REQUEST FOR PROPOSALS: VERIFICATION AGENT FOR CAMEROON NEWBORN DIB

As of 23 April 2018

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1 General information

1.1. Overview

The objective of this Request for Proposal is to select an organization to provide independent outcomes verification services in support of the final design and implementation of a Development Impact Bond focused on scaling quality Kangaroo Mother Care in Cameroon (the "**Cameroon Newborn DIB**").

The Cameroon Newborn DIB is designed to fund the rollout of quality KMC at scale across Cameroon starting in September 2018. KMC is an alternative to traditional neonatal care for pre-term and low-birth-weight (LBW) infants particularly suited to low-resource settings. KMC involves continuous skin-to-skin contact between caregivers and infants, breastfeeding, early discharge from hospital and close follow-up. Recognizing that LBW and preterm births are among the leading causes of infant mortality globally, this DIB aims to expand access to the proven and cost-effective intervention of KMC to save and improve the lives of LBW and preterm infants in Cameroon, where this challenge is particularly severe, and to positively impact their longer term human capital development.

A Development Impact Bond, an outcomes-based financial instrument, will be used to fund KMC rollout in Cameroon over a four-year intervention period starting in September 2018. In a DIB:

- Investors provide the upfront and ongoing capital for an intervention to achieve agreed results, e.g. improved health outcomes for LBW infants using KMC; and
- Outcomes Funders commit to making payments to investors only if the interventions succeed, i.e. if agreed results are achieved.

Investors' financial returns are therefore directly linked to independently verified outcomes. *A key feature of the DIB structure is that the payment metrics will be assessed by an independent third party to ensure that an objective and evidence-based decision is made on whether, and to what extent, outcomes have been achieved to trigger payments to investors.*

A number of critical partners have been working collaboratively to advance key objectives of the project, including:

- The DIB Partners - Grand Challenges Canada, Nutrition International, the Cameroonian Ministry of Public Health, the World Bank, the Global Financing Facility, the Kangaroo Foundation Colombia (KF Colombia) and Kangaroo Foundation Cameroon (KF Cameroon);
- The DIB Advisory Team - Social Finance UK and MaRS Centre for Impact Investing; and
- Sector experts - IDinsight (which conducted a baseline study in 2016), and the project's Advisory Council (including representation from the Gates Foundation, Children's Investment Fund Foundation, and the London School of Hygiene and Tropical Medicine).

The Scope of Work for the DIB Verification Agent will consist of two key phases:

- Phase One: "check and challenge" of the draft DIB Outcomes Verification Framework (June 2018); and
- Phase Two: undertake the outcomes verification, based on the agreed Verification Framework, over the course of DIB program implementation (roughly December 2018 – Q1 2022).

The Scope of Work has been structured in this way to ensure that the successful bidder will be able to input into the final design before implementing the verification framework for the Cameroon Newborn DIB, a pioneering health and nutrition DIB.

This contract is for Phase One, however pending Outcomes Funder approval and performance, the successful bidder will be strongly positioned to undertake Phase Two. We are thus seeking to contract with an organization that demonstrates willingness and ability to undertake both phases of the project.

1.2. Period of contract

It is anticipated that Phase One will be in effect from 1 June 2018 and will consist of 10 working days over one month.

2 Instructions, clauses and conditions

2.1. Contracting Authorities

The contract for the first phase of work will be with Social Finance UK, one of the DIB Advisors. All communications should be through Social Finance, to

Cheriel Neo, cheriel.neo@socialfinance.org.uk

The services will be provided directly to Social Finance (the "co-DIB Advisor" or "Contracting Authority") while interested stakeholders include the other organizations that form part of the DIB Partners and Advisory Team.

Communication can take place in English or French.

2.2. Standard clauses and conditions

2.2.1. Bidder responsibilities

It is the Bidder's responsibility to:

a) obtain clarification of the requirements of this RFP, as needed, before submitting a proposal, as outlined in the terms in 2.1.;
b) prepare its proposal in accordance with the instructions contained in this RFP;
c) submit the proposal by the RFP deadline;
d) send its proposal only to the contacts detailed in Section 2.1. of this RfP; and
e) provide a comprehensible and sufficiently detailed proposal, including all requested details to permit a complete assessment, in accordance with RFP requirements and criteria.

2.2.2. RFP Responses

a) The Contracting Authority reserves the right in their sole discretion to extend the RFP period at any time.
b) Proposals will only be accepted if they are received by the named individuals above by email, on or before the closing date.
c) All information within this RFP is to be held in confidence. Please do not share this document or the content herein without express permission of the Contracting Authority.

d) The Contracting Authority will regard and preserve as confidential and proprietary to the disclosing party all non-public information, written, oral or computer-based, to which it has access as part of this RFP, except with prior approval of the Bidder.

2.2.3. Legal capacity of Bidder

The Bidder must have the legal capacity to contract. If the Bidder is a sole proprietorship, a partnership or a corporate body, the Bidder must provide, if requested by the Contracting Authority, a statement and any requested supporting documentation indicating the laws under which it is registered or incorporated, together with the registered or corporate name and place of business. This also applies to bidders submitting a RFP proposal as a joint venture.

2.2.4. Rights of Contracting Authority

The Contracting Authority reserves the right, in their sole discretion, to:

a) reject any or all proposals received in response to this RFP;
b) enter into negotiations with Bidders on any or all aspects of their proposals;
c) accept any proposal in whole or in part without negotiations;
d) seek clarification and/or verify any or all information provided with respect to this RFP;
e) award one or more contracts;
f) contact any or all references supplied by bidders to verify and validate information provided;
g) verify information provided by bidders through independent research, use of government resources or by contacting third parties;
h) cancel, reissue or extend the RFP at any time without liability; and
i) if no acceptable proposals are received, re-tender the RFP by inviting only the bidders who bid to re-submit proposals within a period designated by the Contracting Authority.

2.2.5. Communications during RFP process

To ensure the integrity of the competitive bid process, all enquiries and other communications regarding the RFP must be directed by email only to the contact identified in section 2.1. of the RFP. Failure to comply can result in the disqualification of the bid.

2.2.6. Conflict of interest

Potential bidders must notify the Contracting Authority immediately if any actual, potential or perceived conflict of interest arises (a perceived conflict of interest is one in which a reasonable person would think that a person's or organization's judgement and/or actions are likely to be compromised).

2.2.7. Costs

No payment will be made for any costs incurred in the preparation and submission of a proposal.

All fees, expenses or other costs of any kind ("Costs") associated with evaluating, preparing and/or submitting a proposal are the sole responsibility of the Bidder. No Costs incurred by a bidder relating to the Scope of Work before the receipt by the Contracting Authority of a signed contract, or absent express, written authorization from the Contracting Authority to incur Costs, can be charged to or in any other way be the responsibility of, the Contracting Authority.

3 Background on the project

3.1. Kangaroo Mother Care in Cameroon

KMC is a cost-effective intervention known to save and improve the lives of low birth weight (LBW) and preterm infants. LBW and preterm birth is the leading cause of under-five child mortality worldwide with around one million direct deaths – with LBW contributing to 60-80% of all neonatal deaths – and is an especially pressing issue in Cameroon where the neonatal mortality rate is about 28 per 1000 live births, and much higher within some regions. LBW and preterm birth is also associated with a higher likelihood of morbidity (e.g. severe sepsis, respiratory tract disease at follow-up) and behavioral problems in later life, which KMC has shown to reduce.

KMC involves continuous skin-to-skin contact and breastfeeding between caregivers and LBW infants. KMC also generally involves an earlier discharge of infants from hospital with regular check-ups to about one-year corrected age. A Cochrane Review of 21 separate studies and randomized control trials concluded that KMC significantly reduces LBW neonatal mortality, infection and hypothermia, and the number of days in hospital when compared to conventional care. KMC has also been shown to improve parent-infant attachment, and infant growth and development. KMC can also influence human capital formation into adulthood, meaning that KMC is an important intervention to ensure children survive and thrive, particularly in regions with limited access to healthcare resources.

Despite the positive evidence, access to KMC remains low globally. The Every Newborn Action Plan, endorsed by the World Health Organization (WHO) Member States in 2014, set a target to increase the reach of KMC to at least 50% of LBW infants globally by 2020. Cameroon's Ministry of Public Health identifies KMC as a priority intervention for scale-up in its most recent operational action plan for improving newborn health.

The DIB Partners and Advisory Team, comprising funders, delivery organizations and investor, wish to support these efforts and have been designing a program that will scale the rollout of KMC across Cameroon starting in September 2018. The program will be designed as a Development Impact Bond to develop the use of results-based financing in this context.

3.2. Development Impact Bond mechanism

A Development Impact Bond is a form of contracting that builds on traditional performance-based financing (PBF) models.

In an DIB:

- Investors pay in advance for interventions to achieve agreed results, and work (through an Implementation Manager) with delivery organizations to ensure that the results are achieved efficiently and effectively; and
- Outcomes Funders (Government and/or external donors) make payments to investors if the interventions succeed, with returns linked to results achieved.

Unlike other results-based financing programs or grants, in a DIB, investors' desire to maximize their return enables a continuous focus on flexible and adaptive program implementation, rather than delivery of pre-defined inputs. The appropriate data systems are put into place to allow for real-time analysis of the intervention and immediate local context within which any issues might arise. Service providers are given the space and financial flexibility necessary to use this data to make operational changes required to maximize impact.

Given the pay-for-success structure, a DIB would provide strong incentives to test and refine the KMC scaling model through continuous data feedback loops and performance management systems. Moreover, by putting in place a rigorous outcomes measurement framework, a DIB would provide a credible demonstration of a model for scaling KMC, with relevance to other low- and middle-income countries with high LBW and preterm infant mortality rates.

Further information about DIBs can be found in Appendix A.

3.3. Proposed intervention

Under the DIB, KMC will be implemented in 10-11 regional and district-level hospitals across 5 regions in Cameroon (see Appendix C for illustrative list), delivering the prescribed method of care to LBW and pre-term infants who are either born in or referred to these facilities.

Target facilities will be trained in the KMC method through the "train the trainer" model. The newly founded Kangaroo Foundation Cameroon, supported by the Kangaroo Foundation Colombia (leveraging their 20-plus years of expertise in KMC), will train one hospital in 4 of the target regions in the KMC method, preparing them to become "Centers of Excellence" for KMC in Cameroon. KF Cameroon will support the KMC team at these Centers of Excellence to train other facilities in their region to implement comprehensive KMC. The DIB intervention builds on a pilot program run by KF Cameroon and KF Colombia, funded by Grand Challenges Canada, where six hospitals (one Centre of Excellence and five other facilities) were trained in KMC.

The DIB will focus on enabling the delivery of comprehensive KMC at the highest tier of hospitals in the target regions to promote the long-term sustainability of KMC in Cameroon. Ensuring quality delivery in a core number of facilities builds a solid foundation for future training and delivery in lower-level facilities and expansion of the program into other regions.

3.4. 2016 baseline study

From October to November 2016, the research firm IDinsight conducted a baseline study in 11 Cameroonian hospitals to inform the program and evaluation designs and payment structures for the Cameroon Newborn DIB. The study had two primary objectives:

- Produce estimates for the status of KMC implementation and potential DIB outcomes. Outcomes under consideration included: 1) the effective delivery of quality KMC, 2) provider knowledge of KMC, 3) newborn weight gain speed, 4) exclusive breastfeeding, 5) newborn morbidity, and 6) newborn mortality.
- Inform program and evaluation design. IDinsight tested measurement methodologies and collected contextual metrics (e.g. monthly average number of eligible newborns born in or referred to DIB hospitals) that can be used to refine the KMC program and evaluation designs.

To achieve these objectives within the baseline study's time and cost constraints, IDinsight used four data collection techniques: 1) retrospective collection of historical data, 2) prospective data collection 3) interviews with healthcare providers, and 4) staff assessments on KMC knowledge. Based on the findings from this study, IDinsight developed four recommendations for the DIB Design Team and Partners:

- Minimize the number of outcomes included in the DIB and optimize existing data systems.
- Outcomes measured in this DIB should be simple, objective, and verifiable. Hospital records are not always reliable, meaning that all outcomes measured in the DIB should be verifiable.

- The DIB verification framework should be designed to account for small expected volumes of eligible newborns. A monthly average of 10 newborns per hospital was observed. A small verification sample size reduces the ability of the measurement team to confidently draw conclusions.
- Build additional time and budget into all aspects of project planning. Frequent delays and a high cost of operating in Cameroon was cited.

The results of the study led the DIB Advisory Team and Partners to agree, at a high level, the metrics to trigger payments in the DIB. These are:

- The number of hospitals able to deliver quality KMC based on a minimum hospital-level inputs checklist (Payment Metric A);
- The number of eligible newborns receiving quality KMC until discharge based on a quality checklist (Payment Metric B); and
- The percentage of infants who come back to their 40-week follow-up appointment and who have reached an adequate nutritional status while receiving appropriate nutrition (Payment Metric C).

Further detail on the proposed payment mechanism, the KMC theory of change and initial considerations around measurement can be found in Appendix B.

3.5. Proposed overall measurement approach

The overall measurement framework will include additional metrics beyond those used to trigger payments. It will include:

- Payment metrics, i.e. Payment Metrics A, B, and C as outlined above, used to determine the payments made to the investor;
- Performance management metrics to feed into program management decisions, enabling adaptation of the program to optimize results delivery; and
- Wider outcome metrics (e.g. mortality) to measure more broadly the outcomes of LBW infants receiving the interventions to enable triangulation of whether project results are trending in the right direction. There is room for the successful bidder to propose recommendations on wider outcome metrics that could be efficiently captured.

The measurement framework will also specify:

- Methodology for measuring/collecting data for the above metrics; and
- Timeline for measurements.

The DIB Advisory Team is in discussions with data systems providers to develop a data collection app and database for measurement purposes. While the data systems will be bespoke to meet project needs, they will leverage on existing systems used in Cameroon's Health Management Information Systems wherever possible. The DIB will also fund a data entry clerk to be based at each hospital, given a key finding from the IDinsight study was that there are currently large gaps in data collection.

4 Scope of work

4.1. Two-phased approach: Final Design and Implementation

The scope of work for the DIB Verification Agent will consist of two key phases:

- Phase One: "check and challenge" of the draft DIB Outcomes Verification Framework (10 days of work in June 2018); and
- Phase Two: undertake the outcomes verification, based on the agreed Verification Framework, over the course of DIB program implementation (roughly December 2018 – Q1 2022).

The Scope of Work has been structured in this way to ensure that the successful bidder will be able to input into the final design before implementing the verification framework of the Cameroon Newborn DIB.

This contract is for Phase One, however pending Outcomes Funder approval and performance, the successful bidder will be strongly positioned to undertake Phase Two. We are thus seeking to contract with an organization that demonstrates willingness and ability to undertake both phases of the project. Value-for-money will be a key criterion in evaluating the proposals.

4.2. Phase One: "Check and challenge" of the DIB Verification Framework

While DIB Partners will have agreed the high-level payment metrics and operational data to be collected in the DIB prior to contract signing, the successful bidder would be expected to "check and challenge" the draft Outcomes Verification Framework, which will detail the strategy for verifying administrative data in hospitals collected by the data entry clerks.

During this phase of work, the bidder will be required to:

- Review relevant project documents and meet with relevant parties (in-person and / or virtually) as necessary to provide feedback / recommendations to the DIB Partners and Advisory Team on whether the draft Verification Framework appropriately captures the proposed metrics;
- Based on the operational rollout plan and drawing on results of the initial baseline survey completed with IDinsight, "check and challenge" the draft Verification Framework with a view to ensuring it contains:
  - A proposal on the process for assessing the accuracy and completeness of the proposed payment metrics;
  - Practical considerations around the process for timing and frequency of hospital visits to verify proposed payment metrics A, B and C over the DIB term;
  - Sensible estimated resourcing and time required to undertake standard assessments;
  - Sensible timeline illustrating when each assessment occurs over the DIB implementation period and when Verification Reports will be delivered;
  - An appropriate overall measurement framework approach, including performance management and wider outcome metrics (e.g. mortality), and how these may change over the four years of the DIB;

  - A proposed reporting and coordination process to ensure timeline coordination with the service provider (e.g. KF Cameroon), the Implementation Manager team in Cameroon and the investor;
  - A measurement risk assessment for partners to ensure overall awareness of the challenges with the measurement strategy to ensure an appropriate risk mitigation plan; and

- Attend key meetings with DIB Partners and Advisory Team (in person or virtually) to ensure alignment between outcomes verification and performance management frameworks, including the data collection systems being designed for the DIB, as well as to help set expectations amongst parties around measurement.

4.3. Phase Two: Undertake outcomes verification over the course of DIB implementation

We would expect that, pending Outcomes Funder approval and performance, the successful bidder would undertake the independent outcomes verification, based on the assessment framework agreed under the first phase of work, over the course of DIB implementation. Included below is a provisional list of activities that the DIB Verification Agent will be responsible for, but it is expected that these will be further refined once the Verification Framework in Phase One has been agreed:

- Continue to liaise with DIB Partners and Advisory Team particularly around the operational model, including proactively raising any concerns resulting from refinement of the operational model and providing recommendations on potential actions required to account for these changes from an outcomes verification perspective;
- Review select performance and wider outcome metrics at the facilities. This is likely to include reviewing data collected by the data entry clerks with additional checks as agreed in the verification framework (e.g. health worker surveys);
- Submit an Outcomes Verification Report after each period to the Implementation Manager – the Verification Report will provide the necessary calculations, data and other information needed to enable the Outcomes Funders to verify whether the appropriate amount of outcome payments is to be made, along with selected non-payment metrics being tracked;
- Include recommendations on improvement to the process of verification, as well as on the implementation approaches of the implementation partners;
- Work with DIB Partners and Advisory Team to help resolve disputes around the verification process and results, should such disputes arise.

4.4. Partners and resources

The successful bidder will work closely with the DIB Partners and Advisory Team, including:

- Grand Challenges Canada, Nutrition International, the Cameroonian Ministry of Public Health (drawing upon resources from the Global Financing Facility), who will be Outcomes Funders – i.e. parties responsible for paying for outcomes achieved, based on the Verification Reports submitted by the DIB Verification Agent;
- The parties (yet to be confirmed) who will act as the investor(s) in the DIB;

- Kangaroo Foundation Cameroon, the service provider who will be delivering the intervention;
- Kangaroo Foundation Colombia, the technical expert with a long history of providing KMC in other geographical contexts;
- The party (yet to be confirmed) developing the data collection systems for the Cameroon Newborn DIB;
- Social Finance UK and MaRS Centre for Impact Investing, which are jointly providing support and coordination on DIB design and mobilization; and
- Other advisors as may be needed.

5 Request for proposal

5.1. RfP components

The RfP should address the Scope of Work for Phase 1 of the project in two sections, Technical and Budget, described in more detail below.

The Technical section should include:

1. **Project Workplan:** Detailed and clear work plan with efficient timetable, including table of risks and mitigating factors.
2. **Technical Expertise:** Demonstrated experience with primary data collection using quantitative and qualitative methods and verification / auditing of data. Demonstrated experience with data analysis. Demonstrated experience collecting and monitoring data from the implementation and results of programs.
3. **Local knowledge:** Prior experience working within the healthcare system in Cameroon or established contacts with whom to partner in Cameroon.
4. **Sector experience:** Demonstrated knowledge and understanding of neonatal healthcare, with knowledge of KMC specifically an asset. Experience of previous audit, verification and/or data analysis work in healthcare facilities, particularly in low resource settings. Understanding of the specific considerations of outcome verification and data measurement frameworks for outcomes-based contracts, payment-by-results programs and/or impact bonds will also be considered an asset.
5. **Team & Capacity:** Skills and capability to support both the final design phase and implementation phase of the KMC DIB. Relevant team member experiences, efficient team allocation and roles proposed, relevant case studies and/or past examples of similar work completed by your team, experience and/or knowledge of the KMC method will be considered an asset. Ability to communicate in written and spoken French and English a necessity. **Any potential issue around availability or start / stop dates – should be flagged. Any considerations or constraints around the capacity to deliver Phase 2 (implementation activities) should also be flagged in this proposal.**
6. **References:** At least two recent client references engaged by your team.

The Budget section should include:

1. **Comprehensive budget:** Using a template of your choice, a budget should be prepared that includes cost and total hour estimate (hourly rates, itemized by activity and total

estimate). The budget should include travel and other expenses as required. *Given the social mission and non-profit funded nature of this project, it is emphasized that your RFP bid should focus on the most cost and time efficient work plan.*

The total page limit for both sections should not exceed 20 pages (including appendices). Applications can be made in either French or English.

5.2. Evaluation criteria

Criteria for selecting the DIB Verification Agent will include both technical and budget categories consistent with the scope of work, including:

Criteria	Points
Technical	
1. Project Workplan	10 points
2. Technical Expertise	10 points
3. Local Knowledge	25 points
4. Sector Experience	10 points
5. Team and Capacity	10 points
6. References	5 points
Technical total	***70 points***
Budget	
7. Budget Provision: Comprehensive budget	30 points
Budget total	***30 points***
Total Points	**100 Points**

5.3. Timeline of selection process

- Deadline for RfP – to be sent to the Contracting Authority by email by **14 May 2018** with the subject line "Cameroon Newborn DIB: IVA RFP Submission"
- Interviews – We are targeting short-listed applicant interviews in w/c 21 May 2018. **Please ensure you have capacity to participate in potential interviews over the phone in this week.**
- Contract execution – aiming to be fully executed by **8 June 2018**

Ahead of the deadline, bidders are encouraged to ask clarification questions where required. The answers will be communicated to all prospective bidders.

All documents are due by **5pm EDT** on the date specified.

Appendix A: About Development Impact Bonds

In an DIB, investors pay in advance for interventions to achieve agreed results, and work (typically through a Performance Manager) with delivery organizations to ensure that the results are achieved efficiently and effectively. Outcome funders (Government and/or external donors) make payments to investors if the interventions succeed, with returns linked to results achieved.

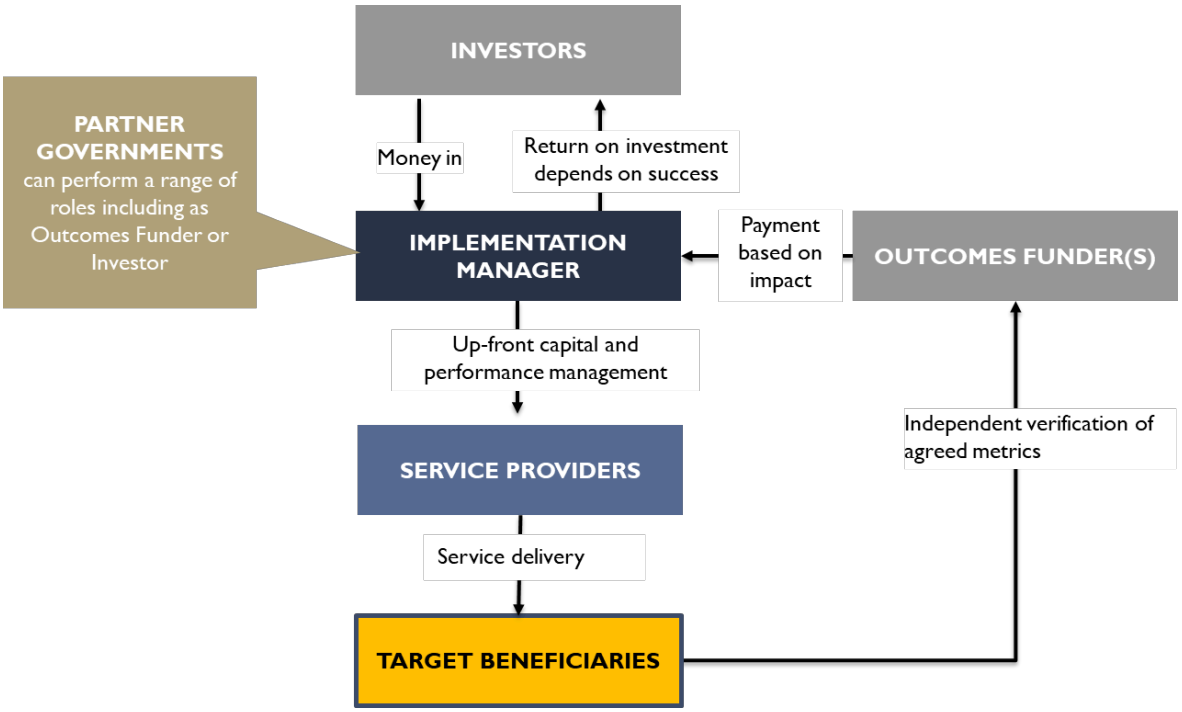
Unlike other performance-based financing program, in a DIB, investors' desire to maximize their return ensures a continuous focus on flexible and adaptive program implementation, rather than delivery of pre-defined inputs. Risk is transferred to investors, and the focus on rigorously measured outcomes increases sustainability by ensuring that public money is only used for tangible, verifiable outcomes.

Typical structure

In a DIB,

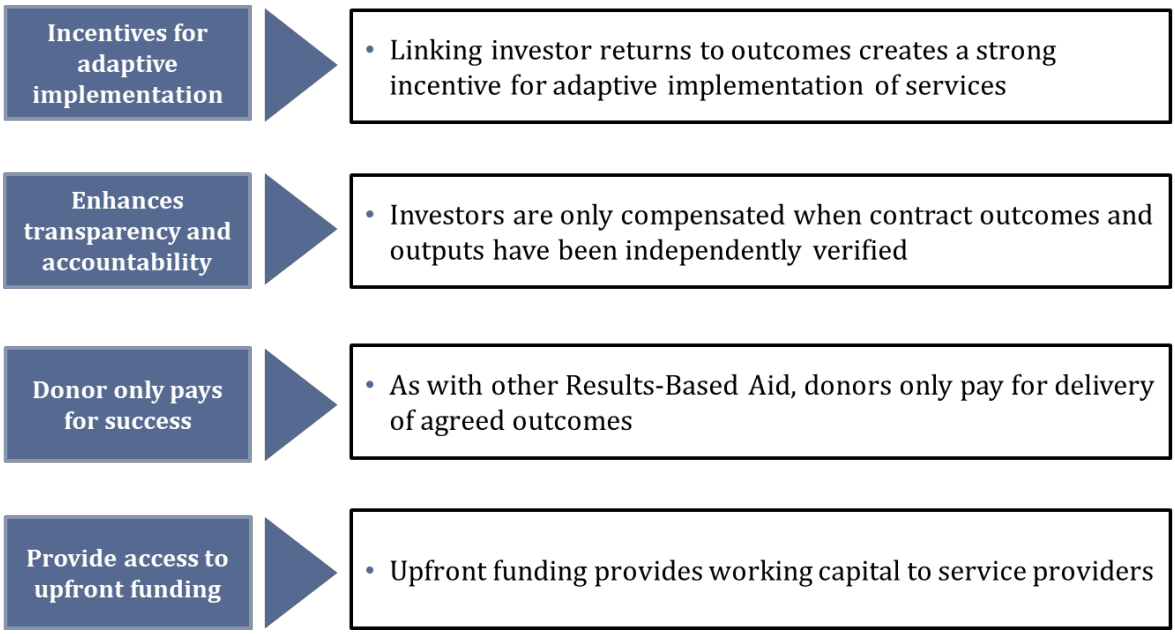
- Project financing provided by investors who take on the risk of the project failing to deliver agreed results, and therefore losing some or all of their capital;
- Outcomes Funders pay for agreed-upon results after they are achieved;
- Financial returns to investors are tied to the achievement of agreed outcomes;
- Outcomes Funders do not specify implementation modalities;
- Investors – typically through a Performance Manager - manage implementation – investors have proven willing to quickly adapt the interventions they finance based on real time data on what is working well and what is not; and
- Contract outcomes and outputs are independently verified.

A typical structure of a DIB can be found below:



Benefits

DIBs can improve the efficiency and effectiveness of development programs in a number of ways:



Steps to developing a DIB

The development of high quality Impact Bonds requires considerable thought and collaboration between a number of stakeholders.

We provide a high-level overview of the activities and timelines typical of each stage of DIB development below:

1) **Initial scoping.** At the scoping stage, we analyze the social issue that the DIB is looking to address, identify the geographical focus and determine clear criteria against which the target population can be identified. Potential outcome metrics and ways of measuring success are developed through consultation with key actors (e.g. partner government, outcomes funders, investors, potential service providers and beneficiaries). In addition, we carry out research to identify interventions that address the needs of the target population and have potential to achieve the desired outcomes.

2) **Detailed feasibility**. At this point, we work with partners to outline the detailed operating model, outcomes measurement approach and payment framework. The operating model sets out indicative program delivery costs and describes how the proposed interventions fit with existing infrastructure and services. An initial outcomes measurement and payment framework is developed to provide detail on the conditions under which outcomes funders will make payments to investors. During feasibility, we illustrate different ways of structuring outcome payments, bring an understanding of potential investor needs to the project and undertake an initial marketing exercise to potential investors.

3) **Final design and launch**. During this stage, key terms in the outcomes contract such as the target population, investment obligations, outcomes definition, payment mechanism, reporting framework and verification processes are finalized. On-the-ground testing of key assumptions is often required. Detailed discussions are held between key parties to agree contract terms, and input from legal experts into contract development is often necessary.

An investor agreement will need to be developed and agreed, which specifies the amount and timeline for drawdown of capital from investors and the terms under which payments are made to investors.

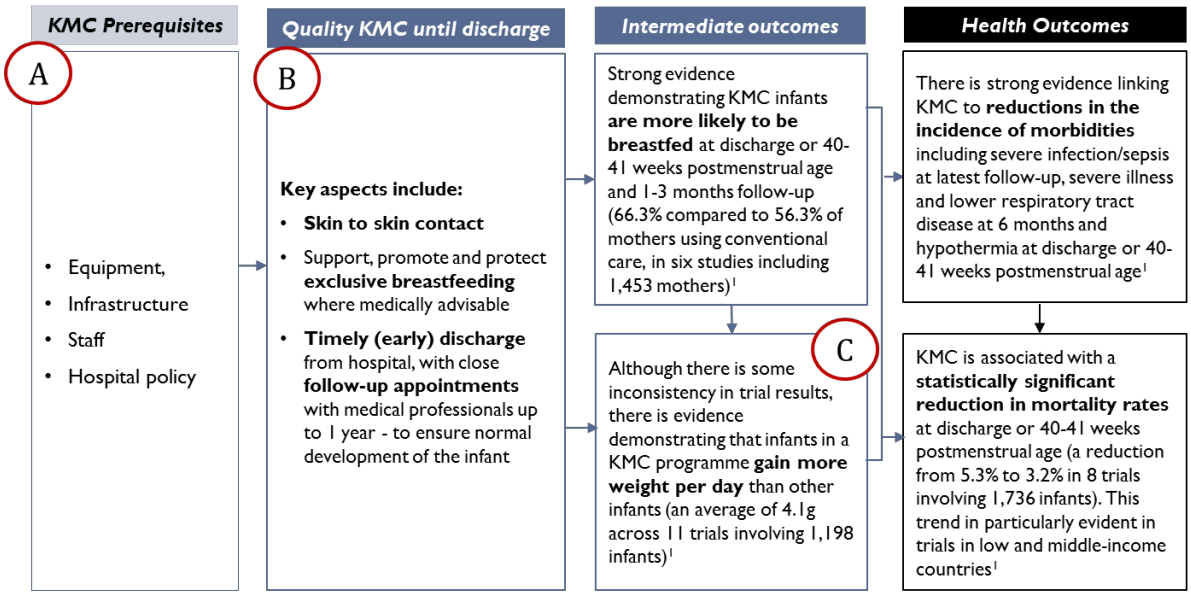
4) **Service delivery / contract and performance management**. Once the outcomes contract is agreed and financing commitments are secured from investors, the mobilization of services can begin on the ground. Contract and performance management will be carried out on an on-going basis by investors, or more typically by a performance manager representing their interests, to ensure that the quality of the service being delivered is sustained. In addition, outcomes funders should commission either an independent verification agent to audit and verify the accuracy of reported outcomes. Based on the results of this measurement and verification process, the level of outcomes payments due can then be determined.

Appendix B: Proposed Payment Mechanism for Cameroon Newborn DIB

Investor capital will be drawn down to fund the rollout of KMC at scale in Cameroon. The current proposal is for payments to investors to be linked to three metrics:

- **The capacity of hospital to deliver quality KMC (Payment Metric A) –** measured as the number of hospitals which have a minimum hospital-level inputs identified as prerequisites for performing quality KMC. This includes the required infrastructure, equipment, trained staff and policy.
- **The effective delivery of quality KMC until discharge (Payment Metric B) –** measured as the number of eligible newborns receiving quality KMC until discharge based on a quality checklist**.** This checklist will be used to determine whether appropriate skin-to-skin contact has been made, whether the infant is being fed appropriately (i.e. through exclusive breastfeeding whenever possible), and whether the discharge from hospital is adequate.
- **Appropriate weight at follow-up (Payment Metric C)–** Measured as the percentage of infants enrolled in a KMC program who come back to their 40-week follow-up appointment and who have reached an adequate weight through appropriate nutrition**.**

There is a strong evidence base linking quality KMC delivery to positive health outcomes for LBW infants such as weight gain, a reduction in common morbidities and a decreased mortality rate. Given the challenges around creating a robust baseline around morbidity and mortality – due to relatively small sample sizes and poor historical data quality – and due to these outcomes metrics being particularly susceptible to the influence of outside factors, the proposal is for quality KMC delivery to be a core payment metric, as it acts as a useful proxy for morbidity and mortality outcomes.



(1) Conde Agudelo et al (2016) Kangaroo mother care to reduce morbidity and mortality in low birthweight infants (Review), Cochrane Library

Identifying the appropriate evaluation approach

In a DIB, the amount of payments from outcomes funders to investors are determined by independent evaluations undertaken to assess the degree to which agreed metrics have been achieved.

To identify the most appropriate and rigorous evaluation approach possible, given the various considerations around payment mechanism design outlined above, we contracted a research team from IDinsight in 2016 to 1) collect relevant data from hospitals to both inform the overall payment mechanism design and develop a baseline for key metrics, and 2) develop an initial proposal for the payment mechanism and independent evaluation framework.

The IDinsight team identified a number of measurement challenges including:

- A lack of data collection processes and records in hospitals, limiting the existing amount of retrospective data available to the research team for analysis, and highlighting the need for the DIB program to budget in resources for data collection at target hospitals once the DIB is in operation;
- When retrospective data was available, its quality was uncertain due e.g. to the poor quality of scales being used. The poor quantity and quality of data means that retrospective data cannot be used to generate a robust baseline for health outcomes of interest; and
- The limited prospective data that can be collected during the study period (due to the small number of low birth weight or preterm infants admitted in some of the selected hospitals), means that it is also challenging to create a robust baseline using prospective data. In addition, given the relatively high standard deviations for some of the health outcomes metrics of interest (e.g. weight gain velocity), a long time period would be required to generate a large enough sample size to create a useful baseline.

The recommended evaluation approaches below for Payment Metrics A, B and C take into account the above concerns:

Evaluation approach – Payment Metric A

For Payment Metric A, it is envisaged that the evaluation process will be a relatively straightforward one, consisting of an independent verification agent verifying a pre-defined checklist to measure whether a hospital has the required infrastructure, equipment, staff and policies in place to deliver quality KMC.

Evaluation approach – Payment Metric B

Given the lack of existing data collection processes in hospitals, it is envisaged that a full-time data entry clerk will be hired by the DIB team and trained for each target facility to collect data on a continuous basis, including the number of newborns enrolled in the KMC program. The independent verification agent will verify this number by reviewing program records, and choose a subsample of enrolled newborns to confirm through medical records that the newborn's birth weight, gestational age, and health condition at the time of enrolment met the KMC eligibility criteria. In addition, the independent verification agent will assess the quality of KMC being performed based on a pre-defined checklist for a subsample of newborn enrolled in the KMC program.

Evaluation approach – Payment Metric C

The IDinsight team explored a number of evaluation approaches for potential health outcomes metrics (e.g. weight gain velocity, morbidity and mortality) relevant to the DIB.

They concluded that a pre-/post- evaluation of key metrics would be challenging as the amount and quality of data we can expect from the facilities pre-KMC implementation will be low. In addition, the potential influence of external factors on outcomes, and the likely shifts in referral patterns and patient flows pre- and post-KMC[1], means that a comparison between the baseline and endline populations will unlikely generate sufficiently robust conclusions in terms of DIB impact.

Experimental and quasi-experimental approaches such as stepped wedge design, randomized control trials and matching with difference-in-differences were also considered. Due to a number of factors associated with these evaluation approaches, including the constraints that these approaches would place on operational flexibility (in terms of rollout timing and geography), challenges in generating an appropriate comparison group (given the large variation in characteristics between target facilities) and the significant increase in evaluation and operation costs that would be required, the recommendation is for us not to pursue an experimental or quasi-experimental approach.

Considering the above, **the recommended approach for DIB outcomes measurement is to compare outcomes against impact targets** – namely pre-determined numbers or percentages (depending on the construction of the metric) – that the outcome should meet or exceed in order to be considered "successful". As applied to Payment Metric C, this means measuring the percentage of KMC-enrolled infants reaching adequate nutritional status at 40-week gestational age, against a pre-agreed minimum target percentage for adequate nutritional status across the cohort.

The key advantages of this 'target approach' are that it does not place constraints on the operational flexibility of the program, a baseline/comparison group is not required, impact targets are more easily communicated to the various stakeholders engaged, and it adds significantly less operational and evaluation costs to what is already a limited program budget. At the same time, this approach instils the desired incentives around embedding robust systems for data collection and analysis around outcomes measurement in what is currently a data scarce environment, and ensures that DIB payments are made on the basis of impact levels pre-agreed by all DIB parties to demonstrate success if reached.

A summary of the evaluation approach and rationale for the proposed payment metrics are outlined below:

Proposed payment metrics		
Metric	**Measurement and evaluation approach**	**Rationale of payment metric**
Number of hospitals with the prerequisites required to deliver quality KMC (Payment Metric A) *Suggested payment frequency: every 6 months*	A pre-defined checklist will be used by an independent verification agent to measure whether a hospital has the required infrastructure, equipment, staff and policies in place to deliver quality KMC.	The lack of infrastructure, equipment and staff is one of the biggest bottlenecks for KMC scale-up in Cameroon. The inclusion of this metric rewards investors for the achievement of this necessary milestone, and helps strike the balance in terms of creating an appropriate risk-return investment profile, since there is a relatively lower delivery risk associated with this metric than with the others included.

[1] For example, implementation may focus on strengthening referral systems, which could result in an influx of newborns who are sicker than the current population (and otherwise would have died on the way to the hospitals). Thus, health outcomes could appear to decline since the population now includes sicker newborns.

Number of eligible newborns that receive quality KMC until discharge (Payment Metric B) *Suggested payment frequency: every 6 months*	The DIB will hire and train in each hospital a full-time data entry clerk whose responsibility is to collect data on a continuous basis. This data will include the number of newborns enrolled in the KMC program. The independent verification agent will then verify this number and assess the quality of KMC being performed based on a pre-defined checklist.	This metric is directly linked to the success of the program. Whether quality KMC is actually provided to the target population is of utmost importance for the program's ability to deliver longer-term health impact at scale. Attributing an improvement in this outcome to the Cameroon Newborn DIB is also relatively straightforward, which makes it a compelling payment metric.
Percentage of enrolled newborns who attend their 40-week follow-up appointment and have reached an adequate target weight. (Payment Metric C) *Suggested payment frequency: every 6 months*	Weight at 40-week gestational age and related administrative data (e.g. gestational age, birth weight) will be collected at the 40-week follow-up appointment and from hospital records, and verified by the independent verification agent, to assess whether infants have reached adequate nutritional status. The independent verification agent would also survey mothers to estimate the percentage of infants receiving appropriate nutrition. Only if **both** an appropriate weight and appropriate nutrition criteria are met would success payments be triggered.	This metric captures a key element of delivering quality KMC, i.e. ensuring that infants come back for their follow-up appointments, at least until the critical 40-week gestational age point. As mothers performing KMC are often discharged early from hospitals, ensuring that they come back is an essential component for the program to focus on. Therefore, success in scaling up the intervention can partly be measured through this metric. Quality KMC is expected to help LBW infants survive and grow, and is shown to have a positive impact on ultimate health outcomes (mortality and morbidity). Tracking the number of infants who have reached an adequate nutritional status at 40-week is therefore a good indicator of quality KMC successfully putting newborns on a healthy growth trajectory. This data on weight is also easily recorded by hospitals as most of them already do so (although the accuracy of most weight scales currently used is not optimal and requires upgrading during DIB implementation).

Appendix C: List of Target Hospitals

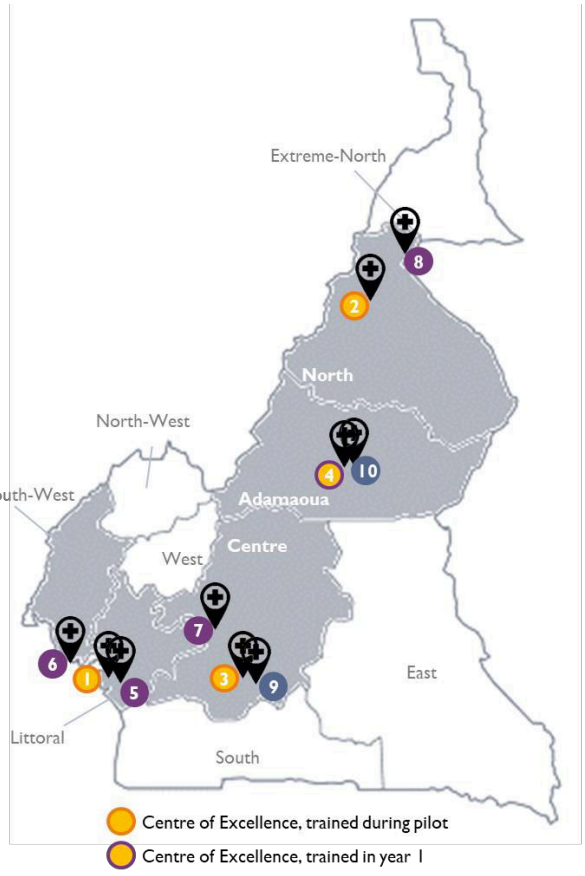
Target hospitals

We are proposing that KMC be implemented in 10-11 hospitals in 5 regions of Cameroon, which were chosen based on government priority, the population need, and the feasibility of implementation (considering key issues such as security and a threshold level of infrastructure which, with limited upgrading, would enable hospitals to be KMC-ready). The product of these considerations was to give priority to 5 regions:

- Government priority regions (North, Adamaoua and Southwest regions)
- Regions with high population density, and in close proximity to facilities already delivering high-quality KMC (Littoral and Centre regions)

Rollout timeline

Hospitals will be trained by the Centre of Excellence in their region (with the exception of Buea Regional Hospital, as the only hospital in the Southwest region, which will be trained by Laquintinie) over the first 2 years of the DIB. The following list of hospitals is illustrative and may be subject to change as we finalise the operational budget and depending on circumstances in the implementation of the DIB.



Hospitals trained during pilot

Refresher training and infrastructure development during mobilisation

	Hospital Name	*Trained by:*	*Date:*
1	Laquintinie	KF Cameroon	2015
2	Garoua Regional Hospital	Laquintinie	2016
3	HGOPY	Laquintinie	2016

Hospitals trained in Year 1 of the DIB

4	Ngaoundere Regional Hospital	Laquintinie	Q4 2018
5	Bonassama District Hospital	Laquintinie	Q4 2018
6	Buea Regional Hospital	Laquintinie	Q1 2019
7	Bafia District Hospital	HGOPY	Q1 2019
8	Guider District Hospital	Garoua Regional	Q2 2019

Hospitals trained in Year 2 of the DIB

9	University Teaching Hospital Biyem Assi	HGOPY	Q3 2019
10	Ngaoundere Protestant Hospital	Ngaoundere Regional	Q3 2019

Appendix D: About the DIB Advisory Team

About Social Finance

Founded in 2007, Social Finance is a not-for-profit financial intermediary regulated by the Financial Conduct Authority. It provides a range of consulting, project management, strategic advisory, performance management and financial advisory services to build the impact investment market. To date, Social Finance has mobilized over £100 million of investment. It is the originator and global leader in Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs), and has also delivered projects across a range of other innovative financing instruments. SF will draw on this experience to design the Cameroon Newborn DIB successfully.

SF has extensive experience working with a broad range of partners including donors, governments, investors and foundations. Examples of clients in the international development space include the Global Fund, World Bank, Grand Challenges Canada, the Inter-American Development Bank, USAID, DFID, Omidyar Network, Rockefeller Foundation, UBS Optimus, Oxfam, Global Innovation Fund and Shell Foundation. SF's international projects cover a range of issue areas (e.g. health, education, youth unemployment, water and sanitation, clean energy and resilience building), and geographies (e.g. South Africa, Uganda, Palestine, India, Swaziland, Bangladesh and Fiji amongst others). SF has sister organizations in the US and Israel and a network of partners across the world.

About MaRS Centre for Impact Investing

MaRS Discovery District (MaRS), a not-for-profit organization, is one of the world's largest urban innovation hubs. MaRS Centre for Impact Investing (MCII), a center within MaRS, unlocks the power of private capital to tackle persistent social challenges. MCII partners with investors, governments, ventures and service providers to create funding solutions for projects that generate both social and financial returns. Since 2011, MCII has helped put more than $92 million to work building stronger, healthier and more sustainable communities.

MCII's Capital Advisory team specializes in evaluating opportunities for, designing, structuring, and managing performance for social finance tools to achieve better outcomes for vulnerable populations. Clients include Ontario Ministry of Economic Development and Growth, McConnell Foundation, Public Health Agency of Canada, Immigration, Refugees, and Citizenship Canada, Public Safety Canada, Grand Challenges Canada, Calgary Foundation, Toronto Foundation, National Bank.