

White Paper

# INNOVATIVE FUNDING MODELS FOR TREATMENT OF CANCER AND OTHER HIGH-COST CHRONIC NONCOMMUNICABLE DISEASES

*A global landscape study of funding trends and innovations*

Commissioned by



Prepared by



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## I. EXECUTIVE SUMMARY

Non-communicable diseases (NCDs) account for a growing disease burden with global mortality estimated at 41 million people every year<sup>1</sup>, including around 9.6 million cancer deaths<sup>2</sup>. Generally, low and middle-income countries (LMICs) are disproportionately affected by NCDs and these are where the bulk of NCD deaths occur. A repeated lack of investment in NCDs will contribute to a global loss of approximately US\$47 trillion in Gross Domestic Product (GDP) from 2011 to 2025<sup>3</sup>.

***“Global loss of US\$47 trillion in Gross Domestic Product (GDP) from 2011 to 2025”***

The costs of NCDs to health systems, businesses and individuals, are significant and growing. Within the next 10 years alone, cancer treatment costs are expected to rise by one-third<sup>4</sup>, creating pressure on healthcare payers in both the public and private sectors. Increasingly, global movements are directed towards taking actions to prevent or treat NCDs; 2 key examples are as follows. Firstly, the Sustainable Development Goals 3.4 aim to reduce one-third of pre-mature mortality from NCDs by 2030. Secondly, the increase in the number of countries moving towards Universal Health Coverage (UHC). Despite these, around 100 million people continue to be pushed into extreme poverty because they have to pay for health care themselves<sup>5</sup>.

Long-term chronic NCDs are expensive to manage, and the risk of catastrophic healthcare expenditure increases in LMICs. A combination of insufficient public coverage and reimbursement for innovative therapies coupled with heavy disease burden<sup>6</sup>, exposes patients to out-of-pocket treatment costs. Patients unable to afford the cost of care, go without the needed treatment, leading to suboptimal outcomes. Disease funding and optimal cancer outcomes are fundamentally linked, therefore there is an urgent need for new innovative models to address the funding gap in LMICs<sup>7,8</sup>.

This study identifies and assesses innovative funding models for cancer treatment and other high-cost chronic NCDs across Asia Pacific, Latin America, Europe, Africa and the Middle East. The objective is to enable readers to better understand the possibilities of innovative funding models currently being used globally. It will also showcase unmet needs, namely affordability, while stressing the need for stakeholder collaboration to improve patient access and financial protection. There is a great potential for shared knowledge among policy makers and relevant stakeholders to tackle challenges in the healthcare space.



## Innovation framework

This study employed a novel approach to define the different innovative funding models seen globally. Innovation was characterized through a single framework—composed by the combination of 2 key components:

- **Source of innovation** categorizes the funding models in terms of how resources are secured and/or deployed to ultimately finance treatment
- **Degree of innovation** shows the extent of innovation in the funding model either through enhancement of existing arrangements (new groups or part of the treatment pathway) or adoption of an entirely new approach through single entity and/or multiple parties

First, innovative funding models (case studies) were primarily identified based on the source of their innovation—either in unlocking new funding sources, deploying funds to patients, or a combination of both. Additionally, for every case study within each category, funding models were also assessed based on whether it enhanced the traditional model or implemented a new funding model and whether the leading entity acted alone (i.e. single entity) or in partnership (i.e. multiparty).

## Results

We narrowed down a shortlist of 105 examples of innovative funding mechanisms globally, based on research. Out of them, 36 case studies were selected to be showcased within this report based on their innovative nature and potential for learning and adoption across other geographies. The following examples reflect a select set of case studies from the global inventory that this report covers.

There are various examples of funding models showing innovation in resource mobilization and/or pooling. This is achieved by leveraging strategic partnerships where resources are pooled and directed at specific initiatives and/or implementing partners. Select examples include public-private resource pooling alliances, sales-linked donations and fundraising partnerships. Another method includes petitioning voluntary contributions from the patients or general population, as is the case in health mutual funds, top-up insurance schemes and voluntary medical savings accounts. Government initiated methods can also increase financial protection—common examples include compulsory medical savings accounts, lottery-based funding, sin taxes, and compassionate use models.

On the other hand, there are funding models that demonstrated innovative means of channelization, allocation or implementation of resources. This is executed through debt financing instruments to facilitate payments over time, such as payroll-based consumer loans, zero-interest loans, and installment payments schemes. There are examples of insurance products that deploy funding for holistic patient-centered care, such as global expatriate insurance, screening-based insurance, and public-private insurance partnerships. Well known models, including means-based patient assistance programs, are commonly used by pharmaceutical companies to increase affordability for expensive therapies.



There are also relevant examples of funding models where innovation is seen in both, how the funds are secured and how they are deployed. This includes results-based financing models, such as development impact bonds that open new sources of funds and deploy benefits in a non-traditional way. Technology-enabled crowd-based platforms such as patient and/or partner-initiated crowdfunding platforms, and cryptocurrency-enabled platforms have also unlocked new sources of funding to deploy benefits to patients in need of funding. Mobile-enabled models including health wallets, and SMS insurance, along with microinsurance policies sold at retail outlets are other relevant examples.

## Key considerations & success factors

Key stakeholders, including policy makers, funding bodies, providers and healthcare companies, need to assess the 'fit' of any given funding model to their respective market to maximize impact and sustainability.



**Government readiness** is important for the successful implementation of funding models. Local government stability, clear regulatory policy and advocacy from key institutions play an important role in creating a conducive environment to foster innovation. Government's priorities and goals towards including cancer and high-cost NCDs into mainstream health systems typically provide the much-needed impetus for stakeholders to focus on the unmet needs in cancer treatment and financing.



**Necessary infrastructure requirements** such as internet penetration, presence of real-world data, penetration of public and private insurance schemes, healthcare and supply chain infrastructure are critical for the implementation and monitoring of certain program types.



**Local experience and implementation capabilities** are essential for the successful execution and adoption of a funding program, including for globally driven initiatives. Program sponsors should ideally partner with local stakeholders with the relevant experience, to execute a program effectively.



**Programs should be designed to be win-win for all the stakeholders involved**, with well-defined roles and responsibilities. Additionally, successful programs typically are simple to execute with minimal ambiguity for patients and the implementation partners.

## Action for the future



Innovative funding models must complement long-term government initiatives, such as the attainment of UHC. Initiatives that aim to reduce the growing healthcare expenditure burden while maintaining or improving patient access and health outcomes will contribute to long term sustainability.

Moving forward, modern techniques can be used to monitor patient outcomes data and enable public payers to measure performance and returns. Policy makers should aim to foster an environment that encourages and facilitates innovative partnerships and approaches, while healthcare companies should evaluate the long-term strategy of programs and create fitting partnerships (including with competitors) to address unmet needs. Patient groups, providers, NGOs, foundations, physician communities are key influencers for policy making, as well as can be potential partners for funding and implementation.



Finally, it is important for programs to localize and be tailored to unique market needs while bringing in learning from regional and global success stories. Localization of innovative funding models will not only improve patient and partner adoption but will also make execution more efficient and sustainable in the long run.

## II. ROLE AND ADDED VALUE OF INNOVATIVE FUNDING MODELS FOR CANCER & HIGH-COST CHRONIC NCDs

### Challenges posed by cancer and other high-cost chronic NCDs are significant and growing

Noncommunicable diseases (NCDs) kill approximately 41 million people each year, equivalent to 71% of all deaths globally<sup>1</sup>. NCDs, generally are of long duration and are the result of a combination of genetic, physiological, environmental and behavioral factors. The main types of NCDs can be categorized into 4 groups: cardiovascular diseases, cancers, respiratory diseases and diabetes<sup>1</sup>. Cancer is the second leading cause of death and is responsible for an estimated 9.6 million deaths in 2018. Globally, cancer accounts for 1 in 6 deaths<sup>2</sup>.

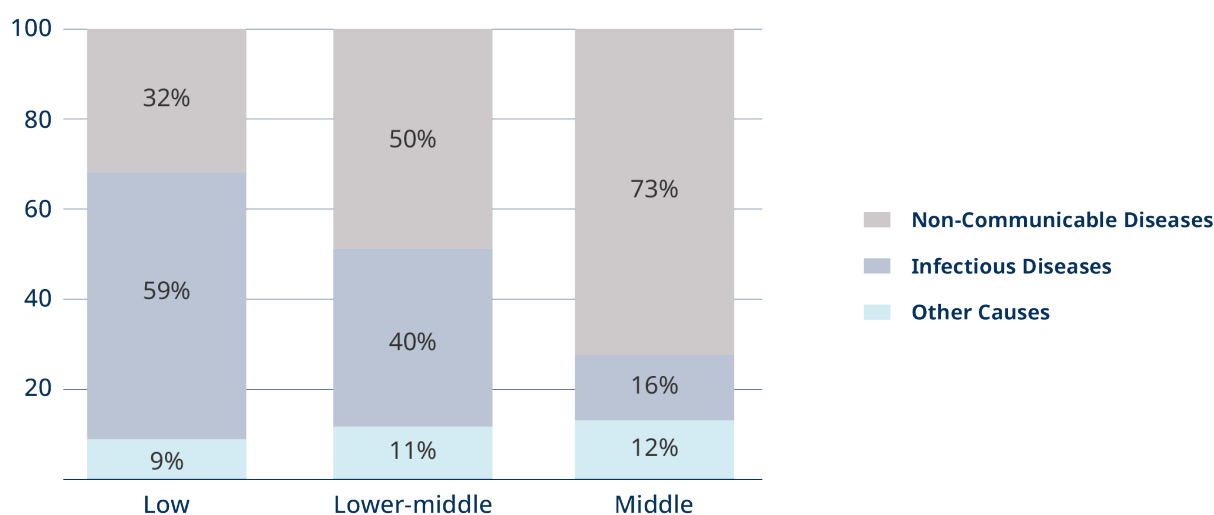
***“Estimated 71% of all deaths globally are due to NCDs”***

Cancer and NCDs disproportionately affect people in low and middle-income countries (LMICs), where approximately 70% of deaths from cancer and more than 75% of global NCD deaths occur. Furthermore, 85% of “premature” patient deaths between the ages of 30-69 years occur in LMICs<sup>2</sup>.

Current funding for NCDs falls short of what is required to deliver global targets, in particular the 2025 Global NCD Targets and Sustainable Development Goal (SDG) 3.4, which calls for a one-third reduction in premature mortality from NCDs by 2030<sup>9</sup>. The cost of repeated underinvestment in NCDs has been estimated to contribute a total of US\$47 trillion in lost Gross Domestic Product (GDP) from 2011 to 2025 globally<sup>3</sup>.

Despite meaningful efforts, several LMICs solutions have not yet reached the level to fully address the extent of the complex problems posed by NCDs. Very few LMICs maintain accurate and comprehensive registries, run surveillance or research programs needed to make informed policy decisions. As a result, there is little focus on prevention or early diagnosis of the diseases, as such patients present themselves at late stages when treatment is more challenging, costly and with lower survival rates. Additionally in most LMICs, public reimbursement of high-cost NCDs, including cancer, is limited—leading to out-of-pocket (OOP) or private spending by patients.

**Figure 1. Share of DALYs by disease type and country Socio-demographic Index (2016)**



By nature, NCDs are long-term, leading to repeated and ongoing costs and amassing high financial burden, driving the patients and their families into a poverty-illness cycle. In this cycle, inadequate treatment leads to loss of health, higher morbidity, lost income and deeper impoverishment<sup>10</sup>. A chronic lack of financial risk protection leaves patients (and families) exposed to a choice between financial catastrophe or abandoning treatment.

## Existing challenges of traditional funding sources

There are 3 primary sources of healthcare funding:



**Public spending** by public payer or government, and overseas development aid



**Private spending** by through insurance coverage pay-outs



**Out-of-pocket** spending by patients and families at the point of service

Approximately 90% of LMIC annual investment in healthcare comes from national governments and overseas development assistance<sup>11</sup>. Public reimbursement and spending on high-cost NCDs, including cancer, typically have restrictions on the amount and type of spend on treatment. In the private sector, health insurance companies often supplement publicly provided health coverage.

Across LMICs, there are large and uneven variations in access to new innovative therapies for NCDs and cancer. Links between funding and treatment outcomes gives rise to a greater need for both, public funding and other funding strategies to address the gaps in the countries<sup>7,8</sup>. Recent increases in health spending remain below those seen in pre-financial crisis years<sup>12</sup>. New access models drawing on new funding sources are needed to cater to patient needs.

Global multilateral organizations are working towards policy and institutional change to strengthen national efforts to address the burden of NCDs (e.g. WHO Global Action Plan for the Prevention Control of NCDs 2013-2020), and support universal health coverage, (e.g. WHO Plan of Action: Health Systems Governance for Universal Health Coverage).

However, there is a limited dialogue in improving overall understanding of innovative funding models available and the opportunities for countries to learn from each other. This report will summarize global and regional trends in innovative health funding models while providing detailed case studies to inspire locally.



### III. STUDY METHODOLOGY

#### Research methodology

This landscape study undertook a combination of secondary research and primary interviews with 32 industry stakeholders and experts between November 2018 and February 2019 to identify funding models for cancer treatment for each selected country and region. Findings from existing publications were also leveraged, including the “Innovative funding models for cancer treatment in Asia” report from ACCESS Health International.

#### Country & region selection

This report covered 17 markets from 5 regions around the world. While the scope of this study does not include a comprehensive review of all countries in all regions, the intention is to highlight examples from selected markets, from which global learnings can be extracted and shared. The regions and countries included in this study are summarized below:

- *Asia*: China, Hong Kong, India, Malaysia, Philippines, Singapore, Thailand, Vietnam
- *Latin America*: Brazil, Mexico, Panama
- *Middle East*: Lebanon, United Arab Emirates
- *Europe*: Hungary, Poland
- *Africa*: Kenya, Nigeria

In addition to regional and country-level examples, this study also looked at global initiatives that have impacted more than 1 region in scope. This geographic selection took into consideration criteria such as: availability of information on health funding systems, diversity of approaches to health funding and diversity of health system development and regional diversity.

#### Therapy scope

This study primarily focuses on oncology treatment, and also explores innovative funding models for other high-cost chronic non-communicable diseases, like hemophilia or multiple sclerosis, where there are relevant learnings.

#### Inclusion and exclusion criteria

This study focuses on funding models that provided monetary or in-kind support for treatment to individuals for medical oncology, or for other high-cost chronic non-communicable diseases.

Health funding models for innovative treatments should consider the broader cancer care services as well as ongoing health systems strengthening efforts in the country—due to this the following additional inclusion and exclusion criteria were defined:

- Funding models must be deployed in at least 1 country and impacting cancer patients
- Funding models for the supply of cancer treatment services (e.g. salaries, equipment, infrastructure) was excluded
- Funding models which exclusively focus on screening, diagnosis, surgery, radiology and/or palliative care without supporting medical treatment are excluded for the purposes of this report

## Defining funding models

This study defines a funding model as a configuration of any mechanism which impacts funding, access or coverage for the treatment of cancer and high-cost NCDs.


### The 3 health financing dimensions: funding, access, coverage

The World Health Organization has recognized 3 key dimensions of health systems which are important for universal health coverage: the proportion of health costs covered (funding), who is covered (access), and which health services are covered (coverage).


The model has been used to examine the extent to which cancer services are covered. These dimensions are defined in relation to cancer as follows:



**Funding:**  
the amount of financial protection from external sources that helps offset the out-of-pocket burden for cancer care.



**Access:**  
the extent to which the entire population has access to funding to pay for cancer services and the extent to which cancer funding is equitable among different population groups.



**Coverage:**  
the extent to which cancer funding prioritizes each of the basic cancer and treatment care services: screening, diagnostics, radiology, surgery, medical oncology and palliative care.

The absence of financial resources affects each of these dimensions. This results in a higher out-of-pocket burden on patients, and lower coverage for people who do have access. This report seeks to analyze the approaches of various stakeholders to leverage innovative funding models to address gaps in 1 or more of these dimensions.

Within the scope of mechanisms which can be considered as funding models, there are 2 broad categories: traditional and innovative. The focus of this study is on the innovative models.

## Traditional funding models

Traditional funding models include how patients have previously been able to pay for the cost of oncology treatment. These models are not documented in the report, and tend to be similar across markets and regions:



It is important to note that traditional funding models can be enhanced through some innovative component. For example, a traditional insurance program can be innovative if the insurance product is delivered through a telecom provider.

## Innovative funding models

The term “innovative financing” was developed in 2002 to describe new financing from nontraditional sources and incentives to mobilize them to achieve the Millennium Development Goals (MDGs)<sup>13</sup>. Building consensus on a unified definition of “innovative” is challenging as it implies an ongoing and active evolution; what is innovative today may become redundant as new inputs, processes, organizational reform, products and services emerge.

To better understand the types of innovations and to make recommendations to inform future policy, we sought to analyze the innovative models according to their essential characteristics through **a single framework with 2 components**:

- **Source of innovation** - segmentation of innovative funding models, in terms of how resources are secured and/or how they are deployed to ultimately finance care.
- **Degree of innovation** - the funding model either enhances existing arrangements (extending them to a new demographic group or a new part of the treatment pathway) or adopts an entirely new approach to address funding, access or coverage. Funding models may involve a single entity or multiple parties.

## Source of innovation

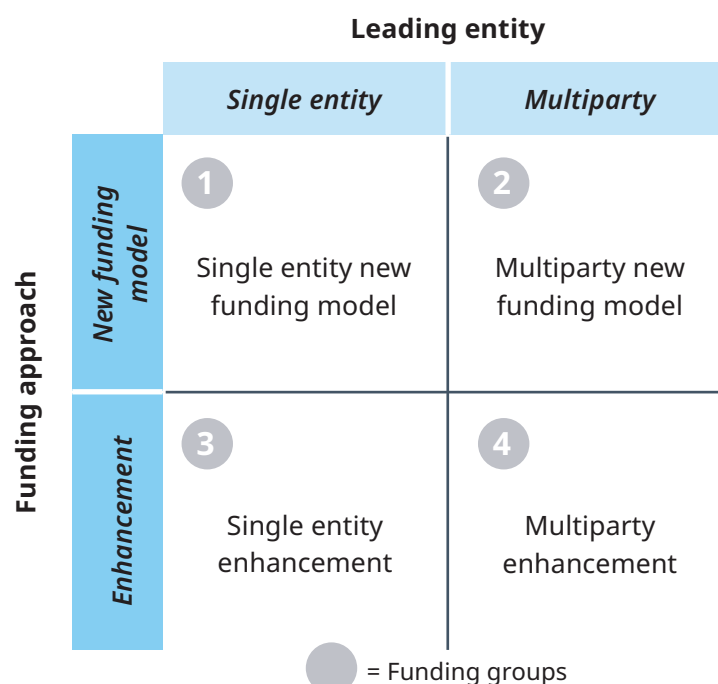
Firstly, innovative funding models were categorized based on the source of its innovation - either in unlocking new funding sources, deploying funds to patients, or a combination of both:

Securing funding	Deploying funding	Securing & deploying funding
Innovations can occur through resource mobilization and resource pooling. Funds can be gathered from new sources (e.g. national treasuries, philanthropic foundations, corporate donations and private citizens), or pooled together at a global or regional level for a common purpose (e.g. GAVI, the Global Fund and UNITAID).	Innovations can also occur through the way that they are deployed or dispersed. Funds can be directly channeled to government or non-government institutions or indirectly transferred via international health and funding agencies as intermediaries.	Some innovative funding models are a combination of novel approaches to both resourcing and deployment of funds.

## Degree of innovation

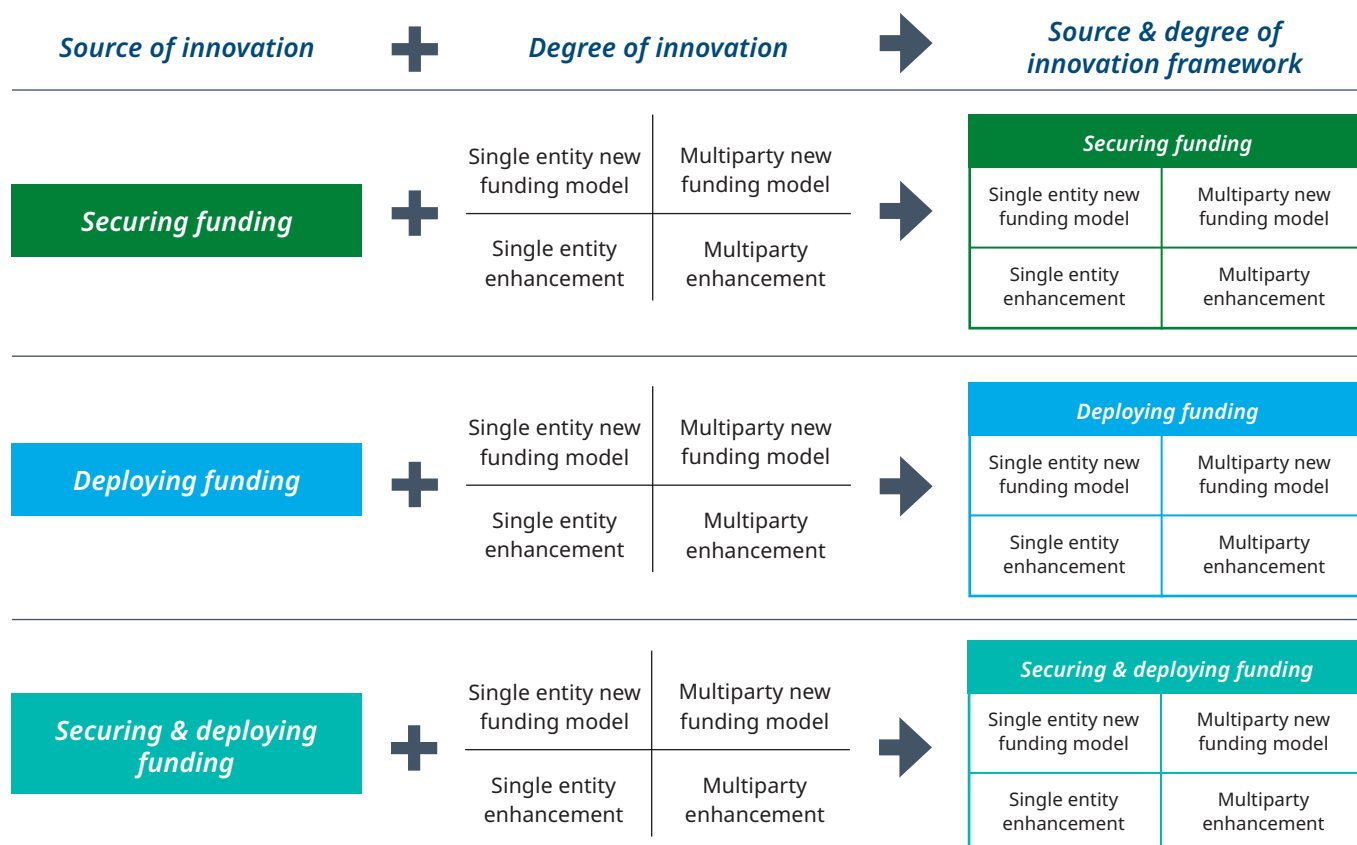
Additionally, within each of these 3 categories, funding models were also assessed on its **funding approach**, whether it builds on a traditional model (i.e. an enhancement) or adopted an entirely new approach (i.e. new funding model) and whether the **leading entity** acted alone (i.e. single entity) or in partnership (i.e. multiparty). Based on this, all funding models can be categorized into 1 of these 4 groups:

1. *Single entity new funding model*
2. *Multiparty new funding model*
3. *Single entity enhancement*
4. *Multiparty enhancement*



## Source & degree of innovation framework

A visualization of the innovation framework is shown below. We look at the funding models in this report through the lens of this framework





## Case study format

The case studies presented in the following section are organized by the source of innovation to capture a snapshot of a selection of innovative funding models identified in this study. The individual case studies follow a general format as follows:

### **Name of Innovative Funding Model**

*Geography // Leading entity // Funding approach*

- Summary of leading entity or entities and where they operate
- Overview of the design of the innovative funding model, including disease focus and target beneficiary population
- Highlight year of inception or implementation and key partners that were involved

- *Geography – Country or Region*
- *Leading entity – Single entity or Multiparty*
- *Funding approach – Enhancement or New funding model*

## IV. GLOBAL INVENTORY OF INNOVATIVE FUNDING MODELS

### Summary of innovative funding models

This study has identified 105 diverse and innovative approaches to treatment funding for cancer and high-cost chronic NCDs which are being developed across the regions of study. Below is a high-level list of types of innovative health funding models categorized by source of innovation:

Source of innovation type	Description	Examples
<b>Securing funding</b> Innovations in resource mobilization and resource pooling	Strategic partnerships where resources are pooled and directed at specific initiatives and/or implementing partners	Public-private resource pooling alliances, sales-linked donations, fundraising partnerships
	Voluntary contribution from the patient or future patient	Health mutual funds, top-up insurance schemes and voluntary medical savings accounts
	Government intervention to increase financial protection	Compulsory medical savings accounts, lottery-based funding, sin taxes, and compassionate use models
<b>Deploying funding</b> Innovations in channeling, allocation or implementation of resources includes	Debt financing instruments to facilitate payment over time	Payroll-based consumer loans, zero-interest loans, installment payments schemes
	Insurance products which provide holistic patient-centered care	Global expatriate insurance, screening-based insurance, public-private insurance partnerships
	Patient assistance programs	Means-based patient access programs operated by pharmaceutical companies
	Charity-funded medical tourism or partnership	Charitable funds for treatment services abroad
<b>Securing &amp; deploying funding</b> Innovations in both how the funds are secured and how they are deployed	Results-based financing models	Development impact bonds
	Technology-enabled crowd-based platforms	Patient-initiated crowdfunding platforms, partner-initiated crowdfunding platforms, cryptocurrency-enabled platforms
	Mobile-enabled insurance or savings schemes	Mobile health wallets, mobile SMS insurance, other mobile microinsurance policies
	Other retail microinsurance policies	Community-based health plans, micro-policies sold at retail chains

The diverse set of examples from this study are a testament to the broad range of financing solutions that are currently being used to address affordability gaps in treatment. These examples can be summarized visually in the overall innovation framework:

Case study summary by source & degree innovation framework					
Source of innovation	+ Degree of innovation				Total case studies
	Single entity new funding model	Multiparty new funding model	Single entity enhancement	Multiparty enhancement	
<i>Securing funding</i>	2	4	9	4	19
<i>Deploying funding</i>	0	1	0	9	10
<i>Securing &amp; deploying funding</i>	1	5	1	0	7
Total case studies	3	10	10	13	36

In the subsections below, we will analyze drivers and impact of specific funding models through a deep-dive of a selection of case studies. The 36 case studies are designed to highlight the diversity of funding models, in terms of the degree of innovation, source of innovation, geography, as well as the availability of public information. Note that a full descriptive list of innovative funding models organized by region/country can be found in the Appendix.

## Case studies: innovations in securing funding

The 19 case studies in this section highlight innovations in pooling or mobilization of resources to finance treatment costs for patients and future patients.

Innovations in securing funding	Innovative funding model	Case study
<i>Strategic partnerships to pool funding</i>	Public-private resource pooling alliances	<ul style="list-style-type: none"> <li>Kenya: The Academic Model Providing Access to Healthcare (AMPATH) oncology partnerships</li> <li>Africa Region: Pink Ribbon Red Ribbon (PRRR)</li> <li>Africa Region: African Access Initiative</li> </ul>
	Sales-linked donations	<ul style="list-style-type: none"> <li>Vietnam: SeALady Cashback</li> <li>Poland: War on Cancer Mobile Game</li> <li>Poland: Good Beer Campaign by Rak'n'Roll Foundation</li> </ul>
	Fundraising partnerships	<ul style="list-style-type: none"> <li>Kenya: The Faraja Medical Support Fund (FMSF)</li> <li>Mexico: Amigos de los Niños (ADLN) Special Case Program</li> <li>Latin American Region: Pro Mujer's Cervical Cancer Initiative</li> </ul>
<i>Voluntary contribution from the patient or future patient</i>	Health mutual funds	<ul style="list-style-type: none"> <li>India: Inter Aide and ATIA Health Mutual Fund</li> </ul>
	Top-up insurance schemes (critical care, government, gender-based, age-based, expatriate)	<ul style="list-style-type: none"> <li>Kenya: Private Insurance Top-up Scheme</li> <li>Asia Region: AXA Cancer Care Insurance Plans</li> <li>Brazil: Gender-based Insurance Schemes</li> <li>Hong Kong: ManuSilver Care</li> <li>UAE: BASMAH Dubai Health Authority Partnership</li> </ul>
	Voluntary medical savings accounts	<ul style="list-style-type: none"> <li>Hungary: Voluntary Medical Savings Accounts (VMSAs)</li> </ul>
<i>Government intervention</i>	Compulsory medical savings accounts	<ul style="list-style-type: none"> <li>Singapore/China: Compulsory Medical Savings Accounts (MSAs)</li> </ul>
	Lottery-based funding	<ul style="list-style-type: none"> <li>Philippines: Philippine Charity Sweepstakes Office</li> </ul>
	Sin taxes	<ul style="list-style-type: none"> <li>Panama: Earmarking public health taxation</li> </ul>



### *Strategic partnerships to pool funding:*

The first 3 case studies, feature public-private resource pooling alliances where strong intersectoral partnerships have been successful.

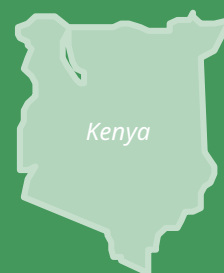
- The first example is led by a pharmaceutical company with support from academic partners to build a center of excellence for oncology care
- The second and third examples are led by non-governmental organizations in which pharmaceutical companies have played a supportive or partnership role

#### **The Academic Model Providing Access to Healthcare (AMPATH) oncology partnerships**

*Kenya // Multiparty // New funding model*



Since 2011, Celgene has worked with the Academic Model Providing Access to Healthcare (AMPATH) to support development of the AMPATH Oncology Institute (AOI), a Center of Excellence in cancer care in the region which aims to increase access to oncology diagnosis and treatment services for low income populations in Kenya.



Celgene's support to the AMPATH Oncology Institute has also enabled the creation of a successful multiple myeloma (MM) program, the first and only in Kenya. AMPATH has expanded the MM program to 16 outreach sites associated with AMPATH-Oncology and other sites in Western Kenya where it has a hematology or oncology presence.



#### **Pink Ribbon Red Ribbon (PRRR)**

*Africa Region // Multiparty // New funding model*

Pink Ribbon Red Ribbon (PRRR), an independent affiliate of the George W. Bush Institute, is an innovative global partner of national governments, non-governmental (NGO) and multilateral organizations, foundations, and corporations. Founded in 2011, PRRR leverages public and private investments in global health to combat cervical and breast cancer in 5 African countries (Botswana, Ethiopia, Namibia, Tanzania, Zambia) and Peru.

PRRR's activities include education, vaccination, screening, treating and providing support, increasing access to treatments and training healthcare providers.

Other founding partners include: Susan G. Komen for the Cure, US President's Emergency Plan for AIDS Relief (PEPFAR) and Joint United Nations Program on HIV/AIDS (UNAIDS). PRRR has 16+ additional funding partners, including pharmaceutical companies like GlaxoSmithKline, MSD and Bristol-Myers Squibb.<sup>14</sup>

## African Access Initiative

*Africa Region // Multiparty // New funding model*

BIO Ventures for Global Health (BVGH) runs the African Access Initiative (AAI) wherein they are expanding access to cancer medicines and technologies by establishing affordable business and pricing agreements between companies and African governments. They are also strengthening the healthcare infrastructure, building clinical oncology capabilities via workshops and fellowships, and increasing patient access. BVGH has recently completed needs assessments of 24 hospitals in Cameroon, Côte d'Ivoire, Kenya, Nigeria, and Rwanda.



"AAI is driven by Africa, for Africa," stated BVGH President Jennifer Dent.<sup>15</sup> Partners include:

- African Organization for Research and Training in Cancer (AORTIC)
- International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) / Access Accelerated
- Ministries of Health of Cameroon, Côte d'Ivoire, Kenya, Nigeria, and Rwanda
- Pfizer, Inc.
- Takeda Pharmaceutical Co., Ltd

The next 3 case studies are examples of a sales-linked donations program developed through a partnership between foundations and private sector players, including a bank, a craft brewery and a mobile game developer.

## SeALady Cashback

*Vietnam // Multiparty // Enhancement*



SeALady Cashback is a Vietnamese sales-based donation scheme – a type of funding model in which 1 or more private companies pledge to donate to a social cause by allocating a portion of product sales to charity.

These schemes typically involve the company including a brand or logo that identifies to consumers that sales from their purchase will be directed to a specific cause. While the approach has been successfully used on a larger scale elsewhere, namely with (Red) products for HIV/AIDS and Pink Ribbon products for breast cancer, it is yet to be rolled out extensively in Asia.

SeALady Cashback is an exception. A collaboration between SeABank and the Brighter Future Foundation, it aims to boost funding for breast cancer patients. For every VND1 million that SeABank credit card users spend, they have the opportunity to contribute VND2,000 to the Bright Future Foundation.

### War on Cancer Mobile Game

*Poland // Multiparty // Enhancement*



'War on Cancer' is a free-to-play fundraising mobile game, where money can actively be donated to a real-life chosen cancer patient whilst the player enjoys playing a shooter game. It was created by Saatchi & Saatchi Interactive Solutions (IS) Poland and leading Polish charity, Alivia Oncological Foundation (Fundacja Onkologiczna Alivia).

As the player progresses through various levels of killing as many cancer-monsters as possible, there are 'in-app purchasing' options (e.g. additional ammunition packages, ads served) which link to a fundraising page for a real-life patient in need through the Alivia database. If the player doesn't identify a specific person to link their account to, then any money raised goes to 'Skarbonka' – a fundraising pool that supports all of the patients.

This game targets young professional males which are considered a group that's the least involved in charity work. The game has been extremely effective, earning more than 5 million Polish Złoty (approximately €1.2million). A special international edition of the game is being launched to promote the Foundation's reach across Europe.

### Good Beer Campaign by Rak'n'Roll Foundation

*Poland // Multiparty // Enhancement*



The Rak'n'Roll Foundation partnered with a local brewery with the conceptual and creative support from Grey Poland in 2017, to create a new beer brand in which 50 Eurocents per bottle was donated to support cancer patients in Poland.<sup>16</sup>

This initiative turned into a self-sufficient donation engine within a year, with sales of 1,500 bottles and further investment to increase production. Rak'n'Roll gathered 50% more tax-based charity donations compared to the previous year.

The support of partners like Grey Poland to develop the campaign and market the product was critical to the success of the initiative. Other companies involved in the campaign include Cohn & Wolfe, Shootme, Wołowski & Partners Studio, IndaHash, Lettly and MediaCom.

The following 3 case studies in this section are examples of fundraising partnerships led by non-profit organizations which provide or support care treatment for patients who are otherwise unable to access appropriate care.

These community-based organizations have strong relationships with stakeholders in the communities where they operate and have a common-view that access to oncology and high-cost NCD treatment should be accessible by all.

### The Faraja Medical Support Fund (FMSF)

*Kenya // Single entity // Enhancement*



Faraja Cancer Support, founded in 2010 to provide patient support services, launched the Faraja Medical Support Fund (FMSF) in 2016 to provide adult and pediatric patients with cancer treatment in both private and government institutions across Nairobi. Faraja aims to raise Kshs 100M through partnerships with companies, trusts and foundations to ensure up to 50 patients receive appropriate cancer treatment every year. Major partners and sponsors include: Safaricom Foundation, Nakumatt Holdings, Cancer Care Kenya, I&M Bank, Simba Corp Foundation, RSM Eastern Africa, PwC, Anjarwalla and Khanna and Mamujee Foundation.



These funds cover medical costs associated with cancer treatment. The beneficiaries are required to cover the initial consultation and the first 10% of the treatment plan. To qualify for a grant, individuals submit an application form which is vetted monthly by members of an expert panel. The selection criteria is based on the financial status of the applicant, type of cancer, prognosis and age.

A pilot project for the Faraja Fund was carried out in 2014 from a donation given by Nakumatt Holdings during their October cancer awareness campaign. The pilot funded 42 children and adults at the cost of Kshs 5.5M<sup>17</sup>.



### Amigos de los Niños (ADLN) Special Case Program

*Mexico // Single entity // Enhancement*



Amigos de los Niños (ADLN) is a local non-profit organization that's been providing quality health care in Los Cabos, Mexico to children up to the age of 18 through 2 major programs since the 1990s:

1. ADLN Free Clinics- professional medical volunteers provide pro bono services such as Pediatric Dentistry, ENT and Audiology with free hearing aids, Pediatric Cardiology and Corrective Eye Surgeries for Strabismus
2. ADLN Special Case Children- ADLN facilitates treatment for severely ill or disabled children who require long-term medical aid (i.e. medicines, transportation, special treatment), the largest segment of which is oncology. Other conditions include cerebral palsy, Downs syndrome, scoliosis and diabetes<sup>18</sup>

ADLN supports the transportation of patients to and from La Paz for chemotherapy medication and treatment, and also provides financial incentives to bring specialized physicians for the Special Case Children program.



## Pro Mujer's Cervical Cancer Initiative

*Latin America Region // Single entity // Enhancement*

Pro Mujer was founded in the 1990s as a women's development organization and operates in Argentina, Bolivia, Mexico, Nicaragua and Peru, providing financial services, business and empowerment training and healthcare for nearly 2 million women. Since chronic illnesses account for 47-75% of the disease burden and health-related loss of productivity in the countries where they operate, Pro Mujer's focus on screening and primary care has a strong impact in these communities.



In recognizing the importance of health and chronic disease in women's development, Pro Mujer committed to providing access to all of its clients to the following screenings: PAP smears to detect cervical cancer, blood sugar measurement to detect and monitor diabetes, blood pressure monitoring to diagnose hypertension, breast examinations to detect breast cancer, and Body Mass Index (BMI) measurement to combat obesity<sup>19</sup>.

Pro Mujer also initiated a program in Bolivia to cover cancer detection to cancer treatment with funding from its financial services revenues. Coverage features discount coupons for medical specialists, additional treatments and prescription drugs for women's cancer<sup>20</sup>.

### *Voluntary contribution from the patient or future patient:*

This study found 3 innovative funding models which focused on mobilizing resources voluntarily from patients and future patients. These funding models created attractive pull incentives which encouraged participation and investment of target population segments.

The first case study from India describes a health mutual fund policy developed by development partners with support of a foundation and local insurance partners.



## Inter Aide and ATIA Health Mutual Fund

*India // Multiparty // New funding model*



Inter Aide and ATIA, with the support of the Sanofi Espoir Foundation, worked with 6 local partners (Antyodaya, NSVK, Parvati, Prem Seva, SAI and Uplift) to provide mutual health insurance services to their members, who are micro-entrepreneurs generally excluded from any health coverage system<sup>21</sup>.

This micro-credit model allows families to join to a mutual health insurance scheme for a fee of US\$1.50, creating social protection for the poorest families in certain districts of Pune and Mumbai. This scheme entitles members to claim:

- A refund for hospitalization worth up to US\$210
- Access to contracted healthcare providers where rates are negotiated on average 30% below standard market prices
- A system of referrals and telephone support (a healthcare hotline available 24/7)
- Further preventive health activities (free medical consultations, healthcare briefings)

This coverage includes cancer screening and treatment. As of December 2013, Mutual Health Funds covered 14,058 families or 54,230 individuals<sup>22</sup>.

Insurance companies have also acted independently in developing top-up insurance products for those willing to purchase additional financial protection, for either certain illnesses (e.g. critical care insurance), risks by demographic segments (e.g. gender-based or age-based insurance), or employment status (e.g. government employee top-up, expatriate insurance). Five of such examples are included below.

### Private Insurance Top-up Scheme

*Kenya // Single entity // Enhancement*



Several private insurers in Kenya, including Equity Bank Diaspora Banking and AAR Insurance, have developed comprehensive in-patient and out-patient medical insurance packages for National Hospital Insurance Fund (NHIF) members, that provide top-up medical coverage, which includes cancer treatment.

NHIF is a State Parastatal that was established in 1966 that provides medical coverage for 7 million members, or a total of 25 million Kenyans including members' dependents as of January 2018. For those in the formal sector, it is compulsory to be a member of NHIF, for those in the informal sector and retirees, NHIF membership is open and voluntary.

AAR was founded in 1984 and is a leader in medical insurance in East Africa, with products available in Tanzania, Kenya and Uganda. Individual & Family Medical Plans is 1 of 5 products offered in Kenya to NHIF members<sup>23</sup>. A similar product, Equimed, is offered by Equity Bank Diaspora Banking<sup>24</sup>.

### AXA Cancer Care Insurance Plans

*Asia Region // Single entity // Enhancement*



The AXA Group operates in Western Europe, North America, the Asia Pacific region, and the Middle East, with presence also in Africa. AXA Asia has operating businesses across Life Insurance and General Insurance in 8 markets.

Representing the growing trend in private health insurance towards value based and patient-centered services, AXA is a leader in designing insurance policies that take a holistic approach to cancer, including support for screening, treatment at all stages, and comprehensive after care services. The latter includes palliative care,

side effect medication, home visits by a nurse, and psychological support. Additionally, some of AXA's cancer care plans include a concierge initiative that can help with the arrangement of a variety of services, like home and palliative care, that work to make the patient journey seamless. Some examples include:

- Hong Kong: Cancer Therapy Insurance II, Cancer and Stroke Therapy Insurance<sup>25</sup>
- Singapore/Malaysia: AXA 360 Cancer Care plan<sup>26</sup>
- Thailand: SmartCare Cancer, SmartCare Executive Plus<sup>27</sup>

### Gender-based Insurance Schemes

*Brazil // Single entity // Enhancement*

Several insurance companies and banks have developed insurance products which are tailored for gender-specific health conditions. For example, MetLife's Women's Protection Plus<sup>28</sup> and the Women's Insurance by Bradesco<sup>29</sup> provides coverage for the diagnosis and treatment of women's health conditions including breast, ovarian or cervical cancer.

Santander and Tokio Marine also offer insurance products which are tailored to men and women, for serious diseases and hospital stays, or coverage in case of death or disability due to gender-specific cancers.



### ManuSilver Care

*Hong Kong // Single entity // Enhancement*

ManuSilver Care, an insurance package introduced by Manulife Hong Kong in 2016, specifically targets those between the ages of 50 to 80. This is the age demographic most vulnerable to cancer, with research showing that over 60% of cancers occur amongst people over 60 years of age.

The insurance package has a particularly strong cancer focus. It offers an 'early stage cancer benefit,' which provides each user with 25% of the notional amount for each diagnosis of carcinoma-in-situ, and a 'major cancer benefit,' amounting to 100% of the notional amount if late stage cancer is diagnosed. Holders who pay the premium up to the age of 85 are covered until the age of a 100, thereby ensuring that the most high-risk segment of the population receives adequate protection<sup>30</sup>.



## Public-private partnership to provide cancer insurance for low income population in Dubai

*UAE // Multiparty // Enhancement*



The emirate of Dubai (UAE) has a population of over 4.6 million people, with one of the fastest growth rates in the world. The expatriate community is almost 4.4 million, out of which 2.6 million low income workers make up 85% of the population. However, the coverage level of their mandatory health insurance is insufficient to fund cancer treatments.



Roche has partnered with the Dubai Health Authority (DHA) and leading international health insurer AXA to develop a new compulsory funding scheme under the name of “Dubai Cancer Initiative – BASMAH” that covers screening and treatment for colorectal, breast and cervical cancers. The initiative provides comprehensive access for all expatriates in Dubai, including those in low income groups.

As a result of the deep integration and partnership between public and private sector stakeholders, 4.4 million expatriates—across the income spectrum—are now able to access funding for cancer treatment, regardless of their insurance policy, through a system that has been planned to account for future population growth and will benefit all Dubai residents through better screening and diagnosis.

The next case study is an example of governments who have also developed voluntary savings schemes to serve as supplemental insurance.

## Voluntary Medical Savings Accounts (VMSAs)

*Hungary // Single entity // Enhancement*



Act XCVI of 1993 on Voluntary Mutual Insurance Funds was established as part of the reform on the social security system in Hungary. This Act allowed Hungarians to participate in self-organized, non-profit Health Savings Funds which serves the role of supplementary insurance.

Individual payments, which include membership fees and ad hoc payments, are eligible for 30% tax benefit to be credited directly to the health saving fund account. Services provided by funds are income tax free unless cash withdrawal is requested in case of termination of membership or death of the fund member.

Most voluntary medical savings membership is motivated by employer support. It is relevant to note that South Africa and the USA also have VMSA schemes, which operate in the private insurance market.

### *Government intervention:*

The final category of innovations in securing funding involves funding models which are a result of direct government intervention. The first case study is about compulsory Medical Savings Accounts (MSAs) in China and Singapore.

#### **Compulsory Medical Savings Accounts (MSAs)**

*China/Singapore // Single entity // Enhancement*



Compulsory Medical Savings Accounts (MSAs) in Singapore and China are government run compulsory schemes that earmark individuals' savings for expenditure on designated health services, designed to address some of the private health insurance inefficiencies – moral hazard, escalating costs, adverse selection and gaps in coverage<sup>31</sup>.



In China, compulsory MSAs for all urban employees was introduced in 1998 to cover the expenses of items reimbursable under Social Health Insurance. Some Chinese cities are experimenting with ways of making better use of MSA funds given the mismatch between MSA funds and need for healthcare. The Zhenjiang model has been adopted by a growing number of cities where MSAs are separated into a main account for most types of care (e.g. inpatient, outpatient, preventative and long-term care), and a secondary account for all funds above RMB 3,000 which can be used to pay for healthcare of family members.



In Singapore, Medisave was introduced in 1984 as health savings accounts mandated contributions from individuals to create a minimum level of savings that can only be used for health expenditures<sup>32</sup>. It is complemented by MediShield, a voluntary high-deductible, catastrophic insurance plan, and the Medical Endowment Fund (Medifund), a safety net for poorer people. Medisave and Medishield are part of the Central Provident Fund, a government-managed savings scheme<sup>33</sup>.

Although existing for several decades in China and Singapore, MSAs are not common in other countries. The evidence on the success of MSAs are mixed particularly given concurrent health reforms, and the impact of the schemes on long-term healthcare costs is unclear. Research suggests that prerequisites for the feasibility and sustainability of MSAs include a high income per capita, a national culture of saving and personal responsibility for health, and a well-functioning and transparent regulatory environment in the health sector.


Another innovative funding model driven by the government is lottery-based funding. Examples of government-led lottery-based funding were found in the Philippines and Lebanon. The Philippine Charity Sweepstake office case study is below.



Philippines

### Philippine Charity Sweepstakes Office

*Philippines // Single entity // New funding model*



The Philippine Charity Sweepstakes Office is a government agency responsible for providing funds for national health initiatives, medical assistance programs, and charities that provide health services. By conducting charitable sweepstakes, races, and lotteries, the Philippine Charity Sweepstakes Office aims to maintain and expand the government's capability to provide a sustainable source of funding for health and welfare related projects<sup>33</sup>.

The Philippine Charity Sweepstakes Office represents a new attempt from the government of the Philippines to diversify the source of funding for patients suffering from illnesses such as cancer. It boasts several projects that provide financial assistance to people affected by catastrophic diseases, including but not limited to cancer. The Individual Medical Assistance Program, for instance, provides funding for cancer treatment such as chemotherapy and radiotherapy. Through the issuance of guarantee letters to hospitals or partner health facilities, the Individual Medical Assistance Program shoulders a certain amount of medical expenditure that would otherwise come from patients.

Another example is the At Source Ang Processing Program, in which the Philippine Charity Sweepstakes Office enters into an agreement with several private and government hospitals willing to provide chemotherapy drugs to cancer patients at a 20% discount rate in addition to providing the health services required by Individual Medical Assistance Program.

Many of the government intervention models are considered innovative in the local market, but common in a regional or global lens. While these government-led initiatives and policies have a direct impact on access to care, it is difficult to isolate the influence on funding for cancer and high-cost NCD treatment. Some examples include: sin taxes, tax relief for essential medicines and compassionate use mechanisms.

Sin taxes:

There is growing interest in the use of 'sin taxes' or public health taxes (e.g. tobacco duties, alcohol taxes, levies on the purchase of sugary drinks, gambling duties) to discourage a behavior that is known to contribute to ill health while also raising revenue for funding health services.

A growing number of countries are considering earmarking taxation as a mechanism to:

- 1) Increase their fiscal spaces and mobilize resources for the health sector
- 2) To finance progress toward universal health coverage
- 3) To fund other health priorities

Earmarking all or a portion of consumption taxes is a common practice, particularly in countries with a large informal labor force or other obstacles to collecting direct taxes.

With arguments for and against, the evidence available on public health taxes is not sufficiently robust on

whether they bring a sustained increase to government revenues for funding therapeutic treatment. Moreover, past case studies have shown the revenue collected were mainly directed towards general health promotion or prevention efforts.

However, hard earmarking (def.: where a particular service or program is the main or only revenue beneficiary and the revenue cannot be re-allocated to another purpose) when supported by direct benefits rationale can lead to greater accountability for the use of funds. Nonetheless, proper impact evaluation exercises are required to determine its validity as a policy mechanism. One example can be found in Panama.

### **Earmarking Public Health Taxation in Panama**

*Panama // Single entity // New funding model*



In 2019, The National Assembly of Panama approved a legislative initiative that establishes an economic amount in support of health, education and the agricultural sector by means of the selective tax on the consumption of sugar-sweetened beverages. Bill 570 established a 8% taxation for a segment of sweetened beverages of domestic and imported production and 10% for syrups and concentrates.



Improving health outcomes in the population is the main goal behind this policy with 75% of the amount collected being directed towards the health sector with the remaining amount to be distributed among Ministries of Education, Agriculture and Commerce. A remarkable aspect is that 40% of total funds have been hard earmarked for fighting the growing burden of Non-Communicable Diseases (NCDS), particularly targeting cancer and diabetes. Newly created funds will strengthen the National Oncological Institute and support the creation of Diabetes Clinics.

National Revenue authorities expect that this new tax on consumption would generate approximately US\$30 million annually.

### **Tax relief for essential medicines:**

In contrast to sin taxes, governments can also encourage appropriate health seeking behavior by improving the affordability of essential medicines through tax relief. As an example, Malaysia abolished GST for approximately 25% of drugs in the National Essential Medicines List (NEML) in 2015 for public health facilities. This tax relief applies to 30 illnesses, including cancer, though not all innovative treatments are included under the NEML.

### **Compassionate use mechanisms:**

As governments create or amend legal frameworks and procedures by which to systematize compassionate use requests for unapproved indications, like the *Ratunkowy Dostęp Do Technologii Lekowych* in Poland, there's an opportunity to build evidence-based and outcomes-driven measures to expand access for seriously ill patients.



## Case studies: innovations in deploying funding

In this subsection, there are 10 case studies which explore innovations in the way that funding is deployed or disbursed in either pull-based models (e.g. incentives) or push-based models (e.g. targeted funding based on disease burden).

Innovations in deploying funding	Innovative funding model	Case study
<b><i>Debt financing instruments</i></b>	Zero-interest loans	<ul style="list-style-type: none"> <li>Europe Region: Brain Cancer Treatment Loan from European Investment Bank (EIB)</li> <li>India: Arogya Finance Zero-Interest Loan</li> </ul>
	Installment payment schemes	<ul style="list-style-type: none"> <li>China: Iressa and Tagrisso installment-based payment schemes</li> </ul>
<b><i>Insurance products with holistic patient-centered care</i></b>	Screening-based insurance	<ul style="list-style-type: none"> <li>China: Beijing Genomics Institute Canseq Cervical Cancer Home Screening and Insurance Package</li> </ul>
	Public-private insurance partnerships	<ul style="list-style-type: none"> <li>China: Insurance Program for Catastrophic Diseases</li> <li>Singapore: Medishield and Integrated Shield Plans</li> </ul>
<b><i>Means-based patient access programs</i></b>	Means-based patient access programs	<ul style="list-style-type: none"> <li>Multi-region: CMLPath to Care</li> <li>Asia Region: Pfizer's Means-Tested Patient Access Program</li> <li>Multi-region: Sanofi's My Child Matters</li> </ul>
<b><i>Charity-funded medical tourism</i></b>	Charity funded medical tourism or partnership	<ul style="list-style-type: none"> <li>Hungary: Children Cancer Foundation (CCF)</li> </ul>

### *Debt financing instruments:*

This study identified 3 innovative funding models which provide patients with options to finance health-related expenses: payroll-based consumer loans, zero-interest loans and installment payment schemes.

Payroll-based consumer loans, also known as “cash-to-go” loans, were found in most of the countries in scope of this study. One example is the Credit Direct Consumer Loans in 25 states in Nigeria which offered 12-hour “sharp sharp” turnaround. This can often be a last resort for patients.

The following 2 case studies are related to debt financing partnerships in which zero-interest loans are offered to patients, or strategic investment loans are provided for the roll-out of innovative treatment therapies.

## Arogya Finance Zero-Interest Loan

India // Multiparty // Enhancement

Mumbai-based Arogya Finance is a social healthcare venture which offers loans for medical treatment to the traditionally un-banked, using risk assessment tools. HealthCare Global Enterprises, which runs a cancer treatment hospital network in India, has partnered with Arogya Finance to offer first year interest-free loans to cancer patients<sup>34</sup>.



India

Arogya provides direct financial loans of US\$300 to US\$7,000 for a period of 12 months and pays the medical bills on behalf of the patient directly to the hospital or service provider. The loan tenure is from 6 months to 48 months 0% interest rate for 1 year, 6% for 2 years, 8% for 3 years, 9% for 4 years. A processing charge of 2% on loan amount is applicable.

In addition to direct financial loans, patients can register for a cashless insurance card with an embedded pre-approved loan based on their ability to pay. This loan card can be used for the cardholder and up to 5 family members.

This program will be initially available in Bengaluru, Gulbarga and Mysuru and then expanded to other cities, based on the success of the pilot.

Europe  
Region



## Brain Cancer Treatment Loan from European Investment Bank (EIB)

Europe Region // Multiparty // Enhancement

In 2017, the European Investment Bank (EIB) and European Fund for Strategic Investments (EFSI) agreed to lend €35 million over 3 years as part of the EU Juncker Plan to finance the Europe-wide roll-out for NanoTherm developed by MagForce.

NanoTherm therapy is a novel approach to the local treatment of solid tumors, tackling the most aggressive type of brain cancer, glioblastoma, and potentially prostate cancer in the future. This loan to MagForce was viewed as a strategic investment by the European Commission to boost the competitiveness of the European economy<sup>35</sup>.

Installment-based payment schemes are another debt financing instrument. An example from China is below.

## Iressa and Tagrisso installment-based payment schemes

China // Multiparty // Enhancement



These models provide financial support by allowing individuals to pay for specific drug treatments through instalments. In China, 2 pharmaceutical programs have enabled patients to defer and space out payments. They are the Iressa and the Tagrisso fee compensation schemes.

The more recent Tagrisso program allows enrollees to spread the payment over 12 months, thereby reducing the financial barrier of patients to access treatment at the outset. The other component of the program, an outcome-based insurance program, compensates patients if the medication did not result in improved health outcomes, thereby providing additional reassurance to users of the scheme.



#### *Insurance products with holistic patient-centered care:*

In addition to innovations in mobilizing voluntary contribution from patients, insurers have also developed innovative products which provide more holistic coverage for cancer and chronic diseases. For example, most of the major insurers carry global expatriate insurance products, which offer financial protection globally for screening and medical expenses for conditions, including cancer.

Screening-based insurance is another innovative funding model which leverages cutting-edge diagnostics technology to increase financial protection available to cancer patients.



#### **Beijing Genomics Institute Canseq Cervical Cancer Home Screening and Insurance Package**



*China // Multiparty // New funding model*

The Beijing Genomics Institute's home screening and insurance package allows women to test themselves for human papillomavirus (HPV) in a private setting. In partnership with Henan Zhongyuan Life Science Research Institute Co., Ltd., which is the main funder for the program, The Beijing Genomics Institute applies its cutting-edge genome sequencing technologies to the detection of all 16 HPV strains. After paying for 1 of the 3 plans (3 years, 9 years, or lifelong), users not only receive a home testing kit but also an anti-cervical cancer insurance plan attached to the screening package.

The scope and content of the insurance is contingent upon the screening result. However, it is not only a negative result that will activate the plan – a positive result can also act as a trigger, on the condition that, through treatment deemed appropriate by the program, the screening result turns negative in 1 year's time. All fees associated with screening, diagnostics, and treatment are fully covered by the Canseq program<sup>36</sup>.

In addition to partnerships with technology players, public-private collaborations between insurers and governments can result in new insurance models. Two examples are showcased below.

### **Insurance Program for Catastrophic Diseases**

*China // Multiparty // Enhancement*



The Insurance Program for Catastrophic Diseases is an integral component of China's Social Health Insurance scheme and an extension to the Basic Medical Insurance program. This partnership program between the government and private insurers covers designated portions of medical expenditures exceeding the maximal reimbursable amount of Basic Medical Insurance. Enrollees are offered additional financial protection against severe illnesses, including but not limited to cancer.

In this partnership, private insurers are responsible for the administration of the insurance plan, while the government manages the provision of funding to insurers. In most cases, Insurance Program for Catastrophic Diseases has a standalone funding pool that draws funds from the funding pools of other Social Health Insurance schemes. Specific policies of the Insurance Program for Catastrophic Diseases vary from 1 locality to another, with national policies serving primarily as guidance for local policy making. Breaking from the national norm of two-tiered structures, Shenzhen, for instance, has a three-tiered system that considerably extends the financial protection of the enrollees.



### **Medishield and Integrated Shield Plans**

*Singapore // Multiparty // Enhancement*



Across the region, different financing entities have come together to develop risk mitigation strategies that strengthen incentives to increase funds available for cancer treatment. In China, Vietnam, and India, these have resulted in new insurance offerings that extend treatment services to a wider populace.

An excellent working example of this can be found in Singapore, where a public-private partnership has emerged between Singapore's Central Provident Fund Board and 6 private health insurers. The insurance package that has emerged is composed of 2 parts: the state backed Medishield Life, which offers protection for all Singaporean citizens and permanent residents against significant hospitalization charges, and an additional private insurance component known as Integrated Shield Plans. As of the end of 2016, 67% of Singapore's resident population had Integrated Shield Plan coverage and the remaining 33% percent had Medishield Life coverage<sup>37</sup>.

This partnership sees public and private schemes working in tandem. Specifically, in terms of cancer funding, the maximum amount offered for cancer treatment within an Integrated Shield Plan may exceed the maximum reimbursable amount under Medishield Life alone, as within Medishield there are significant caps on chemotherapy and brachytherapy. The 6 private insurers administer the additional private insurance component and assist the Central Provident Fund Board with premium collection and claims disbursement for Medishield Life.

### *Means-based patient access programs:*

Innovations in traditional patient access programs operated by pharmaceutical companies include new methods, such as means-testing to qualify the patient's ability-to-pay. The 3 case studies in this section are examples of global patient access programs led by pharmaceutical companies, which incorporate means-testing assessments.

#### **CMLPath to Care**

*Multi-region // Multiparty // Enhancement*

The Glivec International Patient Assistance Program (GIPAP) was initially developed by Novartis in partnership with the Max Foundation in 2002 and has provided access to treatment for 75,000 patients with CML (chronic myeloid leukemia) or GIST (gastrointestinal stromal tumor), 2 rare cancers<sup>38</sup>.

In 2017, Novartis transitioned this partnership to a new program called CMLPath to Care™, which will run until 2021 and supports continued access to treatment at no cost for the nearly 34,000 previously registered patients in GIPAP with CML, GIST and other rare cancers in over 68 low and middle-income countries around the world.

CMLPath to Care™ provides Glivec at no cost to patients, who would not otherwise have access to treatment. The program also provides patients with access to support groups, treatment and disease information, education and emotional support to help manage their illness.

The Max Foundation assumes responsibility for delivering treatment, including supply chain management, while Novartis provides funding and drug donation support at an expected value of more than US\$29 million.

Early engagement with governments is essential to the success of a program of this size and ambition. Equally important is clarity on the roles and responsibilities of all parties involved along with standard operating procedures to standardize processes across many disparate countries. Crucial education is provided by the program for physicians, governments, patients, distributors and others involved.

The impact of the program is especially significant where local health authorities and civil organizations work together to improve facilities and educate patients and their families, thereby providing resources for integrated patient care.



#### **Pfizer's Means-Tested Patient Access Program**

*Asia Region // Multiparty // Enhancement*

In countries including India, Thailand and China, Pfizer runs PAPs through which the patients pay just for the first few medicine packs, after which they receive the rest for free for as long as required. In India, Pfizer runs a PAP for Sutent® (sunitinib malate) for treatment of renal cell carcinoma and gastrointestinal stromal tumor (GIST), in partnership with V Care, a Mumbai-based registered trust<sup>39</sup>.

## Sanofi's My Child Matters

*Multi-region // Multiparty // Enhancement*



Screening and early diagnosis programs are a recurring theme in many funding models, particularly in systems significantly lacking universal health coverage. My Child Matters is a public-private partnership set up in 2006.

Sanofi and various partners in 42 countries have collaborated to train 20,000 healthcare professionals and treat over 75,000 children<sup>40</sup>. Partners include:

- St Jude Children's Research Hospital
- SIOP (International Society of Pediatric Oncology)
- UICC (International Union Against Cancer)
- GFAOP (Groupement Franco-Africain d'Oncologie Pédiatrique)
- AMCC (Global Alliance Against Cancer)
- CCI (Children Cancer Institute)

The program provides financial support, aid from international experts, mentor/mentee programs at the local level, and networking for project developers to share experiences and best practices.

### *Charity-funded medical tourism:*

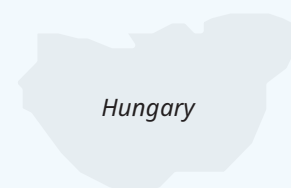
The final innovation in deploying funding is an example of a partnership between a local Hungarian foundation that works with several American oncology institutions to provide medical tourism for children who are unable to access appropriate care in-country.

## Children Cancer Foundation (CCF)

*Hungary // Multiparty // Enhancement*



The Children Cancer Foundation (CCF) founded in 2009, in partnership with Roswell Park Cancer Institute in New York and Children's Hospital of Southwest Florida, provides care for Hungarian pediatric oncology patients in the US<sup>41</sup>.



CCF consults top American pediatric oncologists to understand treatment options and facilitates transport and care in the US for Hungarian children, where innovative treatments that are not accessible in Hungary may significantly increase survival rates. CCF also provides support to families during their treatment abroad.

CCF is sponsored by a range of American and Hungarian donors, including: Arbonne, Blossoms and Blooms, CodeBench, Darlin Dreamers, El Gaucho Inca Restaurant, FGCU Campus Recreation and Honors Program, Florida Gulf Coast University, Frank Jean LMT Massage Therapy, Germain Arena, Indulgence Salon, Juan's Plumbing, L.A. Fitness, Lora Ulrich, Mary Kay, PATCH (Project Art Therapy for Children's Health), Spavana Skincare, Sweetbay and Total Nutrition.

## Case studies: innovations in securing & deploying funding

This subsection includes 7 case studies which explore innovative funding models that incorporate novel approaches to both resourcing and deployment of funds.

Innovations in securing & deploying funding	Innovative funding model	Case study
<b>Results-based financing</b>	Development impact bonds	<ul style="list-style-type: none"> <li>India: Utkrisht Rajasthan Maternal and Newborn Health Development Impact Bond</li> </ul>
<b>Technology-enabled crowd-based platforms</b>	Partner-initiated crowdfunding platforms	<ul style="list-style-type: none"> <li>Multi-regional: Partner-initiated crowdfunding platforms (e.g. Watsi)</li> </ul>
	Cryptocurrency-enabled platforms	<ul style="list-style-type: none"> <li>Multi-regional: OncoPower Platform</li> </ul>
<b>Mobile-enabled insurance or savings schemes</b>	Mobile health wallets	<ul style="list-style-type: none"> <li>Kenya: M-TIBA Mobile Health Wallet</li> </ul>
	Mobile microinsurance policies	<ul style="list-style-type: none"> <li>Lebanon: "Allo...Hayete" Microinsurance by AROPE Insurance</li> <li>Africa Region: Airtel Insurance with Microensure</li> </ul>
<b>Retail microinsurance policies</b>	Retail microinsurance policies	<ul style="list-style-type: none"> <li>Thailand: Private Microinsurance Policies (e.g. Thaivivat)</li> </ul>
	Community-based health plans	N/A

### Results-based financing:

Development impact bonds (DIBs) are a results-based financing structure for external financing of public services in low- and middle-income countries. DIBs fund public services through contracts where private investors provide upfront flexible funding to service providers and outcome funders repay these investors based on the outcomes achieved by people receiving services.

Due to the potential of this innovative funding solution for oncology and NCDs in general, a relevant example coming from maternal and newborn health is included in the case study below to be taken as reference.

### Utkrisht Rajasthan Maternal and Newborn Health Development Impact Bond

*India // Multiparty // New funding model*

Launched in 2018, the Utkrisht impact bond is the world's first maternal and newborn health development impact bond with over US\$8 million made available for outcomes based funding over 3 years.

The objective is to improve the quality of maternal care for up to 600,000 pregnant women in Rajasthan's private health facilities by supporting up to 440 Small Healthcare Organizations (SHCOs) to meet new government quality standards and adhere to them over the long term.



India



The Utkrisht impact bond is made possible through public-private partnership:

- UBS Optimus Foundation is the upfront funder who provided the initial working capital
- Palladium designed the impact bond, and also serves as the implementation manager throughout the 3 year term
- Population Services International (PSI) and HLPPT are the service providers who engage directly with the private facilities in Rajasthan. All implementation partners are also co-investors
- USAID and MSD for Mothers are the outcome payers, who will pay back the investor for the original amount invested plus additional returns, if targets are met

Progress will be assessed by Mathematica, an independent verifier, throughout the 3 year program.

The Utkrisht impact bond is the first of its kind to have leveraged private capital raised from private investors, and aims to achieve full adoption by the Indian Government<sup>42</sup>.

### *Technology-enabled crowd-based platforms:*

This study identified examples of cryptocurrency-enabled platforms and crowdfunding platforms that have not only unlocked additional funding for treatment of cancer and high-cost NCDs but also apply innovative ways of deploying this funding.

Technologies like cryptocurrency have led to a new generation of platforms, which can be applied to support health financing needs. One example of a global technology company that's transforming how funding is mobilized and deployed is below.

#### **OncoPower Platform**

*Multi-regional // Single entity // New funding model*

OncoPower is a platform that uses blockchain technology to help cancer patients keep track of their medical data across providers and offers users incentives, launched by Witty Healthy in 2018<sup>43</sup>.



Users can earn cryptocurrency incentives, called Onco, in a health savings account-like wallet. The platform also enables smart-contracts between payers-providers, payers-patients, and payer-pharmaceuticals. Patients can get monetary rewards for adhering to their treatment regime, as well as through providing content and data, like symptoms.

OncoPower also gives users access to Onco-Space, which is a platform where patients and caregivers can connect with patient advocates, dietitians, behavioral therapist, genetics and financial counselors. Further, providers can receive Onco by posting content, which is then reviewed and rated. The Oncos can then be used for services that have been voted on by the community.

Crowdfunding platforms are commonly used by individuals to raise funds for personal causes. These campaigns can be initiated by the patient or patient's family, or by a partner organization. Partner-initiated crowdfunding platforms, like Watsi, work with medical partners to create profiles on behalf of patients from LMICs.

## Partner-initiated crowdfunding platforms (e.g. Watsi)

*Multi-region // Multiparty // New funding model*



Online crowdfunding began in the late 1990s and quickly took hold for personal causes. GoFundMe, the sector leader, initially envisaged helping users pay for holidays and weddings but noticed that more people were using the site to cope with medical emergencies.

Online donation sites, including GoGetFunding and GoFundMe are booming as patients with little or no health insurance turn to their community as well as strangers to help pay medical costs.

Watsi is a non-profit healthcare crowdsourcing platform that enables individual donors to directly fund medical care for individuals in developing countries without access to affordable medical care. Watsi works with medical partners like African Mission Healthcare Foundation who identifies and prepares profiles for patients that need low-cost, high-impact medical care.

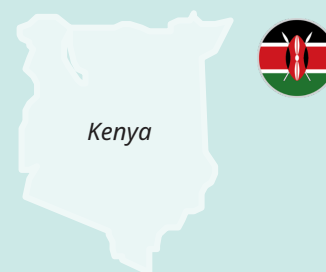
Watsi aims to become 100% financially sustainable through contributions from individual donors, corporate partnerships, and government adoption<sup>44</sup>.

### *Mobile health wallet:*

As mobile adoption exponentially increases in LMICs, partnerships with telecom providers to address health financing gaps have emerged. An example of a mobile health wallet from Kenya is featured below.

## M-TIBA Mobile Health Wallet

*Kenya // Multiparty // New funding model*



In December 2015, Safaricom, PharmAccess and CarePay introduced M-TIBA, a new health mobile 'health wallet' that allows people to save, borrow, and share money for healthcare at very low costs.

M-TIBA was designed to fit the needs of slum dwellers and poor rural populations where health behaviors are rarely captured, it is difficult to be formally assessed for insurable risk, and often pay for healthcare out-of-pocket at catastrophic levels.

With M-TIBA, payments for health services and products are digitally recorded in real-time and people can pool resources to effectively pre-pay for health while improving their insurable risk profile. Funds for M-TIBA are stored in specialized wallets through M-Pesa and can only be used at the 1,800+ healthcare providers who form part of a nationwide M-TIBA network.

In a 9 month trial at 44 clinics covering 10,000 people in Nairobi, over 90% of people responded positively to the health wallet when asked to earmark US\$10 for treatment for children up to the age of 5 years old. 63% used the wallet during the 6 month test period and 77% of the women indicated that they were willing to save for health in their wallet.

Donors and insurers can use M-TIBA to offer healthcare financing products, such as vouchers, managed funds and low-cost health insurance, to specific segments of the Kenyan population, examples include:

- Jaza Jaza- The Pfizer Foundation is the first donor partner which will use the M-TIBA wallet to reach specific groups in the slums in Nairobi in a trial program
- Supa-Cover- M-TIBA has partnered with National Hospital Insurance Fund (NHIF) to offer an insurance scheme with oncology care coverage
- Ngao Ya Afya- registered patients in participating clinics, can access self-management tools to track their diabetes and hypertension, discounted consultations and Sanofi medicines

Donors receive real-time access to monitor the use of their funds. M-TIBA brings transparency and accountability to all stakeholders involved, from the patient to the government<sup>45</sup>.

#### *Mobile microinsurance policies:*

There is great potential to partner with telecommunications providers in LMICs, given their wide population reach. Examples from Lebanon and the Africa region are below.



*Lebanon*

#### **"Allo...Hayete" Microinsurance by AROPE Insurance**

*Lebanon // Multiparty // New funding model*



AROPE Insurance, a member of the BLOM Bank Group, announced the launch of "Allo...Hayete", a novel mobile microinsurance plan exclusively for Lebanon in 2015<sup>46</sup>.

"Allo...Hayete" offers life insurance coverage worth LBP5 million (US\$3,315), covering death resulting from sickness, accident, passive war and terrorism, and targeting a lower-income segment of the population. Eligibility requirements include:

- Prepaid and fixed-line mobile users with SMS
- Permanent and legitimate residents of Lebanon, regardless of nationality
- Ages 18 to 60

The product was developed in partnership with a technology service provider (InMobi) and 2 mobile network operators (Alfa and Touch). Subscription can be completed through free SMS, and can cost US\$3/month, US\$0.7/week, or US\$0.1/day for all ages.

"Allo...Hayete" allows policy holders to amend their payment frequency, change their beneficiary or even cancel their subscription any time by sending a free SMS.

#### **Airtel Insurance with Microensure**

*Africa Region // Multiparty // New funding model*

MicroEnsure and Airtel launched their first simple health insurance product in Ghana in January 2014 and have since launched in 7 other African markets<sup>47</sup>.

This mobile insurance product rewards loyal customers with free insurance when they spend a minimum amount of airtime (usually US\$2). Customers can earn more health insurance by spending more airtime. Qualifying customers receive a lumpsum of up to US\$150 paid to them via mobile money if they spend 3 or more nights in any hospital in the country for



*Africa Region*

any medical reason. This is a unique partnership between insurance and telecom companies which provides an alternative to increasing access to health financing and provides a 'win-win-win' business model for the insurer, the telecom company and the patient.

Customers are able to learn about the insurance product through an Unstructured Supplementary Service Data (USSD) menu and through monthly SMS communications informing them of the amount of insurance they earned for the following month. They receive free and reliable means of mitigating financial risk.

This initiative builds brand loyalty and increased revenue for Airtel, as customers are less likely to engage in SIM-card swapping, a common phenomenon in many African countries. Airtel pays premiums to MicroEnsure and other partner insurance companies on behalf of the customer. Insurers can reach millions of new customers. As of December 2018, over 3.1 million patients were covered under this scheme.

#### *Retail microinsurance policies:*

In addition to mobile microinsurance policies, insurers in partnership with the Thai government have also introduced microinsurance policies at retail outlets like convenience stores.



#### **Private Microinsurance Policies (e.g. Thaivivat)**

*Thailand // Single entity // Enhancement*



In Thailand, micropolicies from 5 leading insurance companies- Muang Thai Life Assurance, Bangkok Insurance, Muang Thai Insurance, Alliance Ayudhya Assurance and Thaivivat Insurance- have been sold in convenience stores like 7-Eleven since 2013 to provide low-cost insurance policies for the poor to protect against risks such as cancer, Songkran accidents or home fires<sup>48</sup>.

Microinsurance targets low income, rural families in the provinces who are uninsured because of the affordability and complexity of traditional insurance products. The Office of the Insurance Commission (OIC) initiated these microinsurance plans with annual premiums of up to US\$30 which are easy to understand.

Thaivivat Insurance offers cancer protection for an annual premium of 711 Baht, paying 50,000 Baht if and when the client is diagnosed and additional 20,000 Baht for medical care per month up to 10 months<sup>49</sup>.

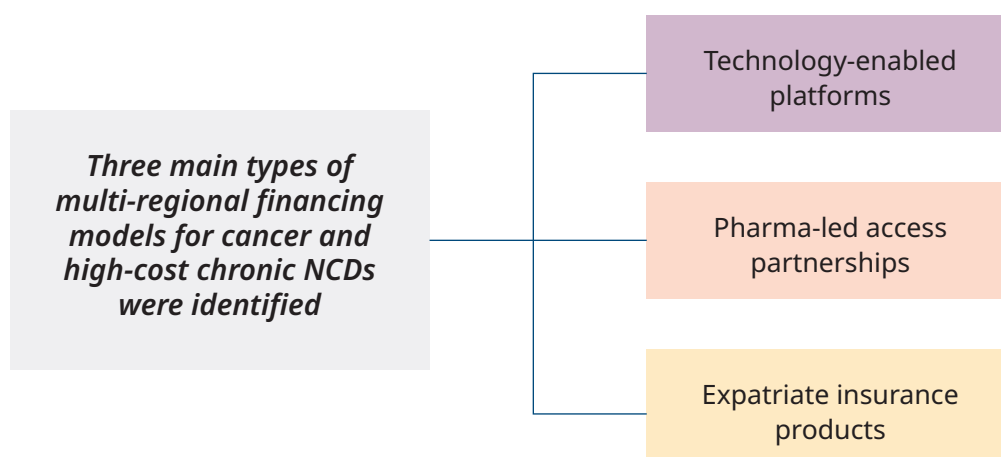
In addition to retail outlets, there are also examples of community-based health plans where financial risk is pooled by close-knit subgroups in a region. For example, the Hygeia Community Health Plan (HCHP) is an insurance product for market women, small business owners, and rural farming families which was launched by PharmAccess and Hygeia Nigeria.

## V. REGIONAL TRENDS IN INNOVATIVE HEALTH FINANCING FOR CANCER AND HIGH-COST CHRONIC NCDs

This study observed distinct trends and varying levels of innovation for funding programs across regions. In the sub-sections below, we summarize the innovative models that were studied on a regional level and synthesize the trends and learnings which can be potentially extrapolated to other regions or contexts.

### Multi-regional initiatives

Multi-regional funding models are initiatives or partnerships which address funding challenges in more than 1 region in the scope of the study. Three main types of multi-regional financing models for cancer and high-cost chronic NCDs were identified:



Crowdfunding platforms enable patients to tap into funds from family, friends and strangers globally to finance their care. They have been booming with both, for-profit and non-profit operational models. GoFundMe, a for-profit platform and also the sector leader, is initiated by the patient or families. More recently, non-profit crowdfunding platforms, like Watsi, have emerged where partner organizations initiate fundraising campaigns on behalf of patients or individuals.

A second type of technology platform has been enabled through the emergence of new technologies like blockchain and cryptocurrency. OncoPower, a novel platform, can expand access to care for patients by tracking medical data and earning cryptocurrency incentives called Oncos. The value of Oncos fluctuate but can be converted to traditional currencies to finance treatment expenses.

Several global pharmaceutical companies have developed access programs that span multiple countries across the world like Novartis Oncology Access, My Child Matters by Sanofi, Celgene Cancer Care Links and the Sandoz World Child Cancer Partnership. These global programs provide support along the spectrum of cancer care services including awareness, screening, diagnosis, treatment and palliative care. These initiatives largely focus on supporting healthcare treatment and capacity initiatives, while closely collaborating with local communities and institutions.

Finally, insurance companies serving expatriates such as Expatriate Healthcare offer coverage for screening and treatment services across the globe for both short-term and long-term duration.

## Asia region

Asia is home to the greatest number of innovative funding models identified in the scope of this study, with India and China driving this trend.

There are several examples of results-based financing initiatives for healthcare in India. Providers have a pay-for-performance incentive where they get returns based on the measured outcomes of the programs including the Rajasthan Maternal & Newborn Health Development Impact Bond. While these initiatives are still in the planning and feasibility phase, they show promise as a model to enable social investors to provide financial support for patients unable to pay out-of-pocket or through insurance.

Other innovative programs in India and China provide instalment-based payment options to patients for high-cost oncology treatment. For example, in China, AstraZeneca worked with institutions such as China Charity Foundation to enable patients to defer and space-out payments for Iressa and Tagrisso. That helped the patients by reducing their financial barrier at the onset. Similarly, in India, MSD subsidized loan interest rates for patients who applied for the monthly instalment scheme with Fullerton India (a financial institution). It improved the affordability of treatment and reduced patient drop-offs due to cost concerns.

On the private insurance front, various innovations in Asia include microinsurance for poor, private top-up schemes for critical illnesses and mandatory government-led health savings accounts. These insurance-based programs increase the coverage of financial protection to uninsured or provide additional protection to the insured, in some cases both. Some programs such as Thaivivat Insurance sold microinsurance policies at 7-Eleven outlets to address the complexity and affordability for rural, and lower income segments of the population.

In some cases, innovations in Asia have been adapted from other successful initiatives in other parts of the world. The sales-based donation program SeALady Cashback in Vietnam is an example of this; as it follows a similar model to other credit-card loyalty program donation partnerships that are common in developed countries.

## Africa region

This study also found numerous innovative funding models for cancer and high-cost chronic NCDs in Africa. Compared to other regions, Africa had the most regional alliances and initiatives including the Red Ribbon Pink Ribbon partnership, African Access Initiative and the Joint Initiative to Fight Cancer. In addition, non-governmental organizations have been the drivers behind the innovative models in this region compared to others covered in the study. These findings are further supported by the presence of overseas development aid in Africa. OECD estimates that nearly US\$50 billion was disbursed to Africa in 2016, greater than any other region in the world<sup>50</sup>.

Hospital and healthcare provider capacity are major challenges in African countries<sup>51</sup>. Initiatives such as the Academic Model Providing Access to Healthcare (AMPATH) oncology partnership with Celgene work to develop a center of excellent (CoE) for cancer care to improve diagnosis and treatment. Several facilities in Africa also actively collaborate with oncology institutions in developed markets to strengthen research, care delivery and improve access to treatment.

In both Kenya and Nigeria, there are examples of innovative approaches to expanding existing insurance coverage with new critical illness coverage models, top-up insurance schemes, community-health plans and for-profit medical tourism health plans. Though the insurance market is still relatively under-developed, telecommunications companies have started to play a bigger role in health financing with the advent of fast-growing mobile penetration in the region.

For example, Airtel (a telecommunication company) has partnered with insurers in 7 African markets to offer free insurance for customers, increasing brand loyalty and minimize SIM-card swapping. In addition, platforms such as m-TIBA in Kenya provide the opportunity for increase in coverage of mobile powered insurance and micro-credit plans for people in the informal sectors. mHealth platforms such as m-TIBA could potentially be used by donors and insurers to offer healthcare financing products such as vouchers, managed funds and low-cost health insurance to specific segments of the population.

### Latin America region

In Latin America, regional initiatives reviewed in this study focused on women's cancers and are implemented in partnership with non-profit organizations, like Pro Mujer. These initiatives recognize the importance of addressing obstacles to attaining appropriate healthcare as part of overall female empowerment efforts.

Latin America has the highest rates of income inequality in the world and marginalized women in the region experience overwhelming levels of gender-based violence, chronic health problems and discrimination<sup>52</sup>. While all cancer types require much greater attention in low-resource settings, breast and cervical cancer are of particular importance because they are amenable to prevention. Effective treatment options that can be provided in low-resource settings have not been widely available to women in need<sup>53</sup>.

In Brazil, there are also several examples of gender-specific insurance policies offered by banks and insurance companies like Santander and Tokio Marine. In addition, there are several insurance products that are specifically tailored for women, including Women's Insurance by Bradesco and the MetLife's Women's Protection Insurance Plus.

There are also several examples of local NGOs like Amigos de los Niños, GRAAZ Hospital in Brazil and the Mexican Cancer Society Fund that are working in underserved communities and low income families in the region. These NGOs are leveraging professional medical volunteers as well as donations from local companies, local institutions and individuals, for treatment. These community led and funded organizations work to facilitate treatment for severely ill or disabled patients who require long-term medical aid. They also recognize that their role extends beyond only paying for treatment. Support for transportation and social services are often equally as important to patients, who may not have the means to reach treatment centers or adhere to care regimens.



## Middle East region

In the Middle East Region, examples of innovative funding models focus on means-based patient access programs that assess the patients' individual affordability to insurance schemes providing targeted benefits to the high proportion of expats in the region.

While pharmaceutical companies often operate Patient Access Programs (PAPs) to expand access to treatments, some have developed an innovative design to assess affordability so that funding is allocated equitably. For example, the "Mosanda" program managed by Axios, enrolled patients who pay for a certain number of treatment cycles each year based on the Patient Financial Eligibility Tool (PFET) assessment and receive the remaining treatment cycles for free. Means-based PAPs offer customized benefits to patients but require close collaboration with local implementation partners as well as the support from local health authorities. In Dubai, insurance schemes have been developed to specifically cater to the 4.4 million expats that make up the vast majority of the total 4.6 million population. Given that the required minimum benefits package is not sufficient for all cancer treatments, a partnership was formed between a pharmaceutical company (Roche), a private insurer (AXA) and the government (Dubai Health Authority) to ensure that expats across the income spectrum can afford cancer care<sup>54</sup>.

In Lebanon, banks like Audi Bank offer loans for medical treatments, given that government reimbursement can take several months. The simplicity of this financing model, like those of the debt financing schemes in India and China, does not diminish its value to patients who otherwise may not be able to pay for the upfront cost of treatment.

There were also several innovations in securing funding in Lebanon (e.g. lottery-based financing, and sales-based donations) which shares similarities with initiatives in the Asia region. For instance, the Lebanese National Lottery Directorate hosted a Charity Tombola for Cancer Patient Support, similar to the Philippines Charity Sweepstakes. Like the SeALady Cashback credit card in Vietnam, the Lebanese Lira Credit Card also allows cardholders to designate cashback rewards to support cancer patients.

## Europe region

In the geographic scope of study, it was found that a fewer number of innovative health funding models existed both in Europe regionally and in Hungary and Poland at a country-level. In most European countries, healthcare expenditure is dominated by a single payer. There is also a limited involvement of private insurance players given the regulatory environment. Global health donors typically prioritize interventions and investments in lesser-developed countries.

In such a set-up, innovations in healthcare funding models predominantly exist in how stakeholders, especially physicians and care providers, can effectively engage with policymakers and public payers to address unmet patient needs in the context of the reimbursement process.

For example, the European Medicines Agency (EMA) provides recommendations on compassionate use through the Committee for Medicinal Products for Human Use (CHMP). Compassionate use programs, including procedures and legal frameworks, are coordinated and implemented by Member States themselves. *Ratunkowy Dostęp Do Technologii Lekowych*, a legislative act in Poland introduced in 2017, systematized a pathway for providers to apply for compassionate use of innovative treatments (that are usually not reimbursed) on a case-by-case basis. This exceptional “rescue care” is reassessed every 3 months or after 3 cycles of treatment.

Two other types of innovative partnerships were identified in this region: charity-funded medical tourism and novel sales-based donations schemes.

In Hungary, the Children Cancer Foundation has partnered with American oncology institutions to facilitate treatment of pediatric oncology patients in the US. Patients may not have access to innovative therapies in Hungary and this initiative aims to fill the short-term delivery gaps in the country.

In Poland, charities developed strong partnerships with mobile-game developers and craft breweries to generate self-sustaining models to secure funding for cancer patients. These charities leveraged the expertise of private sector players, particularly in areas of product design and marketing, to develop unique products. The Alivia Foundation developed a War on Cancer mobile game with an ‘in-app purchasing’ fundraising mechanism, while the Rak’n’Roll Foundation launched a new beer brand.

## VI. IMPLEMENTATION OF INNOVATIVE FUNDING MODELS

### Key considerations

The global inventory of innovative funding models in the previous section provided a summary of the innovative funding models identified by this study. To determine the relevance and fit of these funding models, the local operating context must be taken into consideration:



**Market readiness:**  
payer and policy environment,  
and business environment for  
the funding model to be  
executed

- Is the local government politically stable? Does it have conducive policies to encourage the funding model to be implemented in the country?
- Is there a clear policy framework for the collection and disbursement of funds under the funding model for healthcare financing?
- Is there a regulator in place to enable the roles of different stakeholders if the funding model requires partnership?
- Do the government institutions (payers, policy makers, regulators etc.) have the experience and capability to participate in the funding model?



**Infrastructure requirements:**  
digital, financial, and supply  
chain requirements for the  
funding model to be successful

- Does the market have the right digital infrastructure (smartphone, internet penetration) to execute a particular program?
- Are patient level outcomes data and regional claims level data available at national, or regional level?
- Is the supply chain and hospital infrastructure ready for the execution of the program?



**Stakeholder engagement:**  
capabilities of organizations  
and teams who are prepared to  
participate in or lead the  
implementation of the  
innovative funding model

- Have any of the funding partners worked with the implementation partners to execute similar programs in the past?
- Do funding partners have existing governance models in place to minimize fraud and misuse of resources?
- Are implementation partners equipped with the technical skills and tools for both program advocacy and implementation?

### Key success factors

Key success factors that are critical for the overall success and sustainability of the funding programs have been identified:

- **Cancer and high-cost NCDs should be mainstreamed in health systems as a key government priority:** patient advocacy and support groups are critical in capturing media and public support to increase awareness of cancer as a priority health agenda item for policymakers. Industry should work together with these groups to raise awareness on unmet needs and disease burden in the countries to increase focus on cancer and high-cost NCDs
- **Local stakeholders with a trusted presence in patient and physician communities are valuable implementation partners:** trust in the implementation partners plays an important role in the successful adoption of any patient-facing program. The program sponsor should engage with

the right local partners and work with the government bodies to build credibility for the program. For global organizations, the in-country team must take ownership of partnerships with local implementing partners

- ***Win-win-win models are mandatory for sustainable and scalable partnerships:*** while conversations on innovative treatment is often fixed on price, the reality is that there are opportunities to create partnerships that meet collective and individual stakeholder interests. The ultimate measure of a successful partnership are that the benefits must be tangible and sustainable for all stakeholders involved, including patients and providers
- ***Models should be as simple as possible, minimizing ambiguity for patients and simplifying payment transfers:*** barriers to adoption of innovative financing models amplify as new processes are introduced. Partners must ensure that the strategy is clearly defined, processes are well-documented and simplified for easy adoption and implementation
- ***Long-term governance models are key enablers of innovative financing models:*** risk mitigation plans are important to minimize fraud risks and misuse of the program. Information systems and data governance models should be designed to monitor and measure program outcomes. Given that most innovative models take several years to implement and scale, partnerships and innovative models need to consider fundamental market needs and evolving mid to long-term trends

# VII. THE CALL TO ACTION FOR THE FUTURE OF HEALTH FINANCING

Innovative funding programs identified in this report strive to address the gaps in treatment access due to affordability and payment. However, these programs alone will be insufficient to address the growing NCD burden across the world. There is a need for broader discourse to significantly reduce the access gaps globally.

## Leveraging universal health coverage (UHC) reforms

Many LMICs are working to achieve greater universal financial protection in health care, with funding from domestic sources that combines public insurance and co-payment. UHC is the belief that everyone, everywhere should have access to quality health services where and when they need them, without suffering financial hardship. UHC implies financial protection that promotes equity and efficiency and reduces the risks of financial shocks to families by reducing out-of-pocket payments.

Establishing universal entitlement to key services through guaranteed benefits packages is a cornerstone of improving access to cancer care. While cancer encompasses a set of chronic and complex diseases which challenges the limits of UHC and pathways to progressive universalism, it is critical that cost-effective cancer interventions are progressively incorporated into universal health care coverage packages.


Funding programs should complement the UHC reforms and support the initiatives of the government to ensure sustainability. Government will continue to be the largest spender for healthcare in most of the LMICs, so it is important that funding initiatives are focused on addressing the unmet needs in the markets.


Additionally, due to lack of formal evaluation and recent efforts for UHC reforms, it is often difficult to assess the impact of innovative and expensive therapies on patient outcomes at a sub-national level in most LMICs. Hence, there is a need to monitor patient outcome data including registries or other real-world initiatives which leverage technology to enable measurement of treatment outcomes and provide protection against fraudulent billings.

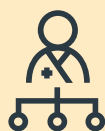
## Importance of partnerships in innovative financing

Of the various types of innovative models identified in our research, the majority were driven by partnerships. The necessity for such partnerships is a consequence of the complex web of funding and service gaps, which cannot be resolved by any 1 party working alone. By pooling complementary expertise and capabilities, traditional funders have been able to address specific service gaps to meet patient needs.

Successful partnerships require all stakeholders to take an active role in shaping the funding, design and delivery of the proposed model. Through primary and secondary research, this study has summarized some of these key roles below:

 <b>Governments</b>	<ul style="list-style-type: none"><li>• Governments can foster a regulatory environment which encourages and facilitates innovative partnerships and approaches to health financing, through intersectoral partnerships</li><li>• Governments can explore partnerships that will fill funding gaps, and cover populations and services not reached by existing funding models</li></ul>
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	<ul style="list-style-type: none"> <li>• Governments can strengthen, fund, and implement national cancer control plans, with specific goals to improve cancer outcomes and measurable indicators of current and future cancer expenditures</li> </ul>
 <p><b><i>Insurers, banks and other financing institutions</i></b></p>	<ul style="list-style-type: none"> <li>• Financing institutions can leverage their health economic data to help establish the gaps in financial risk protection, making the distinction when proposed models are CSR initiatives or for-profit services</li> <li>• Insurers can consider how best to incorporate screening, diagnosis and other care services in addition to disease treatment so that insurance products are a “one stop shop”</li> <li>• Insurers can also develop new risk-sharing models to expand its customer base, especially for marginalized and vulnerable communities (e.g. microinsurance plans)</li> </ul>
 <p><b><i>Healthcare companies</i></b></p>	<ul style="list-style-type: none"> <li>• Healthcare companies should assess long-term strategy of proposed partnership or financing model, business case for investment, sustainability, alignment with corporate social responsibility (CSR) and other externalities (e.g. strengthening country capacity to advance care delivery)</li> <li>• Global healthcare companies can leverage its global footprint and deep understanding of disease in collaborations at the global, regional, national or sub-national scale</li> </ul>
 <p><b><i>Telecommunications companies, retailers, other private sector actors</i></b></p>	<ul style="list-style-type: none"> <li>• Private sector stakeholders that traditionally played a limited role in healthcare provision can play a larger role in health financing, specially related to risk pooling</li> <li>• Telecommunications companies and retailers have strong distribution networks and can enable access to a wide user base for health financing interventions</li> </ul>
 <p><b><i>Foundations, charities and other NGOs</i></b></p>	<ul style="list-style-type: none"> <li>• NGOs can be key implementation partners, and are often the most effective conveners for outreach and facilitation of a broad range of stakeholders</li> <li>• International NGOs and donors can play a key role in organizing regional initiatives, developing regional centers of excellence and setting the global health agenda to focus on</li> </ul>
 <p><b><i>Healthcare providers</i></b></p>	<ul style="list-style-type: none"> <li>• Providers are essential administrators in all health financing models because they are ultimately responsible for the delivery of care and the governance of treatment data and patient data</li> <li>• Providers inherently play a role in health financing as a coordinator between sources of funding, channeling of payment and funding outcomes</li> </ul>



***Physician associations  
and national disease  
associations***

- Physician associations are powerful influencers and can leverage their technical expertise to clearly define the gaps and unmet needs that exist in cancer and high-cost NCD care
- Physicians can provide advice to governments regarding the value of these NCD treatments and advancing the overall NCDs agenda



***Patient advocacy  
groups and civil society  
organizations (CSOs)***

- Patient advocacy groups can play a larger role beyond supporting existing patient needs by engaging in public discourse to shape the future of financing and access for patients
- CSOs can lead grass-roots mobilization efforts to disseminate public health information, and raise awareness of local initiatives for patients and their families as well as fundraise or secure additional resources
- CSOs can collaborate with other public and private sector stakeholders to support the implementation of innovative financing models and monitor its success

Within these partnership models that were evaluated, private sector organizations like global pharmaceutical companies have played a crucial role in driving partnerships. While their involvement frequently targets specific parts of the pathway where there is commercial rationale to instigate partnerships, their contributions have consistently served as a catalyst for innovation more broadly, leading to improved outcomes across the patient journey.

## **Balancing globalization and localization**

Strategies for funding can be supra-national but implementation of the programs should be done at local level. A global or regional framework for programs may not be relevant or practical for local implementation. However, programs should try to bring in the key learnings from successes in other geographies before adapting them to the local context. Different parameters should be considered for strategic allocation of funding mechanisms vs. implementation.

Innovative financing initiatives must have top-down approval and should be made part of the 'business as usual' through setting up of KPIs and clear definition of roles and responsibilities at the local level. Global stakeholders should be positioned as partners, co-creators and supporting functions to the local teams that go on to execute the programs.



## VIII. CONCLUSIONS

This study discovered a range of exciting and innovative funding models which, while complementing traditional funding, can have a big impact on those who do not currently have access to appropriate care for cancer and other NCDs due to affordability. The challenge for stakeholders will be to identify the models that are most appropriate for their health system and the needs of the population, and to take action to adopt them in a sustainable way.

Ultimately, an effective response to cancer and high-cost chronic NCDs requires strengthening all the functions within a health system: provision of health care services, resource generation, financing, and stewardship. Lack of adequate management for 1 component could diminish overall efforts; resulting not only in wasted public resources but in catastrophic expenditures, unnecessary pain and premature death for the patients themselves.

The funding challenges posed by cancer and high-cost chronic NCDs are universal and unavoidable, with a continuous and increasing financial impact for patients, health systems and economies. Responses to tackle these funding challenges vary from region to region and are dependent on country differences. However, amongst these differences, there are also commonalities in collaborations between diverse stakeholders to create win-win partnerships.

Collaboration creates opportunities, and knowledge sharing is critical to ensure that new funding innovations are not only sustainable, but scalable in other markets and regions. Successful funding innovations are frequently driven by collaborations between different funding partners with a shared interest in improving patient care and minimizing financial hardship. These collaborations are increasingly being driven by the private sector (health care industries, private insurers and financiers) seeking partnerships with traditional funders to implement new funding innovations.

The funding gap for cancer care and NCDs is significant and, without action, will grow. Approaching health financing in new and innovative ways can help countries address this challenge, ensuring that patients benefit from new scientific and technological advances. Effective control of cancer and other high-cost NCDs is possible, and all stakeholders—communities, governments, non-profit organizations, and the private sector—have a role to play.

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## Appendix

### Multi-region innovative funding models

- **Partner-initiated crowdfunding platforms (e.g. Watsi):** Cancer patients reach out to Watsi where their profile is received by their medical partner's staff and they post on patient's behalf for crowdfunding
- **Patient-initiated crowdfunding platforms (e.g. GoGetFunding, GoFundMe, JustGiving, FundMe):** Cancer patients can raise funds from the crowdfunding websites by asking for donations for personal problems through their online post
- **OncoPower Platform:** The platform uses blockchain technology to help patients keep track of their medical data across providers and offers users incentives
- **CMLPath to Care (Novartis):** The patient assistance program works towards better access and reimbursement for cancer treatment in low-and middle-income countries
- **My Child Matters (Sanofi):** The program provides pediatrics financial support, aid from international experts, mentor/mentee programs at the local level, and networking for project developers
- **Sandoz World Child Cancer Partnership:** The partnership focuses on improving diagnosis, treatment and support for children with cancer and their families by partnering with hospitals, doctors and nurses locally
- **Celgene Cancer Care Links:** Celgene has collaborated with local communities and institutions focused on enhancing patient care and building care delivery capacity
- **Expatriate Healthcare Insurance:** Insurance product for expats with global coverage for screening and medical expenses for conditions, including cancer

### Innovative funding models in Asia



- **AXA Cancer Care Insurance Plans:** Private-party insurances for crucial diseases covering cancer
- **Hope to Her:** Intra-country pricing models with different tiers aiming to bridge the gap between current reimbursement coverage and achievement of full Universal Health Coverage
- **Pfizer and V Care Access Program:** PAP through which the patients pay just for the first few medicine packs, after which they receive the rest for free for as long as required



Philippines

- **The Philippines Charity Sweepstake Office:** A government agency for raising and providing funds for health programs, medical assistance and services, and charities of national character
- **iCare (Merck):** A program in partnership with leading hospital, Merck KGaA provides free testing for RAS and eases the testing machine, provides kits for free while covering the cost of testing
- **Ating Didibin (Pfizer):** Community-based breast cancer screening program and aims to make the early detection program permanently included under the local government's health budget

## Innovative funding models in Asia

<p>Philippines</p>	<ul style="list-style-type: none"> <li>• <b>Philam Life Group Insurance Care:</b> Philam Life provides customizable medical insurance plan that offers health and life protections</li> </ul>
 <p>Vietnam</p>	<ul style="list-style-type: none"> <li>• <b>SeALady Cashback:</b> Innovated by SeABank, a sales-based donation scheme where partial charity is done for every pool of transactions through credit cards</li> <li>• <b>We Care for Her:</b> A public-private initiative aimed towards public awareness of breast cancer, its prevention and control</li> <li>• <b>K-Care package:</b> A cancer insurance product that shares a part of the financial burden and provides more opportunities to successfully cure cancer</li> <li>• <b>Novartis VPAP Aid programs:</b> Novartis has multiple PAPs in Vietnam tying-up with insurers wherein they bear partial treatment cost for the enrolled patients</li> </ul>
 <p>India</p>	<ul style="list-style-type: none"> <li>• <b>Arogya Finance Provider-Initiated Zero-Interest Loan:</b> A provider-initiated cancer treatment loan targeting the traditionally un-banked, with no interest for the first year</li> <li>• <b>Inter Aide and ATIA Health Mutual Fund:</b> Sanofi Espoir Foundation supports 6 local partners to provide mutual health insurance services to their members offered by Inter Aide and ATIA</li> <li>• <b>Utkrisht Rajasthan Maternal and Newborn Health Development Impact Bond:</b> A public-private partnership to develop results-based financing</li> <li>• <b>Fullerton Health Equated Monthly Instalment (EMI) (MSD):</b> Subsidized loan interest rates for patients who choose monthly instalment scheme with Fullerton India below its usual rates</li> <li>• <b>New India Insurance Cancer Insurance Scheme:</b> The healthcare policy covers in-patient hospitalization expenses for cancer, incurred in India</li> <li>• <b>Indian Cancer Society Cancer Cure Fund:</b> A non-profit organization providing financial aid for treatment to needy cancer patients partnering with an asset management firm</li> <li>• <b>Sparsh by Dr. Reddy:</b> A patient assistance program by Dr. Reddy's to help economically challenged patients complete chemotherapy treatment</li> <li>• <b>The Blue Tree Program (Roche):</b> A comprehensive and integrated patient support program by Roche, also providing financial assistance to the economically poor patients</li> </ul>



India

- **Detect Early Save Her (DESH) by Piramal:** A Community-based cancer program for early screening and detection of Oral, Breast and Cervical Cancer
- **Novartis Oncology Access Program:** Designed to address the lack of access and reimbursement for cancer treatment in low-and middle-income countries for various drugs
- **Karuna Trust:** A public-private partnership model that helps leverage the government's investments in public health care infrastructure by complementing it with a socially committed, not-for-profit, but professionally competent management team
- **Astellas Anticancer Project:** A program in collaboration with local partners structured according to patients' income levels to improve patients' access to their anticancer product



China

- **Beijing Genomics Institute Home Screening Insurance Package:** The package allows women to test themselves for human papillomavirus (HPV) in a private setting. All fees associated with screening, diagnostics, and treatment are fully covered by the program
- **National Insurance Program for Catastrophic Diseases:** A public-private partnership covering designated portions of medical expenditures exceeding the maximal reimbursable amount of Basic Medical Insurance, thereby offering enrollees additional financial protection against severe illnesses
- **Iressa/Cardinal Health (AstraZeneca):** Providing financial support by allowing individuals to pay for specific drug treatments through instalments
- **Tagrisso Fee Compensation (AstraZeneca):** Tagrisso program allows enrollees to spread the payment over 12 months, thereby reducing the financial barrier of patients to access treatment at the outset
- **Compulsory Medical Savings Accounts (MSAs):** Chinese banks have compulsory medical savings accounts in banks for financing healthcare. MSAs provide incentives for consumers to be more cost-sensitive in their demand for health services
- **Zhong'An Colorectal Cancer Insurance:** This insurance incentivizes customers to get screened by requiring potential scheme users to undergo a mandatory screening procedure
- **Anti-cancer Plan for the Young and Middle-Aged of Shuidi Mutual Aid:** Mutual aid with a vision to providing low-threshold yet cost-effective health protection service for every single person with health insurance needs

## Innovative funding models in Asia



Malaysia

- **GST Waiver for Cancer Drugs:** The government abolished GST for around 25% of the drugs mentioned in the National Essential Medicines List (NEML) including cancer drugs



Thailand

- **Private Microinsurance Policies:** Private microinsurance policies providing customized plans for cancer patients (e.g. Thaivivat)
- **Axios Cost Sharing Programs:** The program assesses the patients financially and asks them to pay for only part of the treatment while the remainder cost is covered by the manufacturer



Hong Kong

- **Manulife Silvercare:** An insurance package for elderly people with a strong focus on cancer, providing benefits in both diagnosis and treatment
- **Radi Collaboration:** Radi Collaboration is a government-funded project aimed at enhancing radiological investigation services for cancer patients through collaboration with the private sector
- **SunHealth Cancer Shield:** An Insurance plan that focuses on covering Cancer Condition and Early Malignancies and Carcinoma-in-situ Conditions by providing a lump sum payment upon diagnosis of a covered illness



Singapore

- **Medishield and Integrated Shield Plans:** A public-private partnership offering protection for all citizens against significant hospitalization charges and additional insurance component
- **Compulsory Medical Savings Accounts (Medisave):** Banks have compulsory medical savings accounts, termed as Medisave, in banks for financing healthcare
- **AIA Prime Critical Cover:** The cover provides comprehensive coverage against critical illnesses and early payouts for special conditions



Regional

- **African Access Initiative:** African Access Initiative (AAI) are expanding access to cancer medicines and technologies by establishing affordable business and pricing agreements between companies and African governments
- **Pink Ribbon Red Ribbon:** A global partnership platform aiming to address women's cancers leveraging public and private investments
- **Africa Cancer Foundation:** A charitable trust that creates awareness on the prevention, management and treatment of cancer in Africa
- **Joint Initiative to Fight Cancer:** Multiparty initiative rolled out in Sub-Saharan Africa with each stakeholder bringing unique expertise
- **Secure the Future Program (BMS):** The program funds equipment and drugs for 3 selected hospitals to ease financial burden for pediatric patients
- **Medical Credit Fund:** Fund provides small scale loans to small and medium-sized healthcare facilities for low income patients
- **Airtel Insurance with Microensure:** Telecom company rewarding loyal customers with free insurance coverage to minimize SIM-card swapping



Kenya

- **AMPATH Oncology Partnerships:** AMPATH has received support for development of the AMPATH Oncology Institute (AOI) as a Center of Excellence for cancer care in the region
- **M-TIBA Mobile Health Wallet:** A health wallet that allows people to save, borrow and share funds dedicated for healthcare that can be used to pay for treatment and medication at their partner clinics and hospitals
- **AAR Insurance Top-up Scheme:** Comprehensive in-patient and out-patient medical insurance packages for Kenyan residents providing coverage to cancer treatment
- **Ngao Ya Afya:** Solution allowing insurance entitlement or donations to be disbursed from gate-keeper CarePay to mobile-based saving platform M-TIBA
- **Faraja Medical Support Fund:** A local fund for treatment of cancer patients wherein the patients only pay partially for their treatment
- **NCD Access Program (Novartis):** The Kenya Red Cross makes procurement under Novartis Access to improve access to NCD prevention, treatment, care and support





## Nigeria

- **Donate NG crowdfunding platform:** Local crowdfunding platform where one can ask for donations on their online post for the same
- **Breast Cancer Association of Nigeria (BRECAN):** A leading not-for-profit and non-governmental organization which provides financial help to a selective pool
- **Dorcus Cancer Foundation:** A non-profit organization founded to support children living with cancer-funding their diagnosis, treatments and rehabilitation
- **St. Cyril Foundation:** Works with numerous cancer non-profit organizations in Nigeria to ensure all patients sent to them are treated
- **Pink Oak Cancer Trust:** A harmonized and coordinated approach to create a pool of funds from corporations, private organizations, government and individuals
- **Credit Direct Consumer Loans:** 12-hour “sharp sharp” turnaround for payroll-based cash-to-go loans in 25 states in Nigeria
- **Hygeia Community Health Plan (HCHP):** insurance product for market women, small business owners, and rural farming families, launched by PharmAccess and Hygeia Nigeria
- **Custodian Life Critical Illness Insurance:** coverage includes critical and terminal illnesses such as stroke, cancer, heart attack and renal failure
- **AXA Mansard International Health Plan:** provides coverage for services in Nigeria and abroad, including the US

## Innovative funding models in Latin America

 <p>Regional</p>	<ul style="list-style-type: none"> <li>• <b>Pro Mujer's Cervical Cancer Initiative in Latin America:</b> A non-profit organization with programs ranging from cancer detection to cancer treatment and funding derived from financial services revenues</li> <li>• <b>Women's Cancer Initiative in the Americas:</b> A public-private partnership with the agenda to strengthen prevention and treatment, support national cancer policies and improve data collection in the region</li> </ul>
 <p>Brazil</p>	<ul style="list-style-type: none"> <li>• <b>GRAACC Hospital Support:</b> GRAACC manages a hospital that offers diagnostic, treatment and after treatment for children and adolescents with cancer in Brazil, with an average family income less than US\$20 per day</li> <li>• <b>MetLife Women's Protection Plus:</b> Insurance product which provides support in case of diagnosis of breast, ovarian or cervical cancer. Designated beneficiaries will also receive financial support in case of death</li> <li>• <b>Santander's Gender-specific Insurance:</b> Coverage in case of death or disability due to breast, ovarian, uterine, or prostate cancer</li> <li>• <b>Women's Insurance by Bradesco:</b> Bradesco bank covers diagnostics and treatment specifically of women's health conditions, like breast cancer and uterine diseases</li> <li>• <b>Tokio Marine Vida Individual Insurance:</b> Insurance products tailored to men, women and seniors, with coverage for serious diseases, cancers, hospital stays, as well as disease and disability compensation</li> </ul>
 <p>Mexico</p>	<ul style="list-style-type: none"> <li>• <b>Amigos de los Niños Special Case Program:</b> Provides financial assistance and support programs for Los Cabos children suffering from cancer, to ensure high treatment adherence</li> <li>• <b>Mexican Cancer Society Fund:</b> Provides payment for chemotherapy treatments for very poor patients in under-served communities</li> <li>• <b>Risk sharing agreement AMIIF and IMSS:</b> A public-private partnership working on an ongoing risk-sharing agreement that will facilitate access of innovative drugs to public payers' formularies</li> <li>• <b>Mapfre Insurance Policy:</b> An insurance policy covering transportation, diagnosis, surgery, treatment as well as post-mortem diagnosis</li> <li>• <b>Avon Sales-Based Donation:</b> Avon Mexico has raised donations through selling their rose products and donating it to Mexico Civil Society organization for women breast cancer care</li> </ul>
 <p>Panama</p>	<ul style="list-style-type: none"> <li>• <b>Public Health Taxation:</b> Legislative initiative to establish an economic amount in support of health by means of a selective tax on sugar-sweetened beverages</li> </ul>

## Innovative funding models in Latin America



Regional

- **Healthcare Loan Interest Paydown:** Gates Foundation will pay the loan interest for the countries when they borrow a loan from Islamic Development Bank dedicated to domestic healthcare expenditure



Lebanon

- **Audi Bank Personal Loan:** Audi Bank provides personal loans to patients which can be used for medical treatments while the government reimbursement is being processed
- **Charity Tombola for Cancer Patient Support:** Organized by the National Lebanese Lottery Directorate to raise funds for the Barbara Nassar Association
- **Children's Cancer Center of Lebanon (CCCL) Donation Boxes at Carrefour Hypermarkets:** Non-profit with a fundraising partnership with the Carrefour Lebanon CSR department
- **MetLife Critical Care Insurance:** insurance product with lumpsum payment upon diagnosis of cancer and coronary heart disease
- **"Allo...Hayete" Microinsurance by AROPE Insurance:** Micro life insurance policy worth LBP5 million (US\$3,315), covering death resulting from sickness, accident, passive war and terrorism. Product is available only via SMS, in partnership with InMobiles and mobile network operators Alfa and Touch
- **Lebanese Lira Credit Card from Bankmed:** The loyalty reward program allows cardholders to designate 1% cashback to the Children's Cancer Center of Lebanon (CCCL)



UAE

- **Farah Pediatric Program (Al-Jalila Foundation):** A global philanthropic organization dedicated to providing life-saving treatment, funds cutting edge research and offers hope to countless children and their families
- **Friends of Cancer Patients:** Provides a broad spectrum of support including—covering treatment expenses in addition to expenses for investigative and surgical procedures
- **Dubai Cancer initiative - BASMAH:** All insurance companies now charge a small additional amount on the premium paid by employers, which is pooled into a central fund used to provide coverage for cancer treatment
- **Mosanda Program – managed by Axios:** Patients pay for a certain number of treatment cycles each year according to their ability to pay and receive the rest of the treatment free-of-charge



Regional

- **Brain Cancer Treatment Loan from European Investment Bank (EIB):** EIB and European Fund for Strategic Investments (EFSI) supported a medical devices company with €35 million for brain cancer treatment
- **Pannonia Endowment Life Insurance with Critical Illness Coverage:** Life Insurances provided by private insurers with low monthly premiums and flexible terms



Hungary

- **Children Cancer Foundation:** A local non-profit organization that provides financial and social support for children to receive cancer care in the US, when it is not available in Hungary
- **Voluntary Medical Savings Accounts (VMSAs):** Special healthcare bank accounts to be used exclusively to finance healthcare by the account holders
- **Partial Drug Tax Gains:** 10% of the tax gains from specific drugs are put into a strategic reserve fund that finances healthcare expenditure



Poland

- **Ratunkowy Dostęp Do Technologii Lekowych:** Launched by the Ministry of Health, the hospital in which a person is treated has the possibility to request the MoH to cover the costs of a registered medicine, that is not covered by the general reimbursement
- **Piggy Bank Program (Alivia Foundation):** Provides cancer patients with financial aid for their medical treatment
- **War on Cancer Game (Alivia Foundation):** Mobile game that's free to download with in-app purchasing options which serve as a fundraising model for real-life patients as well as 'skarbonka'- a general fundraising pool for all cancer patients
- **Good Beer Campaign (Rak'n'Roll Foundation):** Rak'n'Roll partnered with a local brewery to make a new beer brand, which quickly became a self-sufficient donation engine to support cancer patients
- **Chubb Insurance for Cancer:** Critical illness insurance product for anyone diagnosed with cancer in female or male organs
- **Nationale-Nederlanden Play Insurance:** Heart and cancer insurance provided via partnership with Poland's largest telecom company, Play, on an online insurance platform

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