoral collaboration has been challenging, constrained by factors like weak coordination, vertical programs and insufficient meaningful engagement.

Multi-sectoral collaboration only works when it is aligned with local priorities, owned by and adapted to the unique circumstances of local stakeholders. This can be a challenge for global stakeholders and funders to navigate, particularly when seeking large-scale and rapid change in cancer control. There is no singular approach or program to reverse trends in cancer; progress takes time, sustained commitments and strong coordination.

In the cancer community, we are shifting our approach from a “do-it-alone” and “low-hanging fruit” philosophy to joint and sustained efforts. There are countless examples emerging, from new global cancer initiatives, to coordinated research and innovation, to cancer in humanitarian settings – all have required multi-sectoral collaboration and evidence of positive impact is beginning to emerge. Indeed, there has been recent progress for partnerships in cancer.



The World Health Organization has launched three integrated cancer initiatives in breast, cervical and childhood cancers, creating platforms for effective collaboration and meaningful engagement. Because of partnerships and local ownership, these initiatives are now active in more than 100 countries, have generated more than US\$ 1 billion in strategic investments and have positively impacted the lives of millions of people. These initiatives are community-led and locally-owned by national stakeholders who have fostered dialogue, aligned agendas, and leveraged the unique strengths of diverse stakeholders.

Rapid expansion in transformative partnerships is happening. The City Cancer Challenge is an important example of how multi-sectoral collaborations are transforming local health systems to better deliver cancer care, under local needs and ownership. As a community, we are initiating a new chapter in cancer control, together, defined as a joint venture, inspired by collaborative innovation and applying lessons to sustainably reach scale.

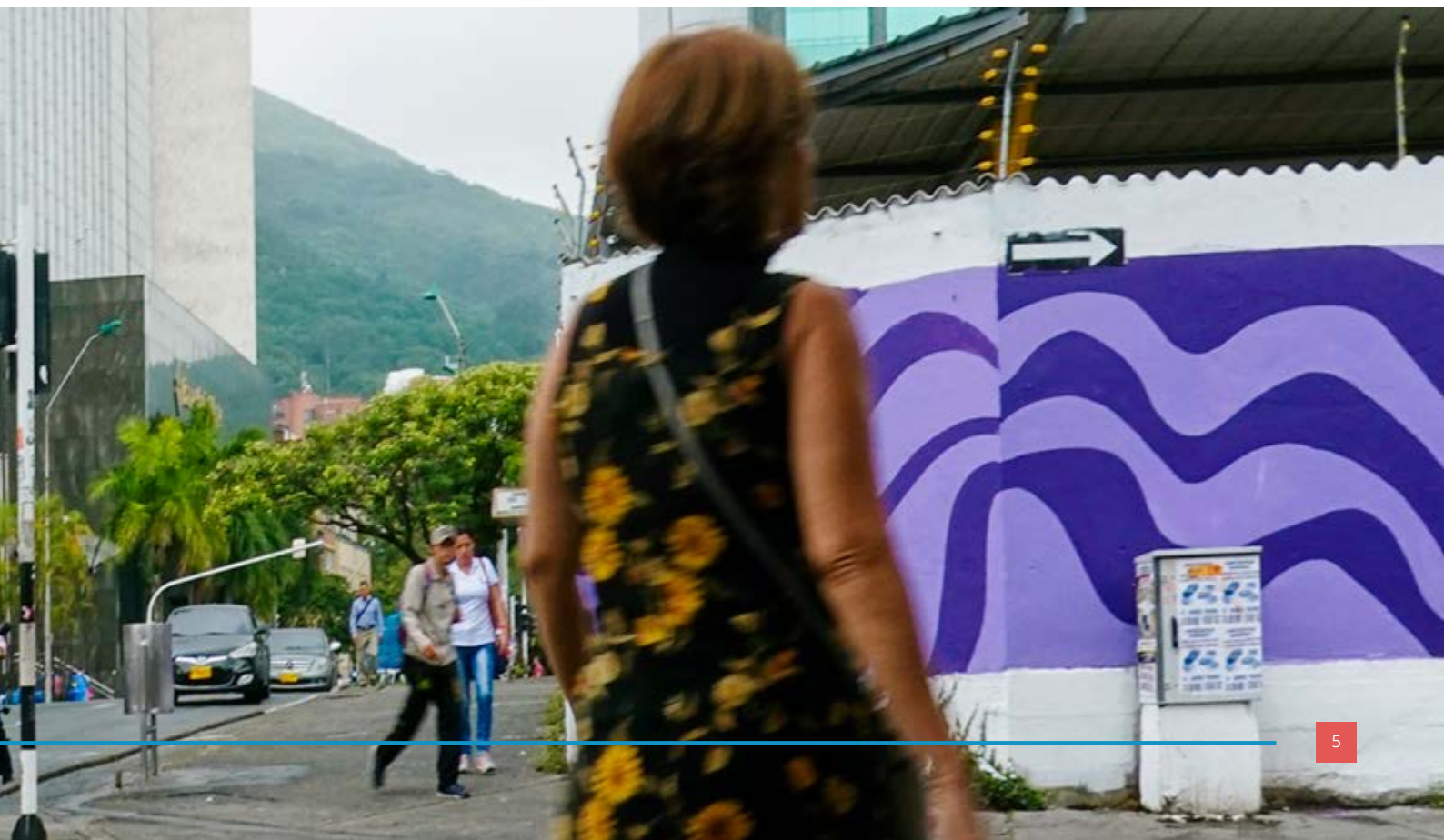
There are more than 20 million people affected by cancer each year, relying on all of us to create better systems to deliver the care they need. Together is the only way forward.

Dr Andre Ilbawi

Lead, Cancer Control

Department of Non-communicable Diseases, Rehabilitation and Disability (NCD)

World Health Organization



2. Welcome Letter



Cancer knows no boundaries. It affects communities in every corner of the globe, causing as many as 10 million deaths every year.¹ But nowhere is its impact more devastating than in low- and middle-income countries (LMICs), where access to essential healthcare services, diagnostics, and treatments remains limited. Without concerted efforts to bridge the enormous gaps in service provision, millions of people will continue to face unnecessary suffering and premature death.

The City Cancer Challenge (C/Can) was founded on the recognition that solutions to this crisis need to be pragmatic, multi-sectoral, and focused on driving meaningful change where it counts the most: closer to the patient.

Cities provide the perfect environment in which to do so, allowing for a closer view of the burden that cancer places on its population, communities and health systems. At C/Can, our goal is to build the knowledge, relationships and expertise needed to empower cities to tackle the challenges they face in cancer care, with a view to replicating solutions in other parts of the country.

As well as equipping communities with tools to catalyse change, we also seek to use the urban experience of cancer care as a means of understanding the challenges facing a wider population. We believe in a holistic and integrated approach, where instead of isolated efforts in specific specialties or cancers, or in distinct phases of the patient journey, working at a city level allows us to see the whole healthcare system in action.

This has proved to be pivotal in driving transformative change. To date, C/Can has actively supported 4,227 health workers, pioneering the development of 112 unique cancer care solutions that have impacted the lives of over 67.5 million people.

Beyond our passion, commitment, and entrepreneurial spirit, a pivotal driving force in C/Can's journey is our investment in fostering connections among people. Encompassing partnerships with industry, local providers, their health workforce, and technical experts, these connections combine to create a community that rallies behind C/Can's mission. We couldn't do what we do without our partners.

We recognise that public-private partnerships (PPPs) are a cornerstone in addressing the growing burden of cancer, and building resilient healthcare systems that work for communities in all parts of the world. We've seen how strong, collaborative frameworks can drive real and meaningful change, and we're passionate about making it possible for other organisations to benefit from our experience.

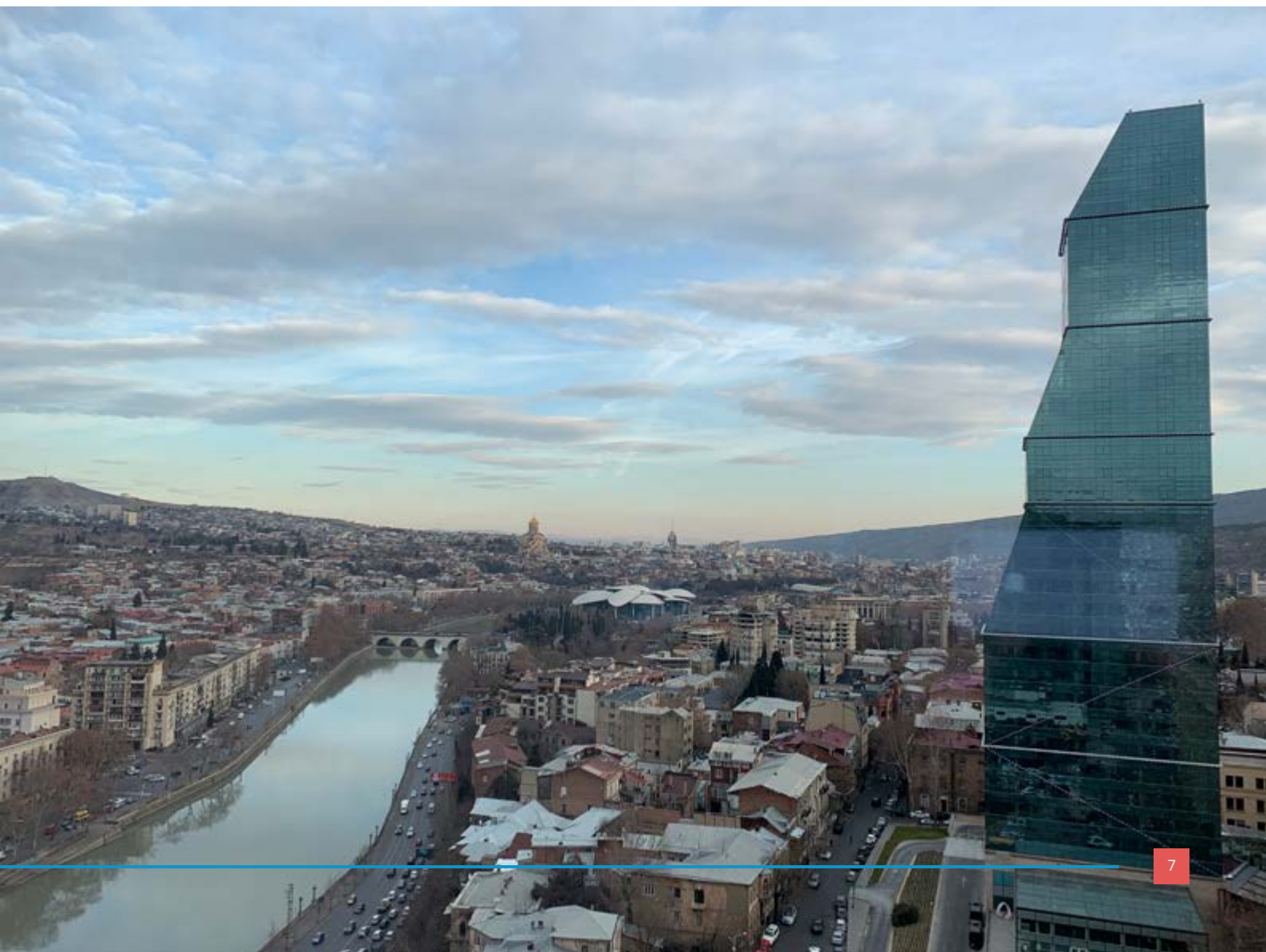
1. <https://www.cancerresearchuk.org/health-professional/cancer-statistics/worldwide-cancer/incidence>

Among our many partnerships, our collaboration with healthcare company Roche exemplifies the theory that, together, organisations can be greater than the sum of their parts. We're proud to have established a framework for partnership that goes beyond funding to create collaborative opportunities that make a measurable difference on the ground. We believe this framework is a blueprint for successful PPPs of all kinds.

After a meticulous analysis of our work to date, we have established a new three-year agreement for our ongoing collaboration, the parameters of which are shared in this report. We hope it will serve as inspiration for other organisations seeking to close the gaps in cancer care and in the management of other non-communicable diseases, and support LMICs to put in place the structures and services needed to improve outcomes, and help build healthier, more resilient communities.

Isabel Mestres

CEO, City Cancer Challenge Foundation



3. Executive Summary

The City Cancer Challenge (C/Can) is a partnership initiative that uses cities as a microcosm for understanding a health system's response to cancer, and as a catalyst for sustainable change. Set up in 2017, C/Can supports cities around the world to improve access to quality cancer care. It does this by transforming the way stakeholders from the public and private sectors collectively design, plan and implement cancer solutions.

Roche – one of the largest pharmaceutical companies in the world – has been a partner for C/Can since its early days. As well as funding, it has provided direct support for specific activities and technical expertise from its large, highly skilled workforce. The two organisations have collaborated on areas and solutions including generating innovative financing structures, strengthening cities' diagnostic capacity, and delivering patient navigation programs, leadership coaching, and training for healthcare professionals.

Embracing the unique assets and strengths each organisation brings to the table, C/Can and Roche have jointly established a framework for their ongoing partnership. This structured and collaborative foundation sets the stage for long-term success, and serves as a benchmark for high impact public-private partnerships (PPP).

This report sets out the transformative impact that a partnership like this can have on shaping a more resilient, sustainable, and equitable future. It's hoped that these insights will inspire a renewed commitment to collaborative initiatives, and encourage others to embrace partnership to address gaps in cancer care.

“Successful PPPs thrive on a shared purpose, trust, expertise, transparent communication, and a commitment to measurable outcomes. These elements collectively contribute to a robust and resilient partnership.”

Isabel Mestres, CEO, C/Can

Joining forces: **A Call to Action for PPPs**

Collaborative action is urgently needed to address the growing burden of cancer in LMICs. With millions of lives at stake, PPPs offer a powerful vehicle for driving meaningful change and improving access to quality cancer care for all.

The collaborative journey between C/Can and Roche shows that real world impact through partnership is possible. But the journey to conquer the challenges associated with cancer doesn't stop. Built on the lessons learned through this partnership, here are C/Can's recommendations for organisations looking to enter partnerships to drive positive, sustainable change:

- 1 Align on shared goals and priorities**
- 2 Leverage complementary resources and expertise**
- 3 Engage, build trust, and establish open communication**
- 4 Advance population health, with a focus on equitable access**
- 5 Measure, evaluate, and socialise impact**
- 6 Sustain engagement and long-term commitment**



4. Background

4.1 About C/Can

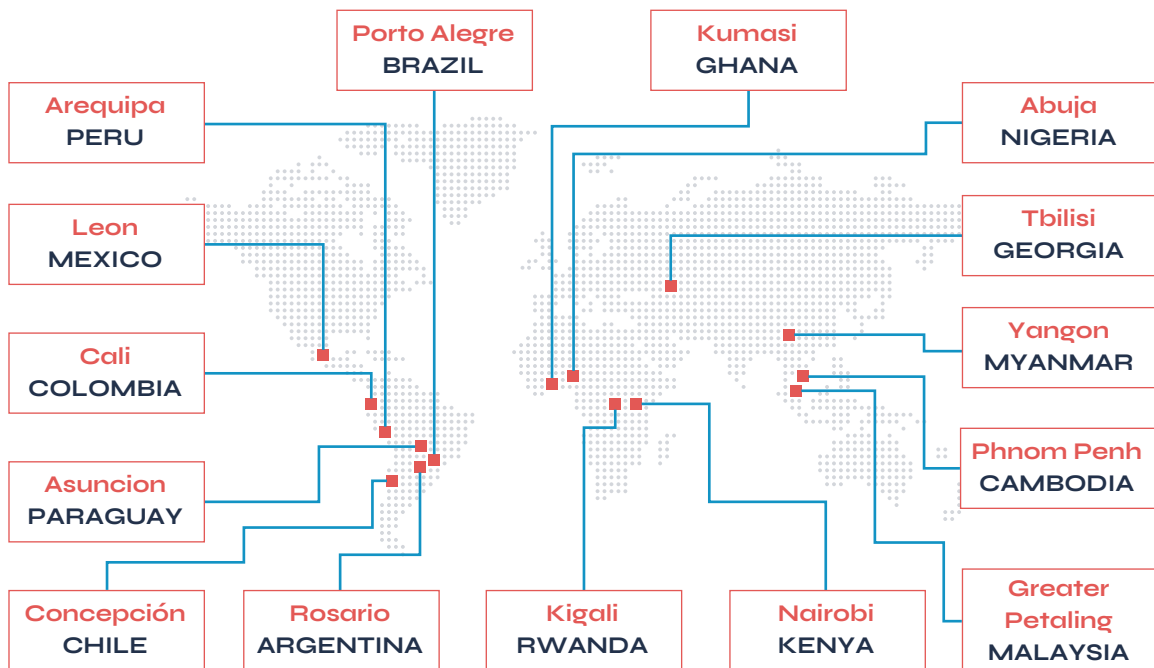
C/Can was built on a vision of a world where quality cancer care is available for all. Established in 2017 by the Union for International Cancer Control (UICC), it has its roots in the UN's sustainable development goals (SDGs), and the urgent need for a coordinated strategy for cancer care. With a notable gap existing in global knowledge about optimal interventions, particularly in LMICs, UICC saw a need for a comprehensive and aligned approach that would acknowledge the complex nature of cancer as a disease and take a holistic view of the health system response.

In January 2019, C/Can evolved to become a standalone foundation, focused on strengthening practical capabilities on the ground. Through innovative approaches to cancer treatment in cities in LMICs, its goal is to bring together the public and private sectors to design, plan, and implement locally-led solutions that are tailored to local needs and resources.

Over 85% of premature deaths from non-communicable diseases (NCDs) such as cancer occur in LMICs. As people continue to move to urban environments, the growing population brings additional challenges when it comes to developing sustainable healthcare infrastructure and ensuring high quality care.

The C/Can model is unique in perceiving cities as a health system in microcosm. Not only does working at a city level provide insights into the intricate networks that underpin national service provision, but it also allows for lessons learned to be scaled up to regional, provincial, national and global bodies as needed. From representatives of governments and civil society, to private and public hospitals and academic institutions, it brings together diverse stakeholders, in many cases for the first time, and emphasises local ownership and community empowerment. While C/Can's role is to facilitate projects, the local community is accountable for its success, ensuring a sense of ownership, and embedding sustainability in the process from the start.





C/Can now operates in 15 cities across all regions, with each city working across six focus areas:

- Improving health information systems
- Developing health workforce capacity
- Catalysing health financing
- Strengthening leadership and governance
- Strengthening health service delivery
- Ensuring readiness for access to medicines and technology

The model has been hugely successful. Not only is it scalable and adaptable to diverse local environments, but it has helped transform collaborative design, planning, and implementation of cancer solutions across multiple sectors. Within a network of 64 partners, including city, regional and national organisations, professional associations, academic institutions, private sector companies, foundations, UN agencies and non-governmental organisations (NGOs), C/Can has fostered a dynamic and co-operative environment where ideas are exchanged, collaborations forged, and innovative solutions emerge.

Local ownership and multi-sectoral collaboration are essential for the continuity and long-term impact of cancer care solutions and in fostering sustainable changes and scalable solutions. So C/Can has developed and tested a city-led, collaborative framework that uses a bottom-up approach to ensure that local needs are not only acknowledged but also prioritised and effectively addressed.

To date, the Foundation has impacted the lives of 67.5 million people, actively supporting 4,227 health workers to drive transformative change, and pioneering the development of 112 unique cancer care solutions.

4.2 About Roche

Roche is one of the largest healthcare companies in the world. Founded in 1896, the Switzerland-headquartered company now has a workforce of over 100,000, working across pharmaceuticals, diagnostics, and personalised health. A key focus area for Roche is oncology – from screening, to diagnostics, to treatment.

Supporting access is a core commitment, and considered a key part of the company's commitment to improving patient outcomes. Working in collaboration with governments, multilateral organisations and patient communities across the world, Roche aims to help ensure people in LMICs have access to the affordable care they deserve, helping them on their journey towards Universal Health Coverage.

As well as investing in health system development, Roche has established partnerships with organisations across the world, seeking to drive equitable access to quality cancer care for all. C/Can is a key partner for the company, with the ability to drive innovation in cancer care and build resilient health systems from the ground up, for the long term.



4.3 What makes a successful PPP?

4.3.1 PPPs in cancer

Public-private partnerships (PPPs), bring together expertise, funding and implementation capabilities from different organisations to accomplish more together. The World Economic Forum (WEF) describes PPPs as “scalable, sustainable and inclusive” but underused.² Ken Buse and Gill Walt of the London School of Hygiene and Tropical Medicine recommend several steps for effective PPPs, including:

- 1 Clearly specified, realistic and shared goals
- 2 Clearly delineated and agreed roles and responsibilities
- 3 Distinct benefits for all parties
- 4 Transparency
- 5 Active maintenance of the partnership
- 6 Equality of participation
- 7 Meeting agreed obligations.³

Typically, non-communicable diseases (NCDs), including cancer, have had relatively fewer donor-supported programs, and fewer PPPs, than communicable diseases. There has been less public funding available for NCDs, and less donor interest, in part because it is harder to define targets and progress in NCDs than it is in communicable diseases. For example, where it is possible to make elimination a target for diseases like tuberculosis (TB), the same cannot be said for lung cancer. And where the number of vaccinations delivered can be counted as a measure of success in communicable diseases, no parallel metric exists for NCDs. As a result, it can be difficult to bring together partners to work on cancer in LMICs. But this makes PPPs all the more important. There is an urgent need for effective cancer prevention, treatment, and care, and to find ways of making the most of limited resources.

The private sector’s contribution is essential. By bringing financial resources, technological advancements, specialised knowledge, and a broader network, it is ideally placed to accelerate progress. More specifically, the pharmaceutical sector plays a crucial role in addressing healthcare challenges, and its contribution to initiatives like C/Can is invaluable.

2. World Economic Forum, Public Private Partnerships for Health Access: Best Practices, Dec. 2021. Available at https://www3.weforum.org/docs/WEF_Public_Private_Partnerships_for_Health_Access_Best_Practices.pdf

3. K. Buse and G. Walt, *Global public-private partnerships: part II – what are the health issues for global governance?* Bulletin of the World Health Organization, 2000, vol. 78, no. 5, p.704

4.4 The challenge of PPPs, and C/Can's response

Although PPPs have the potential to combine the strengths of two or more organisations for a greater impact, there are often misconceptions that make establishing collaborative frameworks difficult.⁴ For example, there is a tendency to assume that everyone in the private sector is focused only on sales, while those in the public sector are not sufficiently results-oriented. This means that open conversations around expectations as well as roles and responsibilities are critical from the outset. Structuring PPPs in healthcare poses several challenges, reflecting the unique complexities of the healthcare sector. C/Can recognises these challenges and overcomes them in the following ways:

Speed of delivery: There is often a mismatch between the pace at which local stakeholders are able to implement programs on the ground, and expectations on the part of private partners. A long hiatus between investment and the delivery of tangible results may hinder momentum and stakeholder engagement, while also discouraging further investment if impact cannot be demonstrated promptly.

C/Can's network of 64 funding and technical partners offers varied support, ranging from funding to technical expertise and IT solutions. This broad partnership approach ensures independence and dilutes individual influence, enabling a flexible and responsive operational framework. Moreover, by pursuing multi-year agreements with partners, C/Can promotes long-term sustainability in program implementation, mitigating challenges stemming from disparate partner and city timelines.

4. Jens K. Roerich et al, Are Public-Private Partnerships a Healthy Option? A Systematic Literature Review, May 2014, <http://dx.doi.org/10.1016/j.socscimed.2014.03.037>

Diverse stakeholders and interests: Healthcare involves a multitude of stakeholders, including government agencies, private healthcare providers, and insurance and pharmaceutical companies, all with varied interests and objectives.

C/Can employs effective strategies to navigate the diverse landscape of stakeholders, including academia, government agencies, healthcare professionals, and the private sector. By fostering local knowledge generation and facilitating international collaboration with its network of cities, C/Can promotes the co-creation of context-specific solutions tailored to the unique needs and interests of diverse stakeholders. A lean but strong secretariat and Board also ensures that partnerships are focused on agreed-upon goals, and measurable metrics allow for ongoing evaluation, ensuring that partnerships stay aligned with those goals.

Long-term nature of healthcare investments: Healthcare infrastructure projects often require substantial upfront investments and have long payback periods. Private investors may be hesitant to commit to lengthy projects with uncertain returns, especially when economic conditions or healthcare policies can change over time.

Successful PPPs hinge on a shared vision that aligns partner efforts in pursuit of a common goal. C/Can emphasises goal alignment and transparency in its partnerships, establishing measurable metrics to guide ongoing evaluation and adaptation. This approach fosters long-term innovation and resilience in health systems, ensuring sustained impact despite the substantial upfront investments and lengthy payback periods characteristic of healthcare infrastructure projects.

Risk allocation and management: Healthcare projects involve various risks, including clinical, financial, and operational uncertainties. Determining who bears which risks and developing mechanisms for risk mitigation is a complex process.

C/Can prioritises trust, transparency, and expertise in its partnerships, fostering robust collaboration while addressing various risks inherent in healthcare projects. By establishing a clear framework for risk allocation and mitigation, C/Can promotes effective risk management and ensures the equitable distribution of responsibilities among partners.

Social and ethical considerations: Healthcare is a sensitive and socially significant domain, and decisions made in PPPs can have a profound effect on public well-being. Balancing profit motives with the need for equitable and affordable healthcare access requires careful consideration and ethical decision-making.

C/Can adopts a locally-led approach that prioritises ethical decision-making and public well-being in its partnerships. By actively involving local stakeholders in the co-creation of innovative solutions and upholding principles of transparency and accountability, C/Can navigates potential challenges arising from conflicting interests and promotes equitable and sustainable outcomes for all involved parties.

Data security and privacy concerns: Healthcare deals with highly sensitive patient information. Integrating private entities into the healthcare system raises concerns about data security and privacy. Establishing robust safeguards and ensuring compliance with data protection regulations are critical aspects of PPP structuring.

C/Can collaborates closely with private partners to address data security and privacy concerns associated with integrating private entities into the healthcare system. By establishing robust safeguards and ensuring compliance with data protection regulations, C/Can promotes trust and reliability in its partnerships, facilitating effective data management and knowledge sharing while safeguarding patient privacy.

Capacity and expertise gaps: Government agencies may face challenges in terms of capacity and expertise when entering into PPPs. Developing the necessary skills to negotiate and manage complex healthcare partnerships is vital for successful implementation.

The WHO has taken steps to ensure PPPs are effective in reducing conflicts of interest and to address some of these challenges. It suggests that countries set their strategies for healthcare improvement before they decide to join a PPP. Governments must take the lead in establishing PPPs in their country, and ensure accountability and ways of working together.⁵ The UN recently published the SDG Partnership Guidebook with recommendations for building effective partnerships.⁶

5. WHO, Public Private Partnerships for Healthcare Infrastructure and Services: policy considerations for Middle Income Countries in Eur

6. The SDG Partnership Guidebook: A practical guide to building high impact multi-stakeholder partnerships for the Sustainable Development Goals, Darian Stibbe and Dave Prescott, The Partnering Initiative and UNDESA 2020. https://sustainabledevelopment.un.org/content/documents/2698SDG_Partnership_Guidebook_1.01_web.pdf

4.5 Strategies for effective partnerships

- **Align on shared goals and priorities:** Establish clear and mutual goals that address the priorities of both parties and focus on improving health outcomes, enhancing access to care, and addressing healthcare disparities.
- **Leverage complementary resources and expertise:** Identify and leverage the unique resources, expertise, and strengths of each organisation.
- **Engage, build trust, and establish open communication:** Foster trust and transparency between cross-sector partners through open communication, collaboration, and shared decision-making processes. This includes regular meetings, joint planning sessions, and mechanisms for feedback and accountability.
- **Advance population health:** Ensure that collaborations prioritise integrated and equitable access to healthcare services and resources across the continuum of care. This may involve initiatives focused on prevention, early detection, diagnosis, treatment, survivorship, and end of life.
- **Measure, evaluate, and socialise impact:** Establish metrics and evaluation frameworks to assess the impact and effectiveness of collaborative efforts. Monitor progress towards shared goals, track key performance indicators, and use data-driven insights to continually improve collaboration strategies and outcomes.
- **Sustain engagement and long-term commitment:** Foster a culture of sustained engagement and long-term commitment to collaboration. Invest in building relationships, capacity-building initiatives, and joint planning efforts that lay the foundation for ongoing partnership success.

“**PPPs are necessary to develop innovative programs and to fill funding gaps. We needed to work together to develop a model and to show that performing HPV DNA testing as primary screening can be integrated into high throughput multi-testing platforms cost-effectively. Once the proof of concept is made, we will need to work to attract different sources of funding so we can expand the program.**

Carlos Catalão, Medical & Health Policy Director, Roche Portugal and co-founder of Project SALVA – a PPP that works with the Government of Mozambique, the US Government’s PEPFAR Program, Roche, and implementing partners to increase access to cervical cancer screening and treatment.

5. Partnership Framework

5.1 C/Can’s implementation strategy

International health organisations typically work through national ministries of health as the key actors in the strategy, governance, delivery, and financing of healthcare. However, UN Sustainable Development Goal 11, which focuses on sustainable cities and communities, provides an alternative framework in which global, national, and local health goals are aligned, and cities are the focus of implementation.

Cities are where most patients receive prevention and care services, and focusing on improving service delivery at this level has proven effective. City-led initiatives for hypertension, tobacco control, and diabetes, as well as other examples of NCD prevention initiatives from the WHO Healthy Cities innovation platform, are using this approach to tackle NCDs at a local level.⁷ There are healthy city initiatives led by the WHO, Bloomberg Philanthropies, the World Health Summit, and other groups.

C/Can identified a lack of coordinated support from the global health community to improve cancer care from a systemic perspective. Many efforts were being made in prevention and at a primary healthcare level, but while critical, these efforts were not addressing the full patient journey from diagnosis to treatment. LMICs typically did not have cancer care plans and robust cancer policies in place, and they lacked healthcare training, financing, and infrastructure to address the challenges of cancer care. Working at a national level is incredibly complex, but working with cities, their health workforce and their cancer care facilities offered the opportunity to generate concrete health system action that could be scaled elsewhere.

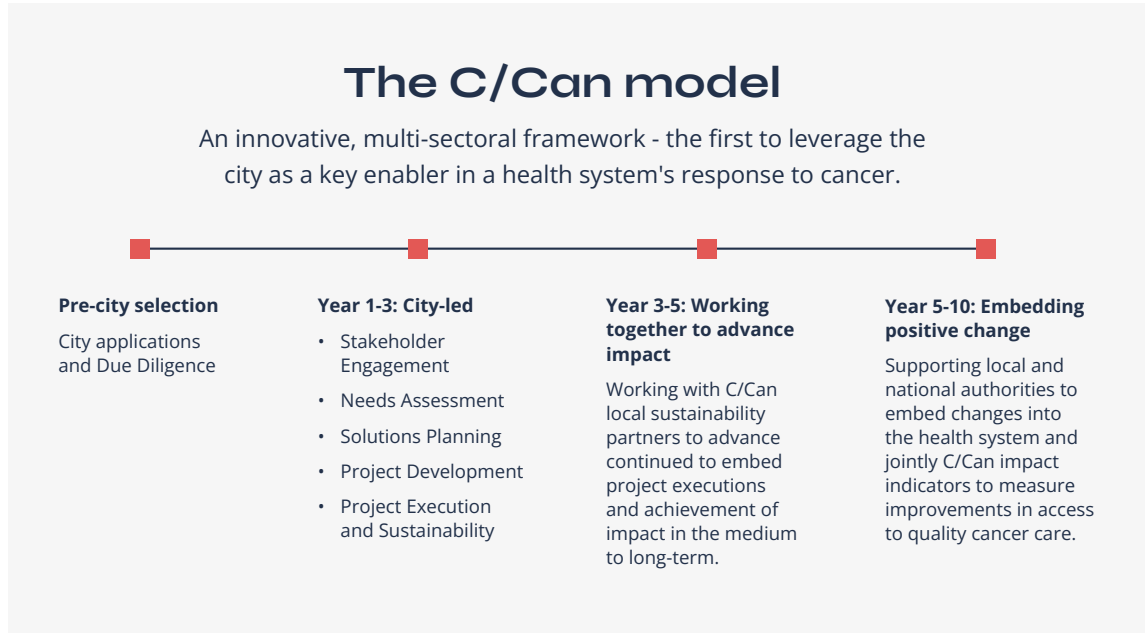
7. WHO: WHO report: A multilevel governance approach to preventing and managing noncommunicable diseases: The role of cities and urban settings. https://www.euro.who.int/__data/assets/pdf_file/0007/397789/Cities-and-NCDs.pdf

For C/Can's initial proof of concept, four cities were selected: Asuncion, Paraguay; Cali, Colombia; Kumasi, Ghana; and Yangon, Myanmar. The initial pilots showed that fostering collaboration across sectors created a unique platform via which to connect fragmented institutions and jointly address cancer care challenges. The approach also prioritised local needs, which led to strong engagement from authorities and stakeholders, supporting the long-term sustainability of projects. The methodology was also shown to be replicable and adaptable in other parts of the country, demonstrating how cities serve as smaller ecosystems for the wider health system as a whole.

C/Can implements a local ownership model.⁸ Cities in LMICs with populations of over one million are eligible to apply when a call for proposals is made. The application process is led by a local civil society organisation (e.g., professional association, cancer society, patient association or health-focused non-profit), with endorsement from the relevant city health leadership such as the mayor or secretary of health.

Selected cities are invited to participate if they meet established criteria. These cities begin with an 18-month pre-implementation phase that includes due diligence, stakeholder engagement, a needs assessment, and an action planning process. With C/Can's support, local topic-specific, inter-institutional, and cross-disciplinary project teams made up of experts in their field are formed and led by designated project coordinators. These teams develop a project plan with specific, measurable goals to achieve during implementation.

C/Can has held three calls for city proposals, in 2018, 2020, and 2023.



8. C/Can City Engagement Process: An Implementation Framework for Strengthening Cancer Care in Cities in Low- and Middle-Income Countries Silvana Frech, Rebecca Morton Doherty, Maria Cristina Lesmes Duque, Oscar Ramirez, Alicia Pomata, Angelica Samudio, Osei A. Antwi, Yin Yin Htun, Rai Mra, Pe Thet Htoon, Ernest Baawuah Osei-Bonsu, Rafaela Komorowski Dal Molin, Nana Mebonia, Isabel Mestres, Aung Naing Soe, Sophie Bussmann-Kemdjo, Maria Fernanda Navarro, Susan Henshall, and Rolando Camacho, JCO Global Oncology 2021 :7, 901-916

Cities in the Active Implementation phase of the program benefit from technical cooperation and training, as well as learning opportunities. C/Can's technical partners, including groups like the American Society for Clinical Oncology (ASCO), the International Society of Nurses in Cancer Care (ISNCC), regional palliative care associations, and the International Atomic Energy Agency (IAEA), can be engaged to support the city to achieve its plans. C/Can's partners also include the private sector, which may provide financial resources as well as technical and business skills important to cancer program development. As the city moves through the Active Implementation process, it is supported by C/Can and its partners, while the partnership works to identify a local sustainability partner for Phase 3, Post-implementation.

In the Post-implementation phase, local partners receive support from C/Can so that the city plan continues to grow and succeed.

“I know that the C/Can team can call upon our colleagues at Roche to describe a problem we're facing and get sound advice. Or we can bring a problem to Roche and they will put their experts to work to help us solve it.

Isabel Mestres, CEO, C/Can

5.2 How C/Can and Roche collaborate

C/Can brings technical expertise to drive improvements in cancer care and access to a collaborative network of diverse stakeholders, including other partner organisations, local governments, healthcare professionals, and international agencies focused on developing and implementing cancer care solutions.

Roche supports the partnership by providing unrestricted funding, technical support, and strategic guidance, and shares its expertise and local health system knowledge. Both C/Can and Roche work in a decentralised structure, and their country teams are in regular contact to identify opportunities for both organisations in strategic areas such as generating innovative financing structures for cities, strengthening cities' diagnostic capacity, and delivering patient navigation programs, leadership coaching and training for healthcare professionals. Ultimately, the strategic value of the collaboration lies in the synergy and trust that can be created locally.

The C/Can City Manager is responsible for the strategic planning and execution of the local C/Can process – the City Engagement Process Framework (CEPF) – working closely with local city stakeholders. Roche engages locally with C/Can from the Pre-implementation phase through Active Implementation and Post-implementation. A designated point of contact for Roche engages with the City Manager, offering contacts and introductions to key leaders as well as support on key initiatives. Roche joins other C/Can partners to support the City Manager and their team to achieve the goals set for the city.



There are approximately 80 people from C/Can and Roche actively involved in the partnership at global, regional, and local levels, all with different accountabilities and involvement. This includes a partnership lead in both organisations, who dedicates approximately 20% of their time to the partnership. Local teams are focused on supporting collaboration activities and exploring new opportunities to work together. Global and regional teams are focused on strategic planning, coordinating priority programs and ensuring best practices and learnings are shared. Everyone is empowered with clear decision-making power.

Engaging in feedback with team members and seeking ways to improve communication and partnership is a best practice for PPPs, and one that strengthens this partnership. In 2023, C/Can and Roche engaged directly with their teams to assess their partnership, and to discuss ways they could work together more effectively. This feedback process led to the Partnership Collaboration Framework, described later, to improve communication and establish clear expectations between the two organisations.

Lessons learned and adopted by C/Can and Roche in their collaboration

- Set clear goals, objectives and activities that everyone agrees on, working towards a shared vision
- Agree upon a formal collaboration framework to maximise impact, so that everyone understand expectations, roles and responsibilities
- Promote open communication at all levels of the partnership, ensuring transparency, trust, and the ability to work seamlessly as a team
- Measure results to inform decision-making, and ensure activities can be adjusted in response to data

5.3 Establishing a partnership framework

In 2023, C/Can and Roche held several discussions with their teams to understand how the partnership was working, and during the review it was clear there were several positive aspects. In many cities, local Roche and C/Can teams had established strong working relationships, and many had identified a robust collaboration model that included healthcare providers, hospitals and government representatives.

There were also some challenges identified in the partnership.

As a global company with over 100,000 employees, Roche's scale was in stark contrast to that of C/Can – a small, newer organisation with only around 40 employees. It was challenging for C/Can staff to navigate such a large company to identify experts who could support them, and Roche employees could overwhelm C/Can staff with requests for information. The staff suggested clearer lines of communication, and setting expectations around impact reporting and outcomes.

Another identified need was further training on the partnership for both C/Can and Roche staff, given the periodic turnover, and designated points of contact in each organisation who would be responsible for different aspects of the partnership.

Roche wanted to provide meaningful support to C/Can, but struggled to find examples of large companies successfully partnering with PPPs in the healthcare space. To achieve greater impact and optimise the partnership between C/Can and Roche at the local level, both organisations decided to develop a new collaboration framework, identifying and working together on many opportunities in strategic areas for both organisations.

Jointly, C/Can and Roche engaged a consultant to guide them through the process of developing a collaboration framework. Together, the group developed a shared vision, goals, and objectives, as well as areas where the partners would work together.

“The question for us was ‘why’? What is it that we are doing together that is making this partnership work and how do we get this down on paper? So we set about reviewing all the different facets of the work with C/Can and started to turn it into the basis of a more structured framework.

Fernando Arnaiz, Roche lead for the C/Can partnership.

Vision and goals collaboration framework

Vision: We envision a world with quality cancer care for all. We collaborate because together we can do more to improve cancer care and strengthen health systems.

Goal: To leverage each other's strengths to establish and support programs that increase access to equitable, quality cancer care in LMICS, reducing cancer morbidity and mortality rates.

Objective # 1: City level

To support city stakeholders across sectors to design, plan and implement locally driven cancer care solutions that improve equitable access to quality care.

Objective # 2: National level

To scale local solution to strengthen national healthcare ecosystems, improve health policy and cancer prioritization.

Objective # 3: Global level

To inspire the global health community to accelerate health system strengthening for cancer in LMICs and showcase our public-private sector collaboration as a model to replicate.

Areas of collaboration:

Strengthening health systems delivery

Developing health workforce capacity

Health information systems

Catalysing health financing

Leadership & governance

“I honestly wasn't sure we needed a collaboration framework, but now we have one I don't know how we managed without. People change in organisations and without properly documenting the partnership, it is easy for it to drift and lose purpose. This framework has set the stage for our success now and into the future

Isabel Mestres, CEO, C/Can

Once the team developed the framework for the plan, specific areas were identified where reports and regular communication would be needed, including:

Elements of our collaboration framework	Shared vision, goals and objectives
	Operating model for the collaboration An operating model for engagement at the global and city level, with regular communication around planning and reporting.
	M&E and reporting framework A monitoring and evaluation framework that includes KPIs and tools, as well as plans for regular reporting on monitoring and evaluation, including impact reporting. Both the Roche team and the C/Can team wanted to streamline reporting so that C/Can didn't have to develop specific indicators for Roche, but could use the indicators already being collected from the partnership. Having clear timelines and agreement on reporting would reduce the workload and improve the quality and timeliness of reporting.
	Communications plan External communications and engagement plans for events, speaking opportunities, and external reports, as well as internal communications to ensure all staff understood and supported the partnership.
	Onboarding, partner collaboration and technical support A clear structure for onboarding, collaboration and support, with a designated point of contact at the city and global levels, and clear direction on how they should engage with their counterparts in the other organisation.

[▶ Click here to see our collaboration framework](#)

The collaboration framework was endorsed by both organisations and is now being implemented. It can serve as a model for other partners working with C/Can, as well as other public-private partnerships.

“The framework gives us structure and direction. It enables us to get the right people on the right project and ensure that we can maximise our collective impact from the partnership.

Fernando Arnaiz, Roche lead, C/Can partnership.



5.4 What's next for C/Can and Roche?

Although C/Can and Roche are very different organisations and there are differences in terms of size and operating models, they find common ground in improving access to equitable cancer care and recognise that they can work together to achieve the same goal.

The main reasons for our joint success are:

- Both organisations are aligned on tackling a very broad and challenging problem – access to cancer care
- At the core of the collaboration is a shared belief in the importance of addressing local needs, and ensuring that local stakeholders and organisations are the drivers of all planning and decision-making
- A long-term commitment to working together is in place
- The partners have jointly invested in building trust and relationships
- Both organisations have committed staff to focus on the partnership, and have also built support and engagement throughout their organisations, from country-based staff to leadership level.

Recognising the learnings and success of this partnership, both organisations have decided to continue working together and for the first time, developed a multi-year partnership agreement.

With the new partnership framework, the organisations have clarity on how to work together for optimum impact. C/Can and Roche's collaboration will be focused on expanding their geographical reach to include seven new cities between 2023 and 2025, and supporting efforts to strengthen healthcare infrastructure. The partners will also explore new funding models, build healthcare workforce capacity, and improve cancer registries, digital solutions, and surveillance systems to enable timely detection, diagnosis, and treatment of cancer. As part of the work, C/Can and Roche will continue to establish clear metrics and key performance indicators to track progress and make data-driven decisions for continuous improvement. They also plan to share the results of their work to ensure other organisations can benefit from their experiences, and that lessons learned at city level can be applied across other parts of the health system.

C/Can is still a young organisation, but it is growing and developing strong partnerships. With 64 partners from industry to academia and non-profits, and ongoing growth among new cities, the potential of the organisation is immense. There are opportunities for new partners to join this dynamic collaboration, and to support cities to achieve the UN's SDGs, and most importantly, deliver high-quality, timely care to cancer patients.

C/Can and Roche's collective efforts have achieved high impact results, but there is more work to be done. It will be important to keep learning and to adapt the model for each city's needs, listening to all stakeholders. With an increased focus on achieving the SDGs, now is a good time to engage in PPPs, particularly those focused on NCDs.

“We feel extremely confident in our partnership with C/Can. We believe this is the way to build long-term capacity to address cancer in LMICs, and we know that as C/Can grows, these lessons will be shared and the work expanded.

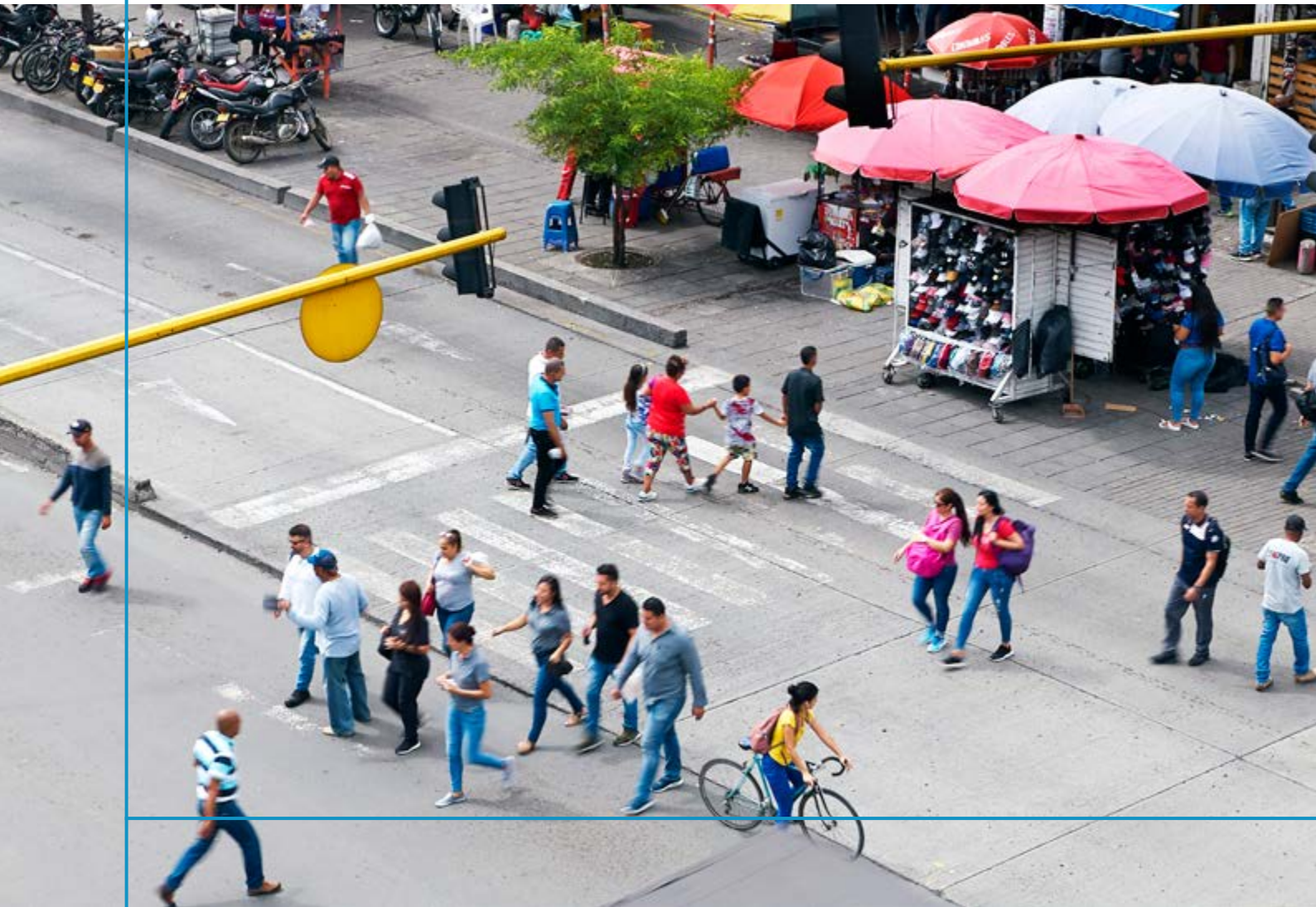
Michael Oberreiter, Roche.

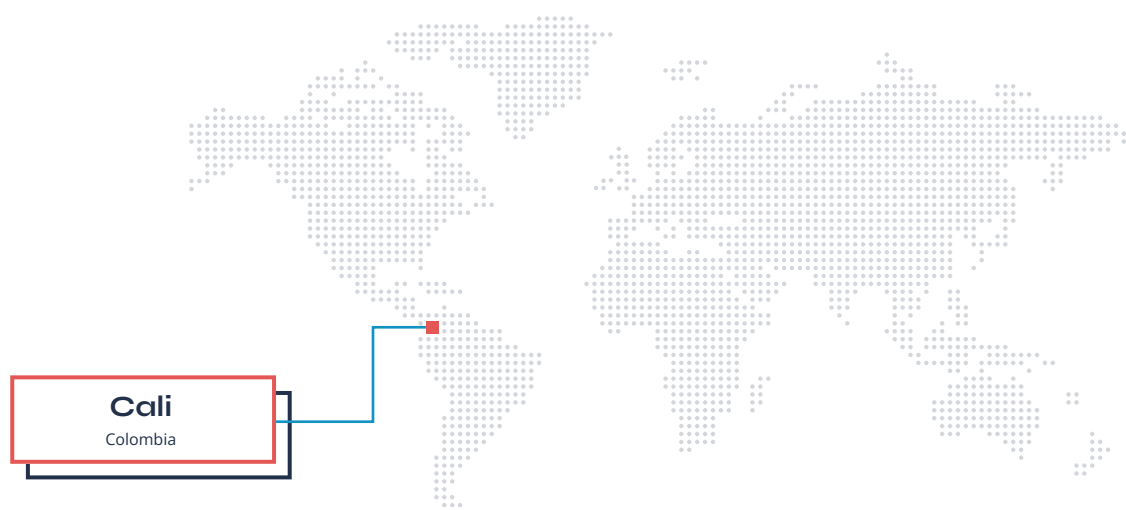
6. Impact

C/Can's approach is focused on long-term capacity building and local ownership at the city level. As such, many impact results are longer term and will take years to see, but there are already clear indications that the approach is working.

In three cities, Kigali (Rwanda), Tbilisi (Georgia), and Cali (Colombia), C/Can has been active for several years and its impact is clear and measurable. From strengthening national cancer policies, to delivering guidance on molecular medicine, and supporting increased access to quality cancer care, C/Can has had a notable impact on patients, and some of the highlights of the Foundation's work in these cities is outlined below.

Other projects serve to showcase the breadth and depth of C/Can's work across other cities. Section 6.3 details discrete projects that demonstrate the impact that can be achieved through tailored programs with key stakeholders.





6.1 Impact: Whole-city programs

6.1.1 Cali, Colombia: From start-up to sustainability

Cali, Colombia, was the first city to join C/Can in 2017. With C/Can's support, it pioneered a multi-sectoral approach – the first of its kind – and solutions-focused projects at city level to address the burden of cancer.

Local leadership and collaboration with a broad range of institutions, universities, healthcare providers and civil society groups, achieved significant progress in improving access to cancer care in Cali. Among many highlights, some of the main achievements include:

- **Development of care guidelines** for leukaemia and breast, cervical, prostate and paediatric cancers, endorsed by the Secretary of Health.
- **Agreement to implement cancer management guidelines** at the city level, endorsed by the Colombian Health Ministry.
- **Standardisation of pathology lab procedures**, resulting in a substantial improvement in diagnostic capabilities for cancer care.
- **Palliative care training for health workers**, strengthening the network of palliative care providers in the city, allowing first-hand interaction between primary care professionals and palliative care specialists. This has decreased referrals to tertiary care for basic palliative care provision for cancer patients.
- **Strengthening planning and capacity development for health workers.** This project saw the creation of the Blood Bank Working Group – a collaborative platform that brought together previously competitive blood banks. It has successfully established a more cohesive and communicative network among blood banks, which is likely to have long-term benefits for blood supply management and healthcare provision in the city.
- **Radiotherapy development and quality assurance plan.** A quality assurance program for nuclear medicine has been developed, and implemented in three (60%) institutions in the city, including the Public University Hospital (Hospital Universitario del Valle).

To ensure that city projects and cancer care solutions initiated and developed through the City Engagement Process Framework (CEPF) continue to be implemented, monitored, evaluated and scaled-up, sustainability is a key pillar of the C/Can model. Embedded into the process from the outset, it is a critical consideration in the selection of C/Can's local partners, with their ability to ensure sustained commitment, availability of resources, progress and impact will continue beyond the City Process itself. Selection is based on eight criteria that were developed based on C/Can's experience and learnings on the ground.

Towards the end of 2019, Cali was ready to begin a phased transition of responsibility to local stakeholders. To take up the role of continuing local efforts, C/Can partnered with ProPacífico, an independent, not-for-profit organisation dedicated to sustainable development in south-western Colombia, as its local sustainability partner.

“In the heart of Cali’s collaboration, Roche’s expertise was key in guiding PR strategies and fostering stakeholder relations. Their insightful support was pivotal in developing the analysis and creating the impactful training for local stakeholders reflecting a partnership of purpose and progress.

Dr Maria Fernanda Navarro, Regional Director Latin America, C/Can

The transformative impact of C/Can extends beyond the programs implemented. It has become a pivotal tool for Cali to redefine itself as a city committed to comprehensive cancer care. This paradigm shift is evident in the evolution of policies implemented by the Secretary of Health. The establishment of a dedicated position for cancer within the portfolio of the Secretary of Health, along with the inception of the Committee on Cancer Care (CODECA), helped establish a governance structure that seeks collaboration among various institutions to guide decision-making on cancer care policies and projects. It is also an indication of the new level of commitment that now exists in Cali to address all facets of cancer management.

Additionally, the convening power of C/Can was used as a platform to catalyse 15 million US\$ from the National government for the construction of a comprehensive cancer unit at the largest public healthcare academic medical centre in Cali – Hospital Universitario. Political will, the appropriate decision-makers around the table and evidence generated through the C/Can needs assessment and feasibility study supported the case for the Ministry of Health to allocate the funding in 2019. The execution of the project started at the end of 2023 and is currently ongoing.

Roche's Cali team played a fundamental role by supporting C/Can's engagement process locally, leveraging its expertise to support public relations efforts, and drive stakeholder engagement with the public and private sector. Roche facilitated introductions to various stakeholders in Colombia, and accompanied C/Can to meetings, providing a direct introduction for C/Can to the country - an important consideration given that Cali was the first city to join the Foundation. Roche also provided insightful feedback on the situation analysis, challenging local perspectives from a pharmaceutical standpoint.

The company also conducted training sessions for local stakeholders, including members of the city executive committee in Paraguay and in Cali. This included media training, providing direction on how to advocate for C/Can, and how to talk about it with the media. Subsequently, C/Can actively participated in Roche events locally, including Roche Press Days.

C/Can conducted a range of social media campaigns to raise awareness of the crucial role of private sector engagement. This included video discussions with Roche colleagues from Colombia, emphasising the significance of multi-sectoral partnerships. These videos were used strategically across various social media platforms, contributing to efforts in promoting the importance of private sector involvement.

Roche also played a crucial role in sustainability discussions with the health regional secretary. Together with MSD and local pharma association AFIDRO, C/Can and Roche approached NGO Propacifico with the aim of working jointly to build the sustainability strategy for Cali. Roche is also actively involved in the ongoing CODECA, with the objective of ensuring that this entity plays a significant role in decision-making from a policy perspective. Roche has been a key supporter of Propacifico in these discussions, assisting it to reactivate CODECA in December, 2023.





“The efforts of key institutions in cancer care underscore a profound dedication to advancing cancer management in Colombia. C/Can’s collaborative approach not only benefited Cali and Valle del Cauca, but served as a national model for fostering synergy among diverse stakeholders, including the private sector, paving the way for comprehensive cancer care nationwide. It remains a reference for other Latin American countries, which can learn and advance from the lived experiences in Cali.

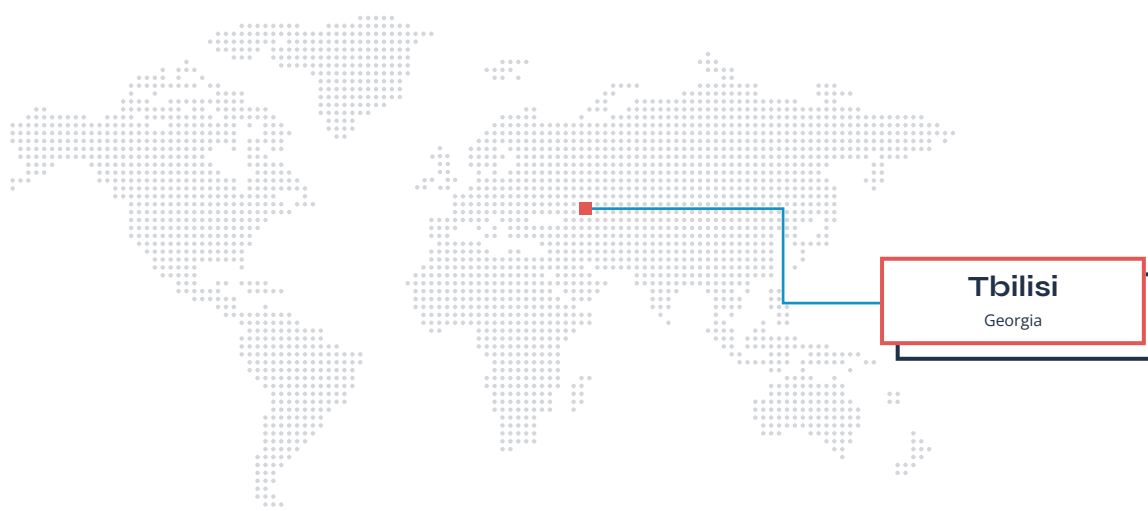
Andrea Lopez Arias, MD., Patient Journey Partner Precision Oncology,
Roche Pharma



Moving Forward

By the end of 2023, the majority of the ongoing C/Can-initiated city projects had been completed. However, as part of C/Can’s sustainability approach, cities that complete the C/Can process will continue to be part of the C/Can cities network, with opportunities to contribute, exchange and share knowledge, learnings and good practices with other cities. Roche continues to support cancer care work in Cali.

For further information, see appendix



6.1.2 Tbilisi, Georgia: Increasing government support for cancer care

In 2018, C/Can put out a call for applications from cities wanting to enhance access to high-quality cancer care. Local stakeholders in Tbilisi, Georgia, responded, and in February 2019, it became the first city in Europe to join the C/Can Foundation.

Working in collaboration with Tbilisi City Hall, the Georgian Patients' Union and the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia, C/Can facilitated the establishment of a new coordination platform for cancer care in Tbilisi: The City Executive Committee. This brought together stakeholders from various sectors including national and city government, cancer care providers, civil society, patient groups, and academia. The City Executive Committee oversaw a comprehensive needs assessment to identify gaps in cancer care. As part of this process, it emphasised the need for concentrated efforts to reduce fragmentation in service delivery and leverage collaborative efforts between city and national governments to achieve sustained improvements in access to cancer care. Based on the assessment findings, a multidisciplinary technical committee of 25 experts developed a city activity plan and strategic objectives to address identified gaps.

Specific project plans were devised to enhance the quality and standardisation of cancer care, establish multidisciplinary teams, implement evidence-based guidelines, and improve financial coverage for diagnosis and care services. Projects included:

- Improvement of quality and standardisation of pathology diagnosis, where C/Can designed and developed quality criteria regulations, quality control manuals, quality protocols for sample-taking, handling and specimen transportation.
- Multidisciplinary management of breast and cervical cancers, where C/Can created and operationalised guidelines for the management of breast and cervical cancer.
- Standardisation of cancer registry data collection, where C/Can created a systematic approach to improving data quality, which was endorsed by the Ministry of Health.

For further information, see appendix

C/Can played an important role in mobilising financial resources for the cancer treatment program in Georgia, helping to strengthen professional platforms, drive increased engagement, and forge connections with private healthcare providers. This technical work and C/Can's advocacy efforts catalysed conversations and built momentum that accelerated progress and decision-making by the government around how to improve access to cancer treatment.

“Roche was able to help us in understanding the aspects of the cancer care ecosystem that supported our work in the city. Roche's long-term vision and interest in building healthcare is very clear.

Gvantsa Khizanashvili, previous C/Can City Manager in Tbilisi, Georgia.

As a result, and as part of a comprehensive response to this need, on Sept 1, 2020, the Government of Georgia announced that it would expand the groups of cancer medicines covered by the Universal Healthcare Program. This meant that in addition to chemotherapy and hormone therapy medicines, the program would also cover monoclonal antibodies, protein kinase inhibitors, and bisphosphonates. It also increased the annual financial coverage by 8000 lari (approximately US\$2600) per patient. Cancer treatments within the framework of the Universal Healthcare Program are covered up to 23 000 lari. However, coverage for diagnostic tests was still excluded.

Faced with this situation, C/Can worked with local stakeholders to present a data model that would support the Ministry of Health and government to define the tests that should be covered for all cancer types, and to develop a public budget forecast for the inclusion of diagnostics. As a result, the Government of Georgia developed a provisional budget forecast to reimburse cancer diagnostic tests for all cancer types from 2024.

Aligned with the core principles of C/Can's model—local ownership, partnership, and collaboration—Roche played a pivotal role throughout the process. From the outset, the company assisted the Georgian Patients' Union in seizing the C/Can opportunity and facilitated the application process. Later, it provided crucial support for communications and logistics activities, as well as ongoing mentorship to enhance stakeholder engagement, helping ensure the effectiveness of C/Can initiatives.

“C/Can is a very valuable initiative as it addresses the burden of non-communicable diseases. It is very inspiring to see that healthcare leaders from government and non-government organisations, as well as the private sector, can come together to address the burden and to increase survivorship, improving outcomes over the years.

Maka Asatiani, Roche GM, Georgia.

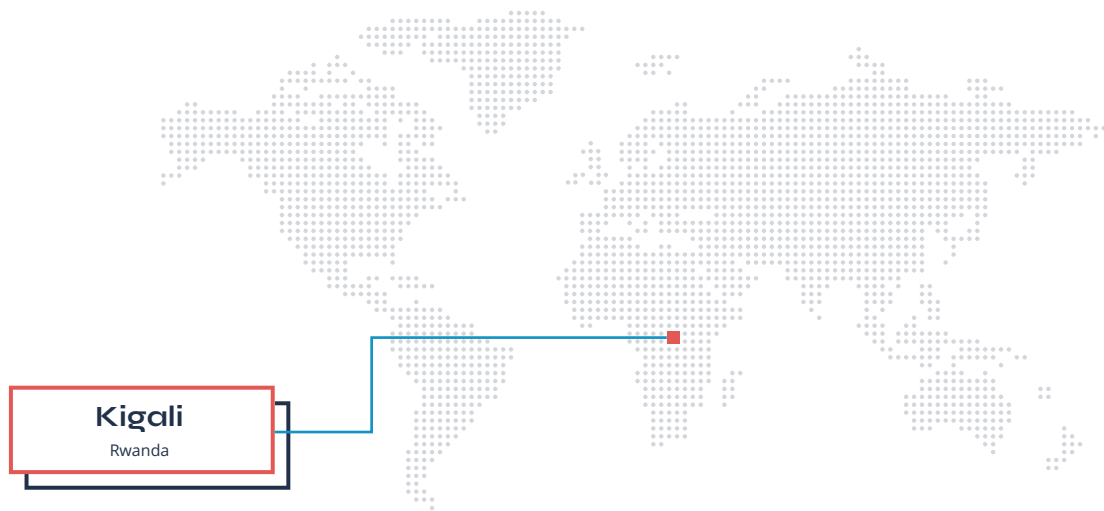


Moving Forward

By the end of 2023, Tbilisi had achieved significant milestones, with 24 outputs completed and seven in progress. C/Can has been a valuable partner, helping to design and implement a sustainable model for action. Throughout this journey, the Ministry of Health has played a pivotal role, endorsing projects and paving the way for nationwide expansion. City stakeholders are united in their efforts to advance implementation and institutionalise solutions. While mobilising local resources remains a challenge, C/Can continues to invest in a dedicated team to manage and enact activities ensuring continuity, knowledge transfer, and synergy – all vital elements for the successful implementation of a sustainable strategy.

For further information, see appendix





6.1.3 Kigali, Rwanda: Navigating the breast cancer patient journey

When Kigali first joined C/Can in 2019, one of the goals identified was to improve the care coordination for women being treated for breast or cervical cancer in Rwanda's five main cancer centres. The needs assessment process revealed critical gaps that were resulting in late diagnoses, under-informed decision-making, and treatment delays due to the fragmentation of patient pathways and treatment plans across the different institutions.

In 2021, the Rwanda Biomedical Centre (RBC) in collaboration with C/Can launched a digitally-enabled cancer patient navigation program for breast and cervical cancer (BCC) patients. The program aimed to strengthen the capacity and communication of five cancer referral health institutions in Rwanda: University Teaching Hospital of Butare (CHUB), Butaro Cancer Center of Excellence, University Teaching Hospital of Kigali (CHUK), King Faisal Hospital (KFH), and Rwanda Military Hospital (RMH). The program introduced and trained five patient navigators who were deployed in each hospital to aid the flow of patients in the care pathway. A new digital platform called JOIN was also implemented, developed by ALL Medical – a Japanese technology provider. The digital platform was intended to improve internal and external data sharing across institutions and healthcare personnel, to enhance coordination of care across participating hospitals.

Data that was previously held in individual institutions could be collected via JOIN and shared between providers along the entire patient journey. A total of 65 clinicians were registered to the platform, and 103 healthcare providers were trained on the principles of multidisciplinary care and patient navigation. Using the data on the platform, they were able to access patient information across institutions, discuss cases for multidisciplinary care, and implement appropriate treatment.

The patient navigation program was designed to achieve more effective use of human resources, greater ease in communicating across care centres, a better patient experience overall, and greater retention in the cancer care journey. It aimed to provide a support system that assisted patients with the challenges of a dispersed system, and increase their understanding of their diagnosis and cancer care journey. With the integrated information shared across facilities and the assistance of patient navigators, the program empowered patients to take responsibility for their care journey by providing basic information that had previously been lacking. Psychosocial support provided by patient navigators to patients and family members helped create a more comprehensive care experience that provided guidance, increased knowledge, informed decision-making, and reduced delays in both diagnosis and treatment.

The program supported more than 1,354 patients, who benefited from timely diagnosis and prompt treatment, consistent continuation of treatments, and psychosocial support from patient navigators. The program was adaptable to individual hospitals and created connections and an information pathway among the five participating care centres in the city, supported by local, public, and private stakeholders.

Delays in diagnosis and treatment decreased significantly, and the program proved cost-effective. The quantitative data revealed that the mean duration to treatment initiation was about 28 days in the digitally-enabled cancer patient navigation (DCPN) group compared to approximately 82 days in the non-DCPN group. Nearly 92% of DCPN patients began treatment within 60 days of diagnosis compared to 58% among non-DCPN patients. The total annual capital costs were US\$3,892, approximately 4% of total costs. The cost per DCPN patient was US\$99.

The digital platform was easily adaptable in the care centres since it was viewed as a much-needed service for both patients and clinicians. The work of the navigator was essential to patient monitoring and was used to inform decision-making on patient management in hospital tumour boards. The DCPN was flexible and adaptable with various services incorporated into the program depending on the need at each site. One site, for example, had a breast cancer support group and the navigator was the group facilitator.



The psychosocial support provided by patient navigators enabled a more comprehensive care experience and contributed to the positive impact on patient adherence to screening and treatment plans. These services included counselling for patients and families, making appointments and follow-up calls, providing information when wait times, testing locations, or treatments changed, and explaining treatments and their significance. Similarly, navigators coordinated care between the various stages of care and facilities as patients progressed from one stage or centre to another, thereby helping clinicians manage the challenge of individual patient follow-up and further contributing to timely diagnosis and treatment. These navigation services led to increased patient awareness, understanding, and empowerment of their individual care journey. Patients reported satisfaction with the quality of the health services provided by patient navigators.

Local ownership and leadership commitment were essential for the success of the Kigali patient navigation program. Meetings were held throughout the implementation phase to provide project progress and collaboratively address any challenges that arose. The collaboration of public and private sectors enabled private hospitals to provide publicly-funded treatments. This cooperation also demonstrates the value of bringing people and sectors together to identify the various issues to be addressed and implementing programs to create a more comprehensive, efficient, and sustainable cancer care journey.



The C/Can-Kigali collaboration brought to light the vital role patient navigation plays in effective cancer care. The patient navigation program has contributed to the city of Kigali's digital healthcare transformation process, a phenomenon that is now informing the national digital health plan. In October 2023, Rwanda Biomedical Centre announced their active commitment to fundraise for project extension among their existing partners. In February 2024, on World Cancer Day, the Rwandan government announced that patient navigation is a national priority for cancer care.

Roche played a critical role in supporting C/Can to deliver a comprehensive response to RBC's needs, including the design of reference patient navigation requirements for healthcare providers, the development of locally relevant patient navigation training, exchange visits to reference centres with embedded navigation practice and the development of supporting policies.

6.2 Impact: Individual projects

6.2.1 Kumasi Laboratory Network

Kumasi is the second largest city in Ghana, with a population of 3.35m people. It has 22 public and private pathology laboratories. Until the C/Can partnership was engaged, each laboratory was fully independent and used its own standards and procedures. Some laboratories were very busy, while others were under-utilised.

Since 2019, with the active support of the Ministry of Health and the Ghana Health Service, Kumasi has utilised the C/Can City Engagement Process Framework to drive a city-wide approach to assessing, planning, and executing locally-adapted cancer solutions designed to strengthen the health system.

As part of this process, 258 health professionals from 38 institutions were brought together across Kumasi to carry out a needs assessment to identify key priorities in cancer diagnosis and treatment. The assessment found that cancer patients experience delays in the period between symptom discovery and the start of treatment, highlighting a critical need to remove health system barriers to timely and accurate diagnosis and staging.

C/Can convened a multi-stakeholder group to assess the laboratory network in Kumasi. One of the main needs arising from the assessment was the desire to create a network among the laboratories. While the laboratories would continue to operate independently, they would standardise processes over time and introduce shared Laboratory Information Systems (LIS), Information Technology systems (IT), sample management, inventory management, and other systems. The network would begin with public facilities, and eventually expand to private laboratories. Patients would remain at the facility where they were first seen, but their samples could be sent within the network to ensure the fastest, most efficient testing process. A continual training process would be implemented to ensure quality control and quality assurance best practices. In addition to the laboratory network, C/Can would work with experts in Kumasi and with global advisors to scale up laboratories and upskill their staff.

“When we identified challenges in the program, my counterpart at Roche could help me identify solutions. Our vision was aligned. Roche wanted C/Can to succeed and they could offer financial and technical support for our work.

Fred Awittor, Digital Health Officer, and former City Manager for C/Can in Kumasi, Ghana.

6.2.2 Leadership Program for Women in Oncology (LPWO)

Women comprise nearly 70% of the global health workforce, but it is estimated they hold only 25% of senior roles. This is not only a sign of inequality, but also a barrier to the creation of lasting cancer care capacity. A growing body of evidence, supported by experiences from C/Can's first round of cities, has shown that committed, competent leaders with 'ownership' of a project can be a key factor in ensuring their sustainability over the long term.

Across C/Can cities, female oncologists have played a key role in the city engagement process, for example, as members of technical working groups and representatives of participating institutions, or in analysing needs assessment data in their respective areas of expertise. To build on this achievement and to further leverage transformational local engagement, the Leadership Program for Women in Oncology (LPWO) seeks to empower women to thrive as leaders in their cities and to enable others to drive change.

The LPWO focuses on the strengthening of key power skills for change-makers, such as critical thinking, problem-solving, communication, leadership, adaptability, and emotional intelligence.

The first cohort of LPWO brought together 10 female oncologists from Cali, Colombia; Asunción, Paraguay; Kumasi, Ghana; Kigali, Rwanda; Tbilisi, Georgia; Porto Alegre, Brazil; Greater Petaling, Malaysia; Leon, Mexico; Arequipa, Peru and Nairobi, Kenya.

The program started with a seminar in Geneva, Switzerland, at the World Cancer Congress in October 2022, where participants met the cohort and their mentors, and started developing their projects. For the following six months, participants joined monthly virtual sessions hosted by the American Society of Clinical Oncology (ASCO) on a diverse range of topics to strengthen leadership mindsets and power skills. The course continued with a second in-person training session at the 2023 ASCO Annual Meeting in Chicago. During this meeting, participants presented their small group projects.

The final part of the program included a 12-month mentorship with ASCO alumni and Roche women leaders as mentors to provide ongoing expert guidance and advice to graduates on how to apply learnings in practice, as well as feedback and support on ideas, innovative approaches, or projects to advance cancer treatment and care in their cities.

Roche supports the LPWO in several ways:

- Participating in Women Leading the Way which brought together LPWO participants and key women leaders in the healthcare and cancer care sectors. The event was organised as a roundtable discussion to give participants an equal standing in a discussion focused on leadership.
- Co-creating and developing the 12-month mentorship program to strengthen the business acumen of mentees in areas such as business planning, stakeholder management and engagement, business case development resourcing, and impact assessment.
- Providing women leaders to serve as mentors, meeting virtually once per month for a year.



The LPWO was a life-changing experience.

LPWO participant

“I learned the power of connection and speaking up. I learned that we are all leaders and that leadership is a journey. As women leaders we have a unique opportunity to bring about meaningful change in the cancer space.

LPWO participant



“Roche is proudly partnering with C/Can on the Leadership Program for Women in Oncology (LPWO) to create a culture of diversity, inclusion, and equity in healthcare systems. LPWO will create a global network of women leaders to act as a multiplier to inspire change, catalyse innovation in cancer care, and empower future generations of girls and women in medicine.

Kyle Srinivasan, Global Patient Partnership Leader, Roche.

6.2.3 Global Coalition for Cancer Diagnostics (GCCD)

Patients in lower-resource settings experience significant challenges in obtaining access to a timely and accurate diagnosis of cancer, which can delay the start of treatment, and ultimately lead to suboptimal health outcomes.

Starting in June 2022, C/Can brought together experts from professional associations, UN agencies, civil society organisations, and private companies to discuss the possibility of forming a Global Coalition for Cancer Diagnostics (GCCD). Eight leading diagnostics companies, including Roche and four civil society organisations joined the effort. Several solutions to improve the patient pathway and speed up diagnostic results were developed during the forum.

Based on the early recommendations of the GCCD, C/Can launched a pilot initiative in Cali, Colombia, with the aim of reducing the time between suspicion and confirmation of diagnosis in breast cancer.

The project, aligned with the Global Breast Cancer Initiative, aims to enhance the standardisation of patient pathways across insurers and healthcare providers, and strengthen the monitoring function of governmental institutions. For the first time, the pilot in Cali took a comprehensive view of breast cancer diagnostic implementation to ensure the coordination of imaging and laboratory diagnostics for faster and better-informed treatment decisions. C/Can plans to replicate the project in an African and an Asian city within the C/Can network. Roche is an active partner in the GCCD, helping to design and plan different solutions.

7. Appendix

7.1 Case studies: Further evidence

7.1.1 Cali, Colombia

Project Focus Area	Outputs	Outcomes/Impacts
<p>Quality</p>	<p>Guidelines for the treatment of breast cancer by a multidisciplinary group (completed)</p> <p>Guidelines for the treatment of cervical cancer by a multidisciplinary group (completed)</p> <p>Guidelines for the management of prostate cancer (completed)</p> <p>Guidelines for the management of colorectal cancer (completed)</p> <p>Guidelines for the management of paediatric leukemias (completed)</p>	<p>Local multi-sectoral coordination strengthened Five interdisciplinary teams were established to focus on and develop the different outputs of this project.</p> <p>Global network of partners connected and sharing knowledge A revision of current evidence and best practices was followed by international expert review and consultation, as well as scientific visits to regional partner institutions.</p> <p>One dissemination workshop was held (300 stakeholders engaged, 40 institutions).</p> <p>Development of five localised solutions Final documents have been developed, submitted and endorsed by relevant authorities.</p> <p>Political will strengthened to improve quality of care The City's Secretary of Health assumed responsibility for overseeing the implementation of the guidelines. Collaboratively, with the support of involved stakeholders, a strategic approach named "SARA" was devised. This acronym encapsulates the core elements of the strategy: S for socialisation, A for acceptance, R for replication, and A for adherence.</p> <p>This initiative commenced in June 2022, marked by the formalisation of political commitment.</p> <p>Institutional adoption by: 15 insurers – EAPB, five State social enterprises, 20 complementary and specialised health institutions</p>
<p>Pathology</p>	<p>Health professionals trained in quality management and immunohistochemistry (IHC) for pathology laboratories (completed).</p> <p>Document with the justification of selected molecular pathology tests for some types of cancer (in progress)</p> <p>Pathology quality control manual, including standard operating procedures and standard pathology reports (completed)</p>	<p>Local multi-sectoral coordination strengthened Two interdisciplinary and interinstitutional technical working groups were created to design a quality control manual based on collaboration between different departments, as well as carrying out comprehensive pathology audits and training in both quality management and IHC.</p> <p>Global network of partners connected and sharing knowledge Sixty-seven health professionals from 31 institutions have been trained in quality management and immunohistochemistry (IHC) for pathology.</p> <p>Workshop to socialise pathology control manual engaged 50 stakeholders from 16 institutions.</p> <p>Development of two localised solutions, one in progress Substantial improvement in diagnostic capabilities for cancer care in the public sector, representing a major leap forward for the city as a whole. In just one year, the public system transitioned from offering no IHC to conducting 1,500 tests in 2018.</p> <p>Political will strengthened to improve quality of care The Secretary of Health is now looking toward 2024 with a strategic plan to train all pathology labs in the city on this manual, which will standardise operating procedures and elevate the overall quality of pathology diagnosis across the city</p>

Project Focus Area	Outputs	Outcomes/Impacts
Radiotherapy	Radiotherapy development plan (completed) Radiotherapy quality assurance program (completed)	<p>Local multi-sectoral coordination strengthened Two interdisciplinary, interinstitutional technical working groups were created to develop the outputs.</p> <p>Global network of partners connected and sharing knowledge A revision of current evidence and best practices was followed by international expert review and consultation.</p> <p>Development of two localised solutions The Radiotherapy Development Plan is a comprehensive roadmap envisioning the future of radiotherapy services in Cali. It encompasses considerations such as machine requirements, human resources, training needs, infrastructure, and governance. The Radiotherapy Quality Assurance Program focuses on ensuring that hospitals providing radiotherapy services adhere to international quality standards.</p>
Palliative Care	Palliative care training course developed and implemented (completed)	<p>Local multi-sectoral coordination strengthened An interdisciplinary technical working group was created to develop a virtual diploma course hosted on the eCancer platform, made available to primary care health professionals in the city. In addition, the local team has designed and edited a document to accompany the course and developed a synchronous virtual session to evaluate clinical cases.</p> <p>Development of one localised solution The Palliative Care Training Course for Primary Care (Link) comprises two pivotal components: supporting the local primary care professionals in managing symptoms and complications, particularly pain management for patients with cancer and strengthening the network of palliative care in the city. A total of 34 healthcare professionals completed the course with 100% reporting improved knowledge/skills.</p>
Nuclear Medicine	QUANUM audit checklist developed for the HUV (completed) Quality assurance program for nuclear medicine equipment developed and implemented (completed)	<p>Local multi-sectoral coordination strengthened An interdisciplinary technical working group was created to develop a nuclear medicine quality assurance program in the city.</p> <p>Global network of partners connected and sharing knowledge Technical documents and existing guidelines from national and international agencies were reviewed in consultation with the International Atomic Energy Agency.</p> <p>Development of two localised solutions A quality assurance program for nuclear medicine has been developed and the Quantum audit checklist has been implemented in the Public University Hospital (Hospital Universitario del Valle).</p> <p>Political will strengthened to improve quality of care Five institutions (100% of institutions) have adopted the nuclear medicine quality assurance program.</p>
Human Resources	Human Resources development plan for oncology services in Cali developed (completed) Online training course in management of oncology services developed (completed) Online training course in oncology nursing developed (completed) Online training course on cancer care for Primary Care Teams developed (completed)	<p>Local multi-sectoral coordination strengthened The multidisciplinary project team composed of the deans of Cali universities, using their expertise in local education, have evaluated the training needs of the city's healthcare professionals and proposed the development of three graduate courses.</p> <p>Development of four localised solutions The three courses were implemented with the following results: Online training course in management of oncology services - 21 healthcare professionals trained from 13 institutions. The course was also adopted by two institutions. Online training course in oncology nursing - 25 healthcare professionals trained from 16 institutions. The course was also adopted by one institution. Online training course on cancer care for primary care teams - 20 healthcare professionals trained from 12 institutions. The course was also adopted by five institutions.</p>

Project Focus Area	Outputs	Outcomes/Impacts
Blood Banks	<p>Blood bank campaign designed and implemented (completed)</p> <p>Blood Bank Working Group created (completed)</p>	<p>Local multi-sectoral coordination strengthened A blood bank working group was created and two blood donation campaigns were conducted with a municipal committee.</p> <p>Development of one localised solution The project led to a series of workshops on immunohistochemistry to train staff from different blood banks in the city in 2019 in which 12 people were trained. Before the project, these blood banks operated independently, often in silos, avoiding collaboration due to their competitive nature. The intervention facilitated a transformative shift by bringing them together. In addition, this collaboration became the catalyst for a more unified and coherent stance when interacting with the Secretary of Health.</p>

7.1.2 Tbilisi, Georgia

Project Focus Area	Outputs	Outcomes/Impacts
Pathology	<p>Quality criteria regulations designed (completed)</p> <p>Quality control manual developed (completed)</p> <p>Quality protocols for sample taking, handling and specimen transportation designed (completed)</p> <p>Specifications for setting up a telepathology program formulated (completed)</p>	<p>Local multi-sectoral coordination has been strengthened Four interdisciplinary teams were established to focus on and develop the different outputs of this project.</p> <p>Global network of partners connected and sharing knowledge A revision of current evidence and best practices was followed by international expert review and consultation, as well as scientific visits to regional partner institutions.</p> <p>Two dissemination workshops were held (Workshop 1: 10 institutions and 45 stakeholders engaged. Workshop 2: eight institutions and 15 stakeholders engaged).</p> <p>Development of four localised solutions The final documents have been developed and submitted to the relevant authorities.</p> <p>Political will strengthened to improve quality of care City stakeholders aim to prioritise the institutional adoption and implementation of the documents once they are endorsed by the Ministry of Health (MoH).</p>
Radiotherapy	<p>Radiotherapy development plan (completed)</p> <p>Radiotherapy quality assurance program (completed)</p> <p>Syllabus for common training of radiation medical physicists developed and implemented (completed)</p>	<p>Local multi-sectoral coordination has been strengthened Three interdisciplinary, interinstitutional technical working groups were organised to focus on the different outputs</p> <p>Global network of partners connected and sharing knowledge A revision of best available international and local evidence was carried out to develop the documents. An international consultation was carried out with experts nominated by the International Atomic Energy (IAEA) as well as relevant city stakeholders, including the Agency for Nuclear and Radiation Safety (ANRS).</p> <p>A dissemination workshop was held engaging 10 different institutions with 45 city stakeholders.</p> <p>Development of three localised solutions The three finished and translated documents were submitted for approval and endorsement by the relevant authorities.</p> <p>Political will strengthened to improve quality of care City stakeholders aim to prioritise the institutional adoption and implementation of the documents once they are endorsed by the Ministry of Health (MoH).</p>

Project Focus Area	Outputs	Outcomes/Impacts
Quality - MDT and Management Guidelines	<p>Resolution to set up and operationalize MDTs in centres treating breast and/or cervical cancer patients (completed)</p> <p>Guidelines for the management of breast cancer and cervical cancer (completed)</p> <p>Capacity development for MDT care practice for breast and cervical cancer patients (completed)</p>	<p>Local multi-sectoral coordination has been strengthened An interdisciplinary and interinstitutional technical working group was created to develop a resolution for the creation of multidisciplinary teams (MDTs) in all institutions treating oncology patients within the city.</p> <p>Global network of partners connected and sharing knowledge The team also undertook scientific visits to reference centres in Europe and international consultation with experts.</p> <p>The outputs 1 and 2 were socialised during a three-day workshop with international experts on the management of breast and cervical cancers was held in Tbilisi, with the participation of technical working groups, medical societies and professionals totaling 45 participants from 10 institutions.</p> <p>The Multidisciplinary Cancer Management Course (output 3) was implemented successfully with 70 participants from 10 institutions.</p> <p>Development of three localised solutions The documents were submitted to the Ministry of Health and Scientific Societies for approval, endorsement and implementation.</p> <p>Political will strengthened to improve quality of care Moving forward, city stakeholders aim to prioritise the institutional adoption and implementation of the resolutions and guidelines once they are endorsed by the Ministry of Health (MoH).</p>
Cancer Registry	<p>Policy guidance to harmonise high-quality data collection, data synchronisation, completeness and dissemination (completed)</p> <p>Assessment of quality of cancer registration processes, identifying gaps and producing the appropriate recommendations (in progress)</p> <p>Data assessment on cancer-related vital statistics (not started)</p> <p>Updating of the cancer registration process (not started)</p> <p>Dissemination of cancer registration processes changes (not started)</p> <p>Publication of the "Improvement of the Cancer Registry data quality for better cancer management decision-making" (not started)</p>	<p>Local multi-sectoral coordination has been strengthened An interdisciplinary technical working group was created to develop policy recommendation documents for the harmonisation of data collection from the various cancer care centres across the city.</p> <p>Development of one localised solution These recommendations were resource-stratified, based on the best available evidence and developed in consultation with international experts and endorsed by the Ministry of Health.</p> <p>Plans moving forward: Following the completion of the first output, the National Centre for Disease Control and Public Health of Georgia is being supported through C/Can by the International Agency for Research on Cancer (IARC) in conducting assessments and investigation into the issues identified and to come up with recommendations to support and ensure quality of cancer data in the Tbilisi cancer registry. A site visit took place in enabling broader stakeholders' involvement and engagement (15) with additional insight in cancer registry procedures and cancer registry data quality in general.</p> <p>Moving forward, city stakeholders aim to prioritise the completion of planned outputs expecting the cancer registry to improve coverage, completeness and reporting of cancer information ensuring an effective surveillance of cancer.</p>

Project Focus Area	Outputs	Outcomes/Impacts
Nuclear Medicine	<p>Standardised radiology report designed (completed)</p> <p>Quality assurance guidelines for radiology and nuclear medicine (completed)</p> <p>Syllabus for common training of radiation technologists (completed)</p> <p>Pet/CT and Cyclotron development plan (completed)</p>	<p>Local multi-sectoral coordination has been strengthened Guidelines to ensure the harmonisation of radiology and nuclear medicine services were developed by five interdisciplinary, interinstitutional technical groups.</p> <p>Global network of partners connected and sharing knowledge. Technical documents and existing guidelines from national and international agencies were reviewed to extract best and evidence-based practices, and the team conducted scientific visits to reference centres in Europe.</p> <p>Consultations for imaging and nuclear medicine were carried out with international experts for both specialisms, along with capacity-building workshops to disseminate this project.</p> <p>Development of four localised solutions The completed documents were then submitted for approval, endorsement and implementation to the relevant authorities.</p> <p>Political will strengthened to improve quality of care City stakeholders aim to prioritise the institutional adoption and implementation of the documents once they are endorsed by the Ministry of Health (MoH).</p>
Human Resources	<p>Policy recommendation to the medical universities for strengthening cancer care education at undergraduate level (completed)</p> <p>Review postgraduate level training programs for medical and surgical oncology (completed)</p> <p>(Draft) Resolution presented to the Ministry of Health to ensure the provision of continuous medical education - completed</p> <p>Development and implementation of cancer care training modules designed to develop non-cancer medical specialists, including primary healthcare professionals - completed</p> <p>Policy recommendation to develop and implement cancer care training modules designed to develop oncology nurses (completed)</p>	<p>Local multi-sectoral coordination have been strengthened The multidisciplinary project team developed recommendations and proposed both reviews and improvements to the existing training programs for oncology specialties and subspecialties. Furthermore, the team designed and proposed continued cancer care education opportunities for non-oncology specialists and primary care professionals, to support the decision-making and treatment referral process outside cancer care centres.</p> <p>Global network of partners connected and sharing knowledge The technical working groups conducted city consultation meetings with relevant stakeholders, including the Ministries of Health and Education, as well as professional associations and international consultants.</p> <p>Development of five localised solutions Policy recommendations designed for medical universities to strengthen cancer care education at undergraduate level and postgraduate level training programs for medical oncology, radiation oncology and surgery (surgical oncology) have been reviewed.</p> <p>Cancer care training modules have been designed for non-cancer medical specialists, including primary healthcare professionals. Resolution was presented to the Ministry of Health to ensure continuous medical education in all centres licensed to treat cancer patients.</p>
Diagnostic / Financing	<p>List of diagnostic test packages for the eight more prevalent cancers to be reimbursed (completed)</p> <p>Collect real-world diagnostic test package pricing across the seven centres of Georgia (completed)</p> <p>Budget impact forecast scenario for the inclusion of diagnostic reimbursement (completed)</p> <p>Workshop with MoH to present the report of the budget impact analysis, co-develop the recommendations for reimbursement of diagnostic procedures for cancer and for the criteria for inclusion (completed)</p>	<p>Local multi-sectoral coordination have been strengthened Using existing data and analysis, a multidisciplinary project team developed a model for pricing standard cancer diagnostic procedures according to national and international guidelines. They also prepared a budget impact forecast to the Georgian Ministry of Health for the inclusion of diagnostic reimbursement in UHC.</p> <p>Development of one localised solution Based on the analysis recommendations were provided on priority areas of reimbursement.</p> <p>Political will strengthened to improve quality of care Based on the budget Impact analysis developed, MoH announced the reimbursement of cancer diagnostics tests from 2024.</p>

How to get involved

C/Can encourages organisations from different sectors in cancer care and non-communicable disease management to come together and collaborate on joint initiatives that leverage the strengths and resources of each sector to address common challenges or achieve shared goals. If you are involved in structuring cross-sector partnerships, the C/Can and Roche collaboration framework can be used as a partnership model, and a guide or a best practice for others.

[▶ Click here to see our collaboration framework](#)

Due to the evolving nature of healthcare challenges, both teams are committed to adaptability and flexibility in the collaboration. This may involve adjusting strategies based on lessons learned, emerging health trends, or changing priorities.

You can engage with the teams from C/Can and Roche to learn more about their joint work by participating in upcoming events, webinars, and conferences, or simply by following their communication platforms (<https://www.roche.com/> <https://citycancerchallenge.org/>) or contacting:

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Acknowledgements

We would like to express our sincere gratitude to all the individuals who have contributed their time, expertise, and support to the development of this report. Their valuable contributions have been instrumental in shaping the ideas and recommendations presented here.

We would like to extend our appreciation to the following contributors (in alphabetical order), whose dedication, insights, and collaboration have greatly enriched this project:

- C/Can: Abubakari Jaliu, Alfredo Polo, Catalina Muller, Chika Kitajima, Fred Kwame Awittor, Gvantsa Khizanishvili, Harold Cottin, Isabel Mestres, Jade Chakowa, Maria Fernanda Navarro, Mark Cianfagna, Marlene Mumukunde, Mathieu Morand, Natia Verdzadze, Shalini Eragoda, Sophie Bussmann, Tim Hoswitschka, Vanessa Tracey. Special thanks are extended to the City Managers for their invaluable presence at workshops, where they provided validation and insightful feedback on the collaboration framework: Leandro Duarte, Rosa Gonzalez, Maria Fernanda Esquivel, Beatrice Okumu, Berenice Rodriguez, Derrick Zhie Chan, Bunthoeun Pich
- Roche: Andy Walker, Anna Steenrod, Carolina Falciola, Claudia Echeverria, Etienne Laine, Justine Hibbert, Kyle Srinivasa, Maka Asatiani, Celina Schocken

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