

Strengthening health systems in developing countries through private investment

Lessons from the Global Health Investment Landscaping Project (GHILP) January 2015

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Executive summary

- The purpose of this work is to understand the current landscape of global health investors in India and East Africa; to do so, we reviewed ~85 organizations and interviewed ~30 capital providers in the field
- From those conversations, we heard a very honest assessment of the challenges in the sector as well as a fuller picture of the macroeconomic trends that are leading to increased interest in the private health marketplace
 - Main addressable challenges for investors included a lack of coordination and collaboration among parties in the sector (public & private, different investor types, etc.) and a mismatch of available capital and needs of enterprises on the ground
 - Other challenges stated were lack of adequate health insurance schemes, a need for an enabling policy environment, and pipeline of human capital (with medical and business training)
 - Major trends spurring activity were the growth of the middle class, increased access to information and technology, increased mobility and urbanization, and peaked interest from large corporations who see growth potential in these markets
- To address the main challenges for impact investors, we developed a two step framework for evaluating health sector opportunities:
 - First, investors should assess and understand the typical market failures associated with the segment of the value chain and the consumer population targeted to see if the capital can be flexible or patient enough to overcome market challenges
 - Next, investors should understand the stage of the organization to fit capital to their true needs (instead of the entrepreneurs reshaping themselves to serve investor needs)
- The framework highlights the different areas where grant capital may be more appropriate than investment capital and vice versa. Additionally, it underscores that the intention and characteristics of the capital are important for greater alignment between the investor and entrepreneur(s)

Agenda

- **What we set out to do**
- Who we talked to
- What we learned
- What we propose might help
- Contact & Acknowledgements

The GHILP was launched to understand the current sources of financing for global health entrepreneurs

Goal of the GHILP

To landscape the **current sources of debt and equity** financing for global health entrepreneurs and enterprises in East Africa and India, to **identify opportunities and challenges** seen through the eyes of investors currently active in the field

Purpose

(1) To understand the range of **available financing sources** for SEAD entrepreneurs, (2) to explore potential partners for Calvert Foundation's **Global Health portfolio**, (3) to **share our findings** with other investors to spur additional interest in the sector

Team

Co-led by **Sarah Gelfand**, IPIHD / SEAD and **Beth Bafford**, Calvert Foundation; supported actively by **Cathy Clark**, CASE at Duke; **Bonny Moellenbrock** and **Rachele Haber-Thomson**, Investor's Circle

We limited scope to look closely at the most relevant segment of the market for impact investors

Geography

Focused on **East Africa and India**, but global investment funds or organizations focused on the larger regions of Africa and South Asia were also included

Type of investment

Debt and equity only, preferably \$250K - \$5M average deal size; looked at organizations with multiple products at their disposal, but none that were solely philanthropy

Sector

Focused on **health-only or health-as-a-vertical funds**, but also included sector agnostic organizations to understand if and how they are approaching the health sector from an SME lens

Impact orientation

Focused on funds with an **explicit impact orientation**, but also included those who provide financing for SMEs or growing businesses even if impact was not their primary goal

We spent six months gathering information and talking to investors

March – April '14

May – July '14

August – November '14

Phase 1

Phase 2

Phase 3

Initial research and landscaping

- Compile existing data sources
- Reach out to major players in the field to leverage existing research and work
- Conduct a literature and data review
- Create an interview framework based on core hypotheses

In-depth Interviews

- Conduct structured interviews with funders, infrastructure builders, and intermediaries identified in phase one

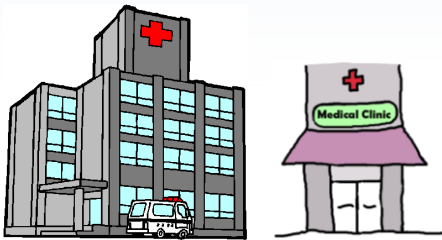
Synthesis and Recommendations

- Synthesized major themes and posited potential set of solutions
- Shared findings with other investors to get feedback / build on existing research

When we consider global health investment, we are looking at opportunities across the value chain

Physical delivery system

Where people go for healthcare services



Medical devices & supplies

The goods medical professionals use to provide services



Pharmaceuticals

The drugs to cure disease, from research to reality



Payment systems

How the money flows to pay for healthcare



Mobile & other technology

Making healthcare goods and services more efficient



Logistics & distribution

Getting products and services to populations



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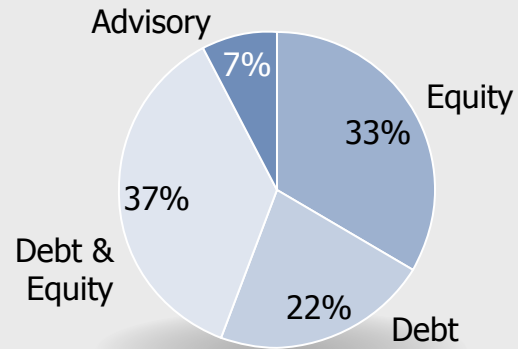
After creating a database of ~85 orgs, we conducted ~30 interviews with active investors in the field



Investors we interviewed varied in their approach to healthcare investment

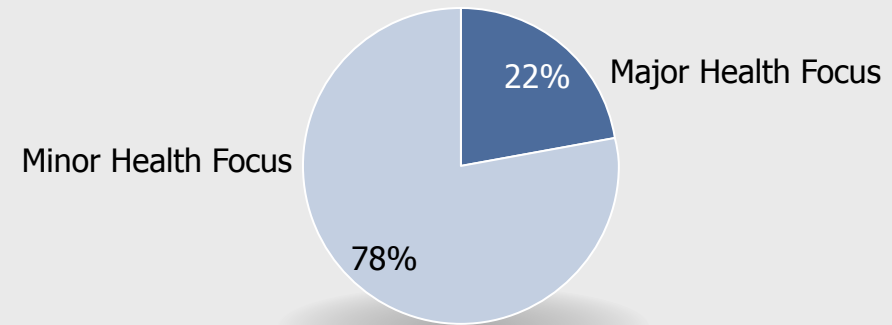
Interviews by type of capital

100%= 27 interviews, % of organizations



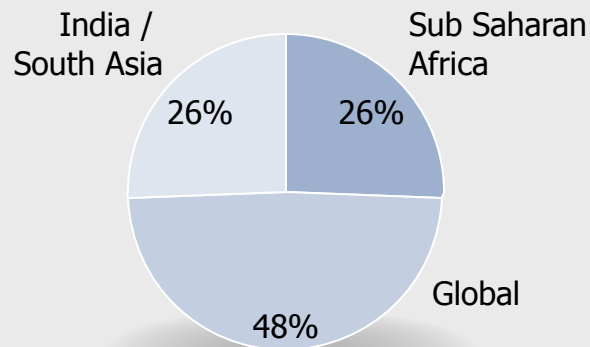
Interviews by health focus

100%= 27 interviews



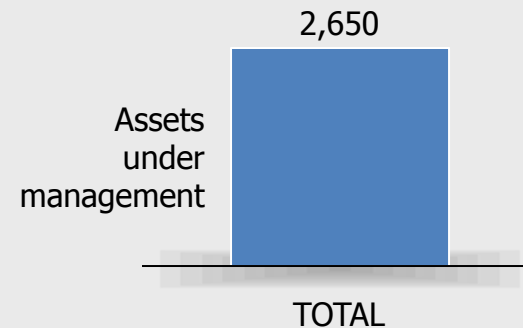
Interviews by region / focus area

100%= 27 interviews, % of organizations



Total assets under management

\$USD in millions, planned or currently deployed

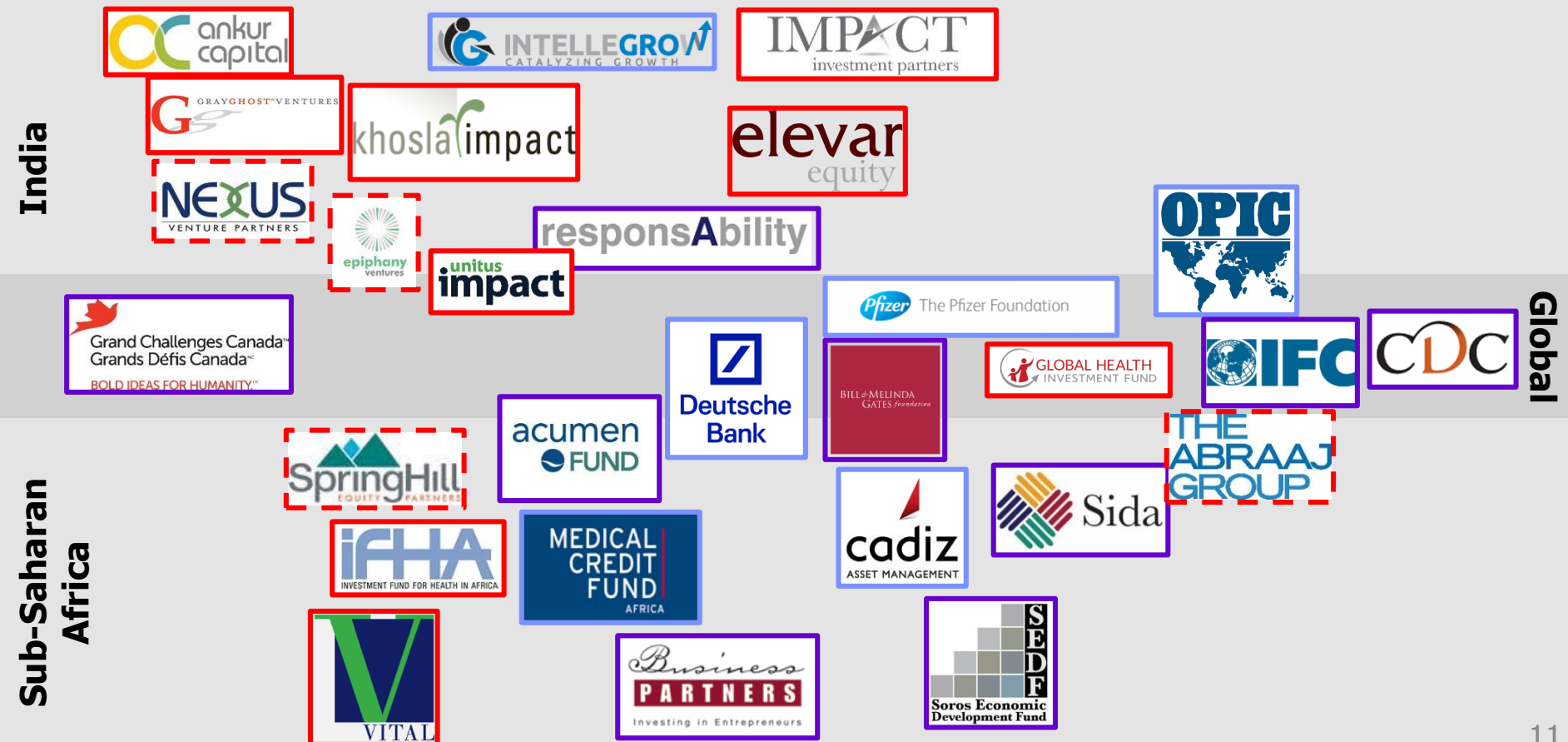


Stage and type also varied, with most looking to provide growth capital to take scaling risk, not seed risk

Early-stage

Growth

Late / mature



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Investors had mixed views about how to balance the opportunity and risks involved

Some are extremely bullish on the market...

“ It is a buyers market, there is more opportunity than capital so we can wait for deals to come to us and pick the ones that are best suited.

– *Equity investor*

We wish we were 80% invested in health because of the huge overlap in financial viability and social impact.

– *Debt & equity investor*

...while others are more bearish, given the stage of market development

“ The market has been flooded with free money for early-stage proof-of-concept companies, which completely distorts the market and makes it hard for private investors to come in later in the business cycle.

– *Debt investor*

Government ignores the private sector but then organizations are negatively affected by policies they make.

– *Debt & equity investor*”

We heard about the particularities of the private health market in India...

Overarching Health Sector Needs

Challenges in India include **shortage of medical professionals**; lack of necessary **grant funding for R&D** phase of development; and **distribution** challenges

Political Context

Healthcare in India is **too political**

Fragmented governments make it hard to replicate across geographies

There is a large **reputational risk of dealing in healthcare** in India because of all of the negative stories about quality

Business Model Considerations

Hard to invest in rural private clinics in India because the benefits of care aren't understood. It takes a lot of coordinated work to make this happen.

For innovations focused on serving rural populations, we haven't seen many scalable / viable business models; **we don't see many pan-country models with large impact**

Financing Environment

Lack of debt - **banks don't understand the business models** enough and they have to stick to their policy guidelines - no risk scoring methodology available

...as well as the unique characteristics in East Africa

Overarching Health Sector Needs

The private healthcare market is **highly fragmented**

There are few **standards around quality**

Challenges include **talent recruitment, management, medical training... human capital.**

There is an HR problem in Africa that doesn't exist in India – **they need more medical professionals**

Political Context

There's a foundational issue that some people don't understand the **need for a private sector health solution**, which is hampering the industry

The public sector needs to be more **responsive and collaborative** with the private sector - private sector healthcare does not get considered in policy making or decision making which can distort the market

Business Model Challenges

Providers are mostly **independent entrepreneurs**

It is hard to find **anything at scale.**

The field is in 'pioneer' stage - needs both **capital and technical assistance**

We've learned humbly that if we're **providing care to the lowest income, it needs to be a cross-subsidy model**

Financing Environment

Traditional investment timeframes of 7-10 years for equity funds are **too short.**

The market is **flooded with early stage free money** from aid agencies which is not helping the entrepreneurs

Local companies are unable to access 'old fashioned' growth financing through debt; either **debt is unavailable, available at crazy high rates, or needs too much collateral**

While some perspectives on dynamics in the sector spanned geographies

Overarching Health Sector Needs

Incentives are not set up correctly for consumers to **adequately demand preventative healthcare**

Political Context

Hard to find **business models that work with the government as purchaser**, plus it is difficulty to manage regulatory environments across countries with **very different standards**

Business Model Challenges

It is hard to find models that are not **highly subsidized with grants** for TA

Need to stop looking at the field from a disease-focused lens; lots of **opportunities in cross-disease business models** like diagnostics, mHealth, health data tracking (EMR), franchise models

Financing Environment

A lot of **silos of investors** - hard to get them to work together, funders say that they are willing to work across organizations in theory, but the **practice has yet to come true**

There hasn't been a lot of movement from the Foundation community, it has been **hard for investors to work with Foundations** so far.

Despite these challenges, there is a trend towards more robust private sector health marketplaces

DEMAND: A growing private health sector

- A **growing middle class** has greatly increased the consumer base and ability to pay for all parts of the health system
- Greater **mobility** of populations and increasing **urbanization** allowing greater access to services
- Increased **access to technology and information** allows consumers to understand the benefits of healthcare services
- Greatly **peaked interest from multi-national corporations** who see developing economies as their future source of growth
- Growing realization that the **public sector is insufficient** to serve the needs of the population

SUPPLY: More capital looking for deals

- Developed country investors and governments are exploring new ways to **deploy capital to solve social problems**, as evidenced by the G8 Taskforce and working groups
- Private capital is increasingly seeking investments that consider – if not explicitly seek – **social and environmental returns**
- Fund managers and Development Finance Institutions with a footprint in Sub-Saharan Africa and/or India are **increasingly looking at health as a focus sector**

Sources: Interviews conducted May – September 2014, G8 Impact Investing Taskforce report, [“The Invisible Heart of Markets”](#)

We heard a lot of interesting commentary on these macro trends and the interest of capital providers

A growing middle class has greatly increased the consumer base and ability to pay for all parts of the system

“ *There is an interesting opportunity in middle class healthcare, because you can create higher quality alternatives, which is a lot less expensive than traveling abroad. This population is growing rapidly and starting to have more access to insurance so we're starting to see differentiated pricing by payor.* ”

Increased access to technology and information allows consumers to understand the benefits of healthcare services

“ *Computing power of mobiles has increased exponentially and that has allowed for micro-innovation based on macro-innovation; most new technology doesn't get adopted by BoP first but trickles down*
There are lots of opportunities in cross-disease business models like diagnostics, mHealth, health data tracking (EMR), franchise models ”

Greatly peaked interest from multi-national corporations who see developing economies as their future source of growth

“ *A lot of corporates are getting more active in the financing space so they can sell equipment to smaller clinics. General Electric used to have one account manager, now have full teams across Africa.* ”

Growing realization that the public sector is insufficient to serve the needs of the population

“ *Some of the top performing companies on the South African stock exchange are in the health sector. People are starting to pay a lot more attention to the field.*
In India, healthcare has been a consistently strong sector for private equity. Every reasonable mid-market private equity fund will have a partner who is at least 50% dedicated to health ”

What we heard can be validated by a quick literature review on capital invested and private healthcare growth...

India

- Over **USD 1.6B** invested in impact investing in India from 2000 – 2014 across impact funds, foundations, DFIs, and angel investors
- Healthcare spending has grown at a **10.3% CAGR since 2008** and is projected to grow to **\$158B** in 2017, annual growth of more than **15%**
- The share of healthcare provided by the private sector is projected to raise from 66% in 2005 to **81% in 2015**; currently **74%** of hospitals and **40%** of beds are run by the private sector

East Africa

- The impact investing market in Africa is between **USD 300-400M** per year; Sub-Saharan Africa, especially in Kenya and South Africa, represent large areas of interest and growth
- Healthcare spending has grown at a **9.6% CAGR since 2000**, largely focused on infrastructure, capacity building, and specialized services and is expected to continue this growth
- Private sector investing in healthcare in Africa is expanding, expected to grow from **USD 11B to USD 20B** from 2007 to 2016 with 50% in healthcare provision

...understanding that there is still considerable unmet demand for private health investment in both regions

India

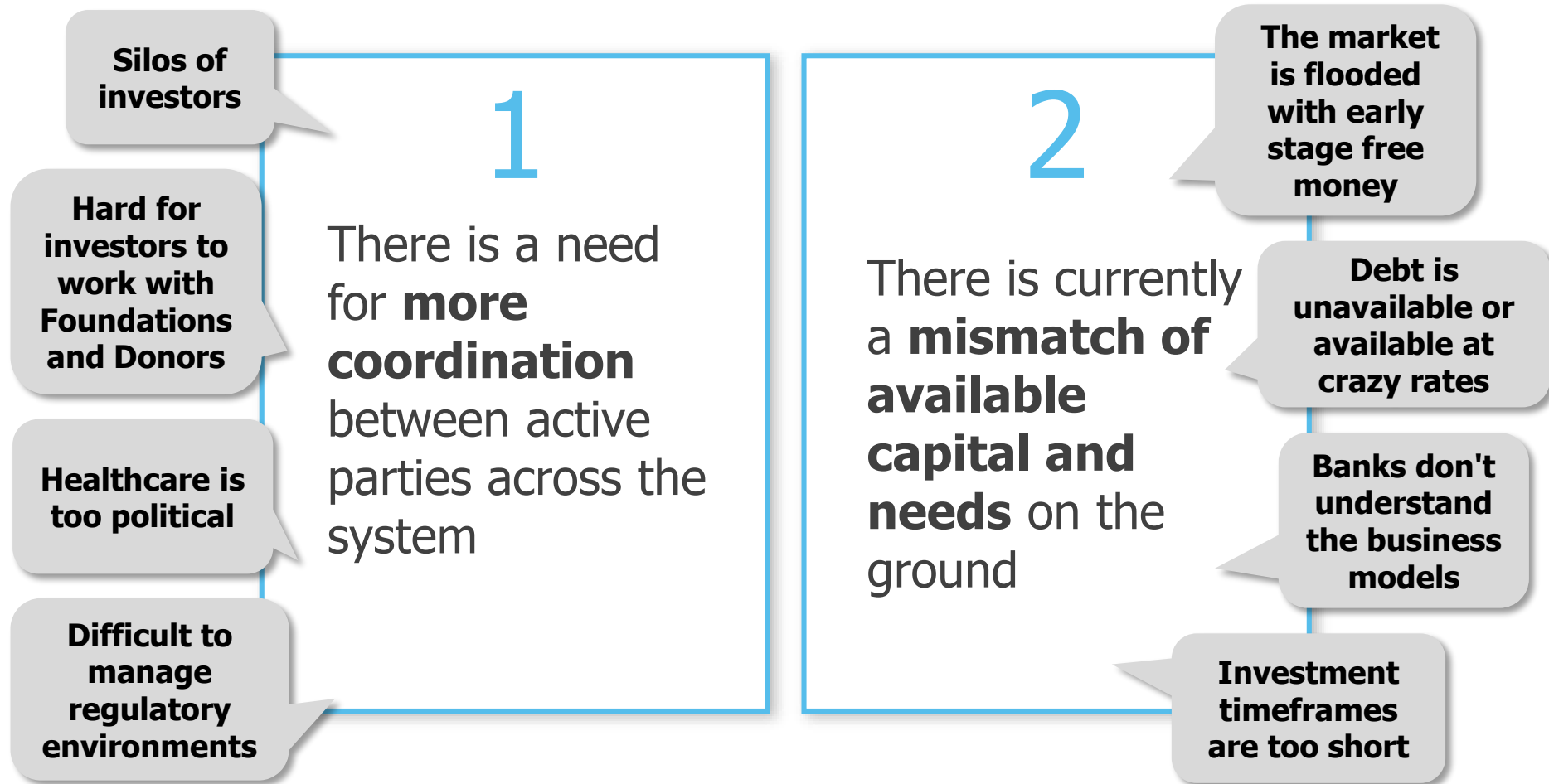
- Population confronting **double disease burden** of communicable and non-communicable diseases, as well as poor sanitation, nutrition, and mental health
- Current **infrastructure and funding inadequate** to meet these needs; **\$20 per capita** government expenditure on healthcare, less than 1 bed per 1,000 people

East Africa

- Sub Saharan Africa has 11% of the world's population but carries **24% of the disease burden** with only 1% of global health expenditure and 3% of health workers
- Region **lacks critical infrastructure** to deliver health care; only **\$14 per capita** government expenditure on healthcare (avg), and public sector offerings tend to be of poor quality

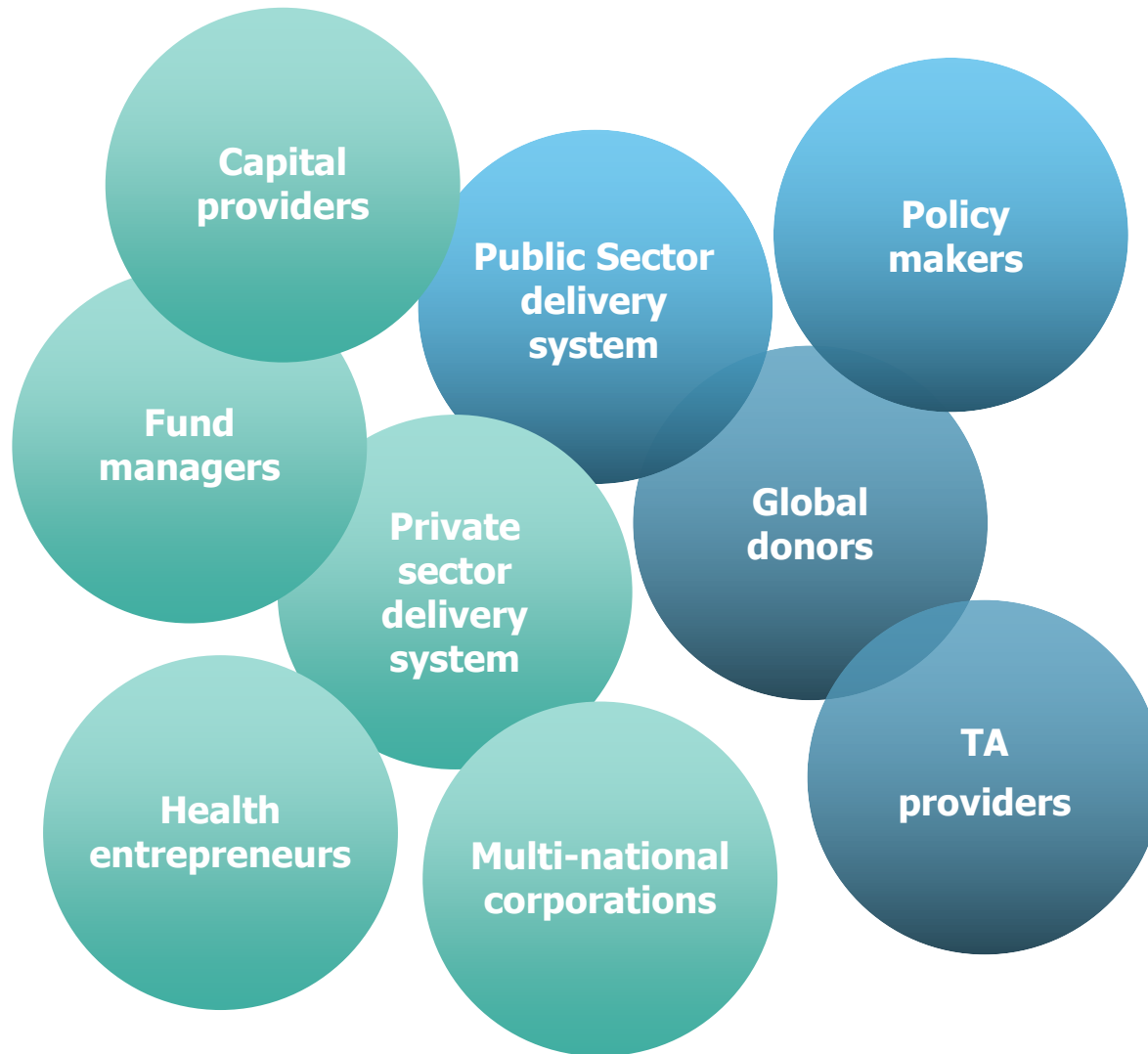
Recent Ebola outbreaks across West Africa have emphasized the need for a **more robust private sector solution** for the successful delivery of essential and emergency health services

Frequently cited challenges can be boiled down to two main categories



1

There is a need for more coordination between active parties



- We heard a lot about frustrations and / or concerns with the **lack of communication between the major players in the sector**, particularly between the private (light green) and public / NFP (blue) sector actors, leading to poor decisions and unintended consequences
- To compliment the growing interest in investment, there needs to be more support to create an **enabling policy and regulatory environment**

2 There is currently a mismatch of available capital and needs on the ground

- There is capital flowing in the global health investment space seeking deals, but the capital available is **not always meeting the needs** of the entrepreneurs or enterprises
- **Restraints on capital** include risk appetite, programmatic lens, return expectations, population requirements, among others
- Enterprises are seeking funding that fits the needs of their organizations along various stages of their development, which often **does not fit neatly into pre-defined capital 'boxes'**



Examples follow

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The market dynamics across the sector vary depending on the target population and sub-sector

For the greatest chance of successful investing in the sector...



We learned that you have to understand the **market challenges** at the **intersection of the population and piece of the chain...**

...before you understand how each **segment** of the market is **optimally financed...**

...and finally where the **enterprise** is in its **stage of development.**

To simplify a complex sector for interested investors, we have developed a two-step framework

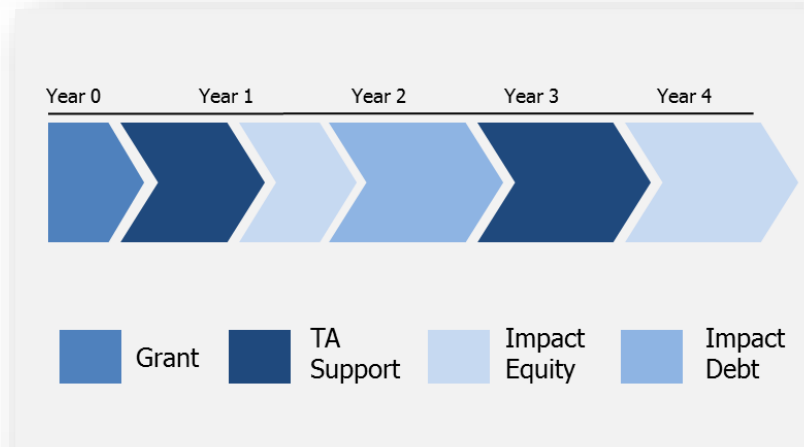
Step 1:

Understand the **market context** using the ecosystem grid

		Populations			
		Rural BoP	Urban/peri-urban BoP	Urban/peri-urban middle-income	Urban/peri-urban high-income
Sub-sectors	Delivery system	Inadequate volume Infrastructure Price sensitivity	Quality for cost Infrastructure Price sensitivity	Quality for cost Infrastructure	Infrastructure
	Medical Device & Supplies	Last mile distribution Inadequate volume Price sensitivity	Price sensitivity	Price sensitivity	
	Pharma	Last mile distribution Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	
	Payment Systems	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry	
	Mobile & Tech	Infrastructure Access Price sensitivity	Access Price sensitivity		
	Logistics & Distribution	Last mile distribution Inadequate volume Infrastructure	Infrastructure Price sensitivity	Infrastructure	

Step 2:

Assess the **enterprise needs** at their current state of growth



Market challenges differ based on the population and sub-sector of the health field addressed

1

2

		Populations			
		Rural BoP	Urban/ peri-urban BoP	Urban/peri-urban middle-income	Urban/peri-urban high-income
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Market failure /
complicating factor

To address the challenges, the intent and characteristics of the capital become important

1

2

		Populations			
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Capital characteristics vary across (and within*) types of funding

1

2

	Characteristics of capital	Intent of capital	Best-suited target beneficiaries
Grant	<ul style="list-style-type: none"> • Provided through a programmatic lens (typically specific to disease type/health issue or population) • Varies in flexibility (exact timeline/use of funding dependent on grant agreement) 	<ul style="list-style-type: none"> • To achieve a health output or outcome for target population • To conduct research or business development • To catalyze investment 	<ul style="list-style-type: none"> • Lowest-income, most disadvantaged populations and communities (typically rural or hard to reach)
Impact capital	<ul style="list-style-type: none"> • Typically more creatively / flexibly structured • Patient, appetite for longer return timeframes in recognition of market complexities • Potential for larger volumes than grant capital 	<ul style="list-style-type: none"> • To achieve a health output or outcome through a market-based solution • To achieve a financial return, not always commensurate with risk • To catalyze future investment 	<ul style="list-style-type: none"> • Low to middle income populations • Lowest-income, most disadvantaged populations through cross subsidy
Traditional capital	<ul style="list-style-type: none"> • Structured similarly to traditional asset classes / financial instruments • Much larger volumes than impact and grant capital 	<ul style="list-style-type: none"> • To achieve a financial return commensurate with risk (real or perceived) • To track impact of investment 	<ul style="list-style-type: none"> • Middle to high income populations with ability to pay higher prices for quality products and services

* These statements are not always applicable for every player in the respective 'type'

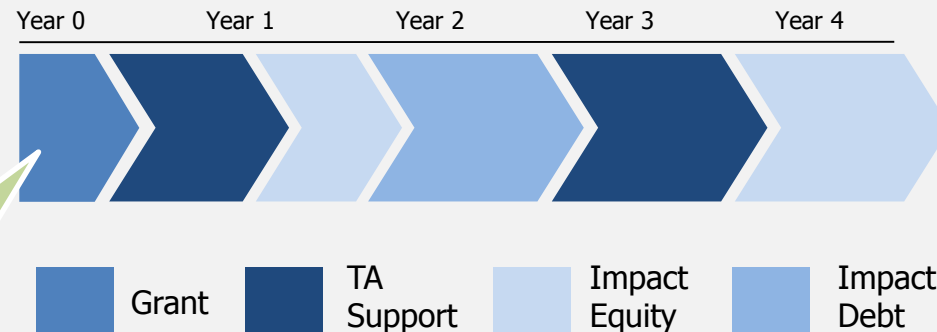
Once the ecosystem is understood, the focus can shift to the needs of the enterprise

1

2

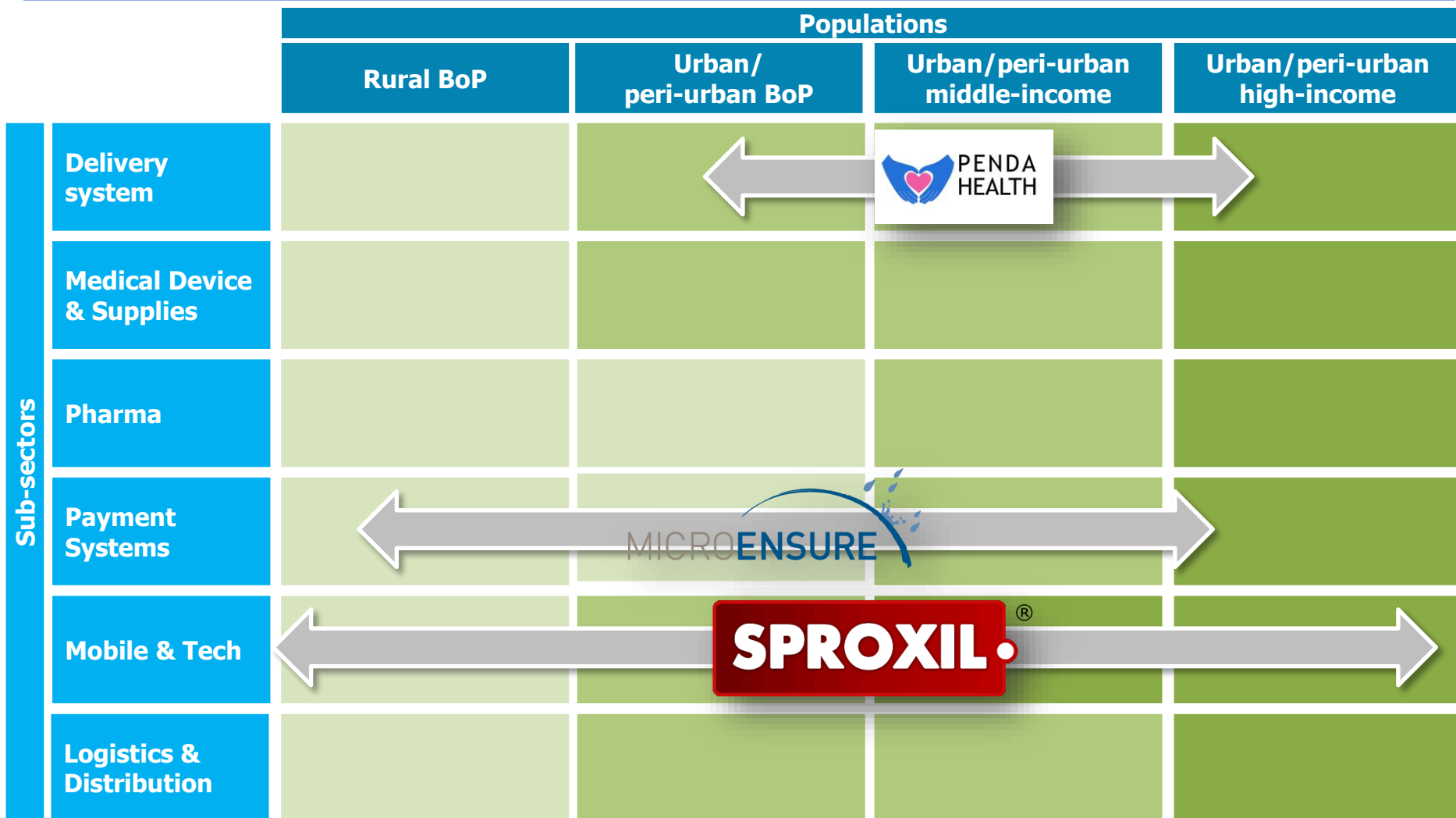
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Enterprise X: Capital and business support needs



No two enterprises are alike in their need for capital and support. There tends to be a greater chance of success when **investors collaborate** to reach into different pockets at different times to provide **responsive capital based on the organization's needs**

A few examples help illustrate how to put these tools to work in the context of real opportunities



Case example: Penda Health

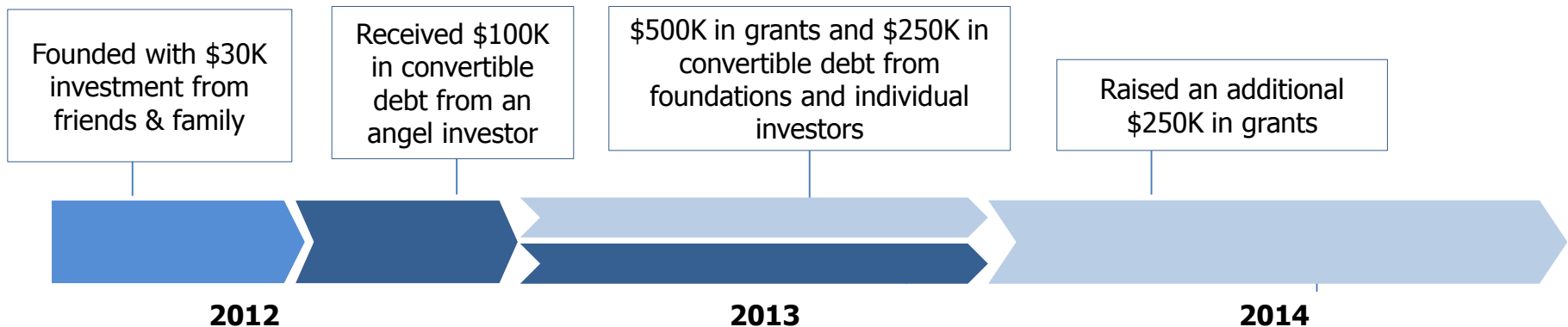
Chain of outpatient clinics

Delivery
System

Quality for cost
Infrastructure
Price sensitivity

BACKGROUND: Penda outpatient clinics offer quality affordable care to low and middle income individuals in Kenya. The Penda model leverages a unique staffing model, a patient-centric approach, and a targeted set of services to address the critical need for cost-effective primary care in Kenya and across East Africa.

INVESTMENT TIMELINE:



REFLECTIONS: Mismatch of capital and business needs early on can hinder growth longer-term

- Early on, Penda found it difficult to raise grants from foundations and easier to raise capital from angel investors
- In year 2, the organization realized it needed more time and money to refine its business model
- They successfully raised grant funding and, over the past two years, have focused on testing what works
- As the organization prepares to raise scale-up equity, the existing debt on its balance sheet makes it harder to reach terms that are palatable for everyone
- A strong base of grant capital early on would have allowed the organization to safely experiment with different approaches to be poised for an equity investment a few years down the road

Case example: MicroEnsure

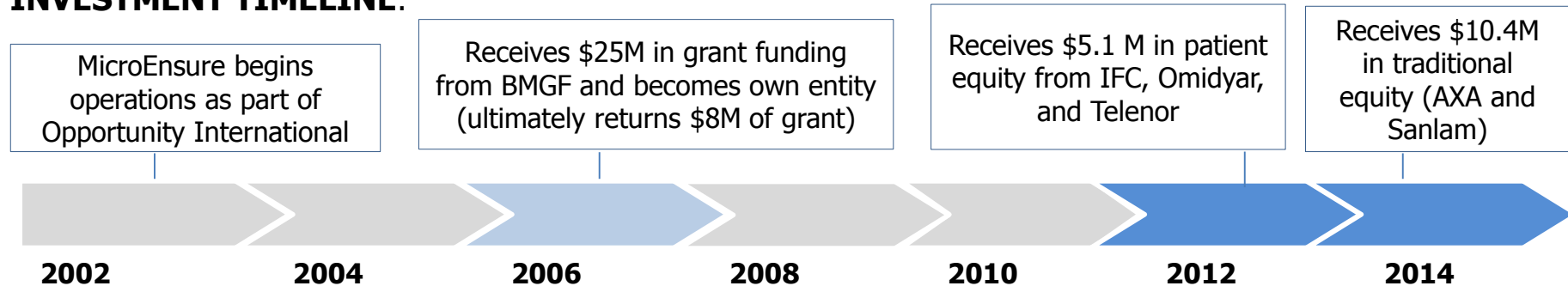
Micro-insurance intermediary

Payments
Systems

Information Asymmetry
Price sensitivity

BACKGROUND: MicroEnsure was founded to bring insurance coverage to the base of the pyramid. MicroEnsure acts as an insurance broker, packaging affordable insurance products and offering back-office support (e.g. claims processing and reporting) to MFIs and other sales partners. MicroEnsure's primary health offering is a hospital cash product.

INVESTMENT TIMELINE:



REFLECTIONS: Mix of flexible grants and equity can be more effective than grants alone

- MicroEnsure received a very large grant in its “start-up” phase in recognition of the significant need for insurance for the BoP and the lack of products, systems, and consumer education for this market
- The large grant pushed the organization to expand extremely quickly and the funder was wedded to the original grant objectives, making it difficult for the organization to adapt its business model
- Having grown to a sizeable scale with solely grant dollars, the organization did not have the discipline to create a sustainable business model in order to raise capital to scale its operations
- A diversified capital mix during the scale-up phase would have helped the organization manage its growth more effectively

Case example: Sproxil®

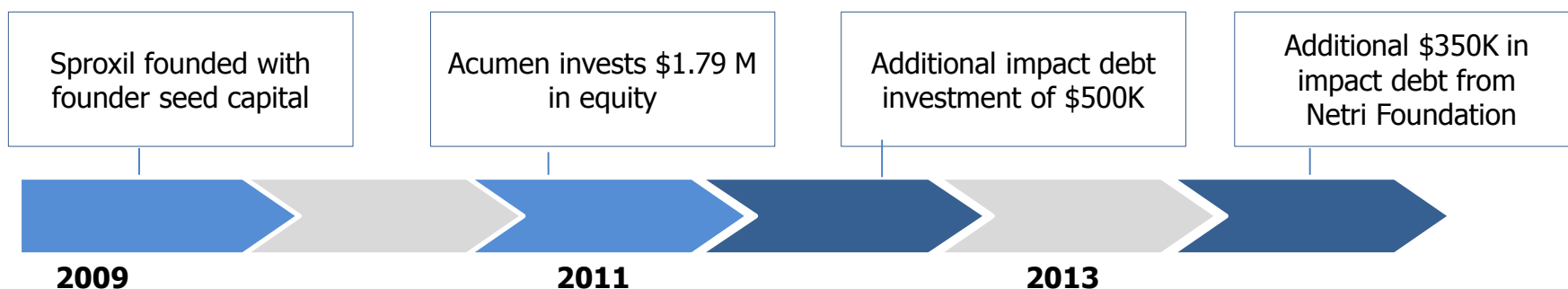
Anti-counterfeiting technology

Mobile &
Tech

Infrastructure
Access

BACKGROUND: Sproxil uses mobile technology to combat counterfeiting, a critical challenge in emerging markets where ~ 25 – 30% of medicines are counterfeit. The Sproxil Mobile Product Authentication™ (MPA™) solution is purchased by pharmaceutical companies and used for free by end-consumers who can verify the authenticity of a drug by sending a code via text message. The market for MPA is quite large and the potential adjacent applications in other industries and supply chain management are also significant.

INVESTMENT TIMELINE:



REFLECTIONS: Scalable business models still need flexible capital.

- Sproxil's solution addresses a significant need in markets with insufficient infrastructure and resources to ensure medicine safety. However, Sproxil's sales process is complex and lengthy, in large part due to the lack of global standards related to anti-counterfeiting
- Each time Sproxil enters a new market, the upfront set-up costs are significant. Patient equity and debt has been key for the organization since it requires longer time frames to achieve break-even goals
- Despite the scalability of the model, the upfront costs of entering new markets makes one-time set-up grant funding another important funding mechanism

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Definitions

Inadequate volume: Most business models serving Bottom of the Pyramid populations are low margin and thus require significant volume to breakeven. These requisite levels of volume for products and services can be hard to reach in rural, sparsely populated areas. For insurance companies, this makes data collection and risk pooling even more difficult.

Infrastructure: Areas where significant infrastructure improvements are needed for businesses to operate effectively , e.g., real estate, roads, electricity, communications tools, etc.

Price sensitivity: For business models that depend on low-income clientele, price is a key driver of consumer decision making. This is nuanced as low prices also influence consumer perception of value.

Last mile distribution: The act of getting products or services to remote rural areas, which is often very costly and time-intensive.

Information asymmetry: Where consumers do not have access to the information or data they would need to understand the value of a product or service (e.g., the value of insurance). This typically requires additional consumer education, which can be difficult and costly.

Access: Products or services that require or depend on the use and availability of specific technologies like mobile / smart phones, computers, etc.

Quality for cost: For healthcare delivery, consumers do not always make rational tradeoffs between quality and cost