



CENTER FOR
INNOVATION
AND IMPACT

 **USAID** | Global Health

Unleashing Private Capital for Global Health Innovation:

Innovator and Investor Support Opportunities

From CII's Investing for Impact Series

USAID's **Center for Innovation and Impact (CII)** takes a business-minded approach to fast-tracking the development, introduction and scale-up of health interventions that address the world's most important health challenges. CII invests seed capital in the most promising ideas and novel approaches, using forward-looking business practices to cut the time it takes to transform discoveries in the lab to impact on the ground.

CENTER FOR INNOVATION AND IMPACT



USAID would like to thank our team of advisors and experts for their invaluable input into *Unleashing Private Capital for Global Health Innovation*. An incredible amount of work went into its creation and we are especially thankful to Dalberg Advisors for their partnership in developing this report. Questions and comments are welcome and can be directed to USAID's CII.

For contact information, and to download the latest version of this report, please visit www.usaid.gov/cii

We are delighted to present *Unleashing Private Capital for Global Health Innovation - Innovator and Investor Support Opportunities*, a report outlining the need for catalyzing private capital for global health innovations and several transformative partnerships that could help us meet the health-related Sustainable Development Goals by 2030.

Many individuals have generously shared their time and expertise to help us validate the framework and concepts, enrich the case studies, and pressure-test this work. CII would like to express its deepest gratitude to them all. We are especially grateful to our esteemed group of Advisors who helped to shape and provide invaluable input to this work.

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Many other individuals and organizations shared their experiences with us, and we are equally grateful to all of them. A full list can be found in the appendix.

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THE ROLE OF PRIVATE CAPITAL AND INNOVATION IN GLOBAL HEALTH

We are approaching a new era for global health and the opportunity for all people to live a healthy and prosperous life. The world has made undeniable progress on a number of health indicators. Between 1990 and 2015, maternal mortality worldwide dropped by 44%, the global under-5 mortality rate has declined by 44% since 2000, new HIV cases have decreased by 35%, and the incidence rate of tuberculosis has declined by 19% in the same timeframe.

While this progress is impressive, it is also clear that reaching our health goals will require far greater financing, especially private capital with financing not just for existing interventions, but also for continued innovation. Current estimates suggest a \$134 billion annual investment gap for the health SDGs in low- and middle-income countries (LMICs); by 2030, the estimated annual funding gap is projected to be \$371 billion¹. In an era of declining official development assistance (ODA), this gap will need to be filled with greater domestic resource mobilization, as well as greater engagement of the capital markets, which at \$200 trillion, dwarf all other sources of funding. Successfully mobilizing some percentage of these assets, even a small percentage at that, will be crucial to fill the financing gap needed.

However, greater financing alone, although desperately needed, will not solve these problems. It will need to be coupled with greater resources directed towards innovation and scaling those innovations so that they can reach millions of lives.

We at the Center for Innovation and Impact (CII), at USAID, along with our partners, have funded a number of our initiatives to drive innovation and scale in areas such as maternal and newborn health and combatting outbreaks, like Ebola and Zika. While we have been very successful in surfacing visionary and groundbreaking ideas, opportunities remain when it comes to driving greater private investment towards those ideas in order for them to scale and create impact.

This report, *Unleashing Private Capital for Global Health Innovation*, is our contribution to understanding both innovator challenges in successfully attracting private capital to scale their solutions and investor challenges to deploying more private capital. We consulted with over 60 innovators, investors, development partners, academics, and other ecosystem stakeholders in order to better understand the needs and opportunities in this space. We hope this report will serve to not only inform the global community about the complexities of innovating and investing in global health, but will also put research into action by enabling the creation of a facility aimed at innovators and investors in order to drive greater innovation, greater private investment, and ultimately greater social impact.

We look forward to your engagement as we move these ideas towards action.

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USAID | Global Health



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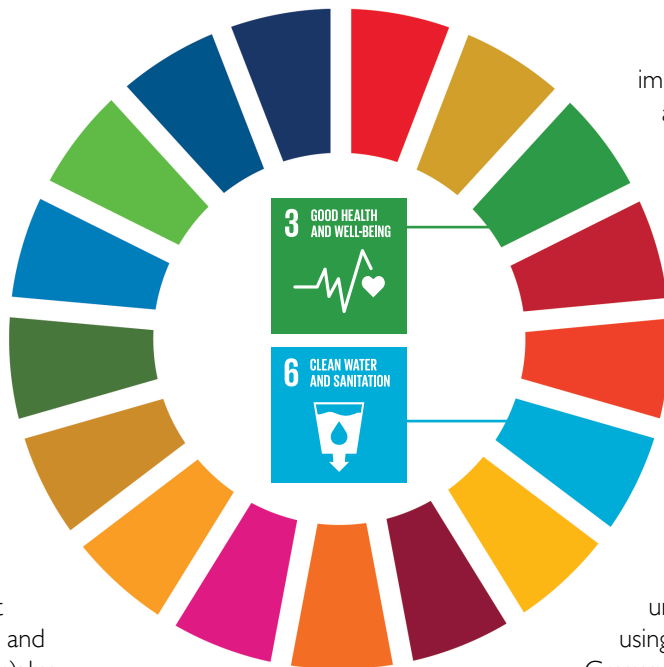
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The global community has committed to an ambitious set of 17 Sustainable Development Goals (SDGs) through 2030 – including SDG3 – “to ensure healthy lives and promote well-being for all at all ages.”¹ The goal’s targets include drastic reductions to maternal mortality, ending preventable deaths of newborns and children under age five, and ending the epidemics of AIDs, TB, malaria, and neglected tropical diseases.

Yet multiple recent estimates suggest that we are not on track to reach those targets – even if we massively scale up coverage of existing interventions including medicines, vaccines, bed nets, and medical devices.²

We will therefore need significantly more innovation – and funding to support that innovation – if we are to successfully achieve our global health aspirations. On the funding side, current estimates suggest a \$134 billion annual investment gap for the health SDGs in low- and middle-income countries (LMICs); by 2030, the estimated annual funding gap is projected to be \$371 billion³. In an environment of declining ODA, new and innovative sources of financing – including from the private sector – will be critical to fill the gap.⁴

There is good reason to believe that both are possible – that we can encourage transformative innovation and that we can effectively mobilize more private capital to support those innovation efforts. There are a myriad of promising global health innovators targeting base of the pyramid populations – and when they scale, they can have a transformative



impact on health access, quality, and affordability. Many of these innovators also have the potential to be commercially viable at scale, making them attractive investment opportunities for private capital.

Meanwhile investors are increasingly interested in committing capital with an explicit dual bottom line objective – for return and for impact. As an example, the total US domiciled assets under management (AUM) using Environmental, Social, and Governance (ESG) criteria has grown from \$2T in 1999 to \$12T in 2018 and represents ~26% of all professionally managed AUM.⁵

Yet today not enough promising innovators are reaching a point of minimum commercial viability – the point at which they might be considered ‘investable’ by commercial (and even many impact) investors. From an innovator’s perspective, there is a mismatch between the types of capital available in terms of return expectations and duration, and what is needed and appropriate to support their efforts from seed to early stages to growth and to maturity.

¹ UN. UN SDGs ²The Commission on Investing in Health, Achieving a “Grand Convergence” in Global Health: Modeling the Technical Inputs, Costs, and Impacts from 2016 to 2030, 2015 ³ Refers to the collective additional investment needed from all entities (governments, donors, private players) towards health in 2016 and in 2030 in order to meet SDG targets. The final funding gap may be smaller if governments scale up health expenditure. From ‘Financing transformative health systems towards achievement of the health Sustainable Development Goals’ - WHO report (SDG Health price tag) covering 67 LMI countries (which represents 95% of the total population in LMI countries); Financing Global Health (IHME), 2017, p. 25 ⁴ OECD database, “Distribution of net ODA (indicator)”, 2018 ⁵ US SIF Foundation, 2018 Report on US Sustainable, Responsible and Impact Investing Trends

Many innovators therefore struggle to attract private financing full stop, let alone private financing with appropriate terms and flexibility, which then inhibits their ability to grow. At best they may underperform their full potential; at worst they may stagnate, or fail, as a result.

This needs assessment focused on understanding both innovator challenges in successfully scaling up and investor challenges to deploying more private capital. The ultimate goal is to stand-up a new (or add to an existing) blended finance and/or technical assistance (TA) facility that catalyzes the right type of private capital, to the right innovators, at the right time to help them scale.

INNOVATOR NEEDS

Scale-up and financing needs tend to be concentrated in early and growth stages. The “missing middle” or the valley of death” refers to the lack of funding between those two stages, the initial promising idea and a viable business model. While exact needs vary by innovator archetype – i.e., whether the innovator is in life sciences/medical devices, service delivery, digital health, or health financing – several common themes emerged:



SCALE UP

Early and ongoing technical assistance tailored to innovator “archetype” and stage

Greater access to industry expertise in the seed and early stage to refine business models and develop commercialization strategies and deep understanding of customer demand

Better connection to talent at key inflection points in the company’s growth

Greater support in the early and growth stages to establish key partnerships (e.g., *manufacturing and distribution networks*) to enter new markets, sell products and services, and navigate the local regulatory environment



FINANCING

More patient (e.g., 5 – 15-year time horizon), flexible (e.g., *convertible notes*), and concessionary capital (*sub-market rate return expectations*) across innovator “archetype” and stage

Greater debt / equity financing at early and growth stages (“*missing middle*”) to transition from proof of concept to early scale (\$1-2M USD ticket size)

Greater short- and long-term debt financing at growth and scale stages to support working capital needs (e.g., *international credit lines, invoice-based financing*)

INVESTOR CHALLENGES

Today very few investors focus on global health innovation exclusively – especially in the critical whitespace (“missing middle”) for early and growth-stage companies who need an average financing of between \$0.25 - \$5M. When investors do play in the space, they concentrate on the growth and mature phases of the innovator journey with average financing ticket sizes of >\$1M when innovators tend to have stronger track records demonstrating business viability and are therefore more “bankable.” Most investors also pursue a multi-sectoral approach given insufficient critical mass of healthcare deals and portfolio risk diversification needs. In addition, they tend to invest opportunistically across innovator archetypes.

The most commonly cited challenge to deploying more capital to promising global health innovators is the mismatch in risk-reward profiles: the real (and perceived) risks are too high for most return-seeking investors relative to other investments. Risks fall into three main categories:



BUSINESS MODEL RISK

Business model risk is the corollary of few innovators successfully navigating the journey from idea to scale. The most commonly cited pitfalls include: unproven products and technology; myopic focus on product and technology and insufficient focus on economics and the path to commercialization; and teams with insufficient strategic, financial, and operational acumen, especially when originating in academia or at nongovernmental organizations (NGOs).



FINANCIAL / TRANSACTION RISK

Emerging markets have greater risk around sourcing, diligencing, executing, and ultimately exiting deals. This drives increased transaction costs – and risk of failure – relative to other opportunities.



MACRO / EXOGENOUS RISK

Complex political, legal, and regulatory structures, fragile IP protection, and weak physical infrastructure undermine the commercial potential of businesses and create a difficult overall investment climate.

INVESTOR CHALLENGES (cont.)

Investors also cite challenges arising from asymmetry of information – i.e., not being able to effectively find promising innovators even when they do exist and challenges in fundraising and securing the right talent for their funds.

Therefore, to effectively deploy more private capital into the space, investors need:

Improved risk-adjusted return profile for promising innovators

Increased technical support to innovators to help them reach a point of “investability” specifically around viable business models that reflect scalability and commercialization (e.g., *market entry strategy, customer segmentation, revenue models, growth plans*).

More blended finance instruments to offset business model, financial market, and/or macro risks to mechanically shift the risk-adjusted return profile for investors to be more in line with expectations (e.g., *subordinated debt, junior equity, guarantees*).

Greater number of market-shaping interventions to create an enabling ecosystem for innovators and investors (e.g., *to help navigate health and policy regulations, manage IP risks, and understand overall local infrastructure*).

Reduced information asymmetry across innovators, investors, and other ecosystem participants

Improved data and knowledge sharing around promising innovator opportunities across the innovator lifecycle from seed, early, growth, to maturity (e.g., *increased data on global health innovation in aggregate, more transparent pipeline of promising innovators*).

Robust network and increased interaction and coordination across relevant stakeholders (e.g., *innovators, investors, governments, development actors, and industry partners*).

Increase support to build the capabilities within funds to effectively invest in global health innovation

Increased technical assistance for investors to help build technical and domain expertise in healthcare investing – for example, to build comfort around investments in new, often complicated medical technologies and to increase understanding of regulatory regimes.

Grant-based support in the early stages of setting up a new global health-focused fund to facilitate talent search and fundraising.

Implications for potential *innovator* and *investor* support opportunities

Five opportunity areas emerged from the needs assessment to potentially enable greater flow of private capital from investors to innovators:

1. **Innovator Curation** (*catalytic capital* + TA): additional capital and technical assistance to promising innovators
2. **New (or support to existing) Impact Investment Funds**: Return-seeking capital with flexible time horizons / hurdle rates
3. **Partnership Curation & Brokerage**: Platforms, convenings, etc. to better match innovators with investors
4. **Investor De-Risking**: Financial instruments (e.g., *1st loss capital*) to improve risk-reward profile for BOP investors
5. **Investor Incubation**: Technical assistance to investors to enable fundraising and improve healthcare-specific investing

Based on a design workshop conducted in conjunction with the Byers Center for Biodesign, Center for Population Health Sciences, and Center for Innovation in Global Health at Stanford University in December 2018 with 40+ innovators, investors, development partners, academics, and other ecosystem participants, we narrowed in on the two most promising prototypes to explore in more detail in this report:



A CATALYTIC
EARLY STAGE
**INNOVATOR
SUPPORT FACILITY**

designed to increase the number of promising innovators successfully navigating the “valley of death” and reaching a point where they can attract and absorb more traditional sources of private capital. This corresponds largely with the Innovator Curation opportunity area but would also include elements of partnership curation. Approximate cost estimates suggest \$115K would be needed annually per innovator over the course of 1-3 years.



A BLENDED FINANCE
& GLOBAL HEALTH
**INVESTOR
SUPPORT FACILITY**

designed to provide low cost risk capital to offset lower risk-adjusted returns in global health and ‘crowd-in’ a wider array of private investors. A network of advisors would also be curated to help augment investor sourcing and diligence – with a focus on filling gaps in healthcare-specific technical and policy acumen. This corresponds primarily with the investor de-risking and investor incubation opportunity areas. It would also include elements of partnership curation and brokerage. Based on existing blended finance facilities, first-loss capital could yield a 3-6x multiplier effect in terms of private capital mobilized relative to non-recoverable capital expended by the facility under a range of realistic return scenarios.

We are still in the early stages of fleshing out the detailed design for each facility. Future work will focus on more robust feasibility analysis, estimates of both commercial and impact ROI, and development of potential operating model options. Yet we are confident that both opportunities have significant potential to enable greater private capital flow to promising global health innovations – thereby increasing the number that successfully scale.

We hope this report serves as a first step in starting a conversation around what it will take, practically, to stand up a concrete facility which can meaningfully further progress towards our shared aspiration of healthy lives and well-being for the world’s most vulnerable populations.

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THE NEED *and* OPPORTUNITY *for* CATALYTIC SUPPORT *to* GLOBAL HEALTH

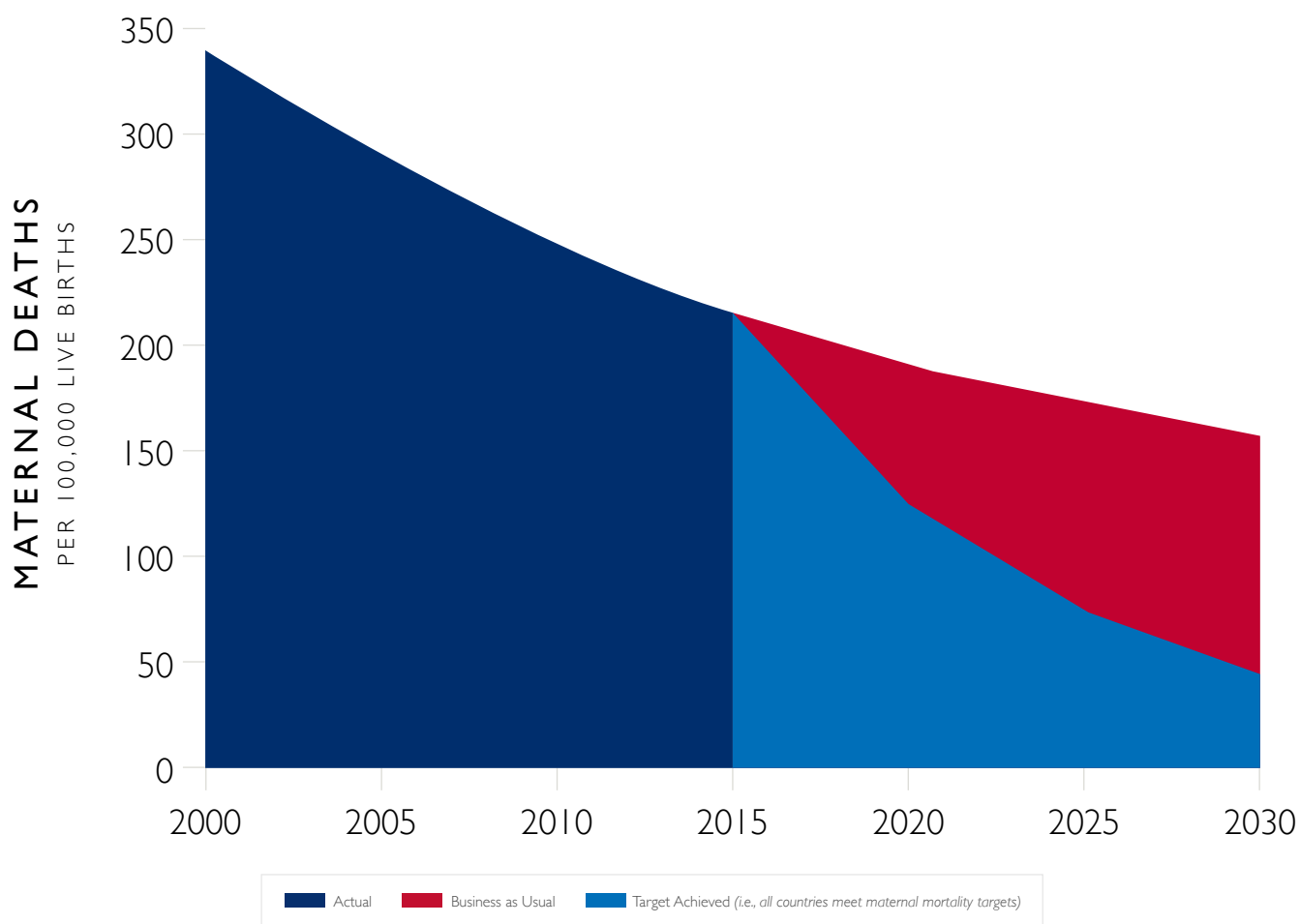
Following on the success of the Millennium Development Goals, the global community has committed to an ambitious set of 17 Sustainable Development Goals (SDGs) through 2030. This includes SDG3 – “to ensure healthy lives and promote well-being for all at all ages.”¹ The goal’s targets include drastic reductions to maternal mortality, ending preventable deaths of newborns and children under age five, and ending the epidemics of AIDs, TB, malaria, and neglected tropical diseases.

However, recent estimates of progress towards attaining these targets present a sobering picture. For example, researchers at the British Medical Journal (BMJ) examined recent trends in child and maternal mortality, combined with population forecasts, to estimate projected mortality levels. Under a “Current Trajectory” scenario global maternal

mortality will fall only to 164 per 100,000 live births, more than twice the 2030 SDG target of 70 per 100,000, and an annual reduction of just 1.5% per year compared to the 2.7% per year reductions observed from 2005 to 2015.²

If we are to meet global health targets, we will need significantly more innovation— from breakthroughs in medical technology to reimagined service delivery models to new forms of health financing. The Commission on Investing in Health (CIH) found that even if today’s health interventions including medicines, vaccinations, bed nets, and diagnostics were scaled up to 90-95% coverage worldwide, we would still fall short of many SDG3 targets.³ Existing approaches simply are not sufficient to expand access to high quality, affordable healthcare to all – particularly the most vulnerable at the base of the pyramid (BOP).

SCENARIOS FOR GLOBAL TRAJECTORY FOR
MATERNAL MORTALITY RATIO TO 2030⁴



¹ UN. UN SDGs ² BMJ, How many lives are at stake? Assessing 2030 sustainable development goal trajectories for maternal and child health, 2018 ³ The Commission on Investing in Health, Achieving a “Grand Convergence” in Global Health: Modeling the Technical Inputs, Costs, and Impacts from 2016 to 2030, 2015 ⁴ BMJ, How many lives are at stake? Assessing 2030 sustainable development goal trajectories for maternal and child health, 2018

We will also need new approaches to development finance, including more effective ways to mobilize private sector capital, to support the innovation needed in global health.

There is an estimated \$2-3T gap annually to meet the 17 SDGs. Since reaching an all-time high in 2013, official development assistance (ODA) for global health has largely remained stagnant (see Figure below). This, coupled with insufficient government spending on health, has resulted in a

\$134 billion annual investment gap for the health SDGs in low- and middle-income countries (LMICs). By 2030, the estimated annual funding gap is projected to be \$371 billion¹. Successfully attracting private capital to support development goals, where commercial returns are also possible, will be crucial to fill the gap.

FIGURE 1
DEVELOPMENT ASSISTANCE
FOR HEALTH
USD BN, GLOBAL (2003-17)²

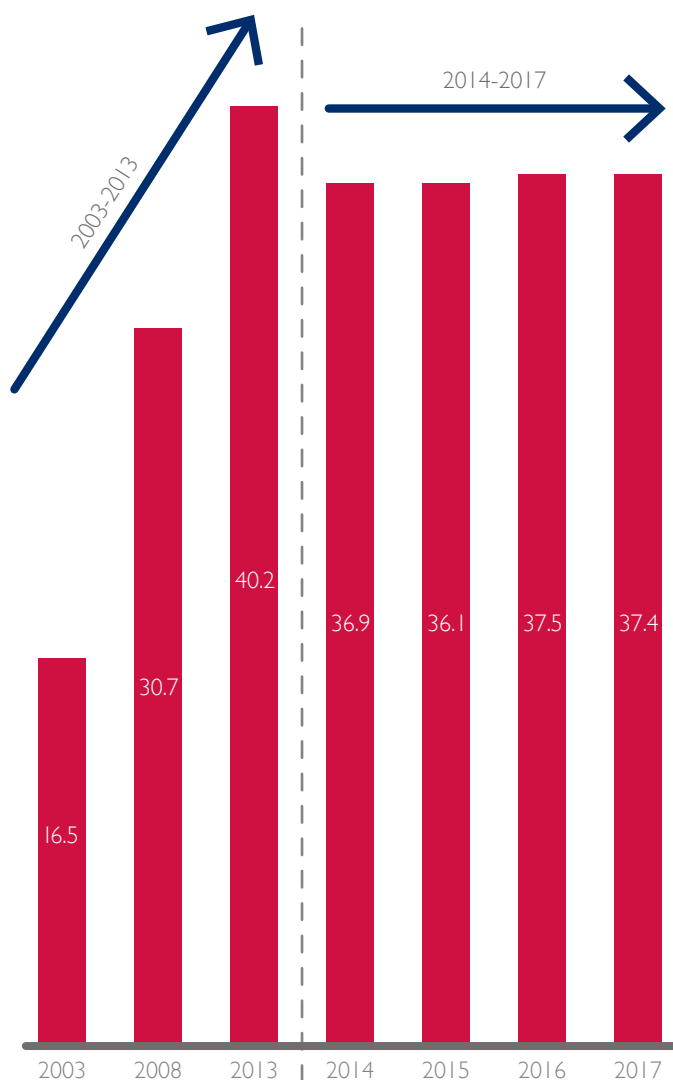
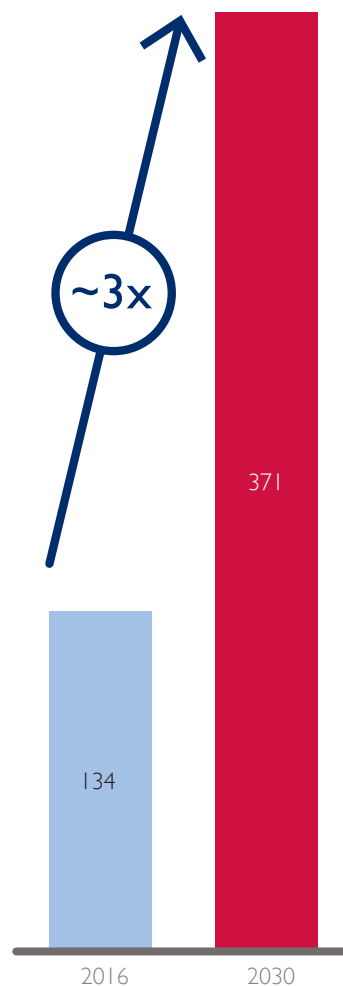


FIGURE 2
ADDITIONAL ANNUAL
INVESTMENT REQUIRED
IN HEALTH
USD BN



Successfully attracting private capital to support development goals, where commercial returns are also possible, will be crucial to fill the gap.

¹ Refers to the collective additional investment needed from all entities (governments, donors, private players) towards health in 2016 and in 2030 in order to meet SDG targets. The final funding gap may be smaller if governments scale up health expenditure. From 'Financing transformative health systems towards achievement of the health Sustainable Development Goals' - WHO report (SDG Health price tag) covering 67 LMI countries (which represents 95% of the total population in LMI countries) ² Financing Global Health (IHME), 2017, p. 25

There is good reason to believe both objectives are possible: that we can successfully increase the number of promising global health innovations that reach scale and that we can attract more private capital to play a role supporting innovators on that journey.

On the innovation side, thousands of innovators are emerging in diverse settings from academic and medical research institutions, to corporate life sciences divisions, to local communities across the developing world. When these innovators sustainably scale, they can have a transformative impact delivering quality care to base of the pyramid

populations. To cite just a handful, the Aravind Eye Care System has performed more than 4M low-cost cataract surgeries to date in India, while an estimated 450M cases of malaria have been prevented as a result of PermaNet long-lasting insecticide treated bed nets (LLINs).

HEALTHCARE INNOVATIONS HAVE IMPACTED HUNDREDS OF THOUSANDS OF LIVES.

These innovations deliver critical primary & secondary care services ...

750,000

antenatal care check-ups
provided over five years by the
Merrygold Health Network in India

450,000

outpatients seen per year
at CARE multi-specialty
hospitals in India

... improve emergency & specialty care ...

100,000,000

people covered by
Ziqitza ambulance services,
with 4M patients transported to date

4,000,000

low-cost cataract surgeries
performed to date by
Aravind in India

... and result in life saving products.

2,000,000,000

KI single-use syringes
manufactured to date, lowering
risk of syringe reuse and
contamination

450,000,000M

estimated cases of malaria
prevented from use of long-
lasting insecticide-treated bed
nets like PermaNet

Source: company websites

On the private capital side, significant capital remains on the sidelines. Mobilizing just 1% of the \$200T currently in capital markets would fill the entire financing gap for all 17 SDGs.¹ Perhaps more importantly, investors are increasingly interested in deploying private capital for impact. The total US domiciled AUM using Environmental, Social, and Governance (ESG) criteria has grown from \$2T in 1999 to \$12T in 2018 and today represents ~26% of all professionally managed US

assets.² Impact investing has been buoyed by the Millennial and Gen X generations, 77% and 72% of whom have made some form of impact investment respectively, compared with just 30% of affluent donors in the Baby Boomer and older generations.³ This tailwind is set to continue as more Millennials reach their prime earning years; by 2020, the aggregate net worth of Millennials is expected to reach ~\$24T, nearly double 2015 levels.⁴



● **\$5-7 T²** Estimated annual cost to achieve the 17 Sustainable Development Goals (SDGs)

● **\$2.5 T³** Estimated annual investment gap to meet the SDGs by 2030

MOBILIZING JUST

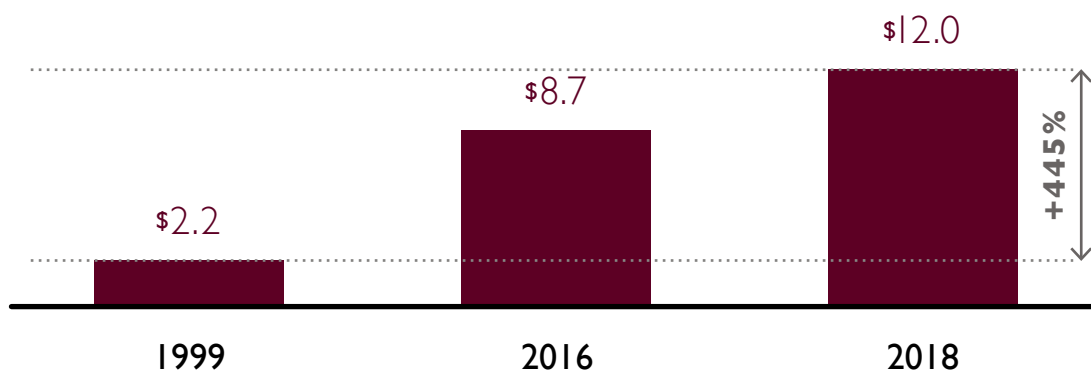
1%

of **GLOBAL CAPITAL MARKETS** would fill the **ENTIRE SDG GAP**

—

and less than 1/2% would fill the gap for **HEALTH-ONLY SDGs**

GROWTH OF US-BASED ESG INVESTMENT¹ IN USD (TRILLIONS)



¹ US SIF Foundation, 2018 Report on US Sustainable, Responsible and Impact Investing Trends ² UNDP, Impact investment to close the SDG funding gap, 2017 ³ GLIN, Roadmap for the Future of Impact Investing: Reshaping Financial Markets, 2018

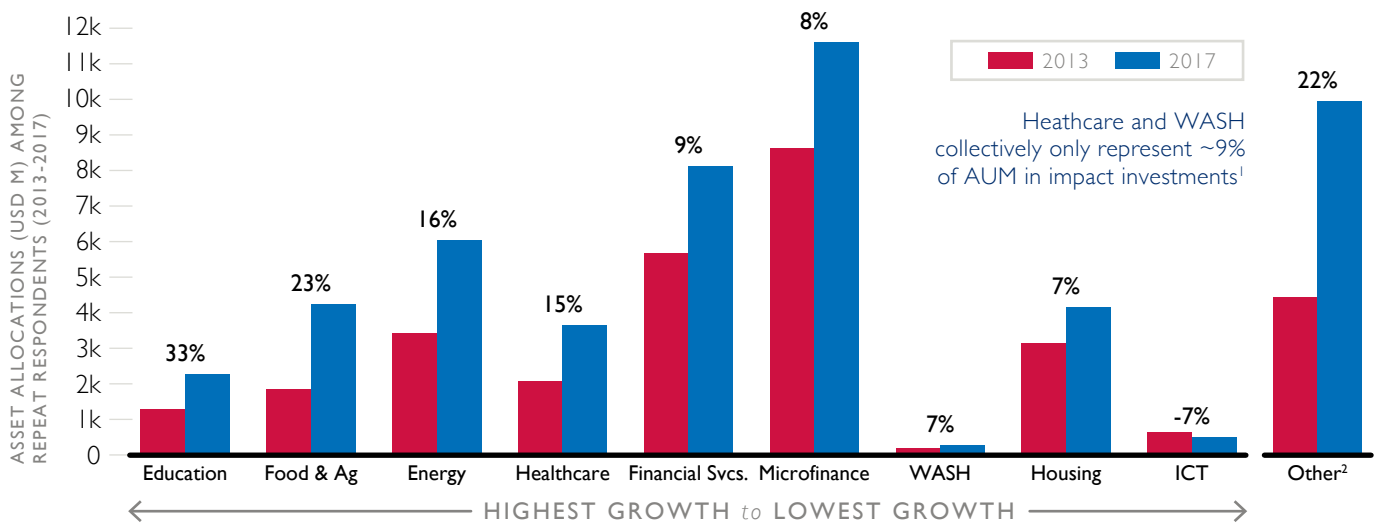
However, private investment in global health innovations – even those with commercial potential – remains nascent today. While limited data exists on total aggregate private capital flows to global health innovations, particularly those targeting the base of the pyramid populations, we can get a sense of the scope and direction from the Global Impact Investment Network’s annual surveys. Among investors surveyed, only 9% of total AUM were allocated to healthcare and water and sanitation. Interest in investing in healthcare is growing, as evidenced by the 15% annual growth rate between 2013 and 2017; WASH investment was among the lowest growth sectors at just 7% per year. Yet growth lags behind sectors like education, food and agriculture, and energy which have seen annual growth between 16-33% in recent years as commercially interesting opportunities increasingly align with development agendas. Investors cite several unique barriers to healthcare which inhibit increased deal activity. First the commercial market for healthcare remains relatively underdeveloped given often longer lead times for approvals combined with uncertainty around end customers; this reduces available deal flow. Investors also remarked that the level of domain and technical expertise, as well as local regulatory knowledge, is comparatively higher in healthcare – just as it is in developed markets.

“Investors tend to invest in what they know and while they may be interested in the space, the threshold of healthcare knowledge they need to be comfortable to invest is very high.”

HEALTHCARE
IMPACT INVESTOR

GROWTH IN INVESTOR SECTOR ASSET ALLOCATIONS¹

2013 - 2017 CAGR*



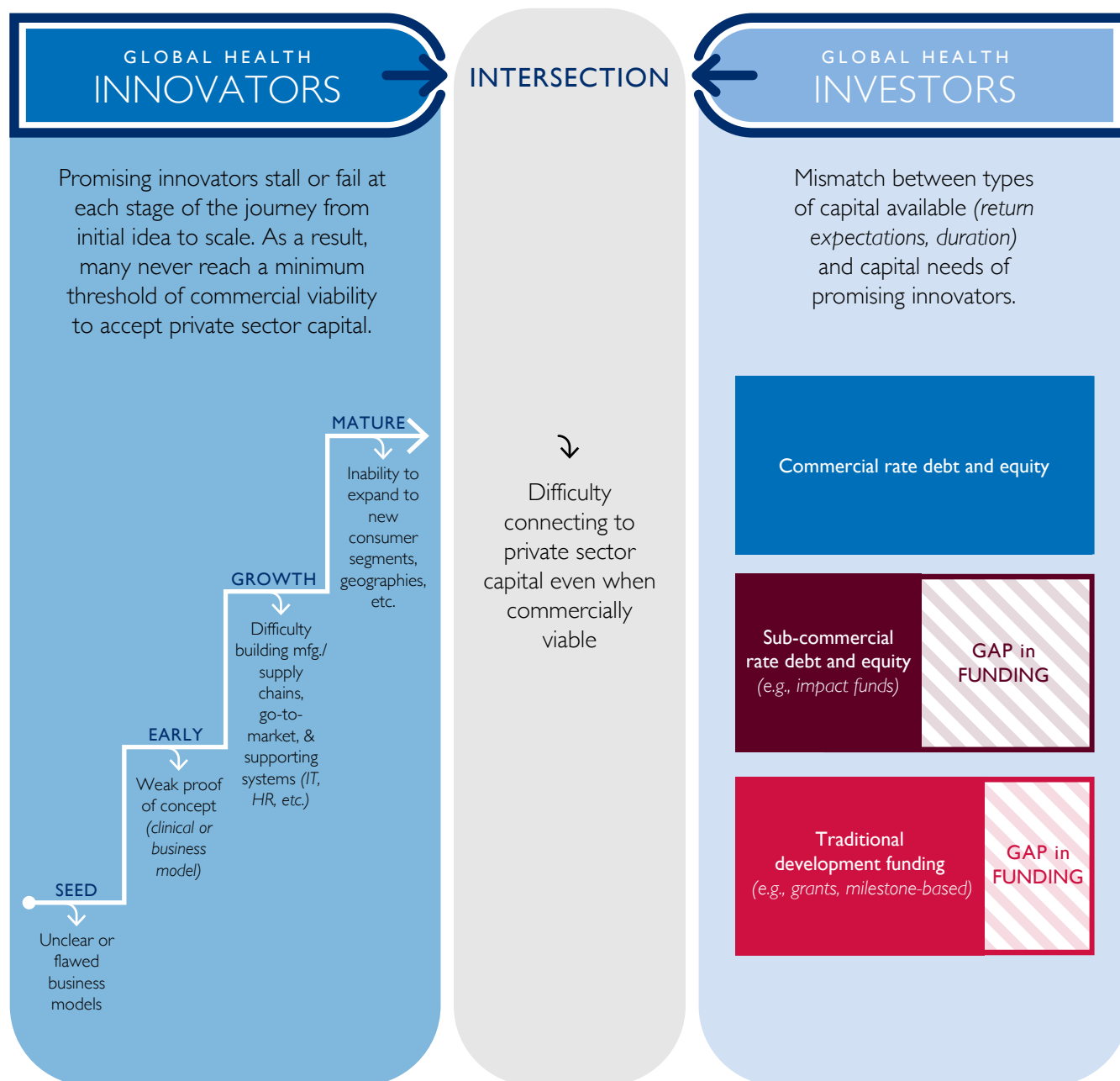
“The biggest challenge is that the path to commercialization in various countries is unclear. The second big problem is that regulations surrounding healthcare are very unclear and when companies get into innovation phase, they don’t know how much money and time it will take to go through regulation.”

HEALTHCARE IMPACT INVESTOR

*Compound Annual Growth Rate. 1. GIIN, Annual Impact Investor Survey 2018, based on 81 respondents that provided data for 2013 and 2017 and shared AUM data. 2. Other sectors includes arts & culture, conservation, infrastructure, and manufacturing.

The challenges to mobilizing more private sector capital for global health innovation occur on both sides of the innovator and investor divide: **1)** Promising innovators stall or fail at each stage of the journey from initial idea to scale. As a result, many never reach a minimum threshold of commercial viability to accept private sector capital. In other words, investors do not perceive there to be sufficient deal

flow of innovators with risk-adjusted return profiles that are attractive relative to other investments they could be making. **2)** There is a mismatch between types of capital available (return expectations, duration) and capital needs of promising innovators at each stage of the innovator journey. Moreover, investors in healthcare in particular struggle due to lack domain and local markets expertise.



As a result, not enough promising innovators are reaching sustainable scale, limiting their potential impact extending high quality, affordable health care to BOP populations.

Acumen Fund, "From Blueprint to Scale: The Case for Philanthropy in Impact Investing," April 2012

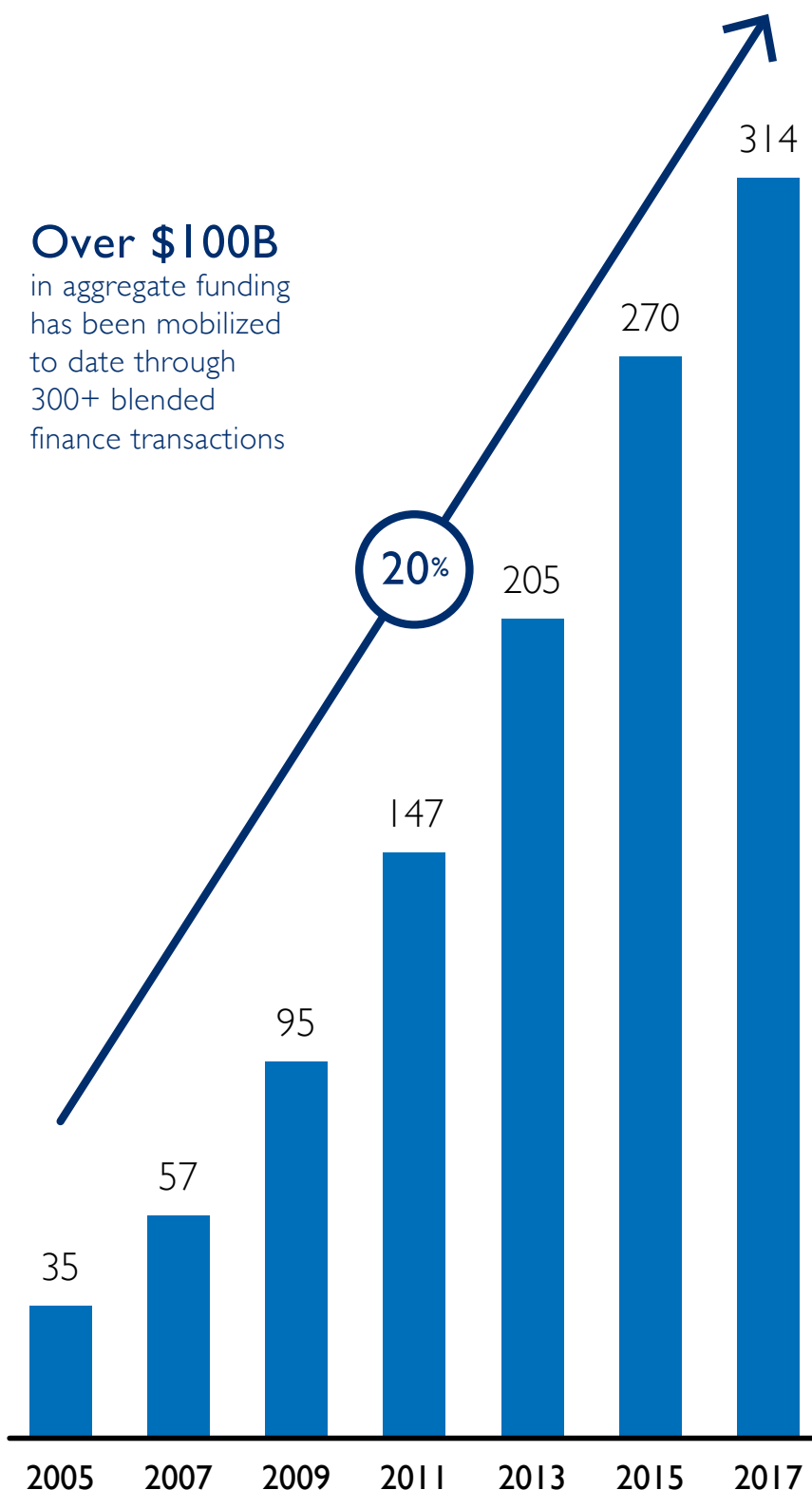
Blended finance offers one promising avenue to fill the gap in global health investment. Blended finance refers to the strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets.

Development and/or philanthropic funding can be used to de-risk investment and improve the overall risk-adjusted return of global health investments, bringing it in line with investor expectations. Blended finance makes use of existing financial instruments and can focus de-risking on either side of the innovator and investor divide. For example, targeted technical assistance and catalytic grant capital can be provided to promising innovators who are just under the threshold of minimum viable business model sustainability; by allowing such innovators to refine strategies and begin to gain revenue or income traction, such support reduces perceived business model risk relative to potential return.

On the other side of the spectrum, development funders can provide de-risking instruments directly to funds at the fund or deal level in the form of guarantees, junior equity, or subordinated debt; by providing a tranche of capital with asymmetric exposure to risk – typically capped returns and/or first loss capital, development funders can help mechanically bring risk-adjusted returns in line with a wider set of private investors' expectations.

BLENDED FINANCE TRANSACTIONS CUMULATIVE DEAL COUNT¹

2005 - 2017



¹ [The State of Blended Finance](#), Convergence, 2018

\$1.00

IN DEVELOPMENT DOLLARS
INVESTED IN A BLENDED
FINANCE STRUCTURE

FOR
EVERY

\$4.10

IN PRIVATE SECTOR
CAPITAL MOBILIZED

POTENTIAL TO MOBILIZE PRIVATE CAPITAL FOR GLOBAL HEALTH 2030 ESTIMATES (USD BILLIONS)



For development and philanthropic funders, blended finance offers leverage – that is a clear multiplier effect for every development dollar invested. Based on a sample of 72 different blended finance funds or fund-like structures, development funders were able to ‘crowd-in’ ~\$4.10 of private sector capital for every \$1 of development funding. Perhaps not surprisingly given investors’ increasing interest in investing for impact, and the possibility of receiving returns near or in-line with commercial rates, blended finance is rapidly gaining traction – with over \$100B in financing mobilized to date. However, as is the case in the overall impact investment space, blended finance facilities focused on healthcare remain a small proportion of the total – just 5% of all deals, compared to 29% in financial services, 24% in energy, and 10% in agriculture.

Yet we believe there is significant opportunity to enable more private capital flow to global health innovations through targeted development and philanthropic funder efforts to stand up new blended finance facilities.

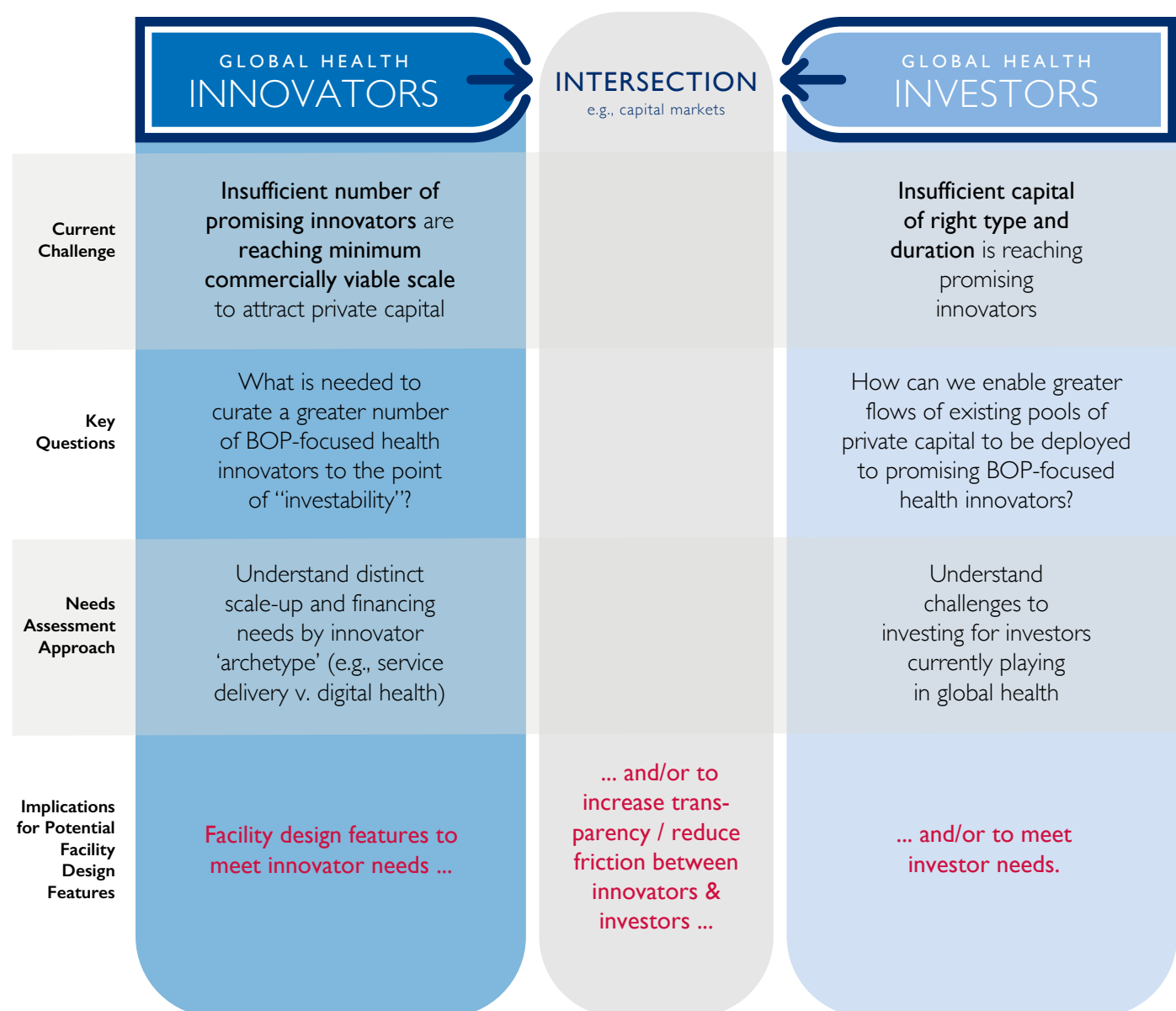
Indeed, if current annual growth rates continue, private capital mobilized through blended finance will total \$252B USD by 2030¹. Even if the total allocated to the health sector remains at 5%, this represents an additional \$13B for health funding (~60% of total annual ODA for health)².

¹ “Blended Finance: Understanding its potential for Agenda 2030” Development Initiatives 2016 ² Total ODA funding approximately 21.5B in 2017 for health and population policy / reproductive health services. “Aid (ODA) by sector and donor” OECD dataset

This report builds on the USAID Center for Innovation and Impact's 2017 "Investing for Impact" Report, which identified non-traditional financing tools that could be deployed for global health. The objectives of this needs assessment are to understand both innovator challenges in successfully scaling their solutions and investor challenges to deploying more capital – and implications for a potential support facility that could address these challenges. The ultimate goal is to stand-up a new (or add to an existing) blended finance and/or technical assistance facility (in partnership with others) that catalyzes the right type of private capital, to the right innovators, at the right time to help them scale.

The first section will present findings from ~25 interviews with innovators across life sciences and medical devices, service delivery, digital health, and health financing to understand their distinct scale-up and financing needs at each stage in the innovator journey – and the greatest pain points today. The second section will present findings from ~30 interviews with investors and intermediaries to understand the difficulties in investing more capital in promising global health innovators. The final section will present several opportunity areas that emerged to address innovator and investor pain points – and will share two high level prototypes for an innovator post-investment technical assistance facility or an investor blended finance facility.

OVERALL GOAL: Catalyze private sector capital to global health innovators focused on Base of the Pyramid (BOP) populations – to increase number of promising innovators who reach sustainable scale, ultimately improving access to high quality, affordable health care for BOP populations.



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INNOVATOR LANDSCAPE *and* NEEDS ASSESSMENT

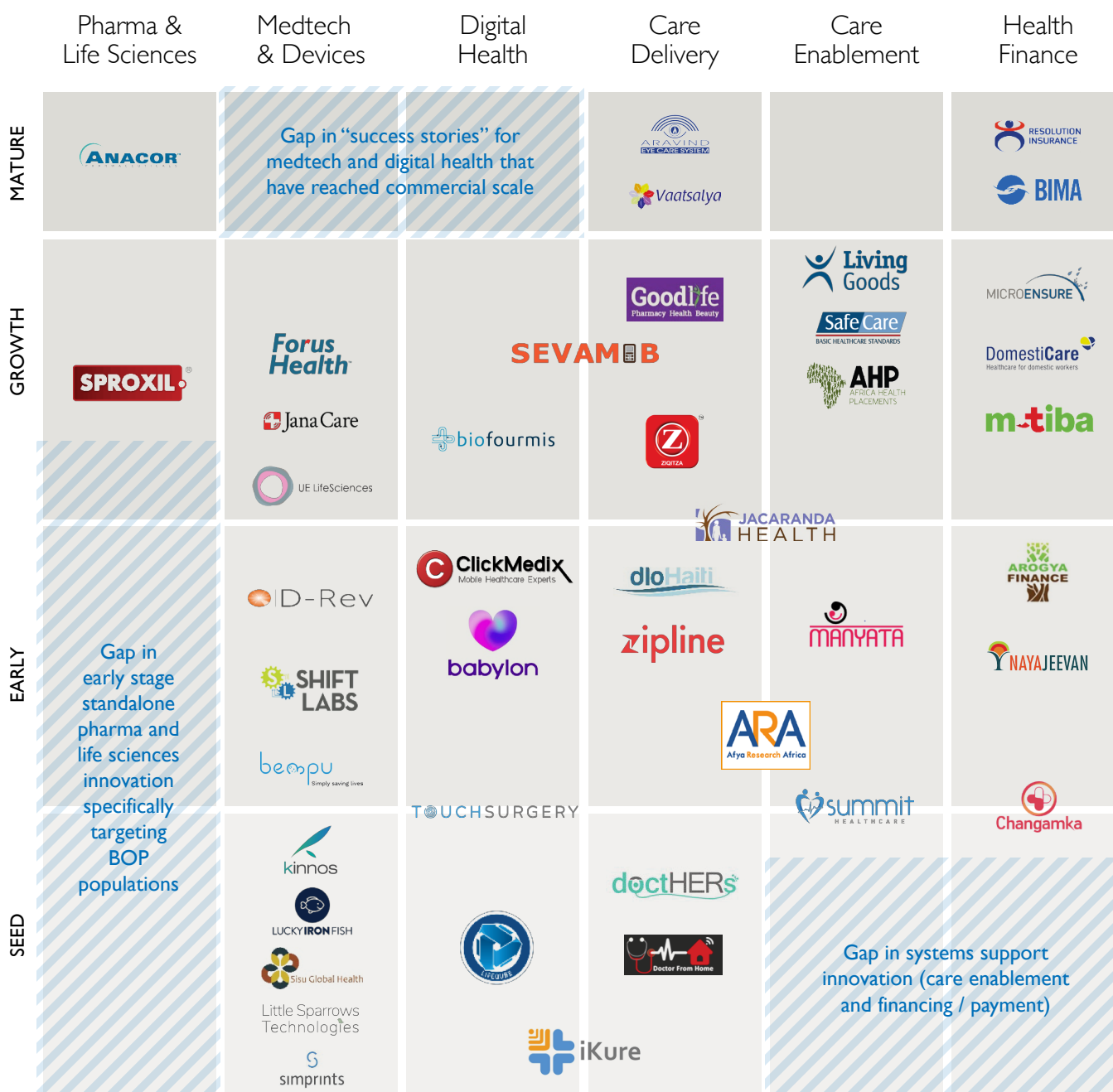
This needs assessment gathers insights from promising global health innovators across a mix of **innovation type**, including pharma and life sciences, med tech/ devices, digital health, care delivery, care enablement, and health finance, as well as across innovation stages, ranging from seed stage to mature innovators.

A few key findings reveal gaps across innovation type and stage:

- > There is a gap in early stage standalone pharma and life sciences innovations specifically targeting BOP populations
- > There is a gap in systems support innovations (care enablement and health finance)
- > There is a limited number of med tech and digital health innovators

that have reached commercial scale, compared to other innovation types

We interviewed a subset of 25 innovators from the larger landscape of innovators in the figure below to take a deeper dive into the innovator needs.



1 Stage approximated based on funding rounds, number of employees, years of operation, or self-designation where available. 2 Most financing and payment systems are enabled using mobile or digital platforms. Source: Saving Lives at Birth portfolio; Innovations for Healthcare cohorts; investor portfolios; Dalberg analysis.

Number of Innovators Interviewed by Geography¹



Of the 25 innovators we spoke to, we were able to scan across geographic regions to identify “hotspots” of innovation activity. We found that most innovation activity occurs among innovators targeting South Asia and East Africa, although only a handful of these innovators were local and/or community-based.







¹ Some innovators counted in multiple geographies. Source: innovator interviews; Dalberg analysis

We also considered their origin to understand if they started as an academic idea, from NGOs, as social enterprises, or as more traditional startups. A majority of innovators we interviewed started as in-country NGOs before pivoting to a for-profit model; the remaining were distributed across academia, social enterprises, and for-profit start-ups.



Source: innovator interviews; Dalberg analysis

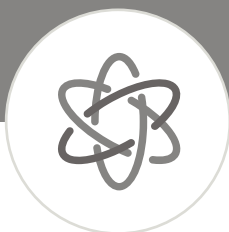
We then segmented the innovator landscape into four archetypes based on innovation type, offerings, customers, economics, and core competencies. This helped us understand targeted needs of innovators by archetype.

						
	Pharma & Life Sciences	Medtech & Devices	Digital Health	Care Delivery	Care Enablement	Health Finance
OFFERING	Development of drugs and vaccines for disease burden	Development of tools / devices for diagnostics and treatment	Digital tools for providers, patients, and broader systems	Provision of care by health care providers to patients and supporting supply chains	Ancillary finance, HR, operations support for health providers / systems	Insurance, medical loans, and health savings wallets
CUSTOMERS	Donors Government Payers	Donors Providers Government Payers	Donors Consumers Providers Government	Donors Consumers Payers	Donors Providers	Consumers Employers Government
ECONOMICS	High failure rates and long time horizons (e.g., R&D, clinical trials), resulting in high up front costs High fixed costs and low unit costs at scale; typically high unit margins if receiving patent protection	Low to medium up front costs for R&D & prototyping High fixed costs at scale; unit costs depend on low v. high resource settings	Lower up front costs Low marginal costs at scale Lower unit economics	Lower up front costs Linear capital requirements (e.g., to open new clinics) Typically lower unit margins	Lower up front costs Linear capital requirements (e.g., to expand training to new clinics) Typically lower unit margins	Lower up front costs Low marginal costs at scale Lower unit economics
CORE COMPETENCIES	R&D Regulatory approvals Scale manufacturing Sales & distribution (typically via channel partners)	Prototyping and new product development Regulatory approvals / IP Scale manufacturing Sales / distribution	Software engineering talent IP protection Digital marketing	Local market navigation (e.g., real estate) People (HCPs and support) Operations / process mgmt.	People Operations / process mgmt. IT systems / support	Software engineering talent Actuarial / pricing Digital marketing

Source: innovator interviews; Dalberg analysis

SCIENCE-LED INNOVATORS

can find success with low-cost medical devices,
especially those that target dual markets



Unit cross-subsidization from
high income markets to low
income markets

Low cost devices engineered
for a target market in low
resource settings

Advanced market
commitments via public private
partnerships (PPPs) for pharma
and life science innovations

*Deprioritized pathway: Life sciences typically
require years of R&D subsidized by donors
before reaching commercial viability*

COMMERCIAL
PATHWAY



EXAMPLE
INNOVATOR

SEED EARLY GROWTH MATURE



HICs; 8 LMICs¹

SEED EARLY GROWTH MATURE



12 LMICs²

SEED EARLY GROWTH MATURE



HICs; all LMICs

STAGE &
GEOGRAPHY

Lucky Iron Fish

developed a cast iron
cooking utensil for iron
deficiency anemia

~30% of proceeds from
each sale in HICs subsidize
sales to NGO distributors
in LMICs

It has attracted investors
interested in its HIC
growth potential

UE Lifesciences developed
the low-cost, portable
iBreastExam breast cancer
screening device specifically
for health workers in low-
resource settings

Health workers have
screened 200,000 women
across 12 countries to date
using the device

Anacor Pharmaceuticals

found applications for its
boron-based compounds
against several neglected
tropical diseases (NTDs)

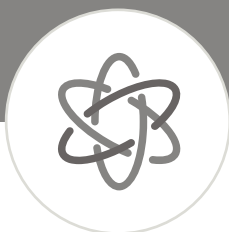
Philanthropic grants and
a product development
partnership (PDP) with an
NGO provided non-dilutive
financing for Anacor to pursue
R&D in this field over the next
5-10 years

DESCRIPTION

¹ DRC, Haiti, Mozambique, Nicaragua, Pakistan, Peru, Somalia, and Uganda. Source: innovator interviews; company websites

SCIENCE-LED INNOVATORS

need critical support at the early stage to develop robust commercialization strategies for their products to allow them to grow successfully and enter markets



SEED



EARLY



GROWTH



MATURE



BUSINESS JOURNEY

A small team of academics or social entrepreneurs develops a new, low-cost medical device prototype (e.g., *DripAssist infusion monitor*)

The team secured initial grant funding through startup competitions to test the product

Program mentors provide initial contacts (e.g., *hospital chains*) for in-country market trials

Team tests different commercialization strategies (e.g., *selling to providers directly*)

Team closes first pre-revenue VC round, securing growth equity

Influx of growth capital allows team to expand product sales to new geographies, and establish local operations in other countries

Short-term working capital helps meet daily operational demands (e.g., *paying input suppliers, channel partners*)

Company secures procurement contracts from public partners, cementing place in global supply chain

Company experiments with new product lines after initial market is saturated



TECHNICAL ASSISTANCE NEEDS


Initial R&D and product development
Early clinical trials and data collection

Business strategy to transition from "new tech" to a viable commercial model 

Partnerships with mfg. and distributors for market trials

Regulatory approval in new markets

Large-scale mfg., sales, & distribution partners

Local c-level executive talent to lead scale-up 

Public private partnerships (PPPs) and other public procurement options

Support for continued growth / product development



FINANCING NEEDS

Smaller grants for med tech product development (\$0.1 – 0.25M USD)

Access to private sector investors

Flexible, pre-revenue mezzanine or equity instruments (e.g., *convertible notes*) to fund scale-up (\$1 – 2M USD)

Equity instruments to continue international scale-up (\$2 – 3M USD)

Secure line of short-term working capital (e.g., *invoice-based financing*) to smooth cash flow and support daily operations

Secure lines of long-term working capital to support business growth

PE, M&A, public offering, or other exit opportunities (if no new product development)

KEY | Greatest pain points | Innovation businesses recognized for their disproportionate difficulty:  Academics  NGOs  Social Enterprise  Startups

Source: "From Blueprint to Scale: the Case for Philanthropy in Impact Investing" Acumen Fund, BMGF, and Monitor Group 2012; innovator interviews; Dalberg analysis

DIGITAL HEALTH INNOVATORS

typically pursue B2B services to find a viable commercial segment



Cross-subsidization from HICs to cover overhead or upfront development costs before reaching low marginal costs for LMICs

Provider and systems-centric apps which monetize via enterprise subscription / licensing fees

High volume consumer-centric apps which monetize via minimal user fees, data acquisition, or digital marketing; can be in concert with health insurance of corporate plans

Deprioritized pathway: While a standard commercial strategy for digital platforms in HICs, few successful examples in LMICs

COMMERCIAL
PATHWAY

TOUCHSURGERY

ClickMedix
Mobile Healthcare Experts

babylon

EXAMPLE
INNOVATOR

SEED EARLY GROWTH MATURE



HICs; East Africa

SEED EARLY GROWTH MATURE



18 LMICs

SEED EARLY GROWTH MATURE



Rwanda, UK, Canada; plan to expand to US, China, & SE Asia

STAGE &
GEOGRAPHY

Digital Surgery developed 250+ surgical training modules for practicing surgeons in US / UK markets

They offer their module at a low cost to academic hospitals to improve MCH in East Africa

They have raised \$30M in VC funding to date to pursue VR-based modules in HICs, which will likely lead to uses cases in LMICs as well

ClickMedix offers a subscription or licensing model to providers for their comprehensive mHealth and enterprise software platform

The startup has experimented with multiple pricing models (e.g., per user pricing, SaaS, lump sum lifetime license) and tailors pricing to the local context across the 18 countries where they are active

Babylon is a virtual health services provider that provides AI-enabled triage and human medical expertise directly to consumers via smart and feature phones, as well as provider-mediated at the point of care

Through its partnership with the Government of Rwanda and its national health insurance plan, Babylon has over 2M subscribers (~30% of adult population)

To date, they have raised \$85M in VC funding; multiple planned paths to monetization including user fees in HICs, provider subscriptions, and integration with insurers / employer plans

DESCRIPTION

Source: interviews; company websites

DIGITAL HEALTH INNOVATORS

need support to develop monetization strategies in low-resource settings



SEED



EARLY



GROWTH



MATURE



BUSINESS JOURNEY

A young tech start-up develops an innovative digital platform (e.g., AI-enabled chatbots) with applications for BOP

Small grants allow the venture to experiment with platform version geared toward low resource settings (e.g., content customization, SMS compatibility)

Team tests platform through initial market trial with academic or NGO partner

Capital influx from venture equity pushes team to test different adoption (e.g., B2C, B2B) & monetization strategies (e.g., freemium, ad-based) in both HICs and LMICs

Growth takes off rapidly as larger provider chains adopt the product across multiple countries

Margins from higher-income countries continue to subsidize low-resource settings


Series B and C rounds fund further software development

Platform gains market share across countries and establishes itself as industry standard



TECHNICAL ASSISTANCE NEEDS

Rapid platform development, user testing, and iteration

Top technical talent (particularly in AI-related platforms) 

Development of a GTM (go-to-market) adoption and monetization strategy 

Partnerships (e.g., service bundling) to bring product to market

Marketing team to support GTM strategy

New market entry support (e.g., content customization, cultural context)

IP protection for proprietary software

Local exec-level talent (e.g., COO) in new markets

Strong consumer awareness and demand for product to build a "network effect"



FINANCING NEEDS

Smaller grants for platform development (\$0.1 – 0.25M USD)

Access to private sector investors (e.g., angels,) with knowledge of BOP markets and tolerance of sub-market rate returns

Flexible, pre-revenue equity instruments to fund rapid scale-up (\$1 -2M USD)

Equity instruments to continue international scale-up (\$2 – 3M USD)

Secure line of short-term working capital to smooth cash flow and support daily ops

Longer-term working capital (\$3 – 5M USD) to support business growth

KEY | **Greatest pain points** | Innovation businesses recognized for their disproportionate difficulty:  Academics  NGOs  Social Enterprise  Startups

Source: "From Blueprint to Scale: the Case for Philanthropy in Impact Investing" Acumen Fund, BMGF, and Monitor Group 2012; innovator interviews; Dalberg analysis

SERVICE DELIVERY INNOVATORS

pursue B2B and B2C services to find a viable commercial segment



Low cost care delivery typically via focus on high volume, repeatable, less talent-constrained services

Disruption of profit pools by vertically integrating end-to-end care provision

High-quality care (with consumer brand recognition) delivered at a reasonable cost through tech-enablement

Ancillary B2B services targeting health care providers (e.g., health worker training, billing support, janitorial svcs)

Deprioritized pathway: Low ability and/or willingness to pay among microenterprises in current environment

COMMERCIAL PATHWAY

EXAMPLE INNOVATOR

STAGE & GEOGRAPHY

DESCRIPTION



SEED EARLY GROWTH MATURE



East Africa

SEED EARLY GROWTH MATURE



India

SEED EARLY GROWTH MATURE



Mexico

SEED EARLY GROWTH MATURE



East Africa

Jacaranda Health focuses on high-quality maternal healthcare and childbirth services in Kenya

Focusing on MCH services has provided it with a steady consumer base in a large footfall area (i.e., Nairobi) and allowed the first facility to reach breakeven

Aravind dramatically lowered the cost of providing ophthalmology services by gaining control over the supply chain

Aravind continues to provide low-cost cataract surgery across India today, and is one of the most successful examples of BOP health innovation to date

Reina Madre Clinicas de la Mujer offers comprehensive maternity care services at 30 – 40% of the cost of other private clinics

Its “new age” clinics focus on quality to build strong customer brand awareness and loyalty
Each clinic reached breakeven in less than six months

Living Goods pursued a for-profit model in which it trained community health workers to sell medical supplies door-to-door in an “Avon” model

Living Goods deprioritized returns and pivoted to a broader health systems approach after initial efforts brought below-cost returns

Source: interviews; company websites

SERVICE DELIVERY INNOVATORS

specifically need debt and patient return expectations that allow for more linear scale-up



SEED



EARLY



GROWTH



MATURE



BUSINESS JOURNEY

A local innovator identifies a concrete need in his or her community (e.g., *cataracts, maternal care*) and begins to offer these services

Grant support from philanthropic actors allows the pilot to grow into a larger non-profit or social enterprise

Initial pilot sites slowly reach breakeven as org develops a reputation for high quality service at an affordable price among middle-income consumers

Positive cash flows and / or real estate ownership allow team to secure asset-backed lending


Team eyes country / regional expansion and offers new services (e.g., *digital wraparound services*) at existing sites as it pivots to for-profit model

New sources of growth capital (e.g., *equity, results based financing*) fund expansion

Once established, company competes with legacy players in the health system on both price and quality



TECHNICAL ASSISTANCE NEEDS

Founding team member with local community presence 


Initial pilot site(s) demonstrating successful service delivery

Breakeven unit economics at pilot site, and strategy to replicate success

Consumer acquisition and brand recognition among middle income and BOP consumers

Brick and mortar expansion into new geographies (e.g., *real estate acquisition*)

Skilled local health talent

Full breadth of administrative business capabilities (e.g., *finance, IT*) 

Competitive response strategy with a continued emphasis on cost, value, and pricing




FINANCING NEEDS

Medium-size grants to establish pilots (\$0.25 – 0.5M USD)

Access to non-traditional investors (e.g., *family offices*) with sub-market ROI expectation

Patient debt products, (\$1 - 2M USD ticket size, 5+ year term horizon) 

Patient debt or equity products for growth (\$2 – 3M USD)

Results-based financing (e.g., *social/development impact bonds*) to unlock funding 

Short-term working capital to smooth cash flow and daily ops

Longer-term working capital (\$3 – 5M USD ticket size)

KEY | *Greatest pain points* | Innovation businesses recognized for their disproportionate difficulty:  Academics  NGOs  Social Enterprise  Startups

Source: "From Blueprint to Scale: the Case for Philanthropy in Impact Investing" Acumen Fund, BMGF, and Monitor Group 2012; innovator interviews; Dalberg analysis

HEALTH FINANCE INNOVATORS

can replicate successful models from other industries



Employer-centric insurance or health savings platforms that take advantage of a B2B model

Expansion of successful MFI services to healthcare payments and financing

Use of digital platforms to lower operational costs and/or monetize (e.g., through data collection and analytics)

COMMERCIAL
PATHWAY



EXAMPLE
INNOVATOR

SEED EARLY GROWTH MATURE



South Africa

SEED EARLY GROWTH MATURE



India

SEED EARLY GROWTH MATURE



Kenya

STAGE &
GEOGRAPHY

Domesticare in South Africa provides a platform for employers to purchase health insurance for domestic workers. The platform provides services to lower-income consumers by targeting high-income clients to purchase or subsidize these services for domestic workers, unlocking a new class of payers in the health system.

Arogya Finance (AF) repurposed novel risk models from the MFI model to make medical loans to consumers without assets in India. The startup uses a combination of psychometric tests and personal visits to assess user risk, with a 96% repayment rate to date among BOP consumers. AF is now targeting expansion across several Indian states.

MTIBA is a digital health wallet associated with the M-Pesa mobile money platform that allows its IM+ users to save for medical expenditures. The platform plans to allow donors and government to target health vouchers to specific groups, and to then collect data on health outcomes for results-based outcome payments. MTIBA is experimenting with a big data strategy to further monetize the platform.

DESCRIPTION

Source: interviews; company websites

HEALTH FINANCE INNOVATORS

need support navigating the cumbersome regulatory hurdles of local healthcare markets



SEED



EARLY



GROWTH



MATURE



BUSINESS JOURNEY

Experienced fintech entrepreneurs consider health insurance and/or financing as a promising new market opportunity

The team builds a digital platform and leverages an existing pool of capital from other business lines to begin service delivery

Team deploys product through partners (e.g., hospital and clinic chains) and gathers data to improve financial models (e.g., *repayment rates, actuarial risk*)

Fintech equity investors push team to deliver returns in line with expectations for other fintech start-ups

Risk/pricing model bears out and team targets rapid customer acquisition and international scale-up

A secure line of short-term working capital allows team to shuffle cash flows across country borders to meet payout needs at different times

Platform gains market share across countries and establishes itself as industry standard



TECHNICAL ASSISTANCE NEEDS

Rapid platform development

Knowledge of financial mgmt. (e.g., *actuarial models*) for appropriate pricing / risk weighting 🌐

Breakeven economics within 1-2 years of operation

Initial partnerships with healthcare players to bring product to market

Marketing team to support GTM strategy

Market-specific knowledge of finance and health regulatory affairs (e.g., health data privacy laws)

Local exec-level talent (e.g., COO) to oversee scale into new market

Strong consumer awareness and demand for product to build a "network effect"



FINANCING NEEDS

Large initial pool of capital for consumer lending / financing (~\$1M USD) 🌐

Impact investors with unique mix of finance and healthcare industry expertise 🌐

Secure line of short-term working capital (\$1 - 2M USD) to backstop initial lending

Venture equity for scale to new markets (\$2 - 3M USD)

"Internationally savvy" short-term working capital to meet payment needs

"Internationally savvy" long-term working capital

KEY | *Greatest pain points* | Innovation businesses recognized for their disproportionate difficulty: 🎓 Academics 🌐 NGOs 🌐 Social Enterprise 🚀 Startups

Source: "From Blueprint to Scale: the Case for Philanthropy in Impact Investing" Acumen Fund, BMGF, and Monitor Group 2012; innovator interviews; Dalberg analysis

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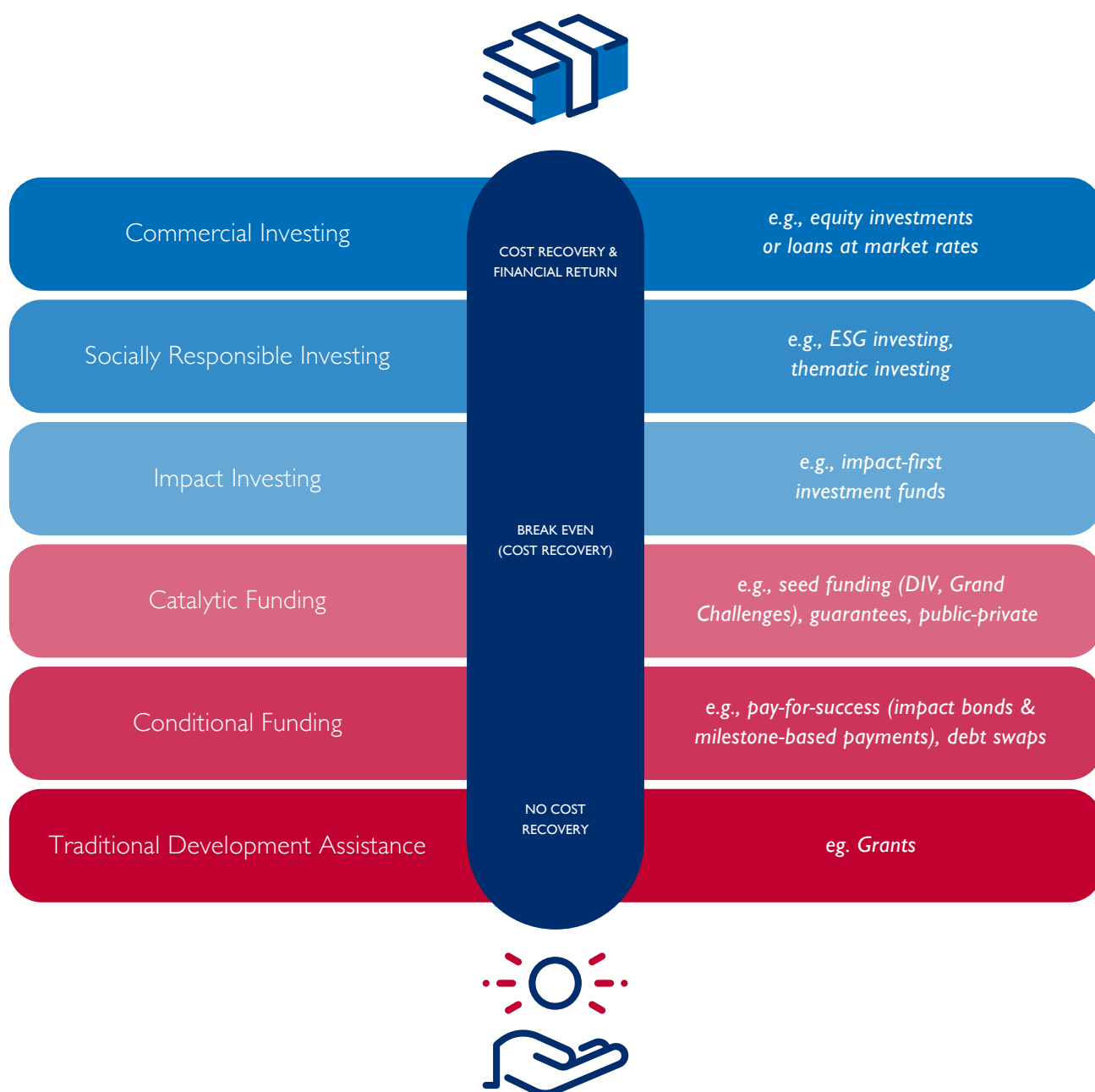
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POTENTIAL FACILITY OPTIONS

In this needs assessment, **we have largely considered the challenges and opportunities among investors with market and sub-market return expectations**, recognizing that there are multiple types of capital supporting innovators ranging from traditional development assistance to commercial investing.

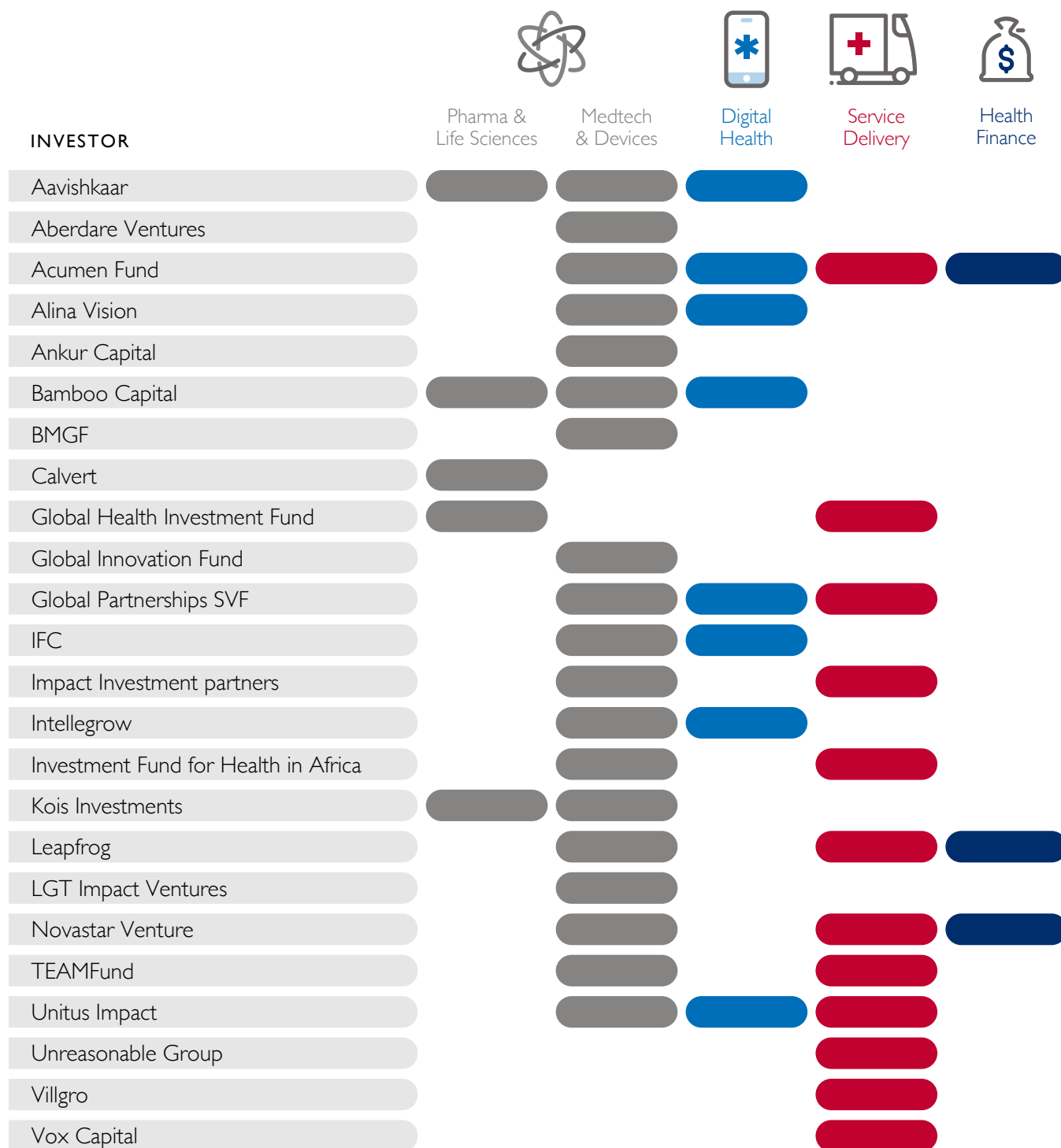


Source: Investing for Impact report, CII. USAID. 2017

We gathered insights from multiple health investors with varying degrees of concentration in the health space. We found that while investors may have some number of health investments, only a handful have portfolios that are solely global health focused. In fact, most investors pursue multiple verticals due to a lack of deal flow in the health space and overall need for portfolio diversification.



Source: Investor expert interviews, investor websites, Crunchbase website



Of the firms with health portfolios, we found that investors tend to invest opportunistically across health archetypes - given lower overall deal flow in the space.

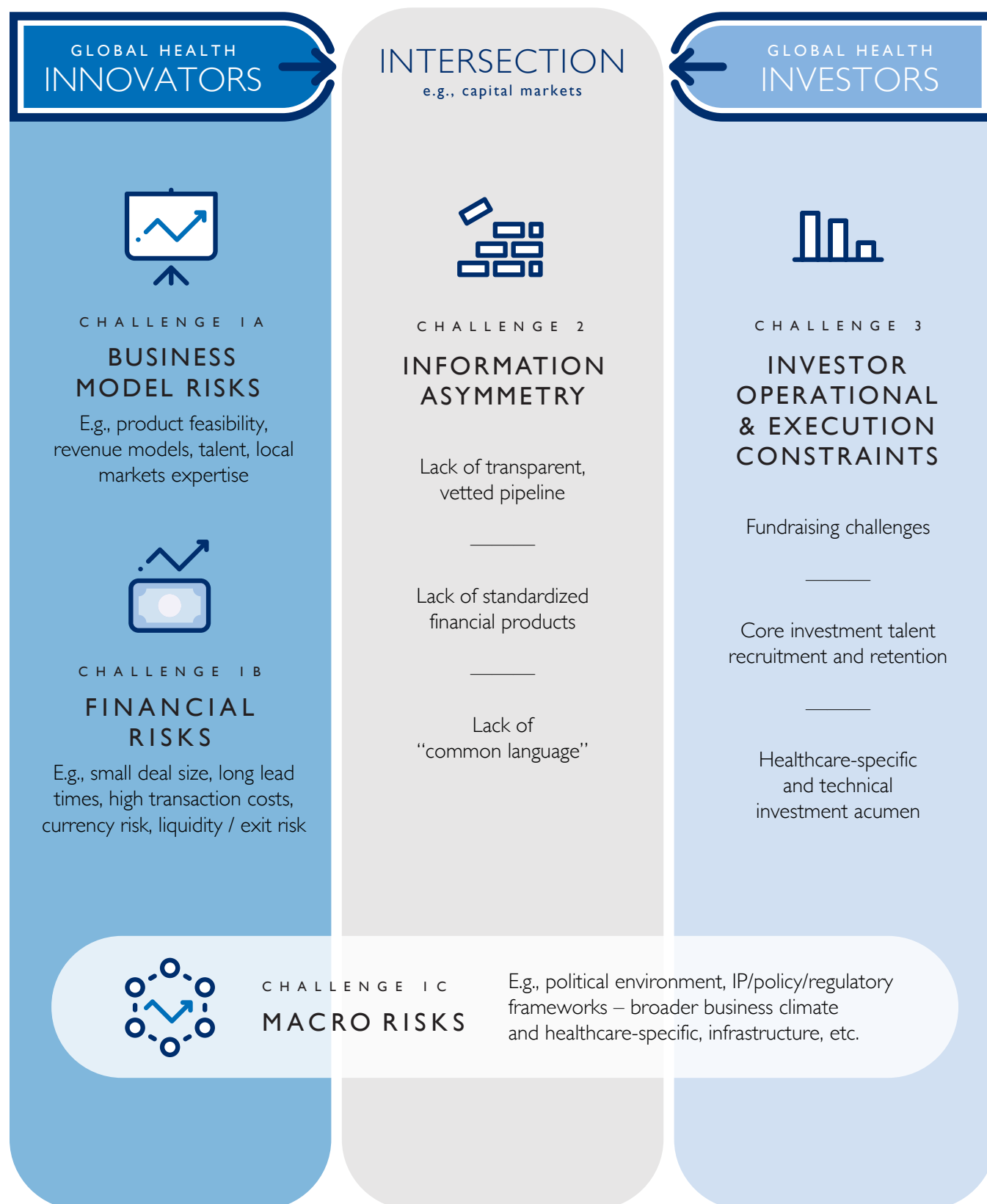
For this subset of investors in the figure above, there is a **slightly greater**

concentration of investment in **medical technology and devices**. After speaking to investors, we understood this could be due to the perception that med tech / devices are often seen to have higher growth potential than service delivery, while digital health is still relatively nascent.

In developed markets, **pharmaceuticals and life sciences investors tend to be specialized** given high technical expertise required and unique capital needs (large investments up front, high failure rate).

*List of investors only includes a subset who have made 3 or more health investments, where portfolio information was available. Source: Investor expert interviews, investor websites, Crunchbase website

Challenges Hampering Private Capital for Investing in Global Health Innovators



Source: Investor expert interviews, Dalberg analysis

The assessment revealed that challenges facing investors interested in BOP health can be categorized into three main categories:

CHALLENGE I A BUSINESS MODEL RISKS

Business Model Risk: Business model risk is the corollary of not enough innovators successfully navigating the journey from idea to scale. The most commonly cited pitfalls include: unproven products / technology; myopic focus on product and technology and insufficient focus on economics and the path to commercialization; and teams with insufficient strategic, financial, and operational acumen, especially when originating in academia or at NGOs.

Financial / Transaction Risk: Emerging markets have greater risk around sourcing, diligencing, executing, and ultimately exiting deals. This drives increased transaction costs – and risk of failure – relative to other opportunities.

CHALLENGE I B FINANCIAL RISKS

CHALLENGE I C MACRO RISKS

Macro / Exogenous Risk: Finally, complex political, legal, procurement and regulatory structures, fragile IP protection, and weak physical infrastructure undermine commercial potential of businesses and create a difficult overall investment climate.



Innovators often lack strong entrepreneurial teams.

Those who understand the health sector tend to be health experts, including engineers or scientists, but it is important to help innovators build well-rounded teams. The key challenge is being able to attract strong talent and build talent skill sets for the innovation.

INVESTOR, INCUBATOR IN INDIA



Source: Investor expert interviews, Dalberg analysis

Business model, financial, and macro risks affect real and perceived risk-adjusted returns of BOP-focused innovations.



CHALLENGE 1A BUSINESS MODEL RISKS

Business model risks refer to the lack of “investable” innovators as a result of weak or flawed business models.

Limited understanding of end **customers** and their “willingness to pay”

Narrow focus on product, not **commercialization**

Weak **revenue models** that lack financial milestones, staged capital approach, and sometimes viable unit economics

Lack of **market segmentation** and **market entry** strategy

More volatile cash flows (and higher working capital needs) in emerging markets where the buyers are often NGOs & governments



CHALLENGE 1B FINANCIAL RISKS

Financial risks are any finance related and transaction risks due to high costs and greater chances of deal failure.

Difficulty sourcing, diligencing, and executing deals which drives longer lead times, and increases risk of deal failure

High **transaction costs** as a % of overall cost given smaller deal sizes and local market regulatory hurdles

High currency volatility and need to borrow in USD while lending in local currency, **increasing currency hedging requirements**

Limited **liquidity and exit options** given under-developed end capital markets and fewer strategic buyers



CHALLENGE 1C MACRO RISKS

Macro risks refer to the complex regulatory structures, fragile IP protection, and weak physical infrastructure of the contexts of global health innovations

Global health industry more heavily regulated than other industries (e.g., *patient privacy, clinical protocols*); and each country's regulations differ

Broader business climate less favorable for both investors and innovators (e.g., *burdensome approvals, high corruption*)

Less robust IP in local markets creates risk, esp. for digital health

Lack of basic infrastructure constrains scale-up (e.g., *supply chain constraints for cold storage, internet and digital tech*) & governments

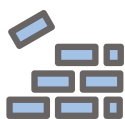
“
There are many innovators in this space but very few entrepreneurs.”

“
Investors do not see potential exit opportunities. This shows a huge gap around market shaping.”

“
We are looking for innovations that aren't necessarily disruptive but easily integrable into a heavily-regulated industry.”

Source: Investor expert interviews, Dalberg analysis

Investors also cited insufficient pipeline transparency and healthcare-specific acumen as barriers to additional investments in BOP health innovations.



CHALLENGE 2 INFORMATION ASYMMETRY

Weak networks, partnerships, and limited knowledge sharing make it difficult for investors locate attractive opportunities even when they do exist.

Limited investor networks and handoffs between capital stages; generally **ad hoc approach to sourcing deals**

Limited **knowledge sharing** and data exchange (*virtual or otherwise*)

Siloed efforts and lack of common language among involved stakeholders, resulting in **uncoordinated initiatives**



CHALLENGE 3 INVESTOR OPERATIONAL & EXECUTION CONSTRAINTS

Investors also often face constraints within their own fund operations – e.g., fundraising and attracting talent with emerging markets and healthcare expertise.

Difficulty **attracting and retaining top talent** for global-health focused investment teams given lower return profiles

Lack of critical mass of investors with deep technical / healthcare-specific expertise

Insufficient local BOP market knowledge to manage investments

Difficulty raising funds given lower risk-return profiles and wariness around healthcare



How do you connect the largest corporations with the fastest moving entrepreneurs when the network simply does not exist?



Investors tend to invest in what they know. Healthcare is incredibly complicated so the threshold of knowledge they need to be comfortable to invest is very high.



Source: Investor expert interviews, Dalberg analysis

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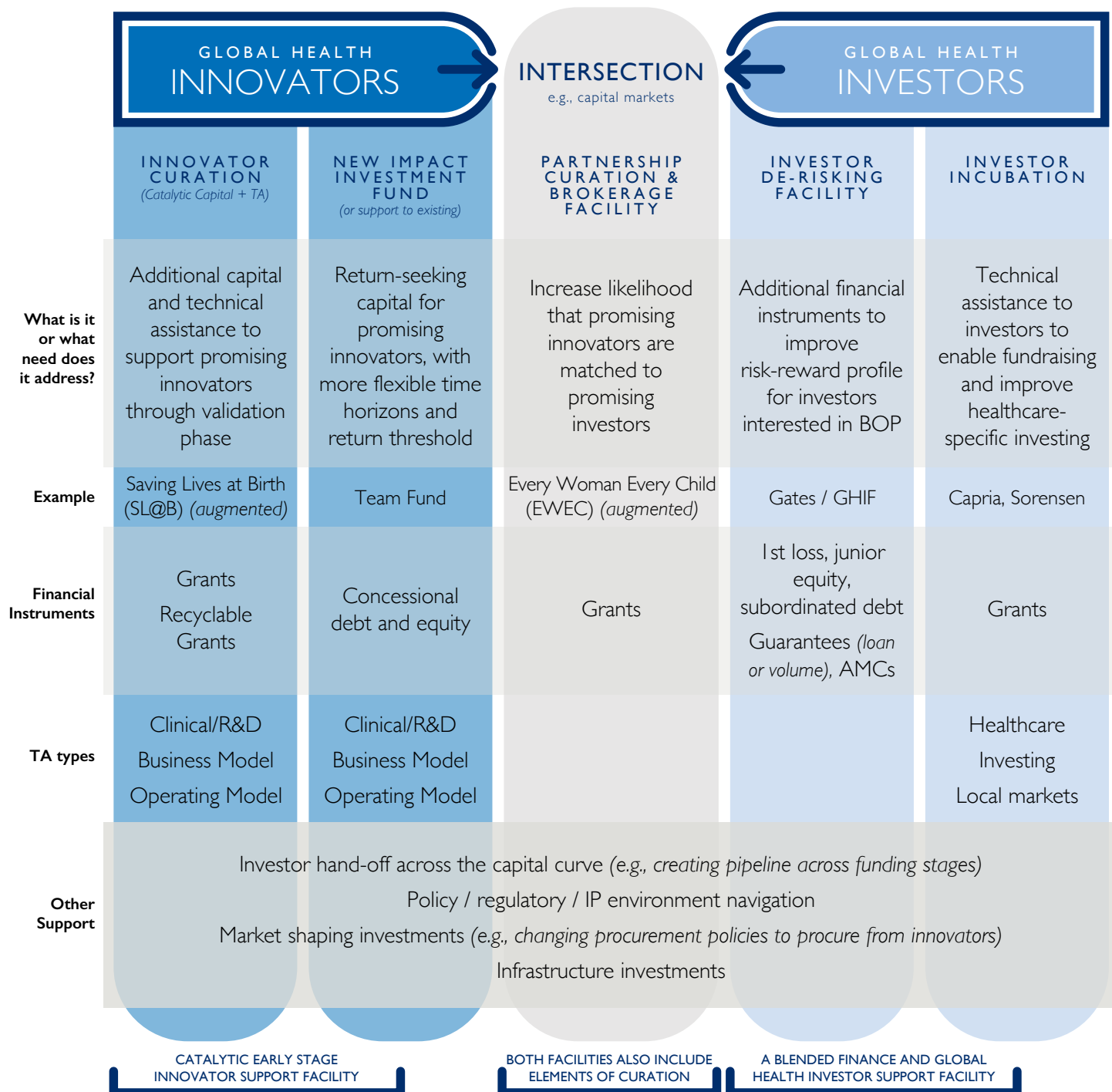
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We developed and explored five opportunities for addressing innovator and investor challenges including an innovator curation facility (with catalytic capital and technical assistance), a new impact investment fund/ or support to an existing impact investment fund, a partnership curation and brokerage facility, an investor de-risking facility, and investor incubation facility. After further research and expert conversations, here we present the case for the two most promising options – innovator curation (an innovator support facility) and an

investor de-risking facility (a fund of funds). These two facilities respectively capture most of the major pain points articulated by innovators and investors. Both facilities would also include elements of partnership and pipeline curation.

While we focused on just two prototypes in this report, we believe investment in all five opportunity areas is additive - and needed - to enable greater flow of private capital to promising innovators. We hope that this is just the beginning of the conversation to bring these concepts to life.

Source: Expert interviews, Dalberg analysis

The Need: Greater support is needed to help promising innovators targeting the BOP - who have the potential to be commercially viable at scale - reach the point where they could accept private capital to further fuel growth.

NEED

There are a myriad of promising global health innovations ranging from medical technology to digital health to service delivery. These innovations have the potential to have a transformative impact on the health of BOP populations, making progress against the SDG health targets if successfully scaled. However, innovators are struggling to transition from a promising health innovation to a successful, scalable commercial business.



While the challenges faced in the innovator journey differ by type and stage of innovation, there are a number of common themes:

- > **Product Feasibility:** Innovators struggle to reach proof of concept and demonstrate technical viability due to the complexities of the healthcare sector and difficult to navigate regulatory pathways, contributing to long timelines that require patient capital.
- > **Financial Model:** Many innovators are further challenged by high initial start up costs and inexperience developing robust financial models.
- > **Commercialization Strategy:** While innovators have brilliant health solutions, they are often unable to develop them into viable businesses adapted to local contexts; this gap is especially pronounced amongst innovators with academic or medical backgrounds. In principle, considering product-market fit should be happening as early as seed stage.
- > **Operations & Execution:** Even when innovators have viable business strategies and a clear understanding of unit economics, they often struggle with internal operations to build the necessary teams, governance models, and systems to successfully roll out their innovations.
- > **Regulatory Capacity:** Innovators find it challenging to navigate complicated health and policy regulations that differ in every country.
- > **Access to Networks:** Underpinning these challenges, innovators also often lack networks of investors, advisors, and local partners (e.g., distribution partners) that can help them successfully raise capital, gain expert mentorship, and navigate complex local markets.



These micro and macro challenges in turn limit innovators' ability to attract investors, further inhibiting their capacity to scale.

- > **Lack of Revenue Generation:** Due to the technical barriers to scale their businesses, enter markets and prove the impact of their solutions, innovators struggle to generate earned revenue or income as early as they could.
- > **Unattractive Risk-Reward Profile:** Without a clear business model, initial market success, and the ability to partly self-fund, investors are deterred by the perceived high risk and low return profiles of health solutions, turning down high impact investment opportunities.

SOLUTION

A support facility focused on helping global health innovators successfully navigate "valley of death".



- > The facility can provide "hands on" and on-going support and mentorship to innovators in the form of technical assistance, targeted to innovator stage and type, by experts and advisors with similar experiences and knowledge of the context.
- > The facility can also offer access to networks of investors and local partners, in addition to the expert advisors, who can serve as resources for innovators to tap into for funding and strategic partnerships.
- > In tandem, the facility can provide grants and concessionary capital to early stage innovators to help provide support through longer start up periods.

Theory of Change: With targeted support, innovators can build more robust business models and connect to important ecosystem partners, especially during the critical early stage when transitioning from a promising idea to a fully fleshed business strategy.

Clear early traction in the marketplace will improve the perceived risk of a given innovation, thereby enabling more private sector investment. By unlocking this next tranche of financing, more innovators can successfully transition to

scale -thereby extending the impact of their innovations. Ultimately more successful, scaled innovations will translate into meaningful improvements in healthcare access, quality, and affordability for the world's most vulnerable populations.

PRIMARY OUTCOMES

Input: Technical skills to Innovators

Innovators are able to develop their solutions into commercially viable businesses in terms of:

Product Feasibility: can reach proof of concept and understand product viability

Financial Modeling: can develop financial plans, staged capital deployment, and attract investors

Commercialization Strategy: can develop robust business models and go to market strategies

Operations & Execution: have better internal organization and governance in terms of people, processes, and systems

Regulatory Capacity: can navigate local regulatory regimes

Input: Access to Networks

Increased access to networks resulting in strategic partnerships and additional support for innovators:

Access to **industry partners** to execute business model

Access to **local experts** to understand specific market and consumer needs

Access to **investors** for financing

Input: Capital to Innovators

(i.e. grants and concessionary debt / equity)

Increased capital with lower return expectations and longer time horizons which allow innovators to:

Navigate the lengthy and cumbersome approvals process

Invest in building out teams, operations, etc.

Establish pilots with viable unit economics

Iterate and take risks earlier on to refine business model

INTERMEDIATE OUTCOMES

More global health innovators are able to scale and generate consistent earned income streams



More global health innovators can self-fund and reinvest, and can attract the next tranche of capital to grow further

IMPACT

Patients receive access to better diagnostics, primary and specialty care, personalized health information, and health payment systems

Providers have better access to tools & resources to provide high quality, low cost end to end patient care in low-resource settings

Health systems offer more points of contact with patients, function more efficiently through competition between players, and realize improved health outcomes

ILLUSTRATIVE KEY PERFORMANCE INDICATORS:

for PRIMARY OUTCOMES

OF INNOVATORS reaching next stage of scale

\$ AMOUNT of funds raised

OF KEY PARTNERSHIPS formed between industry players and innovators

for INTERMEDIATE OUTCOMES

\$ AMOUNT OF INITIAL revenue generated

\$ AMOUNT OF CONCESSIONARY capital from investors

OF PATIENTS/PROVIDERS reached

for IMPACT

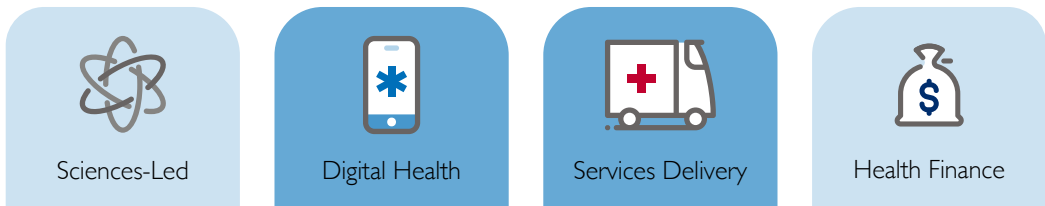
% CHANGE in incidence rates

CHANGE IN LIFE expectancy

\$ AMOUNT SAVED in health systems

Source: Expert interviews, Dalberg analysis

Scope: The facility will span archetypes and will focus on catalytic capital for early and growth stage innovators.



INNOVATOR ARCHETYPE

Primary focus will be digital health – given high impact potential for BOP populations (low unit costs), and service delivery – given differential difficulty navigating early / growth stage



INNOVATOR STAGE

The primary focus will be early stage innovators that can absorb the technical assistance and have a product with established feasibility and a promising commercial pathway



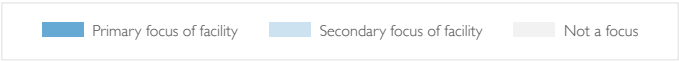
CAPITAL TYPE

The facility will primarily provide grant funding to help de-risk scale-up; in some cases (and over time), the facility may also provide concessionary debt and equity



TECHNICAL ASSISTANCE TIME HORIZON

The facility will provide incubator type assistance for 1-3 years. This will vary based on stage of innovator and their needs as they enter the program.



Activities: There is a limited number of successful social impact incubators globally. This facility design has taken lessons learned from other incubation programs and is a result of in depth conversations with innovators who need support to scale. The facility will provide targeted, hands on, and on-going assistance across any major business model elements where an individual innovator may have gaps. The support will be provided by committed advisors who have relevant past experience growing companies and bringing innovations to market. By helping innovators build more robust business models, the facility will increase the proportion ultimately able to scale.

ACTIVITY: TECHNICAL SKILLS TO INNOVATORS

The facility will provide hands-on, frequent, and targeted support to innovators. Support will vary based on their needs, stage, and innovation archetype. Support will be provided for...



Product Feasibility



Financial Modeling



Commercialization



Ops & Execution



Regulatory Capacity

SPECIFIC TA EXAMPLES

R&D
Proof of concept
Clinical trials

Financial model development
Fundraising
Pitching techniques

Customer targeting / segmentation
Pricing / product economics
Manufacturing / SC
Go-to-market

Talent attraction and retention
Organizational structure & decision making processes
IT systems

Local IP and other relevant legal frameworks (e.g., *data privacy*)
Local health policies and systems

ILLUSTRATIVE CASES

Lucky Iron Fish
growth possible because of SL@B and GCC patient support through clinical trials

Sisu Global Health
initially struggled to secure next tranche of funding after initial proof of concept as unit economics were difficult to validate

Little Sparrows
unaware of target market and who to sell product to after product development

Arogya Finance
lack of people to lead local operations in case of theoretical expansion

Changamka
has scaled down operations and in “waiting area” due to Kenyan universal healthcare impact uncertainty

TA PROVIDERS

Advisors should have **past experiences** that make them **well-equipped** to provide the technical assistance and targeted support needed by innovators (e.g., product development experience, product launch experience, entrepreneurship experience, market scaling experience, fundraising experience)
The group of advisors should be **diverse** in terms of race, ethnicity, gender, geography – from LMICs and HICs, to allow them to cater to and connect with various innovators

Source: Expert interviews, Company websites, Dalberg analysis

Activities: The facility will also curate partnerships between innovators and industry partners, local experts, and investors - bridging direct innovator support with broader ecosystem matching efforts. Additionally, the facility will provide grants which can be invested directly into the business (either unrestricted or milestone based); over time the facility may also explore alternative forms of concessionary debt and equity financing - which could be reinvested into new innovators (e.g., in an evergreen structure).

ACTIVITY: ACCESS TO NETWORKS

The facility will also provide access to a **curated network of actors** to provide support to innovators and help promote strategic partnerships.



Industry Partners



Local Experts



Investors

NETWORK ACTORS	Suppliers, manufacturers, distribution channels to help execute business model	Local businesses and health providers to understand local markets and end user needs
ILLUSTRATIVE CASE	<p>Forus Health</p> <p>was able to scale within India through an existing network of eye clinics, and internationally through strategic partnerships with Microsoft and Google</p>	

ACTIVITY: CAPITAL TO INNOVATORS

The facility will provide initial **grants** to innovators; as they move through the program over the **2-3 years**, they can potentially receive additional **concessionary capital** in the form of debt, mezzanine, and equity financing.



Grants



Debt / mezz. / equity

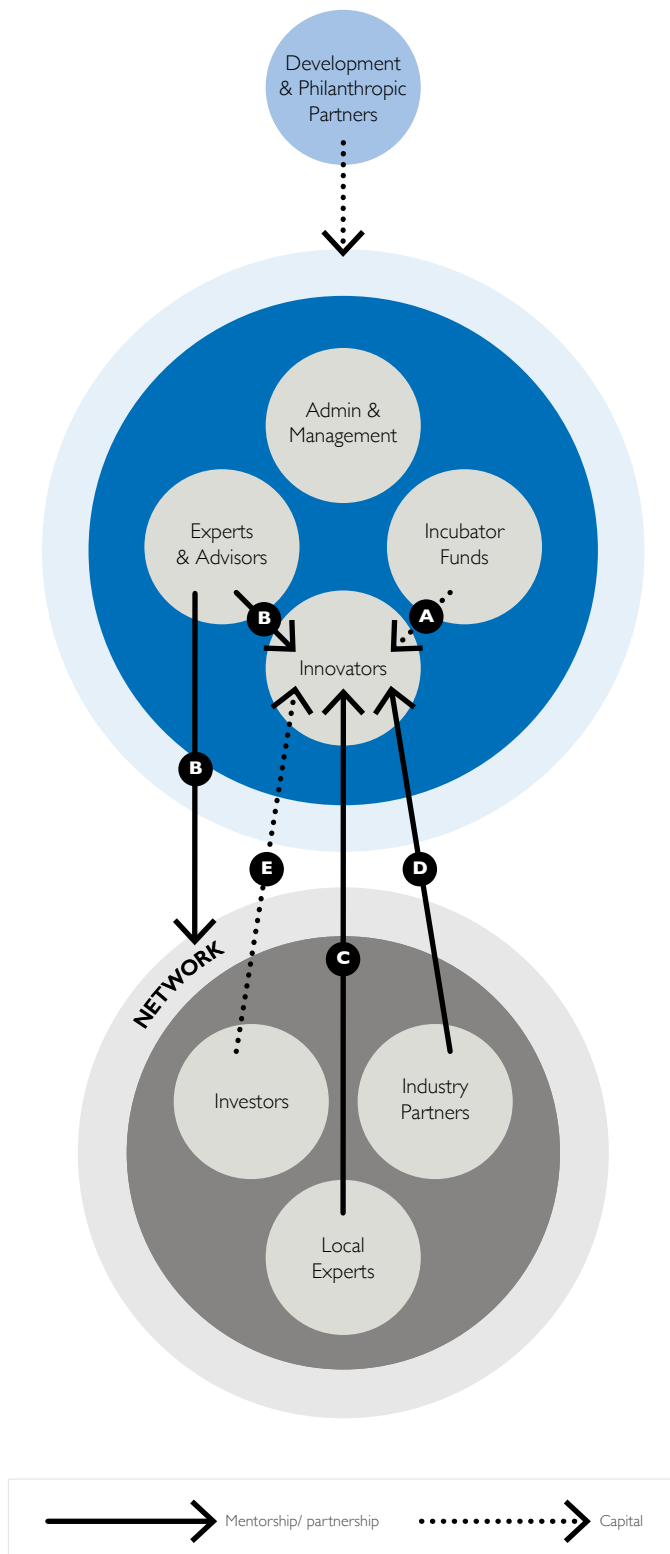
COST OF INSTRUMENTS & TICKET SIZE	\$50 -100k (USD)	\$.1 -5M (USD)
ILLUSTRATIVE CASE	<p>Saving Lives at Birth</p> <p>funds innovators at three levels over the course of 2-4 years: ~\$500K across seed and validation stages, and \$1-2M for transition to scale stage innovators</p>	

Source: Expert interviews, Company websites, Dalberg analysis



Operating Model: The facility can be realized by standing up a new incubator or augmenting existing efforts. The focus should be on developing sustainable business models first and foremost.

OPERATIONAL STRUCTURE



STEPS

Option 1:
Consortium of development funders builds a new incubator...

OR

Option 2:
Partners with an existing support facility/ incubator...

- A** The incubator provides grants to innovators
- B** Experts and advisors provide mentorship and technical skills to innovators, and curate relationships with broader network
- C** Local experts provide guidance on understanding local market and consumer needs
- D** Industry partners help innovators execute business model (e.g., supply chain)
- E** Investors provide additional concessionary (or market-rate) debt, mezzanine financing, and equity as they see innovators have potential

POTENTIAL OPTIONS for EXECUTING:

Option 1: Development partners can launch a new facility that will provide ongoing support, access to a network of stakeholders, and grant and concessionary capital to innovators. It can do this by:

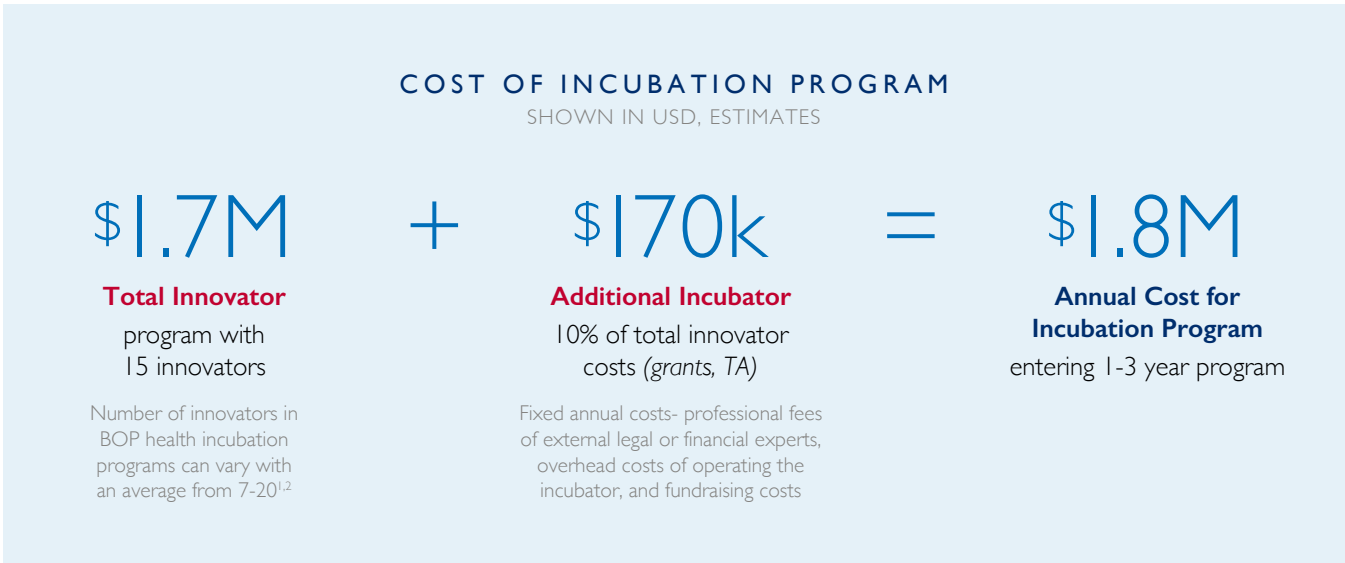
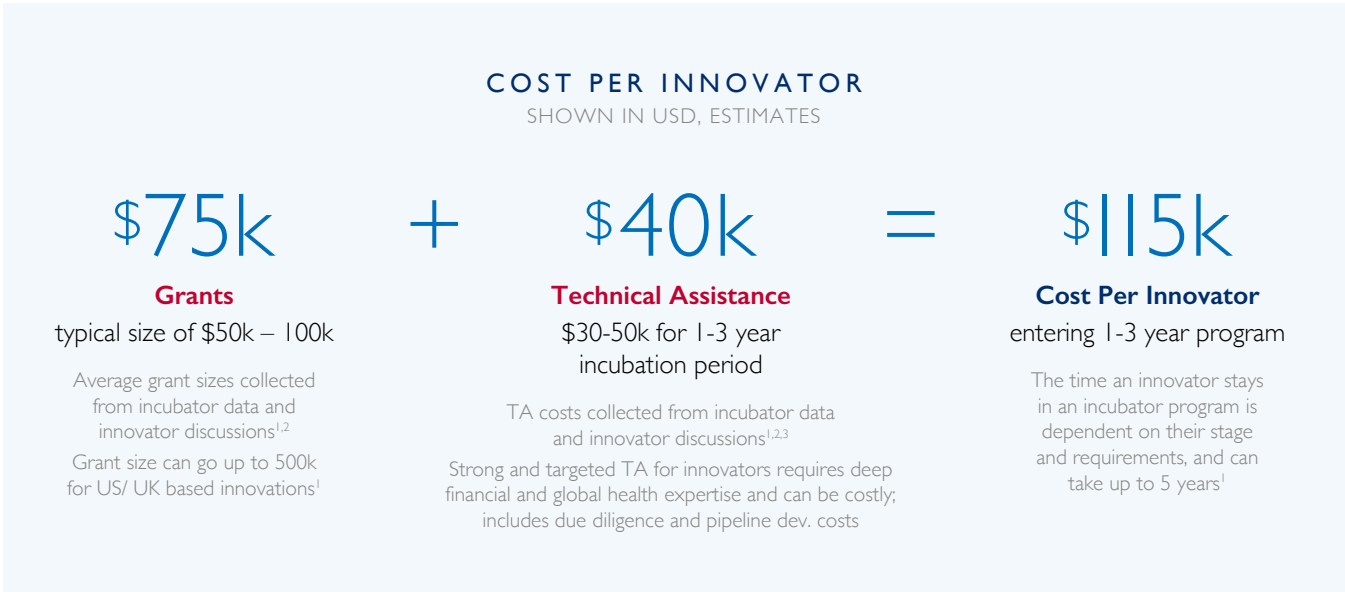
- 1** Following an incubator model and co-locating businesses with advisors or having dedicated virtual support (or a mix); advisors would be staffed and paid by the facility
- 2** Following a lighter-touch model and building a network of relevant advisors with whom the innovators can be matched on an ad hoc basis, depending on specific needs (e.g., accountants to help with tax filing); support could either be on a fee for service or pro bono basis

Option 2: Development partners can augment existing promising incubation efforts by:

- 1** Providing grant capital to existing health-focused incubators (*Potential partners: Villgro, Global Partnerships, Unreasonable Group*)
- 2** Providing grant capital and health expertise, and carve out health vertical in non-health incubators (*Potential partner: Global Innovation Fund*)
- 3** Outsourcing the build of a new facility by providing grant capital to industry players who are well-positioned to provide TA (*Potential partners: Medtronic, BD*)

Source: Expert interviews, Dalberg analysis

Estimated Cost: Depending on the level of assistance provided, funders can expect to spend ~\$115k USD per innovator to provide grants and intensive TA support.



Based on previous successful incubator programs, 25-45% of supported innovators would go on to be able to attract additional concessionary capital from investors as they graduate from incubation programs^{1,2,3}.

¹ Expert interviews with incubators and investors ² Incubator and Investor websites (including but not limited to Villgro Kenya, Villgro India, Blueprint Health) ³ Incubator data sets (Miller Center, GALI, Root Capital)



The Need: An investor support facility would fundamentally shift the risk-reward profile in global health innovation, encouraging more private capital to enter the space.

NEED



There is a large need to **fundamentally shift the real and perceived risk-return profile** in global health innovation investment today.

- > Lower risk-adjusted returns deter private investment in global health relative to other markets.
- > Even among impact investors willing to accept lower risk-adjusted returns, there is reticence to explore more unproven (e.g., earlier stage) or lower growth (e.g., service delivery) business models due to perceived risk.



This is compounded by a need for **greater healthcare expertise among investors** to properly recognize and evaluate real investment risk.

- > Healthcare has fallen behind agriculture and energy in impact investment in part due a lack of technical expertise in the space.
- > Impact investors aiming to work in global health need skills at the intersection of three niche investment areas – local markets, BOP consumer segments, and healthcare expertise.

SOLUTION

There is a white space in global health for a facility dedicated to building the investor ecosystem – making it easier for investors to deploy existing return-seeking capital.



- > The facility could offer **financial de-risking** that would incentivize return seeking funds that would not otherwise invest. This would then **lower future perceived risk** and create a **virtuous cycle** as investors realize meaningful returns on previously unfeasible investments.
- > The facility would also build **investor comfort levels** in the space through **expert advisory services** to impact investors with limited healthcare expertise, and collate **learnings / best practices** across the sector.

Source: Expert interviews, Dalberg analysis

Theory of Change: De-risking can multiply available capital to global health innovation and create a virtuous cycle as investors realize returns. Additional flow of capital will enable more innovators to fund scale-up, extending their impact on healthcare access, quality, and affordability. Over time as the ecosystem for global health innovation and investment develops and investors build expertise, less de-risking capital will be required.

Clear early traction in the marketplace will improve the perceived risk of a given innovation, thereby enabling more private sector investment. By unlocking this next tranche of financing, more innovators can successfully transition to

scale -thereby extending the impact of their innovations. Ultimately more successful, scaled innovations will translate into meaningful improvements in healthcare access, quality, and affordability for the world's most vulnerable populations.

PRIMARY OUTCOMES

Activity: Provide new source of concessionary capital (e.g., *first loss*, *junior debt*) to de-risk investment at the fund or portfolio level

De-risking instruments mechanically shift risk-adjusted returns to be within target range for larger pool of private capital providers, crowding in new investment

Impact funds are able to make **greater number of investments** with new funding, both directly from the facility and indirectly from new LPs incentivized to join the de-risked fund

Activity: Co-invest strategically to de-risk investment at the deal level

Impact funds able to make **more ambitious investments** in traditionally "riskier" (e.g., earlier stage) or more "patient return" models (e.g., service delivery)

Activity: Create healthcare expert advisor panel available for long-term mentor relationships and one-off advisory sessions for impact investors with limited health expertise

Impact investors with existing health portfolios are better able to evaluate less proven products / business models in health

Investors with limited or no investment in BOP health increase their deal activity in sector

INTERMEDIATE OUTCOMES

Kickstarts a **virtuous cycle** where investors are willing to invest in innovations targeting BOP markets given the **improved risk-reward profile**; the right capital at the right time **improves innovator likelihood of success**; investors realize **meaningful returns, lower future risk expectations** and are more willing to invest in BOP ventures



More products and/or services are designed for the unique health needs and unit economics of the BOP consumer segment

IMPACT

Patients receive access to better diagnostics, primary and specialty care, personalized health information, and health finance

Providers can better provide low-cost diagnostics and complex care in low-resource settings

Health systems offer greater access to patients, function more efficiently via competition, and realize improved health outcomes

ILLUSTRATIVE KEY PERFORMANCE INDICATORS:

for IMPACT

\$ FUNDING for impact funds

\$ FUNDING for co-investment

OF EXPERT ADVISORS in advisory network

for PRIMARY OUTCOMES

\$ OF PRIVATE CAPITAL leveraged

OF NEW INVESTMENTS catalyzed

ADVISOR sessions / relationships developed

for INTERMEDIATE OUTCOMES

OF NEW INVESTORS in BOP health

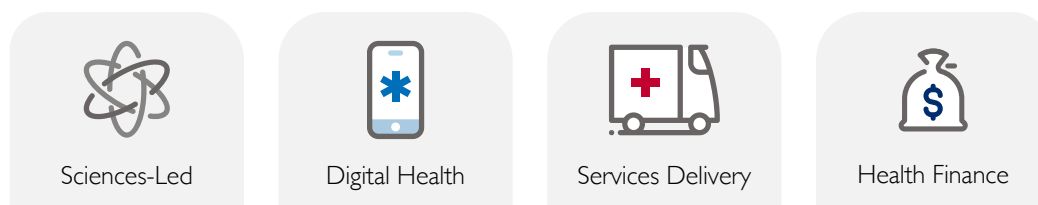
OF NEW HEALTHCARE ventures for BOP

for IMPACT

OF DALYs saved

\$ SAVED in health system

Scope: The facility will focus on supporting existing early and growth stage investors to launch a new, or more ambitious, healthcare portfolio.



INNOVATOR ARCHETYPE

The facility will remain archetype agnostic with decisions left to fund managers, but can encourage investment into traditionally more patient-return archetypes (e.g., service delivery)



INNOVATOR STAGE

It will focus on early and growth stage investment funds with typically smaller deal sizes. The facility can also act as a co-investor, ideally to support innovators in transition from early to growth stage (\$1-5M USD ticket size), but can also offer support for more mature businesses



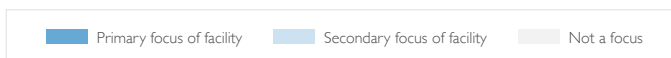
INVESTOR TYPE

The facility will support current impact investors (e.g., Global Innovation Fund) that make limited healthcare investment today due to high perceived risk or limited healthcare expertise. The facility will offer indirect support to more commercial investors as other LPs at the fund- or deal- level



INVESTMENT HORIZON

The primary focus will be early stage innovators that can absorb the technical assistance and have a product with established feasibility and a promising commercial pathway



Source: Expert interviews, Dalberg analysis

Activities: The facility will de-risk impact funds, co-invest strategically, and offer healthcare expertise to catalyze the greater investor ecosystem.

ACTIVITY: PROVIDE NEW POOLS OF CAPITAL AND FINANCIAL DE-RISKING



Guarantees

A guarantee to cover a portion of LP capital invested in the fund in the case of downside



Grant Capital

Non return-seeking capital that absorbs first loss



Subordinated Debt

Lower return rates and first loss on debt products relative to other LPs



Junior Equity

Lower return rates and first loss on equity investments relative to other LPs

The facility will provide capital through a menu of financial de-risking instruments to catalyze investment at either the fund level (i.e., as a LP during initial fundraising) or at the individual deal level (for existing funds) as a concessionary co-investor. These options can be structured as guarantees in the case of downside, or first-loss capital for debt, mezzanine, or equity products that guarantee a minimum upside for other LPs.

ACTIVITY: CREATE HEALTHCARE EXPERT ADVISOR PANEL



One-Off Advice

Funds can reach out to a network of pro bono technical experts for one-off questions during diligence



Long-Term Mentorship

Funds can opt to be paired with 1-2 ongoing mentors from the panel to sit on the fund advisory board



Health Portfolio TA

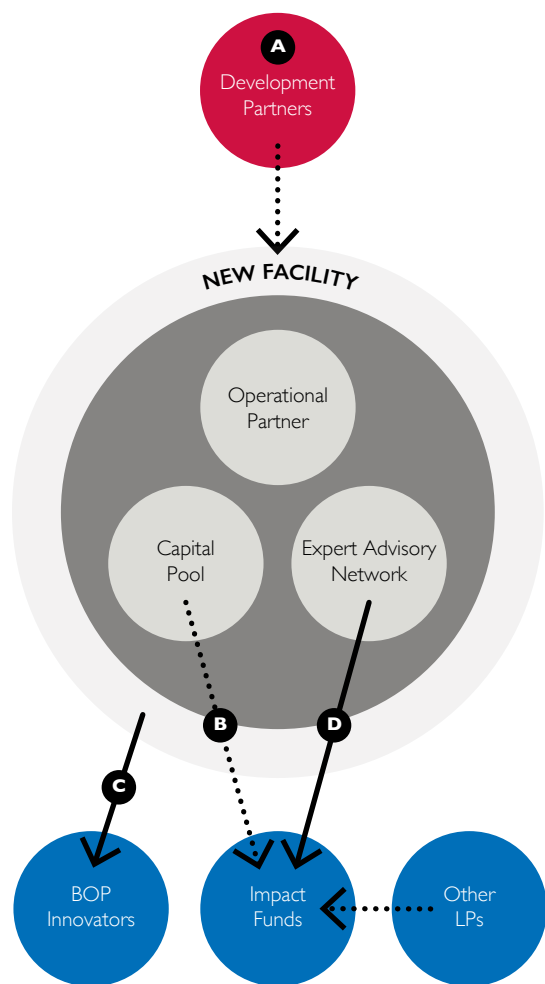
Funds with no existing healthcare portfolio can opt for hands-on TA to source early talent and/or deal flow

In addition, the facility can complement financial de-risking with non-financial de-risking by building a network of expert healthcare advisors to provide varying levels of support to fund managers. Funds can opt for advice from technical experts for one-off deal evaluations, or establish longer-term mentor relationships to oversee new or existing health portfolios.

Operating Model: Development and philanthropic funders can work with existing operational partners to stand up the facility. The resulting structure would need to be able to deploy different capital products (debt, mezzanine, and equity) and earn or re-invest returns.

The facility would also help curate an expert advisory network and facilitate connections with fund managers, but would likely not build the network in-house. It could take advantage of existing resources among potential partners, such as the Bill and Melinda Gates Foundation's healthcare expertise, to form the basis of this network

OPERATIONAL STRUCTURE



STEPS

- A** Development partners fund existing fund of funds or de-risking facility to operationalize investor support facility
- B** Facility deploys de-risking capital to new impact funds during initial fundraising, crowding in other LPs
- C** Facility also deploys de-risking capital as a co-investor in one-off deals to de-risk existing fund activity
- D** Facility connects fund managers with expert advisory network to help evaluate one-off deals or build more robust fund health portfolios

OVERVIEW

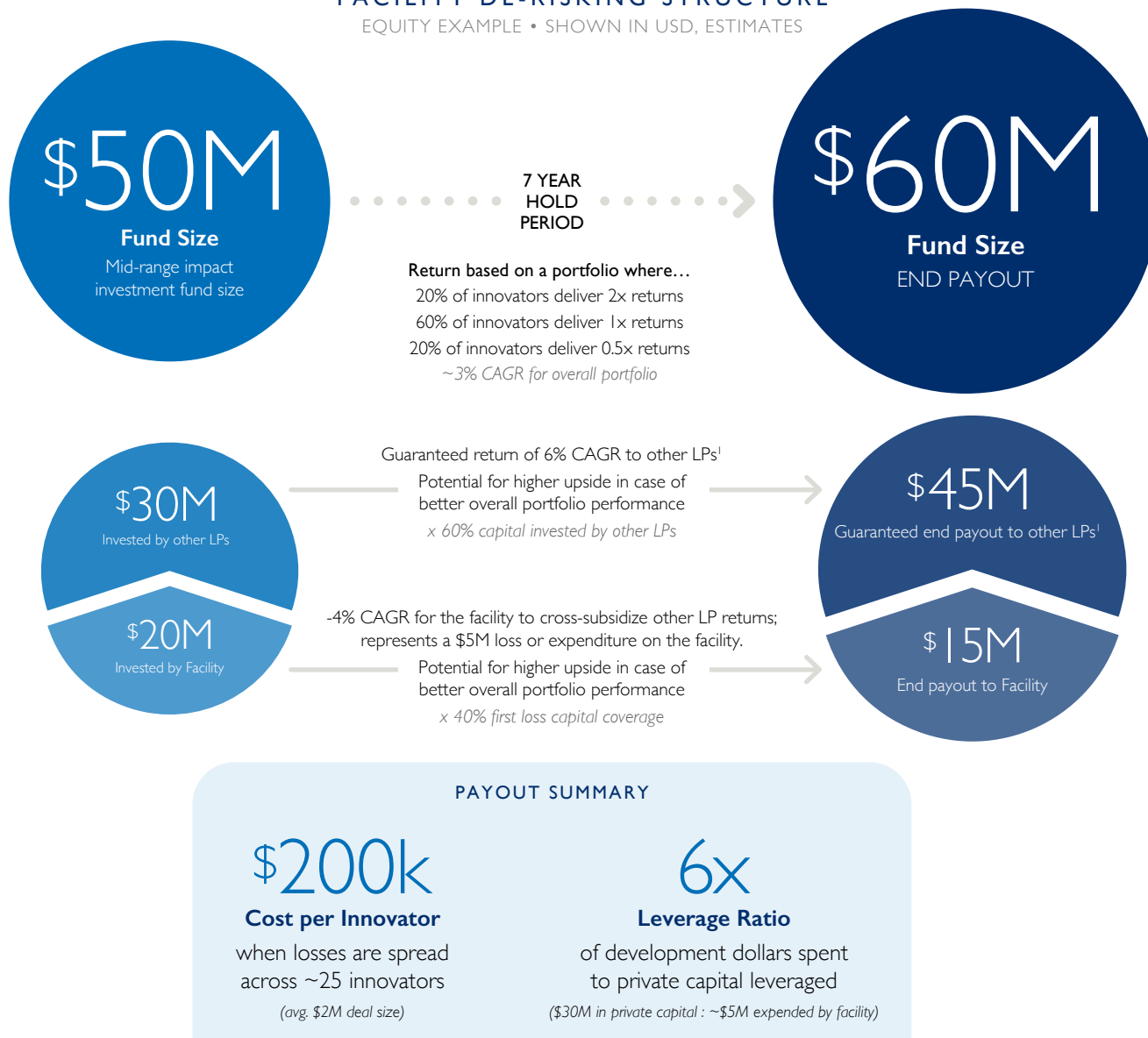
An investor support facility that will de-risk impact investment at both the fund- and deal-level, and can curate an expert advisory panel for fund assistance

Source: Expert interviews, Dalberg analysis

Estimated Cost: development partners can spend ~\$200,000 USD per innovator to leverage up to 6x in private capital by guaranteeing a minimum annual return through first loss capital.

FACILITY DE-RISKING STRUCTURE

EQUITY EXAMPLE • SHOWN IN USD, ESTIMATES



To illustrate the potential power of de-risking capital, we have constructed an illustrative example of how first-loss capital can improve investor returns using a realistic fund size and base case portfolio performance based on historical performance for global health impact investment funds. Without facility intervention, the expected overall portfolio performance would likely be too low to attract investors at a ~3% CAGR – barely above annual inflation rates. However, the infusion of first loss capital shifts the risk-reward profile of the fund and guarantees other LPs a minimum annual return of 6% CAGR with the possibility of even greater upside – a rate high enough to attract impact investors.

At a 3% overall CAGR, the facility incurs a loss of \$5M over the life of the fund, in order to ensure the other LPs hit a 6% annual return threshold in this example. This would equate to \$200K in "cost" per innovator - i.e., the non-recoverable portion of the fund - assuming ~25 innovators in the portfolio (an average of \$2M in ticket size). The scale of expenditure per innovator is line with per innovator costs expected in more traditional innovator grant and technical assistance programs, and yet, critically, that same investment is able to 'crowd-in' 6x in private capital (\$30M in private capital relative to ~\$5M expenditure on facility).

¹ Guaranteed except in cases where facility loses 100% of principal ² Benchmarked with return expectations from other global health impact investment funds



The Every Woman Every Child (EWEC) Innovation Marketplace Spotlight

A platform to bridge the needs of innovators and scaling partners

History: The EWEC Innovation Marketplace is a strategic initiative of development innovation organizations – Bill & Melinda Gates Foundation, Grand Challenges Canada (GCC), the Norwegian Agency for Development Cooperation (NORAD), and the United States Agency for International Development (USAID). Launched in 2016, the main aim was to address the common issue of innovations failing to scale and sustain impact due to the lack of continued access to capital and scaling support. In a recent thorough reevaluation of strategy and processes, the following recommendations were made and employed to further increase the value-add and efficiency of the Marketplace.



KEY PRINCIPLES OF AUGMENTED APPROACH



SELECT

Marketplace selection through Anchor Partner Pipeline and External Partner Pipeline
Strong, thorough vetting process
Reviewers with health and LMIC expertise
Insight from key global health experts
Innovations with highest impact potential



CONNECT

Connections for innovators to opportunities and scaling partners
Includes private investors, grant funders, customers, licensees, governments, suppliers, manufacturers, and implementation partners



ACCELERATE

Ongoing, long term involvement
Monitoring, tracking and enabling of milestone-based progress
Accelerated scaling pathways to deliver impact broadly

AUGMENTED APPROACH

Cluster strategy to attract similar groups of investors and scaling partners; Open intake window for a quicker and efficient process; Intentionality behind value add to all stakeholders.

CLUSTER APPROACH

Medical Device Academic Scaling partners: Clinical trial partners, regulatory partners, licensees.

Medical Device Private Scaling partners: Clinical trial, implementation, procurement, and supply chain partners.

Service Delivery Scaling partners: Implementation partners, supply chain partners, government.

KEY ASPECTS OF PROGRAM

Strength of a technical and thorough **selection process** with the added insights of global health experts

Hands-on, long term involvement similar to a **VC approach** advising innovators to develop business and financial plans that addresses needs of both innovators and investors

Addressing larger issues of developing a **strong investment case** through connections to other scaling partners like supply chains, customers and in-country partners

Team expertise in health sciences, business and investment for a holistic approach to scaling

Leverage unique networks to provide **various forms of capital** with co-investment opportunities

Successes since 2016 launch: **Capital Raised: \$22.2M USD** for 11 innovations, across 12 low- and middle-income countries with 73 connections to scaling partners facilitated

Source: Expert interviews, EWEC website, Reports, meeting minutes, other documentation from EWEC team



INNOVATION SPOTLIGHTS

Healthy Entrepreneurs

A digital technology enabled, fully integrated end-to-end supply chain organization offering affordable and reliable health products and services to the poorest women and children living in rural areas via their proprietary network of certified micro-entrepreneurs who leverage the company's technology and services to manage their micro enterprise.

Innovation: *Last mile model, multiple health focus, microentrepreneurship and local livelihoods, addressing access*

Health focus: *Nutrition, contraception, HIV, health education, etc.*

Model: *For-profit social enterprise*

Countries: *Kenya, Uganda, Tanzania, Ghana, Haiti*

Need: *\$2.3 million USD to scale in Kenya and Uganda*

GESTVISION

GestVision is a biotechnology company that is commercializing a simple, point-of-care diagnostic for preeclampsia, a key cause of maternal mortality. The Congo Red Dot test, developed by Prof. Buhumschi, is a urine-based test that identifies conophilic proteins as a biomarker of preeclampsia, thus addressing the serious lack of a suitable and timely diagnostics for this condition.

Innovation: *Urine based, fast, point of care based, no other equipment*

Health focus: *Maternal mortality due to preeclampsia*

Model: *For-profit, dual market strategy*

Countries: *US, Ethiopia, Bangladesh, Uganda*

Need: *Co-funders for current \$750K USD raise to conduct LMIC trials*

JACARANDA HEALTH

Jacaranda Health provides high-quality, affordable care to new mothers and pregnant women in Kenya. Through its system based approach, patient-centred care, training programs and QI tools, Jacaranda is currently growing its number of hospitals. The organization aims to build a network of hospitals around Nairobi to serve more patients that lack access to basic, affordable care.

Innovation: *Disruptive model in high quality, affordable maternal care*

Health focus: *Maternal and infant mortality*

Model: *For-profit/non-profit social enterprise*

Countries: *Kenya*

Need: *\$2.4 million USD to expand additional two hospitals*

MARKETPLACE INSIGHTS

Most forms of available private capital fail to be lead investors for global health innovations often due to lack of familiarity with the sector resulting in the dearth of creative financial structures to both align interest and drive impact. Consequences can include unsustainable models or innovations saddled with unrealistic expectations and returns.

Today, the EWEC Innovation Marketplace, supported by its anchor partners and broad ecosystem of relationships connects innovators to financing directly, or by working diligently with the team to enable milestone-based achievements to ready them for their next financing opportunity.

There is a lack of sufficient funding and other concessionary forms of capital to address the financing needs of these innovations.

Potential Synergies between the EWEC Innovation Marketplace and a New Blended Finance Global Health Investor Support Facilities

A new blended finance facility as prototyped in the previous section could have an accelerated impact by building from the strong foundation the EWEC Innovation Marketplace has already established. As the Marketplace has identified, one of the key constraints today to increased deal activity for early stage global health innovations is the lack of an interested and capable lead investor. The new facility could provide low cost leverage to a new fund vehicle that exists within or alongside the Marketplace. Indeed the Marketplace may be uniquely positioned to lead deals and creatively combine different forms of capital to support global health innovations across seed, early, and growth stages given the Marketplace's:

- > Direct access to deal flow from existing vetted innovators already on the platform
- > Deep knowledge of the optimal type of financing its different innovators need given its in-depth VC-like support
- > Strong technical and diligence expertise in its clusters of focus including medical devices and service delivery
- > Strong network across industry partners, potential customers (e.g., donors and government), and investors

By providing lead-term sheet and diligence expertise, the Marketplace can be the first mover, bringing along other investors seeking to get involved. Over time, as comfort levels in early stage global health innovation increases, this can spur these investors to seek out additional deals of their own – helping to close the financing gap.



Teamfund Spotlight

The investor support facility can provide support to promising impact investment funds, such as TeamFund. Teamfund uses a strong impact thesis, private sector mindset, and a deep network of industry connections to source and support high-potential global health innovators.



NICHE HEALTHCARE FOCUS

Teamfund focuses exclusively on med tech innovation for emerging markets. It is one of a handful of impact investment funds with a sole focus on healthcare and medical technology, allowing it to double down on a niche investment area.



TARGETED IMPACT THESIS

The fund begins with a strategic impact thesis to guide its investment search and pipeline building. It analyzes different healthcare sectors to determine which disease areas and potential solutions will be most in need over time, and sources new medical innovations that target these areas.



STRATEGIC PIPELINE BUILDING

A dual non-profit and for-profit structure allows TeamFund to build a robust pipeline with innovators at different stages of development. The non-profit arm deploys grant funding to seed stage companies to build and prototype new products, while the for-profit arm makes larger investments into early- and growth-stage businesses.



INDUSTRY EXPERTISE

After investment, Teamfund provides portfolio companies with access to its broad network of pro bono advisors in the med tech industry. The advisors provide invaluable one-on-one advice and connections to innovators, and also serve as a bridge to potential exit / acquisition later opportunities by medical device companies.

The facility's catalytic capital can help impact funds such as Teamfund fundraise from other LPs, and make earlier stage and/or more unproven investments within its current pipeline

Both facilities should also include elements of partnership curation and broader enabling environment support to maximize potential impact.

Combined, the two facility concept options can meet many, but not at all, of global health innovators' needs. The direct innovator and investor support outlined in each concept will have higher chances of success if paired with parallel initiatives that build the entrepreneurial ecosystem for global health more broadly. For example, development actors can make parallel investments in partnership curation and building more transparent, vetted pipelines of opportunities. Similarly, development actors can make investments in market shaping activities like working with multilateral organizations or national governments to increase the likelihood of entrepreneurs securing large, stable customer bases. In both cases development actors are particularly well positioned to affect change.

There are many market shaping initiatives development actors can use to further support both innovators and investors, including but not limited to:

Changes in Procurement Policy or Process

Development actors and country governments can work to make procurement policies more favorable to smaller innovators. The vast majority of development funding for health (~\$25B in total annual ODA) flows to traditional procurement partners, yet these large-scale contracts would open up new sales pathways, country entry points, and long-term revenue sources to promising innovators, ultimately improving the trajectory of their businesses while

simultaneously improving health quality and affordability. Changing procurement policies can take the form of working with multilateral agencies such as WHO or UNICEF to update preferred product specifications helping country governments improve, streamline, or aggregate the tendering process, or creating 'single sourcing' or other protocols for development finance institutions (DFIs) to procure from their own portfolios of successful innovators.

Advanced Market Commitments

Development actors can also catalyze greater innovation by expanding the scope of advance market commitments⁴ (AMCs). Traditionally used to incentivize pharmaceutical and life science research, AMCs can be expanded to medtech or service delivery innovations that serve a critical need among BOP populations.

Knowledge Collation / Dissemination

Impact investors can collaborate to create industry benchmarks and share evaluation tools. There is a large knowledge gap in impact investing for global health today, with little known about relative cost-effectiveness of different interventions or hurdle rates among innovators in comparison with other industries. More formal and informal benchmarks will benefit both investors evaluating deals and the innovators being evaluated.



SPOTLIGHT

THE WORLD HEALTH ORGANIZATION'S BED NET PROCUREMENT POLICY



In 2007 the World Health Organization updated its policy position on malaria to recommend universal coverage of the entire population at risk for malaria with long-lasting insecticide treated bed nets (LLINs).¹ The policy change had a significant impact on the Global Fund and other funders' procurement policies, unlocking millions of dollars in funding for LLINs supplied by Vestergaard and other global health companies.

Greater resources have correlated with improved health outcomes. LLIN ownership rates among at-risk households increased by 30% from 2010 to 2016² and some estimates credit LLINs for the 25%³ decline in malaria-related deaths over the past decade with an estimated 450M cases of malaria prevented. These numbers highlight the real impact changes in procurement policy can catalyze.

450 MILLION
CASES OF MALARIA PREVENTED

¹ "Goals, targets, policies, and strategies for malaria control and elimination" WHO world malaria report 2011 ² "Free bed nets fight malaria" J-PAL ³ "Developing bednet durability criteria to inform procurement decisions and innovation" Results for Development. Image source: "Free bed nets fight malaria" ⁴ An Advanced Market Commitment (AMC) is an explicit agreement by buyers to guarantee a market for new products that meet a target product profile (TPP) at an agreed-upon price.

Where are we headed from here? This landscape report represents the first phase of an ongoing process. Next steps will include more detailed iteration and testing of facility prototypes, ultimately leading up to a pilot and official launch.



IDEATE

2018



Analyze the current global health investment landscape

Identify needs and opportunities among innovators and investors

Develop facility prototypes that can help meet these needs



TEST

2019



Conduct more detailed feasibility assessments for both facility prototypes

Perform a robust ROI analysis in terms of cost and impact

Curate a short list of potential partners and begin initial fundraising discussions



LAUNCH

2019 +



Select most promising facility prototype and conduct an initial pilot program

Launch and scale facility using lessons learned from the pilot

If you are interested in being part of the ongoing dialogue on how to more effectively mobilize private capital to support global health innovation or have an interest in partnering on either facility prototype, please contact cii@usaid.gov for more information. We look forward to hearing from you.

USAID

APPENDIX

INVESTOR SUPPORT FACILITY

SENSITIVITY TABLES • 1 of 2

FACILITY ASSUMPTIONS

50M

Facility Size

\$2M

Avg. Ticket Size

40%

First Loss Ratio

7yr

Hold Period

6%

Min. CAGR

for other LPs

FACILITY CAGR

PROPORTION OF PORTFOLIO "LOSSES"¹

	10%	20%	30%	40%	50%
1.0x	-147%	-182%	-191%	-196%	-200%
1.1x	-19%	-166%	-185%	-193%	-198%
1.2x	-11%	-24%	-177%	-189%	-196%
1.3x	-6%	-14%	-43%	-184%	-194%
1.4x	-2%	-8%	-21%	-177%	-191%
1.5x	2%	-4%	-13%	-147%	-187%
1.6x	4%	-1%	-8%	-24%	-182%
1.7x	7%	2%	-5%	-16%	-175%
1.8x	9%	4%	-2%	-11%	-147%
1.9x	11%	6%	1%	-7%	-26%
2.0x	12%	8%	3%	-4%	-18%
2.1x	14%	10%	5%	-2%	-13%
2.2x	15%	12%	7%	1%	-10%
2.3x	17%	13%	8%	3%	-7%
2.4x	18%	14%	10%	4%	-4%
2.5x	19%	16%	11%	6%	-2%

RETURN ON "WINNERS"

Scenario N/A – facility loses entire principal

Facility cross-subsidizes min. LP CAGR

Facility earns net positive returns

Scenario N/A – facility would out-earn other LPs

Sample portfolio return

¹ Portfolio losses as shown here indicate total investment loss. While unlikely that most innovators would default / fail to deliver any return on investment, return calculations for win to loss ratios as shown here can also represent a more varied underlying risk-reward profile (e.g., 40% of portfolio defaulting and 60% with 1x return is equivalent to 70% of portfolio defaulting and 30% delivering 2x return)

INVESTOR SUPPORT FACILITY

SENSITIVITY TABLES • 2 of 2

FACILITY ASSUMPTIONS

50M

Facility Size

\$2M

Avg. Ticket Size

40%

First Loss Ratio

7yr

Hold Period

6%

Min. CAGR
for other LPs

FACILITY COST • PER INNOVATOR IN USD THOUSANDS

PROPORTION OF PORTFOLIO "LOSSES"¹

	10%	20%	30%	40%	50%
1.0x	-804	-1004	-1204	-1404	-1604
1.1x	-624	-844	-1064	-1284	-1504
1.2x	-444	-684	-924	-1164	-1404
1.3x	-264	-524	-784	-1044	-1304
1.4x	-84	-364	-644	-924	-1204
1.5x	96	-204	-504	-804	-1104
1.6x	276	-44	-364	-684	-1004
1.7x	456	116	-224	-564	-904
1.8x	636	276	-84	-444	-804
1.9x	816	436	56	-324	-704
2.0x	996	596	196	-204	-604
2.1x	1,176	756	336	-84	-504
2.2x	1,356	916	476	36	-404
2.3x	1,536	1,076	616	156	-304
2.4x	1,716	1,236	756	276	-204
2.5x	1,896	1,396	896	396	-104

Scenario N/A – facility loses entire principal

Facility cross-subsidizes min. LP CAGR

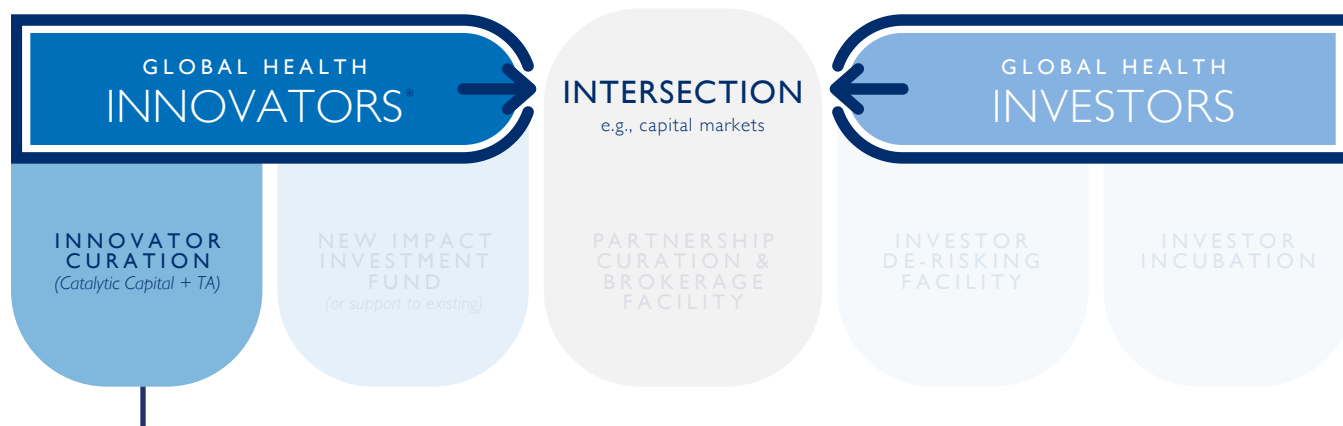
Facility earns net positive returns

Scenario N/A – facility would out-earn other LPs

Sample portfolio return

¹ Portfolio losses as shown here indicate total investment loss. While unlikely that most innovators would default / fail to deliver any return on investment, return calculations for win to loss ratios as shown here can also represent a more varied underlying risk-reward profile (e.g., 40% of portfolio defaulting and 60% with 1x return is equivalent to 70% of portfolio defaulting and 30% delivering 2x return)

EXAMPLE CURRENTLY IN PLAY ACROSS ALL FACILITY TYPES TO VARYING DEGREES OF SUCCESS • 1 of 5



EXAMPLE



DESCRIPTION

- > Saving Lives at Birth (SL@B) was launched in 2011 as partnership between a consortium of funders to provide seed, validation, and transition to scale funding for promising innovations in MNCH
- > SL@B has funded 100+ innovations today across eight rounds of funding with a portfolio that leans toward seed stage med tech / device innovations, and primarily academic and nonprofit innovators
- > It recently launched an in-house accelerator to provide early business model support to innovators through workshops and other events

SUCCESSES

- > Non-dilutive grant funding has been critical to supporting early stage innovation through prototyping and clinical trials (particularly for med tech innovations)
- > Some innovators find value in business workshops hosted by the accelerator

CHALLENGES

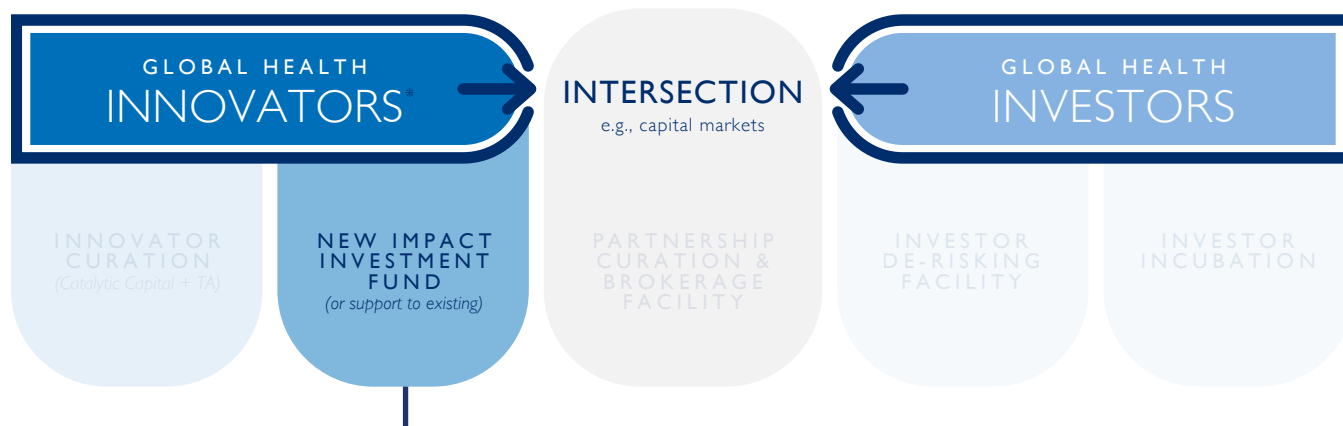
- > Current business support not tailored to individual innovators; not provided by industry experts
- > Mismatch of definitions contributes to the financing gap – i.e., “transition to scale” grantees not ready for private investment
- > Many innovators recycle in grant system (e.g., through non-additive pilots), stall in the “valley of death,” or pivot to a non-profit

IMPLICATIONS FOR FACILITY DESIGN

- > TA is equally, if not more so, critical for early innovator curation than grant funding alone
- > TA should be early, ongoing, tailored to individual needs (i.e., long-term mentors, not workshops) and provided by industry experts
- > Program should graduate innovators at a scale ready to hand off to private investors; ideally, it will help create a pipeline

*with potential to be commercially viable at scale. Source: SL@B Innovator alumni survey results 2017; SL@B funding landscape analysis 2018; SL@B innovation catalog; expert interviews

EXAMPLE CURRENTLY IN PLAY ACROSS ALL FACILITY TYPES TO VARYING DEGREES OF SUCCESS • 2 of 5



EXAMPLE



DESCRIPTION

- > TEAMFund operates both a non-profit and for-profit venture fund focused on med tech innovation that serve BOP consumers and markets
- > The fund invests like a traditional venture equity fund with similar terms and conditions (e.g., market return expectations, takes board seats) but first identifies disease areas and points on the continuum of care with the largest impact potential to guide its investment thesis
- > Portfolio companies gain access to a network of pro-bono advisors from the med tech industry after investment for advice related to clinical affairs, regulatory environment, distribution networks, strategy, and business development

SUCCESSSES

- > TEAMFund has attracted capital from traditional private sector investors (family offices and med tech companies) not typically engaged in emerging markets
- > The team has a robust pipeline and sees no shortage of potential deal activity in the space; two portfolio companies – Jana Care and Forus Health – are scaling successfully

CHALLENGES

- > Difficult to invest in promising early-stage innovators physically based in LMICs, as the enabling environment is not set up for impact investing (e.g., difficult to offer convertible notes)
- > Difficult to invest in innovations that truly focus on BOP or emerging economies without some cross-subsidization or dual-market strategy

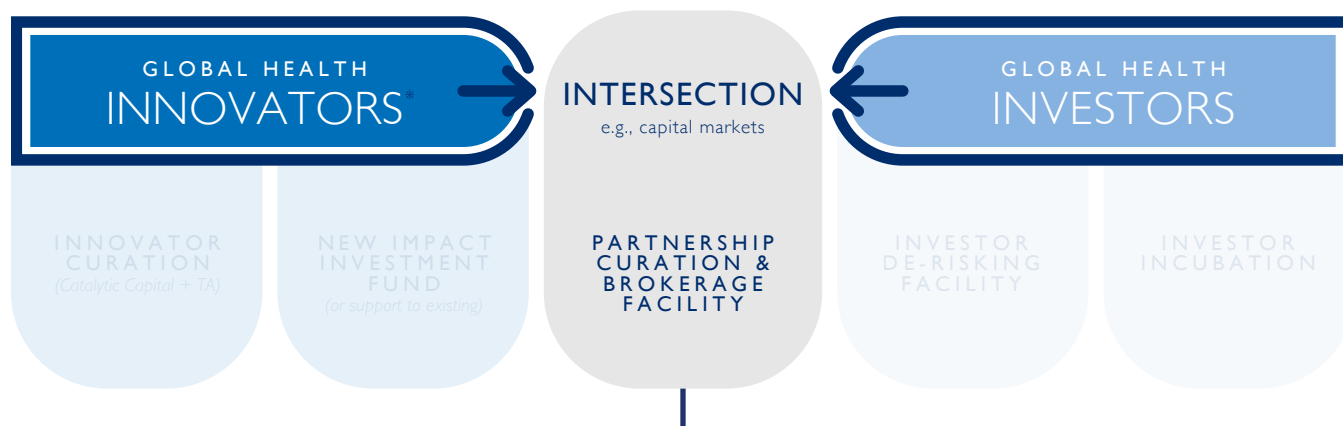
IMPLICATIONS FOR FACILITY DESIGN

- > There is appetite among commercial investors for BOP healthcare funds (if marketed to their interests) and enough potential deal activity
- > Partnerships with med tech advisors provide valuable advice to innovators and paves way for future investor hand-off
- > A strong impact thesis can help guide new funds in this space as they may have to make impact-return trade-offs

*with potential to be commercially viable at scale. Source: TEAMFund mid-year status report 2018; expert interviews

EXAMPLE CURRENTLY IN PLAY ACROSS ALL FACILITY TYPES

TO VARYING DEGREES OF SUCCESS • 3 of 5



EXAMPLE



EVERY WOMAN
EVERY CHILD

DESCRIPTION

- > The Every Woman Every Child (EWEC) innovation marketplace is a curation and brokerage platform associated with the EWEC initiative with the goal of scaling 20 innovations in MNCH by 2020
- > Partners of the platform submit innovations they have funded for consideration by an expert advisory panel, and if selected, innovations receive connections to other funders, governments, implementers, customers, and licensing partners to help scale their innovation
- > EWEC recently refreshed its strategy to focus on three clusters of innovations – private med tech, academic med tech, and service delivery – to better tailor support and networks to these clusters

SUCCESSES

- > Supported a carefully vetted portfolio of 19 innovators to date to raise significant direct and indirect funding (\$5M from GCC, and \$17M from 25+ development partners, respectively)
- > Facilitated ~60 formal connections for these innovators across a wide range of business needs

CHALLENGES

- > Lack of ownership among anchor partners of platform leads to challenges sourcing, updating, and resourcing EWEC
- > Lack of focus among innovation types before cluster strategy, making it difficult to provide tailored support to innovators
- > Extended review timeline (4 -5 months) required for curation too slow for most innovators' business needs

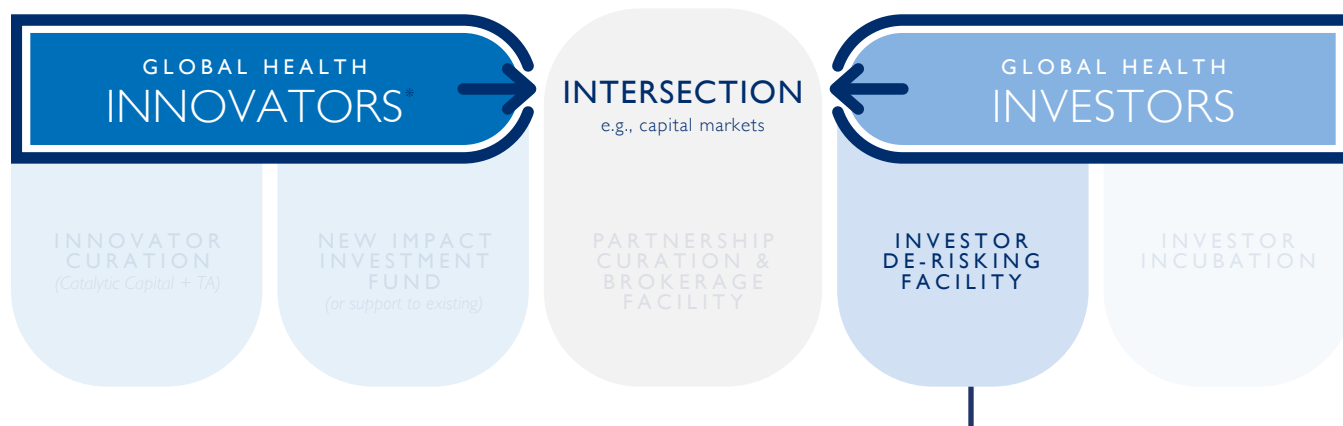
IMPLICATIONS FOR FACILITY DESIGN

- > Curation platforms can falter due to ownership issues, and work best when spearheaded by one partner, or wrapped into larger initiative (i.e., not a standalone website)
- > Efforts should have clear owner and committed resources, with liaisons at partner orgs, and handoff across investors
- > Focus – both on types of innovators and specific forms of support provided – is a critical success factor for any initiative

*with potential to be commercially viable at scale. Source: Innovation Marketplace strategy report 2018; EWEC term of reference 2018; EWEC Steering Committee meeting materials 2018; expert interviews

EXAMPLE CURRENTLY IN PLAY ACROSS ALL FACILITY TYPES

TO VARYING DEGREES OF SUCCESS • 4 of 5



EXAMPLE

Development Credit Authority
Putting local wealth to work

DESCRIPTION

- > USAID's Development Credit Authority (DCA) uses loan guarantees to incentivize local banks and financial institutions to lend their own capital to new sectors and borrowers
- > DCA offers loan, loan portfolio, and bond guarantees that guarantee up to 50% of the principal amount to financial institutions making loans in USAID priority development sectors (e.g., agriculture, energy, healthcare)
- > The facility has issued ~550 guarantees to date to 400+ partners across 80 countries, representing \$5.4B USD committed

SUCCESSSES

- > DCA offers a standardized and replicable process to access loan guarantees, whereas most de-risking in the space is currently one-off or sporadic
- > DCA popularizes the use of guarantees in blended finance, which are currently under-utilized, despite their success at crowding in private capital

CHALLENGES

- > Most DCA funding is in energy and agriculture, with little funding to global health (3% of total portfolio)
- > Current structure only allows for de-risking debt products, leaving other de-risking instruments on the table
- > Less uptake from the private sector than expected, as long timelines and bureaucracy dissuade private lenders

IMPLICATIONS FOR FACILITY DESIGN

- > There is an unmet need for investor de-risking within global health, esp. given success of other sectors
- > A new facility should offer guarantees alongside a wider range of de-risking instruments to offer more flexibility to investors (e.g., for equity investors)
- > New facilities should operate on short enough timelines to match private sector

*with potential to be commercially viable at scale. Source: "Development Credit Authority Impact Brief" USAID 2017; expert interviews

EXAMPLE CURRENTLY IN PLAY ACROSS ALL FACILITY TYPES

TO VARYING DEGREES OF SUCCESS • 5 of 5



EXAMPLE



DESCRIPTION

- > Capria is a fund accelerator founded in 2015 by the team behind Unitus Seed Fund that trains and seeds first-time fund managers in emerging markets
- > The accelerator provides \$500,000 USD in seed funding, business connections, and a four-week intensive “investor bootcamp” to a cohort of 10 carefully selected in-country fund managers from emerging markets
- > Capria also plans to raise a \$100M Emerging Managers fund of funds that will deploy up to \$5M in each of the funds it has helped to seed

SUCCESSSES

- > First fund of its kind to invest in first-time emerging market fund managers; “the only game in town” for interested co-investors
- > Stringent application requirements have led to strong talent pool (e.g., avg. of 10+ years business experience, finance experience)
- > Geographic diversity among cohort outside of main investment geographies (e.g., Zimbabwe, Guatemala)

CHALLENGES

- > Attracting non-impact focused co-investors for Emerging Managers Fund remains difficult, particularly when mentioning the fund's impact thesis
- > Current model relies heavily on founders' personal expertise and business connections, making the model difficult to scale
- > Accelerator offers no healthcare expertise

IMPLICATIONS FOR FACILITY DESIGN

- > Still some difficulty attracting / retaining talent in the space; new accelerators may need to invest in team building beyond founders
- > Few investor accelerators in the space beyond Capria – a new accelerator may need to build capacity from scratch, esp. for healthcare specific expertise

*with potential to be commercially viable at scale. Source: Company website; expert interviews

COMPLETED INTERVIEWS

Investors and Intermediaries

01

Acumen

Sachin Rudra

Chief Investment Officer

02

Blueprint Health

Mathew Farkash

Co-Founder

03

BMGF

Joe Wilson

Senior Investment Officer

04

Calvert

Beth Bafford

Vice President, Syndications
and Strategy

05

Endeavor

Rhett Morris

Director

06

Global Innovation Fund

Alix Zwane

CEO

Simeon Bridgewater

Investment Director

07

Global Partnerships

Jim Villanueva

Managing Director

08

Grand Challenges Canada

Deepika Devadas

Program Officer, EWEC

Leeat Gellis

Senior Portfolio Manager

Julie McDowell

Consultant, EWEC

Marketplace; President,
TARIS Inc.

Annie Theriault

Special Advisor Innovative

Finance, EWEC

Marketplace; Chief

Investment Officer, GCC

09

ICV

Robert Smith

Founder

10

IFC

Biju Mohandas

Head, IFC Health
and Education, SSA

11

Leapfrog

Michael Jelinski

Health Team Member

Rob Schneider

Senior Director, Strategy

12

Lemelson Foundation

Maggie Flanagan

Program Officer

13

MARS

Kathryn Wortsman

Fund Manager

14

Menterra Venture Advisors

Mukesh Sharma

Managing Director

15

MM Supply Chain Advisors

Maeve Magner

Principal

16

Novastar

Sapna Shah

Investment Director

17

PATH

Praveen Raja

Vice President of Technology
Dev. and Introduction

18

TEAMFund

Yousuf Mazhar

Managing Director

19

Total Impact Capital, Live

Amb. John Simon

Founder

Sunita Grote

Innovation Fund Manager

20

UNICEF Innovation Fund

Elisa Omodei

Innovation Fund Manager

Research Scientist

21

Unitus

Saumya Gaur

Healthcare Investment Team

22

Unreasonable Institute

Dave Smith

Creative partnerships

23

USAID

Jen Fluder

Innovation Team Lead

Alexis Bonnell

Chief Innovation Officer

Priya Sharma

Senior Policy and Innovative
Financing Advisor

Sofia Stafford

Program Analyst

24

Village Capital

Deepak Menon

Director, South Asia

25

Villgro

Robert Karanja

Co-founder and CEO

COMPLETED INTERVIEWS

Innovators

01

Africa Health Placements

Saul Kornik

Chairman and Co-Founder

Stacey Ann Pillay

Chief Innovation Officer

02

Afya Research Africa

Samson Gwer

Executive Director

03

Arogya Finance

Dheeraj Batra

Co-founder and VP of Business Development

04

Aurolab (Aravind)

David Green

Founder

05

Changamka

Zack Oloo Rombo

CEO and Co-Founder

06

ClickMedix

Ting Shih

CEO and Founder

07

Dlohaiti

Jim Chu

CEO

08

D-REV

Krista Donaldson

CEO

Andrea Coen

Director of Development

09

Forus Health

KC Chandrasekhar

CEO and Founder

10

Impact Water

Evan Haigler

Executive Director

11

InnAccel

Siraj Dhanani

CEO and Founder

12

Jacaranda Health

Nick Pearson

Executive Director and Founder

13

Kinnos

Jason Kang

CEO and Co-Founder

14

Institute for Transformative Technologies

Shashi Buluswar

Director

15

Little Sparrows Technologies

Donna Brezinski

CEO and Founder

16

Living Goods

Lisa McCandless

Chief Development Officer

17

Lucky Iron Fish

Tania Framst

VP of Operations and Sales

18

Reina Madre Clinicas de la Mujer

Juan Esteban MB

Co-Founder

19

SevaMob

Shelley Saxena

CEO and Founder

20

Shift Labs

Beth Kolko

CEO and Co-Founder

21

Simprints

Nicolas Morena de Palma

Head of Impact Partnerships

22

Sisu Global Health

Katie Kirsch

CMO and Co-Founder

23

Sproxil

Ashifi Gogo

CEO and Founder

24

Touch Surgery

Andre Chow

Co-Founder

25

UE Lifesciences

Akshat Shah

Head of Strategy and Business Development

ACRONYMS

AI	Artificial intelligence	HR	Human resources
AMC	Advanced market commitment	IP	Intellectual property
AUM	Assets under management	IT	Information technology
B2B	Business to business	LLITN	Long-lasting insecticide treated bed nets
B2C	Business to consumer	LMIC	Low- or middle-income country
BD	Becton dickinson	LP	Limited partner
BMJ	British medical journal	M&A	Merger and acquisition
BOP	Base of the pyramid	MCH	Maternal and child health
CAGR	Compound annual growth rate	MNCH	Maternal, newborn, and child health
CEO	Chief executive officer	NGO	Non-governmental organization
CIH	Commission on investing in health	NTD	Neglected tropical disease
CII	Center for accelerating innovation and impact	ODA	Official development assistance
COO	Chief operating officer	PDP	Product development partnership
DCA	Development credit authority (USAID)	PE	Private equity
DIB	Development impact bond	PPP	Public private partnership
DIV	Development innovation ventures (USAID)	R&D	Research and development
ESG	Environmental, social, and governance	ROI	Return on investment
EWEC	Every woman every child	SaaS	Software as a service
FTE	Full-time equivalent	SC	Sales channels
GCC	Grand challenges Canada	SDG	Sustainable development goals
GHIF	Global health innovation fund	SL@B	Saving lives at birth
GIF	Global innovation fund	SMS	Short message service
GTM	Go to market	TA	Technical assistance
HCP	Health care practitioner	USAID	United States agency for international development
HIC	High income country	WHO	World health organization



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