Innovative financing strategies

Improved diabetes care & health system strengthening in middle-income countries

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Founder & CEO

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“Billions to Trillions” SDG agenda

$2.5 Trillion
Annual Financing Gap to Achieve SDGs by 2030.

Innovative Finance
Mobilizing private capital towards development outcomes at scale requires a blended finance ecosystem with catalytic intermediaries and bankable projects.
INNOVATIVE FINANCE

TRADITIONAL DEVELOPMENT ASSISTANCE

CONDITIONAL FUNDING
CATAclySTIC FUNDING
IMPACT INVESTING
SOCIALLY RESPONSIBLE INVESTING

COMMERCIAL INVESTING

NO COST RECOVERY

BREAK EVEN (COST RECOVERY)

COST RECOVERY + FINANCIAL RETURN

BLENDED FINANCE

e.g., Grants

e.g., Pay-for-success (impact bonds & milestone-based payments), debt swaps

e.g., Seed funding (DIV, Grand Challenges), guarantees, public-private mechanisms

e.g., impact-first investment funds, Program-related investments, Mission-related investments

e.g., ESG investing, thematic investing

e.g., equity investments or loans at market rates

Source: USAID
Blended Finance Instruments and Approaches

- De-risk
- Leverage
- Return

Instruments:
- Risk Guarantee
- Impact bonds
- Micro Insurance
- Others
- Catalytic First-loss Capital
- Advance Market Commitment

Applicable:
- Increase investment in innovations
- Decrease OOP expenses
- Cost-effective Prevention
- Re-design Primary healthcare systems
- Call for Action
Blended Finance Characteristics

Public and philanthropic funds are used to catalyze private investment

LEVERAGE

IMPACT

Investments must result in social, economic, and environmental progress

RETURNS

Financial returns must be in line with private investor expectations.
Four Success Determinants for Blended Finance

- Stable Political and Economic Environment
- Robust Health Systems
- Justifiable Transaction Size
- Technical Assistance
Innovative Finance / Blended Finance in Health Sector in East Europe

• Among all ten Eastern Europe countries, only Russia has five impact bonds, three in health sector.
• All 3 Russia health SIBs contracts signed in 2020

SIB 1: Increasing the number of citizens involved in assessing their health status and creating conditions for additional supply of medicines
SIB 2: Residential care for disabled people
SIB 3: Supporting independent living for disabled people in the Republic of Sakha (Yakutia)
HFI & Type II Diabetes in Armenia

HFI will partner with the Danish Red Cross to:

- Determine the status quo of the data collection system
- Calculate the health and economic impact of diabetes programming

**JAN - MAR 2022**
Review of available data systems and liaising with an in-country economist to determine the status quo and feasibility of collecting key socio-economic, health, and financial data

**MAR - JUNE 2022**
Calculation of health and economic impact, including the cost-effectiveness of the current diabetes program and long term projections

**JUNE - DEC 2022**
Feasibility and initial design of a Social Impact Bond-type model for the scale-up of the Armenian diabetes program
HFI Type I Diabetes Program in Jalisco, Mexico (D4DC)

26,578
children have T1D

60%
of salary for a minimum wage earner spends on diabetes care

55%
of Jalisco’s population living with diabetes fails to manage their condition

All children with Type I diabetes must have a glucose monitoring device in order to survive and thrive.

Through Devices for Development Consortium (D4DC) HFI Will

• Use innovative finance instruments to stimulate the research, development, and mass production of affordable life-saving glucose monitoring devices for children in LMICs.
• Start from Jalisco Pilot and scale up to federal level for 480 children with T1D in low-resource settings in Mexico.

* International Diabetes Federation (IDF) Diabetes Atlas
Social Impact Bonds Case Study - Israeli Social Impact Bond to Tackle Type 2 Diabetes

SNAPSHOT

Objective:
Treating 2,250 high-risk pre-diabetics with professional intervention and innovative solutions

Outcome Payer:
Based on reducing allowances: National Insurance Institute of Israel
Based on reducing costs: Clalit, Leumit (two of Israel’s four state-mandated health service organizations)

Investors:
15 Impact investors: 50% Israelis, 50% International
Diverse background and motivations: Philanthropic funds, Impact funds, Commercial bank, High-net-worth individuals, Family offices

Capital Raised:
US$5.8 million
Blended finance generates returns for all

HFI is committed to reducing worldwide deaths from NCDs, saving millions of lives and health systems dollars.

#TogetherWeSave Lives
Thank You

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Appendix
The Danish Red Cross is implementing community health approaches to diabetes care

- Review available data collection systems in Armenia
- Quantify the health and economic impact of the new diabetes program to identify the highest-impact interventions
- Design a Social Impact Bond-type model to finance the scale-up of the program

HFI Type II Diabetes Program in Armenia

141,200 Adults in Armenia are living with diabetes *

60,000 Undiagnosed *

76.3 deaths per 100,000 people

HFI Will

* International Diabetes Federation (IDF) Diabetes Atlas
HFI Type I Diabetes Program
Devices for Development Consortium (D4DC)

1. Data collection, analysis, and economic modeling at the state and federal level to measure economic impact.

2. Financial modeling and business case for T1D specific legislation and financial allocation.

3. Convening and Technical Assistance

4. T1D National registry design & implementation with local and int’l stakeholders to demonstrate state and national demand.

Support
480 children living with T1D in Jalisco, Mexico

Now – March 2023
HFI Type I Diabetes Program
Devices for Development Consortium (D4DC)

Conquer a Moral & Market Failure

- Save up to 49,500 children and youth from dying too soon
- Avert 50K premature deaths over 5 years
- Give back children and youth 50,000 healthy days per year
- 250K healthy days gain over 5 years
- Avert $30M spending on T1D complications per year
- Avert $150M in healthcare spending over 5 years

150,000 children and youth
**Blended Finance Instruments and Approaches**

**Catalytic First-loss Capital**

### Structure

<table>
<thead>
<tr>
<th>Debt</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Subordinate Debt</td>
</tr>
<tr>
<td>Junior Equity</td>
<td>Equity</td>
</tr>
</tbody>
</table>

### Capital Flow

**Capital Providers**

1. **PRIVATE INVESTORS**
   - Upfront investment capital
   - Returns from service provider

2. **PUBLIC INVESTOR**
   - Upfront investment capital
   - Returns paid after commercial investors

3. **SERVICE PROVIDER**
   - Provide services to deliver social outcomes
   - Payments by beneficiaries

4. **BENEFICIARY**
   - Alignment on investment objectives and terms of liquidation

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**Actors**

- **PRIVATE INVESTORS**
- **PUBLIC INVESTOR**
- **SERVICE PROVIDER**
- **BENEFICIARY**
First-loss Capital Case Study - Medical Credit Fund

The Medical Credit Fund (MCF) is a blended finance fund dedicated to providing loans up to $2.5 million to small and medium-sized companies in the health sector (health SMEs) in Africa.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>First-loss Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier</td>
<td>Health SMEs have difficulty accessing capital to improve the infrastructure, staff training and quality service because of their lack of banking history, limited collateral, and the perceived high risk of the sector.</td>
</tr>
<tr>
<td>Solution</td>
<td>The Fund’s capital base of first loss is funded by grants from public and private parties, serving as a risk cushion for investors, comprising a mix of private investors and semi-public development finance institutions.</td>
</tr>
<tr>
<td>Impact</td>
<td>To date, MCF has been able to leverage first loss grants received of US$7 million and debt drawn down of US$18 million to disburse US$ 71 million in loans to 1,760 Healthcare Facilities at a repayment rate of 96.4%.</td>
</tr>
</tbody>
</table>
Risk Guarantee

Blended Finance Instruments and Approaches

Structure

Capital Providers

Public Investor

Guarantee

Debt

Equity

Equity

Capital Flow

Alignment on investment objectives and terms of guarantee trigger

Guarantee payment IF triggered

PRIVATE INVESTORS

Upfront investment capital

Returns from service provider

SERVICE PROVIDER

Provide services to deliver social outcomes

Payments by beneficiaries

BENEFICIARY

1 6

Guarantee payment IF triggered
## Risk Guarantee Case Study - Kalangala

The town of Kalangala, Uganda, leverages blended finance to solve a health-related infrastructure challenge

<table>
<thead>
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<th>Instrument</th>
<th>Risk guarantee</th>
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<tr>
<td>In Kalangala, Uganda, an outdated water pipe network led to consumption of unsafe water and high incidence of water-borne diseases. As upgrading the water infrastructure was seen as a risky investment by private investors, there was a lack of funding to complete the project.</td>
<td></td>
</tr>
<tr>
<td>Barrier</td>
<td>InfraCo Africa established a multi-donor, public-private partnership, in which donor organizations agreed to partially cover losses from the project. With their risk of loss minimized, private capital providers invested both debt and equity in the project.</td>
</tr>
<tr>
<td>Solution</td>
<td>The water infrastructure produced a significant amount of clean water for the region, resulting in a 80% decrease in cases of water-borne disease and a notable reduction in medical expenses.</td>
</tr>
</tbody>
</table>
Case Study II – Kalangala Financing Model

PIGD

- InfraCo Africa
  - US$ 11.8M
- Instalaciones de Asistencia Técnica
  - US$ 6.04M
- Fondo Emergente de Infraestructura de África
  - US$ 9.4M
- GuarantCo
  - US$ 1.8M

Equidad

Subsidio Basado en Resultados

Deuda

Servicios de Infraestructura Kalangala y Renovables Kalangala

Equidad

Deuda

Servicio de Deuda

Nedbank
  - US $5.2M

USAID
Blended Finance Instruments and Approaches

Social Impact Bonds and Development Impact Bonds

Capital Providers

INVESTOR (PRIVATE)

RESULTS FUNDER (PUBLIC)

Actors

SERVICE PROVIDER

BENEFICIARY

Alignment on target results and payment terms

Payment in accordance with achieved results

Evaluation of results against targets

Independent Evaluator

Provide services to deliver social outcomes

Upfront investment capital

Payment in accordance with achieved results
# Social Impact Bond Case Study – Hachioji City SIB

The city government of Hachioji City, Japan, utilized blended finance to improve health outcomes for bowel cancer.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Social Impact Bond (SIB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier</td>
<td>Due to lack of awareness and incentives, screenings for bowel cancer in Hachioji City were below the national target, leading to delays in treatment, higher healthcare costs, and suboptimal health outcomes.</td>
</tr>
<tr>
<td>Solution</td>
<td>The city government issued a SIB to fund a program to identify and “nudge” at-risk residents to screen for cancer. Upon achievement of desired outcomes, the bond’s investors were to be repaid.</td>
</tr>
<tr>
<td>Impact</td>
<td>Cancer screenings in the City increased from 9% to 27% in the target group and 84 early-stage cases were detected, resulting in significant healthcare cost savings.</td>
</tr>
</tbody>
</table>
Case Study III – Hachioji City SIB Financing Model

Hachioji City
- Report on residents screened and those found to have cancer

k-three Inc.
- Service agreement
- Support for project planning and associated creation of SIB
- Payment of commission

Medical institutions, etc.
- Cancer screenings
- Precision examinations
- Detection of early cancer

Cancer Scan Co., Ltd.
- Recommendation to take screening

DIGISEARCH & ADVERTISING Inc.
- Provision of funding

SIIF
- Dividends and redemptions

Mizuho Bank, Ltd.

Hachioji City residents
Blended Finance Instruments and Approaches

Microinsurance

Capital Providers

Actors
Microinsurance Case Study - MicroEnsure

Blended finance arrangements that pool funds across communities

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Microinsurance</th>
</tr>
</thead>
</table>

| Barrier | People in Tanzania with volatile income streams often have limited access to health insurance, as they are seen as too risky to take on as clients. This, combined with the high cost of care, discourages hospital visits and results in poor health outcomes. |

| Solution | MicroEnsure formed partnerships that allowed a microinsurance product to achieve scale. With the pooling effect, private insurers were de-risked and underwrote many policies in underserved regions. |

| Impact | MicroEnsure’s products, which include hospitalization, life, property, and disability insurance, now span 15 countries with 40 million customers and $20 million in claims paid. |

| Applicability To Cancer Care | Public-private partnerships can work to increase insurance coverage for expensive cancer drugs by leveraging pooling techniques. With its size and scale, the pharmaceutical industry may facilitate the pooling, which can in turn encourage public payers to increase coverage. |
Case Study I – MicroEnsure Financing Model

- **MicroEnsure**
  - Claims processing & approval; admin support
  - Economics sharing

- **Bima**
  - Sales agent training
  - Economics sharing

- **Tigo**
  - Premium payments deducted from airtime balance
  - Mobile cash transfers for approved claims

- **Golden Crescent**
  - Claim approvals; cash for approved claims
  - Economics sharing

- **Policy-holders**
  - Payment for treatment

- **Healthcare Providers**
  - Economics sharing