

Stars in Global Health: Request for Proposals

Country Innovation Platform – Ghana: Increasing access to quality maternal and newborn health services

June 14, 2023 (Revised & reported Jul 19,
2023 – extended deadlines)

The Country Innovation Platform Ghana Pilot is a partnership between Ghana Health Service, USAID's Center for Innovation and Impact (CII) and USAID/Ghana, Grand Challenges Canada and AMP Health.



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AMPHEALTH

List of Acronyms

CHPS	Community Health Planning and Services
CII	Center for Innovation and Impact
CIP	Country Innovation Platform
EmONC	Emergency Obstetric and Neonatal Care
GCC	GRAND CHALLENGES CANADA / GRANDS DÉFIS CANADA (also referred to as “Grand Challenges Canada”)
GHS	Ghana Health Service
ICT	Information and Communications Technology
LMICs	Low- and middle-income countries
MNH	Maternal and newborn health
RFP	Request for Proposals
USAID	United States Agency for International Development

Executive Summary

Over the past few decades, Ghana has made considerable progress in reducing maternal and newborn mortality. However, the country still faces many challenges in ensuring that mothers and newborns receive high-quality health services. Some of the key challenges Ghana is facing in maternal and newborn health (MNH) include:

- Poor access to quality MNH services, especially in rural and underserved areas.
- Low levels of skilled birth attendance and emergency obstetric care.
- Limited availability of essential medicines, medical supplies, and equipment.
- Weak referral linkages between health facilities for maternal and newborn health services.
- Inadequate emergency transportation for patients in need of emergency maternal and newborn health services.

Ghana aspires to eliminate avoidable maternal and neonatal deaths and recognizes the role innovations can play to improve MNH in Ghana and in so doing, contribute to achieving this bold ambition.

To this end, the Ghana Health Service (GHS) in collaboration with USAID's Center for Innovation and Impact (CII) and USAID/Ghana, Grand Challenges Canada (GCC), AMP Health and other collaborators across the health ecosystem, have launched a Country Innovation Platform (CIP) in Ghana and put forward a Request for Proposals (RFP). This RFP will enable the CIP in Ghana to mobilize crucial resources and work to address these critical needs by identifying relevant innovators with transformative ideas at proof-of-concept stage that could help address key challenges in MNH in Ghana.

Through this funding call, the CIP-Ghana Partners seek bold ideas to support Ghana's ambition to increase access to quality MNH services. These innovative solutions are expected to improve patient referrals, increase accessibility & availability of patient transport, improve delivery of quality emergency MNH services, and/or increase availability of essential MNH medicines and supplies. This will support Ghana's ultimate goal of reducing maternal, perinatal and neonatal morbidities and mortalities, reducing direct obstetric case fatality rates, and reducing the rate of stillbirths.

Successful proposals will be awarded seed grants of CAD \$200,000 to CAD \$250,000 for a period of 12 to 18 months to develop and test the proposed innovation. We aim to award approximately 10 seed grants in this round.

Organizations incorporated in North, West, East, Central and Southern Africa are eligible to apply, as well as Canadian institutions. All innovations will be implemented in two of the six target regions within Ghana – Western, Upper East, Upper West, North East, Northern, and Savannah. We encourage locally-led organizations who are meaningfully connected with the communities they are looking to work with and for to apply to this RFP. We also want to particularly encourage entities based in Ghana, and organizations led by women to apply.

Proposed innovations must be bold, innovative, and designed with and for people who are not adequately served by current approaches. These innovative solutions are expected to address key challenges in the accessibility, as well as the efficient and timely delivery, of MNH services at the sub-district level within the Networks of Practice without creating an additional resource burden on an already strained healthcare system. A Network of Practice is a group of facilities in a specified geographic area connected to each other, functionally, to allow a smooth system of sharing and managing resources (learn more in Section 1.2.3). Selected innovations must also have the potential to be sustainable at scale and resilient to future changes in the local economic and public health contexts.



APPLICATION DEADLINE (extended): August 14, 2023 at 12pm EDT (4pm UTC).

Applications will not be accepted after this date and time.

Due to processing times, you **MUST** register for a Fluxx account no later than **August 2, 2023 at 11:59pm EDT (August 3, 2023 at 3:59am UTC) [extended]**. Account registrations received after this date and time will not be processed. If you have an existing Fluxx account, there is no need to re-register.

To apply for funding, applicants **MUST** use the online application form provided, which is **ONLY** accessible via Grand Challenges Canada's Fluxx Portal <<https://gcc.fluxx.io>>. Existing users should login to their account and new users must register for an account on the main application portal on Fluxx. (See Section 3.2 *Instructions for Application Portal*.)

For technical assistance with registration or the online application, contact Grand Challenges Canada's Fluxx Technical Support team at: <http://www.grandchallenges.ca/fluxxsupport/>

Email stars@grandchallenges.ca with 'Request for Proposals' in the subject line for questions not answered in the supplemental Frequently Asked Questions (FAQ) document.



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1. Introduction

1.1 THE PROBLEM

Ghana has made considerable progress in reducing maternal and newborn mortality over the past few decades. According to the 2017 Maternal and Health Survey, the maternal mortality rate was 310 per 100,000 live births, and the neonatal mortality rate was 25 per 1,000 live births, which was a decline from the 2014 figure of 29. As of 2022, Ghana has achieved an institutional maternal mortality ratio of 102 per 100,000 live births, and the institutional neonatal mortality rate has dropped to 7 per 1,000 live births. However, the country still faces many challenges in ensuring that mothers and newborns receive high-quality health services. The leading causes of neonatal death in Ghana are prematurity, birth asphyxia and infection, while the leading cause of maternal death is postpartum hemorrhage. These figures indicate that there is still much work to be done to improve the health outcomes of mothers and newborns in the country.

Some of the key challenges Ghana is facing in maternal and newborn health (MNH) include:

- **Poor access to quality MNH services, especially in rural and underserved areas.** In 2022, on the average only 78% of Ghanaian women in the 5 northern regions in Ghana (Upper East, Upper West, North East, Northern, and Savannah) had at least 4 antenatal visits during their pregnancy vs a target of 85%. Similarly, 91% of mothers and 81% of newborn babies are reported to receive postnatal care within 2 days after delivery.
- **Low levels of skilled birth attendance and emergency obstetric care.** Only 63% of Ghanaian mothers utilized a skilled birth attendant at delivery in 2022. There is insufficient and inequitable distribution of Emergency Obstetric and Neonatal Care (EmONC) facilities across the country. The 2020 Ghana EmONC assessment revealed that the availability of Basic EmONC in the health centres declined from 7% in 2010 to 4%. Where these facilities are available, there is a lack of trained staff, equipment, and commodities to adequately provide emergency care to women and newborns in need. In some cases, providers refuse posting due to limited resourcing at the posts, especially in the five northern regions in Ghana (Upper East, Upper West, North East, Northern, and Savannah).
- **Limited availability of essential medicines, medical supplies, and equipment.** District level health facilities – Community Health Planning and Services (CHPS) zones and health centers – often experience stockouts of essential medicines and supplies. In fact, in 2020, a few regions recorded over 90% stockout in essential medicines and supplies, but in the last quarter, on the average, GHS recorded a 33% stockout on essential commodities. Stockouts are largely due to funding limitations, inadequate forecasting, lack of capacity to undertake proper forecasting, and lack of real-time visibility as most district health facilities still rely on paper-based methods for planning, monitoring, and replenishing essential medicines, medical supplies, and equipment.
- **Weak referral linkages between health facilities for maternal and newborn health services.** Most health facilities at the district level still rely on paper-based methods to manage, track, and record patient referrals. Managing paper-based records can be time-consuming, error prone and inefficient, as it requires manual input and retrieval of information. This makes it difficult to track patient outcomes and evaluate the effectiveness of referral processes and can delay the referral process and potentially impact patient care.
- There is also **inadequate emergency transportation** for patients in need of emergency maternal and newborn health services, with staff at community-level health facilities often having to arrange private means of transport, when possible, which are often cost-prohibitive or

inconvenient for patients. There are also longer distances between communities and health facilities, linked with poor road networks (especially in the five Northern regions – Upper East, Upper West, North East, Northern, and Savannah).

1.2 THE OPPORTUNITY

Ghana aspires to eliminate avoidable maternal and neonatal deaths and recognizes the role innovations can play to improve MNH in Ghana and in so doing, contribute to achieving this bold ambition.

1.2.1 Country Innovation Platform

To this end, the Ghana Health Service in collaboration with the United States Agency for International Development (USAID), Grand Challenges Canada, AMP Health (together “**the CIP-Ghana Partners**”) and other collaborators across the health ecosystem, have launched a Country Innovation Platform (CIP) in Ghana to identify health challenges that could benefit from innovation and support local innovators who can respond.

The CIP-Ghana seeks to contribute to the Ghanaian health ecosystem by:

- Testing innovative solutions that have the potential to improve health outcomes;
- Generating lessons learned about how to design an innovation process that is tailored to locally defined needs; and
- Demonstrating the feasibility of a platform for countries to support innovations and invest in an ecosystem of informed and connected local health innovators.

Supported by its partners, the CIP-Ghana has already engaged stakeholders in Ghana in a human-centered design process to define this call for innovations. Stakeholders from across the country, representing diverse groups within the health ecosystem¹ were brought together in February 2023 to participate in a 3-day co-creation workshop that served to identify health challenges in maternal and newborn health that could benefit from innovation and become the focus of this CIP pilot.

This Request for Proposals (RFP) will enable the CIP-Ghana to mobilize crucial resources and work to address these critical needs by identifying relevant innovators with transformative ideas at proof-of-concept stage that could help address key challenges in MNH.

1.2.2 Country Innovation Platform – Ghana Partnership

This CIP pilot in Ghana is being led by Ghana Health Services, with each of the three other core CIP-Ghana partners playing unique and complementary roles within the collaborative model.

1.2.2.1 Ghana Health Service

The Ghana Health Service (GHS) is a government public service body, and the largest implementing agency of the Ministry of Health. GHS was established in 1996 as part of the Health Sector Reforms processes under Act 525 as required by the 1992 constitution.

¹ This included representatives from location innovation hubs, Ghanaian innovators, representatives from public and private sector institution and health facilities, as well as civil society organisations and academia.

The mandate of GHS is to *provide and prudently manage comprehensive and accessible health services with special emphasis on primary health care, in accordance with approved national policies*. The Service ensures administration and service delivery within its decentralized structure –National, Regional, District and Sub-district levels. GHS also supports and supervises private, civil society and faith-based organization health facilities, as well as initiatives of local and international development partners.

The Ghana Health Service is highly structured with eleven divisions at its national headquarters providing high level planning and strategic direction for direct service delivery in each of the 16 regions. Data for decision making is generated at facility level, validated through hierarchical system and accessible from the District Health Information Management System 2 (DHIMS2).

Within this CIP pilot in Ghana, the Ghana Health Service led the co-creation process that identified health priority needs. GHS will continue to provide leadership and overall guidance to the partners and innovators, all geared towards ensuring that CIP-Ghana aligns with existing systems and leads to sustainable health interventions.

1.2.2.4 United States Agency for International Development

The United States Agency for International Development (USAID) is the lead U.S. Government agency that works to end extreme global poverty and enable resilient, democratic societies to realize their potential. USAID's Center for Innovation and Impact (CII) takes strategic risks to incubate new ideas, put them into practice, and scale effective approaches for critical health issues. CII applies expertise in innovation, market-based solutions, and digital health to work in partnership and through institutional change.

USAID/Ghana, in collaboration with the Center for Innovation and Impact, developed the conceptual model for the CIP. USAID is playing a leading role in the design and launch of this initiative in Ghana and will document lessons learned from this pilot.

1.2.2.3 Grand Challenges Canada

Grand Challenges Canada is dedicated to supporting Bold Ideas with Big Impact®. With funding from a variety of government partners and organizations, including Global Affairs Canada, Grand Challenges Canada's mission is to support innovation that saves and improves the lives of the most vulnerable in low- and middle-income countries and Canada. Grand Challenges Canada's vision is a world in which innovation accelerates the achievement of the United Nations' Sustainable Development Goals.

One of the largest impact-first investors in Canada, and with a feminist investment approach, Grand Challenges Canada has supported a pipeline of over 1,400 innovations in 96 countries. Grand Challenges Canada estimates that these innovations have the potential to save up to 1.78 million lives and improve up to 64 million lives by 2030.

Grand Challenges Canada is hosted in Toronto at the Sandra Rotman Centre at the University Health Network. For more information, please see: <http://www.grandchallenges.ca/>

Grand Challenges Canada is providing the grant funding for the CIP pilot in Ghana and is also contributing use of its grant management software and experienced personnel to support running this pilot funding call.

1.2.2.2 AMP Health

AMP Health supports governments to build visionary and effective public sector teams. AMP Health works with these teams to help them develop the leadership and management skills needed to achieve their own ambitious goals.

At the heart of the AMP Model is the recruitment and placement of a Management Partner, a mid-career professional, generally with private sector experience, who is embedded with a government team. The Management Partner works as a coach and mentor to the team, helping them to identify their most important programmatic priorities, and what leadership and management skills are needed to achieve them. AMP Health is embedding a private sector “Management Partner” within the Ghana Health Service to ensure innovations respond to country priorities, serve as the in-country coordinator of the CIP-Ghana, and to help bolster the broader innovation ecosystem.

In addition to the embedded Management Partner, AMP Health provides structured leadership and management training that is tailored to the specific needs of our partner teams. AMP Health works closely with each team and their Management Partner to identify priority skills and tools and provide practical and relevant content to help teams on their leadership and management journeys. AMP also creates in-person and online opportunities for teams to connect with peers from other countries, share their experiences, identify best practices, and support one another through challenges.

AMP Health is working through the USAID-funded Market Access and Innovative Finance (MAIF) award.

1.2.3 Networks of Practice

Recently, the Ghana Health Service has launched a bold new initiative to develop Networks of Practice at the sub-district level to improve the quality of service delivery and ensure patient-centered, comprehensive, and high-quality healthcare experiences that meet the needs of patients and communities. Upon successful roll out, Networks of Practice will be the main model for delivering maternal and newborn care to mothers and newborns across the country.

Over the past two decades, health system strengthening at the district level in Ghana has focused on Community-Based Health Planning and Services and the district hospitals. This has inadvertently led to a degree of neglect of health centres (facilities at the sub-district level), which are to serve as the referral link between the district hospitals, CHPS zones and the communities. Through establishing the Networks of Practice model, the Ghana Health Service will also upgrade health centres to ‘Model Health Centres’ to serve as the central anchor establishment within each network.

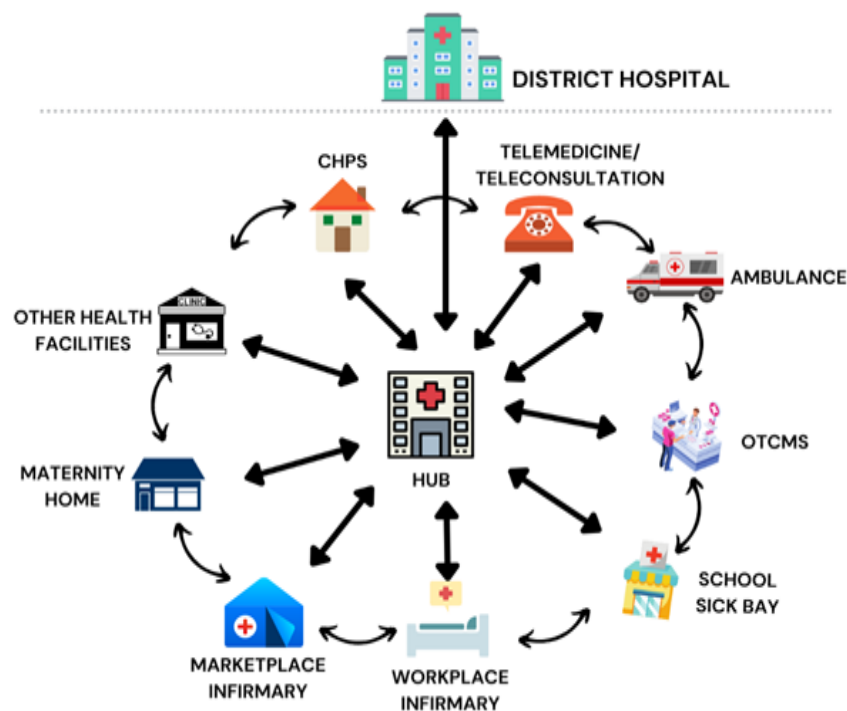
A Network of Practice is a group of facilities in a specified geographic area connected to each other, functionally, to allow a fluid system of managing and sharing resources. This allows the facilities to maximize efficiency in resource use to improve quality and coverage of care. This Networks of Practice model arranges service delivery assets into a network consisting of an anchor establishment called the Hub (at the center), which is complemented by secondary establishments called Spokes.

A Hub is a health centre that provides a full array of services. Complex medical services, especially those that are technology and skill intensive, are centralized at the hub, including

human resource management, marketing, and related operations. The hub shall be developed into a “Model Health Centre” for supporting the network to perform effectively.

The Spokes are a group of health delivery points connected to the Hub. They provide a more limited array of services, but the Hubs provide them with technical and operational support. Spokes are mostly CHPS but include other public and private health facilities such as workplace infirmaries, school-based or marketplace clinics, ambulance services, maternity homes, pharmacies, and over-the-counter medical sellers.

Figure 1: Structure of the Networks of Practice



This [video](#) published by Ghana Health Service explains Networks of Practice in greater detail. By launching the CIP-Ghana while the Networks of Practice are being operationalized, the Ghana Health Service recognizes the opportunity to identify and introduce relevant innovations that could play a role in enabling the success of the Networks of Practice model while advancing MNH. Innovations can enable efficient service delivery by strengthening the Networks while simultaneously bringing in novel ideas and approaches to help address unmet needs and challenges arising in MNH within the Networks. Winning proposals identified as part of this RFP will thus be expected to be implemented within Networks of Practice with a special focus on strengthening health centres.

1.3 STARS IN GLOBAL HEALTH

The Stars in Global Health (Stars) program supports Bold Ideas with Big Impact® from the best and brightest scientists and innovators, both in low- and middle-income countries and in Canada, to address

some of the most pressing global health challenges. It provides funding to explore transformative ideas at proof-of-concept that apply Integrated Innovation® in order to sustainably bring solutions to scale.

Stars in Global Health is Grand Challenges Canada's flagship portfolio to test the potential of new pipeline in areas of strategic interest for Grand Challenges Canada and our funders. It is designed as a flexible portfolio to allow adaptability at each round of funding to meet the most salient development needs. The Stars program also provides responsiveness to changing global priorities with an ability to fill funding gaps and collaborate with key stakeholders to advance specific goals.

In the case of this RFP, and the pilot phase of the CIP in Ghana, the Stars in Global Health program at Grand Challenges Canada is serving as the mechanism through which selected innovators will be contracted and funded. However, the complete funding cycle – from application intake, through review, selection, funding negotiation, and on to project support – will be managed collaboratively by the CIP-Ghana Partners.

2. Program Scope

2.1 AREAS OF FOCUS

Through this funding call, the CIP-Ghana Partners seek bold ideas to support Ghana's ambition to increase access to quality maternal and newborn health (MNH) services. These innovative solutions are expected to improve patient referrals, increase accessibility & availability of patient transport, improve delivery of quality emergency MNH services, and/or increase availability of essential MNH medicines and supplies. This will support Ghana's ultimate goal of reducing maternal, perinatal and neonatal morbidities and mortalities, reducing direct obstetric case fatality rates, and reducing the rate of stillbirths.

These innovative solutions are expected to address key challenges in the accessibility and delivery of MNH services at the sub-district level within the Networks of Practice in six regions in Ghana – Western, Upper East, Upper West, North East, Northern, and Savannah. Networks of Practice is a key strategy under the results framework for Ghana's 2030 Universal Health Coverage agenda. Networks of Practice refers to a group of health facilities (public & private), within a specified geographic area, functionally connected to each other to maximize efficiency by allowing a smooth system of managing and sharing resources.

Overall, the CIP-Ghana Partners seek transformative ideas that lead to at least one of the following four priority outcome areas:

- (i) Improved communication and real-time tracking of information along the patient referral journey for mothers and newborns
- (ii) Increased accessibility and availability of transport for pregnant women and mothers of newborns to reach health facilities, especially in emergencies
- (iii) Improved skills of healthcare workers to deliver high-quality emergency MNH services
- (iv) Increased availability of essential medicines and supplies for MNH where they are needed

For relevant innovations, applicants will be asked to describe how they would work with or possibly leverage existing data and digital systems within Ghana Health Service to deliver the proposed solution (see Section 2.6.2 for more information on the relevant information systems).

We encourage locally-led organizations who are meaningfully connected with the communities they are looking to work with and for to apply to this Request for Proposals (RFP). We also want to particularly encourage entities based in Ghana, and organizations led by women to apply.

Proposed innovations must be bold, innovative, and designed with and for people who are not adequately served by current approaches. Innovations should seek to enable more efficient and timely service delivery within the Networks of Practice without creating an additional resource burden on an already strained healthcare system.

Proposed innovations must have the potential to be sustainable at scale and resilient to future changes in the local economic and public health contexts.

2.2 GEOGRAPHIC SCOPE

The Ghana Health Service has selected six regions of focus for the Country Innovation Platform in Ghana (CIP-Ghana) – Western, Upper East, Upper West, North East, Northern, and Savannah. These are regions, particularly those in the north, with more acute and distinct challenges in maternal and newborn health compared to the rest of the country.

Proposed innovations will be implemented or tested within the Networks of Practice in at least two of the six focus regions during the project period. Applicants will be asked to identify their preferred implementation regions but, if selected for funding, may be asked to shift their implementation site(s) to ensure balanced coverage of innovations across the target regions.

Please see Appendix A for an overview of the regional profiles.

2.3 TARGET USERS

The intended target users of proposed innovations must include women (including pregnant women and mothers), children, adolescents, healthcare providers and/or health facilities in communities within the target regions in Ghana (see Section 2.2) who are unserved and underserved by current approaches.

2.4 AVAILABLE FUNDING

Successful proposals will be awarded seed grants of CAD \$200,000 to CAD \$250,000 for a period of 12 to 18 months to develop and test the proposed innovation. Assuming a sufficient number of proposals of merit are received, the CIP-Ghana Partners aim to award approximately 10 seed grants in this round.

Selected projects will ultimately enter into grant agreements with Grand Challenges Canada, with funding through The Department of Foreign Affairs, Trade and Development of Global Affairs Canada.

While matched funding is not a requirement at the seed funding stage, all innovators are encouraged to secure co-funding. Initiating early strategic partnerships can improve the sustainability of an innovation by creating early buy-in and providing resources and expertise that may prepare teams for the scaling journey.²

² For innovations that successfully demonstrate proof-of-concept, this could potentially be supported through a further Grand Challenges Canada investment as part of the Transition-to-Scale portfolio (see more here <https://www.grandchallenges.ca/programs/transition-to-scale/>).

Please note: All successful applicants must take up the grant (begin the project period) within 6 months of being notified of their selection. Any deferral beyond this period may result in the forfeiture of the award.

Please note: All successful applicants must complete their project within 18 months of the final negotiated project start. Exceptions are at the sole discretion of the CIP-Ghana Partners.

2.5 INNOVATION

This RFP is open to all types of innovation, including product, service, and digital innovations –

- **Product Innovations:** These are innovations that are physical products to improve the delivery of MNH. Products could be used by healthcare providers, mothers, caretakers, or other stakeholders involved in the maternal and newborn care journey. Product innovations may also involve the adaptation of existing products to better meet the needs of mothers and newborns in Ghana. Product innovations should consider potential use cases across Networks of Practice, and especially at health centres.
- **Service Innovations:** These are innovations that aim to provide services that contribute to the delivery of quality MNH. Service innovations may include health services directly received by mothers and newborns, or supporting services that could enable healthcare workers and facilities within Networks of Practice to function effectively.
- **Digital Innovations:** These are innovations that leverage digital technologies to improve MNH, across any part of the maternal and newborn care journey. For example, digital innovations may include mobile applications (apps) for patient education and counseling or the use of electronic health records to improve patient data management. Digital innovations should consider ways to contribute to the functioning of facilities as connected Networks of Practice.

Innovation could also take the form of a new business model, policy approach or delivery mechanism. Where appropriate, applicants are encouraged to consider how combining different types of innovation might best address the challenges facing MNH in Ghana. Projects are also encouraged to have an Integrated Innovation® approach that coordinates scientific/technological, social and/or business innovation, to develop sustainable solutions to these complex challenges. This does not discount the singular benefits of each innovation type or approach, but instead highlights the powerful synergies of aligning any of the three. The selected proposals will be evaluated according to the criteria outlined in Sections 3.4 and 3.5 regardless of the type of innovation proposed.

Given that we expect applicants to address health issues that are not new, we do not expect all proposed ideas to be entirely unique. Rather we understand that many will consist of more standard health solutions that are being approached and/or applied innovatively within the Networks of Practice context. If the solution itself is not particularly novel or bold, the applicant will be expected to satisfactorily describe why implementing it in a new context would be or how the implementation approach itself is particularly original and promising.

2.6 ESTABLISHING PROOF-OF-CONCEPT

The CIP-Ghana defines the proof-of-concept stage as when an innovation is field-tested in a real-world pilot to assess its potential technical, organizational and financial viability.³

The CIP-Ghana's ultimate goal is to save and improve the lives of Ghanaian women and children, by funding projects with real-world impact on MNH in Ghana. All proposals should provide an overview of the monitoring, evaluation, and learning activities that will take place during the project period, including:

- How the proof of concept is defined and how this will be assessed;
- Plans to evaluate the effects on MNH service delivery and usage within the regions and Networks of Practice; and
- A strategy to identify shortcomings, challenges, and unexpected results.

Proposals must include immediate, intermediate, and ultimate outcome indicators, and a description of how these will be monitored and evaluated over the life of the project. Innovators are expected to report against any indicators listed in Appendix B that are relevant to demonstrating success of their innovation. For innovations that are not able to demonstrate proof-of-concept, it is expected innovators will be able to articulate why their innovation did not work in order to accelerate progress in the sector.

How we define a successful proof of concept:

- Evidence that the innovation leads to at least one of the priority outcomes as outlined in Section 2.1 (see below for examples of intermediate outcome indicators linked to these four priority outcome areas)
- Feasible plans for how the innovation can be sustained in at least two target regions
- Evidence of demand from key stakeholders impacted by the project (e.g., mothers, frontline healthcare workers, Ghana Health Service, etc.)

Projects will be required to demonstrate change in at least one intermediate outcome for their targeted priority outcome areas, for example:

- **Improved communication and real-time tracking of information along the patient referral journey** for mothers and newborns
 - Improved and timely visibility of referral information for mothers and healthcare workers
 - Reduction in inappropriate referrals, leading to reduced cost to clients and facilities
- **Increased accessibility and availability of transport** for pregnant women and mothers of newborns to reach health facilities, especially in emergencies
 - Availability of an adequate transport system that caters to the local terrain
 - Reduced referral time i.e., time between referral decision at referral facility to arrival at receiving facility
- **Improved skills of healthcare workers** to deliver high-quality emergency MNH services
 - Increased knowledge and resource sharing of personnel and skills among health facilities
 - Improved visibility, use and delivery of EmONC services within the networks
- **Increased availability of essential medicines and supplies** for MNH where they are needed
 - Improved data capturing and management to enable reduced stockouts of essential medicines and supplies down to the facility level

³ The International Development Innovation Alliance (2017). *Insights on Scaling Innovation*. [online] Available at: <https://static1.squarespace.com/static/6295f2360cd56b026c257790/t/62a1d43829d380213485d4f9/1654772794246/Scaling+innovation.pdf>

- Increased availability of low-cost temperature-controlled storage facilities for both medical and non-medical commodities

Additional intermediate outcomes relating to the four priority outcomes are listed in Appendix B.

2.6.1 Proof-of-Concept within Networks of Practice

As projects will be implemented within the Networks of Practice, **proposals should demonstrate a clear understanding of the Networks of Practice** as well as how the proposed idea would be rolled out given that context. This should include an understanding of:

- **The setup of the Networks of Practice.** The design and launch plan of the proposed idea should be tailored to the diversity of facilities within a network.
- **The emphasis on strengthening (district level) health centers.** Proposed ideas should contribute to improving the quality of service delivery and, in the process, upgrading health centres which serve as the main referral link between communities and district hospitals.
- **How the proposed idea can help strengthen the rollout of the Networks of Practice** e.g., ideas should serve to enable more efficient service delivery within the networks without creating an additional resource burden.
- **The local contexts within the regions.** One size does not fit all. The proposed idea should be tailored to specific regional contexts (e.g., features of the innovation should consider cultural norms within the regions and networks).

2.6.2 Alignment with the existing GHS Digital Platform

The Ghana Health Service (GHS) continues to strengthen its resolution to leverage Information and Communications Technology (ICT) for improved service delivery, reporting, and management decisions at all levels. To this end, GHS has developed, adopted and implemented many digital platforms supporting service delivery, health data management, human resource management, logistics, financial management, capacity building and training. These include the District Health Information Management System (DHIMS2), eTracker, GHS eLearning Platform, the Planning, Budgeting and Management Information System (PBMIS), and many others.

The GHS Policy and Strategy on Digital Health (2023-2027) serves as a directive document to implement ICT solutions in the Service for the next five years. Outlined in this policy and strategic document are strategies that ensure integration and interoperability of digital platforms with main activities being to:

- Develop and operationalize interoperability framework, standards and guidelines for digital health platforms; and
- Monitor interoperability and ensure compliance with standards and guidelines.

The above strategic objective and main activities create an enabling environment for all digital platforms that meet GHS standards and international ones to be aligned. Below are guidelines to ensure innovations work towards systems alignment:

- Define the scope for the alignment with existing digital platforms;

- Conduct an analysis of the new digital platform to identify gaps and parameters for integration, this analysis should address security, standards, vulnerability issues and system functionality;
- Align the outcome of the new digital tool analysis with the existing digital to ensure interoperability;
- Ensure interoperability between systems by exchanging data; and
- Validate interoperable data and make further recommendation.

One of the biggest opportunity areas across data management systems in Ghana is that of standardization of data usage. Currently, data is available but there is a growing need to support facilities to use data properly in order to be able to run analysis and effective decision-making. There is also a broad need to enforce regular review procedures of data management systems and the quality of data produced and to train and employ skilled workers within the field of programming and development, in order to support the system and server maintenance of data management tools. A stronger workforce would also alleviate pressure on staff who run the backend of data management systems.

Communicating results is an important part of the project's accountability to Grand Challenges Canada and other key stakeholders. Innovators should consider how results will be disseminated in order to drive the innovation's impact and sustainability. While communicating results through scientific publications is encouraged, this should not be the primary objective of any funded project without a well-articulated justification that this is a critical path to impact.

2.7 SCALE AND SUSTAINABILITY

The CIP-Ghana Partners expect that the most successful innovations it funds will eventually be scaled up through partnerships, either with the private sector, the public sector or a combination of both, and that scaling will be carried out with the goal of achieving meaningful health impact for mothers and newborns in Ghana. Applicants should convincingly show in their application how and why they believe their project will eventually be scaled by private and/or public pathway(s)⁴.

The seed funding that the CIP-Ghana offers should enable innovations to begin positioning themselves along a preliminary path to scale, taking into account the following factors:

- the state of local infrastructure;
- social, political, and economic forces;
- the capacity of the institution and its leadership;
- potential strategic and implementation partners;
- available funding and revenue streams; and
- other potential barriers to scale.

All projects will be required to integrate into the Networks of Practice in the target regions. Projects are recommended to leverage local systems where this will lead to efficiencies and to meaningfully engage the other facilities within the networks as well as the women, healthcare workers and broader

⁴ **Private sector** scaling paths are suitable for projects that are commercially viable or provide value to attract a private sector partner, either because production costs and sales prices are such that they are profitable, or users demand the innovation and are willing to pay for it themselves. **Public sector** scaling paths are suitable for projects that are likely to compel host country government ministries and departments, multilateral donors or other public sector players to scale them. These should be aligned to, and have the ability to be incorporated into, the country's sub-national or national health plan or strategy.

communities that are meant to benefit from the proposed innovation in order to increase the likelihood of scale-up. This should include an understanding of:

- how the innovation relates to local priorities (e.g., within the respective Networks of Practice);
- why the innovation would be preferred over alternatives; and
- key drivers of consumer demand.

The plan should clearly define the geography or context of use, as well ongoing plans for financial sustainability.

2.8 TEAM LEADERSHIP

To achieve impact at scale, bold ideas need to be championed by effective, results-driven leaders with the capacity to convene and engage with key influencers. Multidisciplinary and cross-sector teams are strongly encouraged. Effective project teams need experience, or a plan to engage relevant expertise, in:

- the health issue they are seeking to address;
- monitoring and evaluation;
- data analysis and statistics;
- business and/or public sector engagement; and
- working in the implementation region/country.

Social entrepreneurs interested in applying should ensure they have the legal capacity to enter into a contract with Grand Challenges Canada. Grand Challenges Canada does not fund individuals, sole-proprietorships, partnerships, unincorporated trusts or any entity that does not have the legal capacity to enter into a contract.

2.9 UNDERSTANDING OF LOCAL CONTEXT

To help ensure sustainable impact at scale, it is essential that project teams and their collaborators understand the local infrastructure and governance context (including relevant laws and regulations) and the social, political, and economic context. This includes local cultures, traditions and beliefs and the stigma and discrimination faced by older adults, women, young people, Indigenous peoples, people with disabilities, and other traditionally underserved and minority groups. Similarly, it is also important that project teams and their collaborators are meaningfully connected to the target populations and communities.

This will help projects better understand the health status and needs of the community, as well as identify risks to project success. Where they exist, innovations should build upon local systems which are able to reach the target population that support health and/or development or address broader determinants of health. Determinants of health include poverty, inequality (including gender inequality), education and literacy, age, gender identification, race, and access to water and sanitation resources. Innovations should be relevant to low resource settings, and benefits of these innovations must target underserved and vulnerable populations of low- or middle-income countries.

Importantly, the local context in the case of this RFP includes the Networks of Practice (see Section 1.2.3) in the six regions of focus (see Section 2.2) of the CIP-Ghana.

2.10 ROLE OF INDIGENOUS AND LOCAL KNOWLEDGE

In line with the importance of understanding the local context is the essentiality of respecting and learning from Indigenous approaches. Project teams should consider, where relevant, how their proposals may be informed and enhanced by Indigenous and traditional knowledge, teachings and practices. This should be done only with the expressed consent and meaningful collaboration of the same communities and their knowledge keepers.

2.11 STAKEHOLDER ENGAGEMENT

Success and acceptability of any innovation in the MNH space in Ghana is predicated on fruitful and strong engagement with the key stakeholders that may include, among others:

- Pregnant women and mothers
- Healthcare providers including doctors, nurses, midwives, community health workers, and other allied health professionals
- Health facility representatives (CHPS compounds, health centers, other health facilities with the Networks of Practice and district hospitals)
- Local communities and community leaders
- Local businesses
- Academia
- Christian Health Association of Ghana (CHAG)
- Private and public sector health associations and institutions
- Local innovation hubs

Innovators should consider the needs and perspectives of these stakeholders when developing their proposals. Proposals should demonstrate a clear understanding of the needs and priorities of the impacted stakeholders.

2.12 WHAT WE WON'T FUND

In this CIP pilot in Ghana, Grand Challenges Canada will not fund:

- 1) Projects establishing proof-of-concept of innovations for which the core intellectual property rights are owned by a third-party institution, unless that third party:
 - a. grants the applicant sufficient license rights to the innovation to permit eventual scaling in low- and middle-income countries; or
 - b. signs an undertaking to comply with Grand Challenges Canada's Sharing and Access for Impact Strategy.
- 2) Projects similar to ones Grand Challenges Canada has already funded – please review our searchable database of funded innovations for more information on previously funded projects.
- 3) Projects implementing outside the six regions of focus for the CIP-Ghana – Western, Upper East, Upper West, North East, Northern, and Savannah.
- 4) Projects that are focused strictly on capacity building and/or advocacy and do not involve the testing of an innovative proof of concept.

3. Application and Review Process

3.1 APPLICATION & REVIEW TIMELINE

All applications go through a multi-step review process by Grand Challenges Canada’s senior management before Grand Challenges Canada makes a final funding decision.

SEED FUNDING SELECTION PROCESS



*Grant negotiations are estimated to take three to six months depending on complexity.

Key Dates	Event
August 2, 2023 at 11:59pm EDT (Aug 3, 2023 at 3:59am UTC) <i>[extended]</i>	Deadline to register for a Fluxx account (https://gcc.fluxx.io) Note: If you have applied for funding in the past, you already have an account. If you do not remember your password, you can reset it and gain immediate access to the Portal. Simply click on Reset or create password .
August 14, 2023 at 12pm EDT (4pm UTC) <i>[extended]</i>	Application submission deadline
December 2023 to January 2024	Notification of approval or rejection
December 2023 to May 2024	Negotiation of award
May 2024	Anticipated project start date

3.2 INSTRUCTIONS FOR APPLICATION PORTAL (FLUXX)

To apply for funding, applicants must use the online application provided, which is only accessible via the Grand Challenges Canada’s Fluxx Portal (<https://gcc.fluxx.io>). You **MUST** register for an account by August 2, 2023 at 11:59pm EDT (August 3, 2023 at 3:59am UTC) *[extended]*.

Grand Challenges Canada cannot provide application questions via email and applications submitted through email will **not** be considered. Google Chrome is the recommended browser (DO NOT use Internet Explorer).

Please note: The application must be submitted using the account of an eligible individual and an eligible organization/entity. Once an application is created, the details from the account used will be displayed (as project Lead and applicant entity) on the application form; these cannot be changed without contacting Grand Challenges Canada. Only applications submitted by accounts that meet eligibility criteria will be considered and reviewed.

- 1) Go to <https://gcc.fluxx.io>

Existing users:

- a) If you have applied for funding in the past, you **already** have an account and do not need to register for a new one.
- b) If you do not remember your password, you can reset it and gain immediate access to Fluxx – simply click on the *Reset or create password* link.
- c) If your email address or organization affiliation has changed since you last registered, you will need to register for a new account.

New users:

- a) If you are a new user, click the *Create an account* button. It will take at least one (1) business day but could take up to three (3) business days, to process your request. Be sure to do this as soon as possible, so you have sufficient time to review and complete the application.
 - b) Once your information has been processed, you will be emailed a username and a URL link to set up a password of your choice. If you do not receive your login email, check your junk/spam folder. Click on the URL link provided in the email to input a password of your choice.
- 2) Once you have your account details, input your username and password. Click *Sign in*.
 - 3) Click on the *Welcome/Bienvenue* link on the left menu, navigate to the Stars in Global Health application section, click on the *Start an Application* button.
 - a) You can *Save your work* at any time and return to it later by logging into your account and clicking on *Drafts*, then clicking on *Edit*.
 - b) When you are done editing, save your form and click the *Submit* button. Once you submit, you will no longer be able to edit.
 - c) **You MUST submit your application via Fluxx by August 2, 2023 at 12pm EDT (4pm UTC).**

The steps above (including screen shots) are detailed in the **Fluxx Quick Reference Guide**. The Fluxx Quick Reference Guide describes how to create a Fluxx account, how to reset the password on an existing account and other helpful tips on navigating Fluxx and the application form. If you still require technical assistance with registration or the online application, you may also *Submit a Ticket*. Please visit <https://www.grandchallenges.ca/fluxxsupport/> to access the **Fluxx Quick Reference Guide** and/or to *Submit a Ticket* to Grand Challenges Canada's Fluxx Technical Support Team.



Innovator Toolbox

Applicants are encouraged to access Grand Challenge Canada's online [Innovator Toolbox](#), which contains materials to help researchers and innovators to develop their project proposals and to plan for how their innovation can be sustainably scaled and have global impact.

Our [Gender Equality Portal](#) provides a set of gender equality tools.

3.3 ELIGIBILITY CRITERIA

The CIP-Ghana Partners will screen applications on the basis of the eligibility criteria outlined below. Applications that do not meet the eligibility criteria will be eliminated.

1. Entities eligible under this funding call include social enterprises and other legally recognized organizations (such as non-governmental organizations, non-profit, for-profit, and limited liability companies, as well as research/academic institutions, or any other appropriately registered legal entity) that:⁵
 - is formed and legally incorporated⁶ in an eligible country listed in Appendix C
 - is active (status) and in good standing with their respective registration body⁷
 - is capable of entering into a funding agreement with Grand Challenges Canada
 - can receive foreign funding and administer grant funding
 - can successfully perform activities in their technical area

These are ineligible:

- individuals
 - sole proprietorships
 - unincorporated trusts and partnerships
 - government organizations
 - United Nations country offices
2. While Canadian entities are eligible to apply, as noted in Appendix C, they must identify a confirmed Ghanaian collaborating institution (not a public sector entity) in the proposal.
 - All applicants will be evaluated against criteria which includes connection to target communities and collaboration experience (see Section 3.5), but this is also a specific minimum eligibility criteria for Canadian institutions.
 3. Applications must be submitted by the eligible applicant entity.
 4. Applications must include all required information and address all questions.
 5. Applications must be submitted in either English or French.

⁵ The following must apply to the entity under its current name.

⁶ The meaning of 'legally incorporated' will vary across different jurisdictions. It is the responsibility of every applicant to understand how this applies to their own jurisdiction. Typically, 'legally incorporated' means that the entity is **incorporated as its own legal person (having separate and distinct legal identity), can enter into binding contracts, can own property in its own name, can sue and be sued, etc.** For example:

- Local registration of an international non-profit would not meet this eligibility requirement in most jurisdictions.
- Unincorporated Trusts or Partnerships, or any business structure that places liability on an individual or individuals, would not meet this eligibility requirement. However, an incorporated trust or incorporated partnership (sometimes a limited liability partnership in certain jurisdictions) would be eligible.

⁷ Where relevant, required filings (such as regular reports or tax filings) related to institutional incorporation or registration are up to date. The registration body in question should be, in jurisdictions where relevant, the governing authority for your entity type according to the country's laws.

- Note that quality of the English or French language proposal will not play a factor in the evaluation of the proposal unless it affects the clarity of the information.
 - Note that any applications submitted in French will be translated to English in order to proceed through the review process.
 - Importantly, successful innovator teams will be expected to be able to implement smoothly with Anglophone health sector collaborators, including Ghana Health Service staff, in Ghana.
6. A majority of the applicant's activities and budget must be carried out/spent in the two approved regions of focus (Ghana). See Section 2.2 for the list of regions of focus.
 7. The Project Lead listed on the application must be affiliated with the applicant organisation.
 - The Project Lead should be the person with the highest level of responsibility working directly on the project and will be the point of contact for Grand Challenges Canada during the review and negotiation process, unless another contact is added to the application ('reporting contact' field).
 8. A Project Lead can only be listed on one (1) application.
 - Single institutions can submit multiple applications, but each needs a different Project Lead.
 9. Applicants must be able to obtain any legal and/or regulatory approvals, consents or reviews required to accept foreign grant funds and/or conduct the project activities, before finalizing a funding agreement.
 10. Applicants are responsible for ensuring that, should they be selected for funding, they would be operating (implementing the funded innovation) in adherence with all Ghanaian laws and regulations. Successful applicants may be required, at the time of funding negotiations, to present confirmation of such adherence to local laws and regulations.
 11. The CIP-Ghana Partners may, at any time and at their sole discretion, modify eligibility criteria with respect to an applicant, Project Leads and/or eligible countries, to the extent that such modifications do not materially undermine the review process.

Please note:

- Project Leads must get their affiliated institution's sign-off before submitting any application.
- The CIP-Ghana Partners must approve any change in Project Lead, applicant organization or country of implementation from the originally submitted application.

3.4 INNOVATION SCREEN

Applications that are deemed eligible will move forward to the Innovation Screen stage. During this stage, the proposals will be assessed by staff from Grand Challenges Canada, Ghana Health Service and other CIP-Ghana Partners and collaborators, based on the below criteria. ONLY a subset of questions (identified in the application form) will be read at this stage to determine if applications will proceed to the next evaluation step, so please ensure these questions are adequately addressed.

Applications are scored against the below criteria using only a subset of questions (identified in the application form). 'Relevance' and 'Innovation' criteria categories carry equal weight.

1. Relevance (Yes/No)

- a. Does the proposed idea address one or more of the priority outcomes outlined in section 2.1?
- b. Does the proposal explain how the proposed solution will address the selected priority outcome?
- c. Is the proposed idea designed to address the needs of women and children and/or health facilities in the priority regions in Ghana (i.e., Western, Upper East, Upper West, North East, Northern, and Savannah)?

2. Innovation (Scored 1–10)

- a. Is the proposed idea bold and does it demonstrate more than an incremental improvement over current approaches?

3.5 EXTERNAL PEER REVIEW

Applications that are deemed relevant and score highly at the Innovation Screen stage will move forward to the External Peer Review stage. At this stage, an independent expert peer review panel with relevant scientific/technological, social and business/sustainability acumen will review the full applications using the criteria below.

1. Impact (weighted for 30% of score)

- a. Does the proposed idea solve immediate needs in the selected priority outcome(s)?
- b. Does the proposed idea have the potential to fundamentally transform how the selected priority outcome(s) is addressed?
- c. Is the proposed idea designed for and with pregnant women, mothers, healthcare workers and/or communities who are not served by current approaches?
- d. How accessible is the proposed idea by end-users?

2. Innovation (weighted for 25% of score)

- a. Is the proposed innovation bold and does it demonstrate more than an incremental improvement over current approaches?
- b. Is the proposed innovation designed with sustainability in mind and have they adequately addressed barriers that might impact scalability?
- c. Does the proposed idea adequately integrate different innovation types and/or approaches to best ensure a sustainable solution?

3. Project Execution Plan (weighted for 25% of score)

- a. Is the project technically sound and feasible within the seed grant funding and timeline?
- b. Is the project designed to demonstrate proof-of-concept of the idea?
- c. Is the monitoring and evaluation plan designed to demonstrate proof of concept of the idea by the end of the project?
- d. Does the proposal consider and outline how the proposed idea will be implemented within the Networks of Practice?

- e. Does the proposal consider and outline how the innovation will align with and (if relevant) leverage existing data and information systems?
- f. Does the project recognize potential risks and present potential mitigation strategies?
- g. Does the proposal take into account and aim to address the gender equality, environmental sustainability, and human rights-based approach objectives?

4. Leadership and Team Capacity (weighted for 10% of score)

- a. Are the Project Lead and key team members appropriately experienced to carry out the proposed scope of work?
- b. Are the project team and collaborators appropriately connected to the target populations and communities?
- c. Does the project team and collaborators demonstrate a track record of collaboration with diverse partners, including public sector and/or health sector partners?

5. Value for Effort (weighted for 10% of score)

- a. Are the scope of the proposed work and the funds requested reasonable and commensurate with the proposal goals?

3.6 FUNDING DECISIONS

The External Peer Review will result in a ranked list of applications scored as fundable. Based on these results, the CIP-Ghana Partners will make final funding decisions and inform relevant management teams and governance bodies, as per their reserved rights set out in this RFP.

As part of final funding decisions, the CIP-Ghana Partners will consider the desire to achieve a roughly balanced set of innovations in terms of regional implementation. Priority will be given to the proposals' self-selected implementation region priorities, but applicants may be asked to consider an alternative implementation region. These requests would be informed by Ghana Health Service -identified experts and focus on minimizing any changes needed to the proposed innovation to support this alternate implementation context.

Based on the results of the review panel, funding selection process or during the negotiations process, other refinements to the proposed project plan, structure, amount and oversight may be required before a funding agreement is finalized.

4. Activities and Deliverables

Innovators funded under this program will be expected to engage in the following activities and provide the specific deliverables listed below in order to demonstrate project progress and success:

- 1) Performance reporting focused on utilization of funds, learnings and outcomes achieved. The frequency of reporting will be every three or six months, depending on our assessment of project and institutional risk.
- 2) Dissemination of knowledge in a timely manner, including through:
 - social media;
 - open access publications;

- depositing of data (with individual identities protected) into publicly accessible repositories;
- press releases;
- conferences;
- stakeholder engagement.

CIP-Ghana Partners, with specific reference to Grand Challenges Canada funding, must be acknowledged in any dissemination of knowledge activities.

- 3) A final report accounting for financial expenditures, that captures a clear assessment of project impact. Please note that a 5% holdback of funds will be applied to all funding under this program, to be released to innovators upon submission and approval of a satisfactory final report and full justification of costs.
- 4) Continued post-grant updates on impact, sharing and access for impact and management of intellectual property rights in supported innovations.

Instructions for reporting will be provided to successful recipients. Written progress reports and conversations via teleconference may be required to satisfy reporting requirements.

In addition to the above-mentioned activities, innovators will be expected to:

- participate in safe public engagement activities; and
- contribute to the learning agenda for specific challenges, including participation in meetings such as annual Grand Challenges meetings and Ghana Health Services events, as requested.

Funded innovators must retain supporting project documentation until March 31, 2031 after the end of the Grant Agreement, including financial records, and may be audited by Grand Challenges Canada or any funders of this initiative. Associated requirements, as well as the full and detailed listing of activities and deliverables will be reflected in the Grant Agreement.

5. Financial Policies

5.1 ELIGIBLE EXPENSES

Grand Challenges Canada has cost directives for each program and/or funder which are available on the Grand Challenges Canada website and the applicable cost directive will be provided to the innovator when they are reviewing the funding agreement. Innovators are required to review the cost directive to understand which costs and expenses are eligible to be covered by Grand Challenges Canada funding. Some of these costs and expenses are outlined in more detail below.

1. Remuneration

Innovators may claim expenses related to remuneration, which includes salary and daily wage rates paid to employees for work directly related to the project. Salary and wage rates should be comparable to the local market for similar types of work.

Salaries paid by the innovator to its employees may be increased in accordance with Global Affairs Canada's [Policy on Salary Increases Under Contribution Agreements for the Delivery of International Development Assistance](#).

The following costs are considered remuneration: direct salaries and benefits. The direct salaries and benefits must be in accordance with the innovator's internal HR policies along with Global Affairs Canada's Policy on Salary Increases Under Contribution Agreements.

2. Subcontractor Fees

Innovators may claim expenses for subcontractors who are external individuals or groups who are engaged by an innovator to provide goods and/or services as part of the project. In order to be eligible, payments to subcontractors must be made under a subcontract agreement. The innovator and the subcontractor must have an arm's length relationship to avoid real or perceived conflicts of interest. The total **subcontracting fees shall not exceed twenty percent (20%) of the total value** of Grand Challenges Canada's contribution, unless expressly approved by Grand Challenges Canada.

Individual rates or amounts negotiated under a subcontract agreement must comply with the requirements of Grand Challenges Canada's [Procurement Policy](#), and must not exceed the fair market value for the service or good in question. Contracts greater than \$40,000 CAD for Services and \$25,000 CAD for Goods each fiscal year, must be tendered competitively, unless there is a valid reason not to, which would require prior approval from Grand Challenges Canada.

Legal fees related directly to the project are eligible subcontractor costs.

Subcontractor costs are subject to the same eligible and ineligible expense requirements, as applicable to the innovator.

3. Travel Costs

Actual and reasonable travel costs directly related to the implementation of the project and incurred by the innovator in accordance with the provisions of Grand Challenges Canada's [Travel Policy](#) are eligible expenses.

4. Goods and Supplies

Actual and reasonable costs arising from the purchase, rental, maintenance, transportation, and installation of goods, assets and supplies directly related to the project, provided that such costs do not exceed the fair market value and are eligible expenses. Office administration expenses should be included in 5.1.6 Project Administration Costs.

5. Equipment Costs

"Equipment" is defined as a good with a useful life of more than one year and costs more than \$1,000 CAD per unit. The price paid for this expense must be reasonable compared to alternative options in the market. Costs may include the basic purchase price, freight, and installation of the equipment.

Innovators are required to submit a Disposal of Assets plan at the end of their project, please see the [Disposal of Assets plan](#) form. If equipment purchased for the project is still valuable at that time but will no longer be used towards project activities, Grand Challenges Canada can request that the innovator sell the equipment at fair value and refund Grand Challenges Canada the proceeds from that sale.

Equipment which costs more than \$25,000 CAD annually must be tendered competitively in accordance with Grand Challenges Canada's [Procurement Policy](#), unless there is a valid reason not to, which requires prior approval from Grand Challenges Canada.

6. Project Administration Costs

Examples of actual and reasonable administrative costs directly related to the implementation of the project include:

- Telecommunication expenses (internet, fax, cellular), mail and courier costs;
- Translation and word processing costs, printing and production costs associated with project reporting and production of reading material;
- Meeting, workshops, conference costs (includes meal and travel costs for participants);
- Bank transfer fees;
- Costs related to office space and associated utilities, required to implement the project;
- Publication fees during the funding period;
- Purchase of advertisement space to promote project activities;
- Hosting services, such as servers or databases required to implement the project;
- Software subscription services directly required to implement the project;
- Ethical approvals and review board costs;
- Patent costs required to implement the project, as deemed reasonable by Grand Challenges Canada; and
- Other administrative type of expenditures relating directly to project activities.

7. Sub-grants

A subgrantee is defined as an external organization that acts like a partner to provide key services required to complete the project and cannot be easily replaced by a vendor or supplier. Subgrantee costs are eligible expenses as long as the following requirements are met:

- Subgrantees must be legal entities, which can enter into legal agreements.
- Subgrantees are subject to the same eligible expense requirements and policies as the innovator.
- Subgrantees must keep track of expenses incurred in a detailed general ledger and submit this detailed general ledger to Grand Challenges Canada with the innovator's final financial report.

The total **subgrants shall not exceed fifty percent (50%) of the total value** of Grand Challenges Canada's contribution, unless expressly approved by Grand Challenges Canada.

8. Indirect Costs

Innovators are entitled to claim indirect costs, calculated as a percentage and **not exceeding 10% of all direct costs**.

Innovators must consistently charge costs as either indirect or direct costs and must not double charge or inconsistently charge the same cost, or categories of costs, as both.

Examples of costs that could be considered as indirect under the innovator's project include, but are not limited to, the following:

- Advertising and promotion (non-project specific);
- Amortization/depreciation;
- Bank charges (non-project specific);
- Board activities;
- Business development activities;

- Capital taxes;
- Financing costs (e.g., interest expense, costs to obtain irrevocable letters of credit);
- General staff training;
- Insurance (e.g., office, board of directors, liability, vehicle, travel);
- Internal or external audits of the organization;
- Office supplies and equipment of the Organization's office(s) (non-project specific);
- Professional fees relating to the administration of the organization (e.g. accounting);
- All legal costs other than some specific exclusions;
- Proposal preparation activities (incurred for proposals prepared during the project period);
- Rent and utilities for shared office space (head office);
- Repairs and maintenance expenses (non-project specific);
- Salaries and fringe benefits relating to the administration of the organization (i.e. indirect staff);
- Recruitment fees and staff recruitment;
- Strategic planning activities;
- Employee bonuses;
- Maternity and paternity leaves;
- Administrative IT System (e.g., financial or HR system) (non-project specific);
- Workstations of indirect staff, including computers;
- Membership fees;
- Travel (non-program/project specific);
- Severance;
- Immunizations and medications;
- Costs related to obtaining passports;
- Expenses above cost of lowest economy flight (e.g., Business Class);
- Gratuities/tips;
- Other indirect/overhead type of expenditures relating to the organization's office(s) or employees deemed as indirect staff; and
- Any other costs that Grand Challenges Canada considers indirect cost elements.

9. Ineligible Expenses

Costs that are considered as ineligible under the innovator's project include, but are not limited to the following:

- Costs incurred before or after the effective date of the funding agreement for the project;
- Entertainment expenses (non-project specific);
- Gifts (non-project specific);
- Costs related to non-authorized accompanying family members;
- Costs specifically disallowed under the [Travel Policy](#);
- Statutory fines, criminal fines or penalties;
- Bad debts;
- Costs related to replacing or refunding any funds lost to fraud, corruption, bribery, theft, terrorist financing or other misuse of funds;
- Foreign exchange gain or loss adjustments;
- Alcohol and cannabis; and
- Any other costs that Grand Challenges Canada considers ineligible cost elements.

Grand Challenges Canada commits to providing Innovators with adequate support to enable appropriate financial reporting. Live or recorded training(s) for financial reporting will be made available to all successful applicants.

5.2 TERMS OF DISBURSEMENT

- 1) Advance Disbursement: Grand Challenges Canada will make an initial advance of funding equal to the estimated cash flow requirements for eligible costs forecasted by the innovator for the first period upon signature of the funding agreement. Subsequent payments will be made through quarterly or bi-annual advances based on the estimated cash flow requirements for Eligible Costs. Funding advances will be subject to a 5% holdback on the amount forecasted.
- 2) All funding advance requests, and financial reports submitted by the innovator must be signed by a qualified finance professional (finance officer), whose qualifications shall be reviewed and approved by Grand Challenges Canada during project negotiations. Any changes to this qualified finance professional (finance officer) must be reviewed and approved by Grand Challenges Canada.
- 3) Outstanding Advances: Advance funding disbursements cannot cover more than two funding periods and, at no time may there be outstanding advances covering the cash flow requirements of more than two funding periods. For example, before Grand Challenges Canada issues an advance funding payment for a third period, at least the first period must be accounted for.
- 4) Final disbursement: Grand Challenges Canada will release the final amounts of funding, such as the holdback payment and any other outstanding payments once the following conditions are met:
 - The project is completed in accordance with the funding agreement; and
 - Grand Challenges Canada has received and accepted the final report.

5.3 AUDIT

Project expenses will be subject to audit by Grand Challenges Canada, up to seven (7) years or until March 31, 2031 (whichever is longer) following the termination of the funding agreement between Grand Challenges Canada and the funding recipient.

5.4 APPLICATION COSTS

No payment will be made for costs incurred in the preparation and submission of an application in response to the Request for Proposals. Costs associated with preparing and submitting an application, as well as any other costs incurred by the applicant associated with the evaluation of the application, are the sole responsibility of the applicant.

6. General Policies and Terms

6.1 SUBMISSION MATERIALS AND PRIVACY NOTICE

To assist in the evaluation and analysis of projects, all applications, documents, communications, and associated materials submitted to Grand Challenges Canada (collectively, “**Submission Materials**”) may be shared with funding partners and members of the Development Innovation Fund – Health Consortium (which includes, in addition to Grand Challenges Canada, the International Development

Research Centre and Canadian Institutes of Health Research) and/or with Global Affairs Canada, and may be publicly disclosed. By submitting any Submission Materials to Grand Challenges Canada, each applicant thereby grants to Grand Challenges Canada and His Majesty the King in right of Canada (“**His Majesty**”) a worldwide, perpetual, irrevocable, non-exclusive, non-commercial, free of charge and royalty free license to use, reproduce, adapt, modify, improve, develop, translate, publish, disseminate, distribute, communicate to the public by telecommunication and display the Submission Materials, in whole or in part, in any form, media, or technology now known or later developed, including the right to authorize others to do such acts and the right to sublicense such rights to others, on the same terms. Each applicant also thereby waives any and all moral rights that it has in the Submission Materials in favor of Grand Challenges Canada, His Majesty, and each of their sub-licensees, successors, representatives, assigns, employees and agents.

The application will be subject to external review by independent subject-matter experts, advisors, and potential co-funders (the results of which will be confidential), in addition to analysis by staff. Please be advised that a copy of the external reviews for each submitted application will be shared with Grand Challenges Canada staff and may be disclosed to Grand Challenges Canada Investment Committee.

Please carefully consider the information included in the Submission Materials. If you have any concerns about the disclosure of confidential or proprietary information (including information related to inventions), please advise as soon as possible and in any event prior to disclosure of such materials to Grand Challenges Canada. It is recommended you consult with your legal counsel and take any steps you deem necessary to protect your intellectual property. You may wish to consider whether such information is critical for evaluating the submission and whether more general, non-confidential information may be adequate as an alternative for these purposes.

Grand Challenges Canada will attempt in good faith to respect the confidentiality of information that is received in Submission Materials, if it is clearly marked “Confidential”. Regardless of your characterization of any information as “Confidential”, Grand Challenges Canada reserves the right to publicly disclose all information contained in Submission Materials as may be required by law, and as is necessary for potential co-funders, advisors, and external reviewers (such as government entities) to evaluate them and the manner and scope of potential funding, consistent with appropriate regulations and their internal guidelines and policies. Grand Challenges Canada expressly disclaims any and all liability that may arise from disclosure of confidential information contained in Submission Materials.

Privacy Notice

In order to conduct due diligence and audits, and to manage and monitor the performance of a funding agreement, Grand Challenges Canada may collect personal information (such as names, addresses, employment history, criminal and other legal checks where legally permissible) about some of a successful applicant’s directors and officers, employees, project lead(s), and others engaged on the project before and during the course of the funding agreement. Some of this personal information is collected for the purpose of complying with applicable legal and policy requirements that apply to Grand Challenges Canada and our funders in order to provide the funding and services by Grand Challenges Canada under a funding agreement. Refusing to provide information that Grand Challenges Canada needs in order to conduct required legal and contractual due diligence may impact Grand Challenges Canada’s ability to provide such funding and services and may result in not being able to enter into a funding agreement with you or early termination of a signed funding agreement. Grand Challenges Canada’s Privacy Policy explains how Grand Challenges Canada collects, use, discloses, and protects the personal information that it collects and receives. By submitting any personal information about others, you represent and warrant that you are authorized to do so. If applicable law allows or requires you to supply the information without authorization, you represent and warrant that you have abided by

that law and that it allows Grand Challenges Canada to receive and disclose the information under the Privacy Policy without any further action on the part of Grand Challenges Canada. You agree to indemnify and hold harmless Grand Challenges Canada against any failure by you to comply with the requirements set out here.

6.2 WARRANTY

By providing any Submission Materials, applicants represent and warrant to Grand Challenges Canada that they have the right to provide the information submitted.

6.3 INTELLECTUAL PROPERTY AND SHARING AND ACCESS FOR IMPACT STRATEGY

Grand Challenges Canada is not able to fund projects for which the core intellectual property rights are owned by a third-party institution, unless that third party (i) grants the applicant sufficient license rights to the innovation to permit eventual scaling in low- and middle-income countries (LMICs); or (ii) signs an undertaking to comply with Grand Challenges Canada's Sharing and Access for Impact Strategy and the Grant Agreement.

The solutions supported by this program comprise innovative technologies, services, business models, knowledge and/or products to promote global health in LMICs. The successful development and deployment of these solutions in order to ensure meaningful access for target beneficiaries in LMICs may require involvement by, support of, and/or collaboration with multiple organizations, including the private sector, government, and academic and/or non-profit research institutions. Therefore, Grand Challenges Canada supports the development of appropriate partnerships that are essential to meet these urgent global health needs. Successful applicants retain ownership of intellectual property rights in supported innovations, including those rights that arise in outputs of funded projects. Grand Challenges Canada aims, however, to ensure that any such intellectual property rights are utilized and managed in a manner that is consistent with achieving the goals of this program. Grand Challenges Canada's [Sharing and Access for Impact Strategy](#) (the "**Strategy**") guides the organization's approach to intellectual property and all applicants are urged to consider their willingness to submit an application in compliance with the Strategy, which includes a respect for the inherent right to self-determination and sovereignty of Indigenous and other communities around the world.

The purpose of the Strategy is to outline how Grand Challenges Canada will work with innovators to: (1) help innovators achieve the greatest possible impact through sustainable, affordable, and as widespread as is appropriate, access to their innovations for the public good; and (2) enable responsible sharing of *new* knowledge and data they generate, in a manner that enables scale and sustainability, addresses (rather than perpetuates) inequities and power imbalances, and honours the diverse needs, priorities and values of self-determination of innovators and their communities.

Successful applicants will be required to commit to compliance with the Strategy; to develop an Access Plan for making their innovations meaningfully accessible to target beneficiaries in LMICs, meaning broadly and quickly available at costs that are reasonable in the context; and to sign a Sharing and Access for Impact Agreement with Grand Challenges Canada, in line with the guiding principles, applicable to the innovative solutions and project outputs supported by this program.

The Sharing and Access for Impact Agreement may provide to Grand Challenges Canada a non-exclusive license to intellectual property rights in supported innovations (including background intellectual property) and/or an agreement for distribution and supply of products, in each case permitting Grand Challenges Canada and its sub-licensees to implement and disseminate products,

processes, knowledge, or solutions LMICs in which applicants or their partners are unable to achieve meaningful accessibility.

The Sharing and Access for Impact Agreement will require all applicants to enter into some or all of the following covenants (promises):

1. to make best efforts and work in good faith to provide widespread, affordable and equitable access to the supported innovations to achieve the greatest possible impact for those most in need;
2. to make best efforts and work in good faith to (i) openly and publicly share results and conclusions of the project, whether positive, neutral, or negative, within 12 months of project completion; (ii) make publications arising from the project immediately openly discoverable and accessible online under a Creative Commons Attribution (CC BY) or equivalent license; and (iii) deposit data outputs into a relevant open access repository within 12 months of project completion or immediately upon publication, whichever is sooner; and
3. to acknowledge Grand Challenges Canada in all publications arising from the project.

Grand Challenges Canada and applicants may develop further commitments suitable for their particular project. Applicants will be required to develop and submit Sharing and Access Plans that specify when and how (i) those most in need will be afforded access to the supported innovation, (ii) data sharing will be implemented, and possibly (iii) findings and publications will be made openly accessible.

At a minimum, 'data' refers to final, annotated quantitative and qualitative datasets, and accompanying information, such as metadata, codebooks, data dictionaries, questionnaires and protocols.

Grand Challenges Canada recognizes the value of intellectual property and commercialization, and the benefits of first and continuing use of data, but not prolonged or exclusive use. In some cases, intellectual property protection, laws or regulations may delay or preclude access to data. In cases where an adequate justification has been provided, Grand Challenges Canada may grant a partial or complete waiver of the data access requirement.

Applicants should note that the above sharing and access for impact commitments survive the end of project activities.

6.4 RESEARCH ETHICS POLICY

It is the policy of Grand Challenges Canada that research involving human subjects, research with animals, and research subject to additional regulatory requirements must be conducted in accordance with the highest internationally recognized ethical standards. In order to receive funds from Grand Challenges Canada, initially and throughout the course of a research project, researchers must affirm and document compliance with the guiding ethical principles and standards outlined below:

1. Research involving human subjects must be conducted in a manner that demonstrates, protects, and preserves respect for persons, concern for the welfare of individuals, families and communities, and justice.
2. Research involving animals must be conducted in a manner that ensures their humane care and treatment.
3. Certain research endeavors, including but not limited to research with recombinant DNA, biohazards, and genetically modified organisms, may be subject to enhanced regulation and oversight.

For further details, please see the Grand Challenges Canada's [Research Ethics and Integrity Policy](#).

The CIP-Ghana Partners are aligned in this commitment to ensuring high ethical standards are adhered to by any project ultimately funded through this Request for Proposals (RFP). Given eventual project implementation will take place in Ghana, Ghana Health Services will be the lead partner with regards to adherence to in-country ethics requirements and clearance. While not necessary for this application and as applicable to the individual project, applicants should be prepared to seek ethical clearance from the Ghana Health Services' Ethics and Research Management Department before research activities commence. Project specific requirements and timing will be discussed with selected project teams during the funding negotiation phase.

6.5 COMMITMENT TO ENVIRONMENTAL SUSTAINABILITY, GENDER EQUALITY, AND HUMAN RIGHTS

Grand Challenges Canada is committed to furthering the principles of environmental sustainability, gender equality and human rights-based approach as follows –

Environmental Sustainability: Grand Challenges Canada requires that applicants commit to ensuring that the innovation will not have significant adverse environmental effects including, but not limited to, long-term and cumulative effects. Applicants shall ensure that the management of environmental effects, including any analysis, is carried out in accordance with the environmental processes and requirements of Grand Challenges Canada and all applicable laws and regulations. Where possible, applicants should incorporate having positive environmental effects throughout the project.

Gender Equality: Grand Challenges Canada is committed to furthering principles of gender equality in the innovations it funds and across the organization. Specifically, Grand Challenges Canada is supportive of the following objectives: (1) advancing women, girls, boys, men and people's equal participation as decision-makers in shaping the sustainable development of their societies; (2) promoting the realization of the human rights of all genders; and (3) reducing gender inequalities in access to and control over the resources and benefits of development. It is believed that supporting gender equality is an important objective in and of itself, and that by using a gender lens in the sourcing and management of development innovations, sustained impact will be bolstered.

Human Rights Based Approach: Grand Challenges Canada is committed to furthering a Human Rights Based Approach. This includes the recognition that inequality and marginalization deny people their human rights. This particularly includes the promotion of principles of participation, inclusion, equity, transparency, and accountability in an applicant's project.

As part of their funding agreement, innovators must commit to Grand Challenges Canada policies regarding these cross-cutting themes.

6.6 RIGHTS OF GRAND CHALLENGES CANADA

This RFP is part of a discretionary granting program, meaning that all funding will be provided at Grand Challenges Canada's option. Submission of an application does not create a contractual relationship between the applicant and Grand Challenges Canada.

Furthermore, all applicants acknowledge that this may evolve and that all terms are subject to change. In particular, Grand Challenges Canada reserves the right, in its sole discretion and without notice, to:

1. Cancel this RFP at any time and for any reason.

2. Amend and re-issue the RFP at any time and for any reason. This RFP is valid commencing on June 14, 2023 and supersedes any previous RFP of this nature. The terms and conditions of this RFP apply to all applications submitted from June 14, 2023, going forward and may be replaced by a revised RFP in the future. Grand Challenges Canada recommends checking for any revisions to the RFP prior to the submission of your application materials.
3. Accept or reject any application that is non-conforming because it does not meet the eligibility criteria, does not comply with the application instructions and/or does not comply with the instructions for allowable costs.
4. Not accept an application based on performance on a previous Grand Challenges Canada grant or project or based on the award of a grant to the applicant for the same or similar research by one of Grand Challenges Canada's partners or collaborating institutions.
5. Disqualify any application at any stage where there is an indication that the application was, in any way, plagiarized.
6. Accept or reject any or all applications, regardless of an application's rating based on the evaluation criteria, with or without providing an explanation.
7. Accept fewer or more applications than expected.
8. Accept applications and provide grants with different funding amounts, different durations and/or different conditions than set out above.
9. Verify any information provided by applicants through independent research or by contacting third parties deemed to be reliable by Grand Challenges Canada and use that information to inform Grand Challenges Canada's funding decision.
10. Modify eligibility and evaluation criteria, including but not limited to criteria assessed at the triage stage, at any time.
11. Use video or other visual representation submitted by applicants on Grand Challenges Canada's website for public engagement.
12. Not provide critiques or feedback regarding the reasons an application was or was not selected.
13. Design grant awards to link to possible funding partners, including private sector investors.

6.7 GOVERNING LAW

This RFP and any resulting agreement shall be governed by and construed in accordance with the applicable laws of Canada and the Province of Ontario. Each applicant agrees that this any and all disputes, actions or proceedings relating to this RFP whether as to interpretation, validity, performance or otherwise, shall be subject to the exclusive jurisdiction of the courts of the Province of Ontario and each applicant and Grand Challenges Canada irrevocably attorn to the jurisdiction of the courts of such province.

6.8 RISK MANAGEMENT, SAFETY, ANTI-TERRORISM, ANTI-CORRUPTION, AND ANTI-BRIBERY

Applications must comply with all relevant Canadian legislation, as well as any applicable international anti-bribery and anti-terrorism legislation. Any person or organization named in Canadian or United Nations Security Council sanctions will not be funded. We may add to this list as more partners join the challenge.

Innovators are to manage material risks associated with their projects and their organizations.

Applications for projects that include work in insecure locations must detail how they'll manage the safety and security risks faced by people and assets. If selected for funding, during negotiations innovators will be required to explain how they'll avoid corruption and the diversion of funding from its intended purpose.

For example, during negotiations innovators will be asked to provide a description of the organization's policies and procedures to address conflicts of interest and financial or other irregularities, including without limitation, adequate procedures:

- requiring the organization and its representatives to declare any personal or financial interest in any matter concerning the funded activities, and exclude that individual from the matter concerned;
- identifying steps to investigate an irregularity; and
- a timely and appropriate plan of action to recover any funds that have been subject to proven fraud.

During negotiations, innovations will also be required to include a description of the organization's policies and procedures to adequately implement internal controls for preventing bribery, corruption, fraud, and other situations of misuse of funds.

Appendix A: Regional Profiles

		Western Region	Upper East	Upper West	North East	Northern	Savannah
Population	<i>Total</i>	2,057,225	1,301,221	904,695	658,903	2,310,943	649,627
	<i>Male</i>	1,043,400	631,258	441,799	322,139	1,141,708	325,973
	<i>Female</i>	1,013,825	669,963	462,896	336,764	1,169,235	323,654
Population Density		148/ sq. km	147.2/ sq. km	49/ sq. km	72.6/ sq. km	87.1/ sq. km	18.7/ sq. km
Land Area		13,842 sq. km	8,842 sq. km	18,476 sq. km	9,070 sq. km	26,524 sq. km	34,790 sq. km
Position of Land Area		7 th	14 th	6 th	13 th	2 nd	1 st
Administrative Divisions		14	15	11	6	16	7

1. Western Region

- The Western Region is located in south Ghana
- The region's total population is 2,057,225 of whom 1,043,400 (50.7%) are males and 1,013,825 (49.3%), females
- The region has about 75 per cent of its vegetation within the high forest zone of Ghana and lies in the equatorial climatic zone that is characterized by moderate temperatures.
- It is also the wettest part of Ghana with an average rainfall of 1,600mm per annum
- The Western Region has the highest rainfall in Ghana, lush green hills, and fertile soils. There are numerous small and large-scale gold mines along with offshore oil platforms dominate the Western Region economy.

2. Upper East Region

- The Upper East Region is located in north Ghana and is the third smallest of the 15 districts in Ghana.
- The region's total population is 1,301,221 of whom 631,258 (48.5%) are males and 669,963 (51.5%), females
- It occupies a total land surface of 8,842 square kilometers or 2.7 per cent of the total land area of Ghana.
- The population is primarily rural (79%) and scattered in dispersed settlements

3. Upper West Region

- The region's total population is 904,695 of whom 441,799 (48.8%) are males and 462,799 (51.2%), females
- It is the seventh largest region in Ghana in total area, and it is made up of 11 districts
- The major economic activity of the Upper West Region is agriculture

4. North-East Region

- North East region is made up of 6 districts.
- The region's total population is 658,903 of whom 322,139 (48.9%) are males and 336,764 (51.1%), females
- The North East Region is much drier than southern areas of Ghana, due to its proximity to the Sahel, and the Sahara
- The vegetation consists predominantly of grassland, especially savanna
- Between December and April is the dry season. The wet season is between about June and November with an average annual rainfall of 750 to 1050 mm (30 to 40 inches)
- The temperatures can vary between 17 °C (63 °F) at night and 47 °C (117 °F) during the day
- More than 85% of the economically active population are agricultural.
- The North East Region has a low population density, partly caused by emigration

5. Northern Region

- The region's total population is 2,310,943 of whom 1,141,708 (49.4%) are males and 1,169,235 (50.6%), females
- Northern region is made up of 14 districts
- The Northern Region is a Guinea Savanna grassland
- Dry season is between January and March while the wet season is between May and October, with an average annual rainfall of 750 to 1050 mm (30 to 40 inches).
- The temperatures can vary between 14 °C (59 °F) at night and 40 °C (104 °F) during the day.

6. Savannah Region

- The region's total population is 649,627 of whom 325,973 (50.2%) are males and 323,654 (49.8%), females
- The Savannah Region is one of the newest regions of Ghana and yet the largest region in the country
- The Savannah Region is much drier than southern areas of Ghana, due to its proximity to the Sahel, and the Sahara.
- Dry season is from December to April while the wet season is from about July to November with an average annual rainfall of 750 to 1050 mm. The highest temperatures are reached at the end of the dry season, the lowest in December and January. The temperatures can vary between 14 °C (59 °F) at night and 40 °C (104 °F) during the day.
- The Savannah Region has a low population density of 18.7/sq. km hence, sparsely spread out
- These characteristics pose a lot of challenges to maternal and newborn health delivery because it's difficult moving patients within the network referral system

Appendix B: Key Indicators

Key Indicators

If your project is selected for funding, you will be required to report on a number of outcomes and outputs, including those summarized below. Please note that this is not a complete list, and the outcomes and outputs will be determined by the project team in consultation with Grand Challenges Canada and key Ghana Health Service team members.

Ultimate Outcomes

The ultimate outcomes are the long-term impacts resulting from the innovation. Ultimate outcomes may not be measurable by the end of the funding period, which is why there is a greater focus on immediate and intermediate outcomes (below). The ultimate outcomes aligned with this funding call's areas of focus are:

- Reduced maternal & perinatal, neonatal morbidities and mortalities;
- Reduction in direct obstetric case fatality rate; and
- Reduction in rate of stillbirths.

Intermediate Outcomes

Intermediate outcomes are the medium-term changes resulting from the innovation. These outcomes should be achievable and measurable within the time and resource constraints of the project and directly linked to the project's outputs. Intermediate outcomes applicable across all projects include:

- Number of people using the innovation
- Number of intermediaries using the innovation ("intermediaries" are the people who use the innovation to save or improve lives, such as health workers or service providers)
- Number of people reporting changes in knowledge and awareness related to MNH services (if applicable)

Intermediate outcomes applicable across specific projects in the **four priority outcomes** include but are not limited to:

- i. **Improved communication and real-time tracking of information along the patient referral journey** for mothers and newborns
 - Improved and timely visibility of referral information for mothers and healthcare workers
 - Reduction in inappropriate referrals, leading to reduced cost to clients and facilities
 - Improved documentation of referral case history in the networks
 - Improved utilization of services in the networks
 - Reduction in delayed referrals
- ii. **Increased accessibility and availability of transport** for pregnant women and mothers of newborns to reach health facilities, especially in emergencies
 - Availability of an adequate transport system that caters to the local terrain
 - Availability of skilled drivers to transport patients
 - Reduced referral time, i.e., time between referral decision at referral facility to arrival at receiving facility
 - Increase in skilled delivery and institutional deliveries

- iii. **Improved skills of healthcare workers** to deliver high-quality emergency MNH services
 - Increased knowledge and resource sharing of personnel and skills among health facilities
 - Improved visibility, use and delivery of EmONC services within the networks
 - Improved visibility and implementation of standard protocols in delivery of EmONC services
- iv. **Increased availability of essential medicines and supplies** for MNH where they are needed
 - Improved data capturing and management to enable reduced stockouts of essential medicines and supplies down to the facility level
 - Increased availability of low-cost temperature-controlled storage facilities for both medical and non-medical commodities
 - Improved adequate and timely supply of essential medicines across health facilities

Immediate Outcomes

Immediate outcomes are the short-term changes resulting from the innovation. These outcomes should be measurable relatively soon after the project is implemented and should be directly linked to the project's outputs. Examples of immediate outcomes include:

- Number of end users (i.e. pregnant women and mothers, healthcare workers, business owners, etc.) that the innovation was tested with
- Number of end users who report that the innovation can meaningfully address an identified need
- Number of end users who report that the innovation is desirable/something they would like to have
- Number of healthcare workers trained on the innovation
- Number of healthcare workers with increased knowledge or skills as a result of training on the innovation

Appendix C: Country Eligibility

Eligible countries (with regards to applicant institution jurisdiction of incorporation) include Canada and those listed in this Appendix.

The below list of countries is based on the African Development Bank's regional country classification for Africa.⁸

Institutions incorporated in any of these countries are considered eligible to apply (if the applicant also meets all other eligibility criteria as detailed in Section 3.3 of this RFP, including implementing project activities in two or more of the six regions of focus for the Country Innovation Platform in Ghana (see Section 2.2)).

North Africa	West Africa	East Africa	Central Africa	Southern Africa
Algeria	Benin	Burundi	Cameroon	Angola
Egypt	Burkina Faso	Comoros	Central African Republic	Botswana
Libya	Cabo Verde	Djibouti	Chad	eSwatini
Mauritania	Côte d'Ivoire	Eritrea	Congo	Lesotho
Morocco	Gambia	Ethiopia	Democratic Republic of Congo	Madagascar
Tunisia	Ghana	Kenya	Equatorial Guinea	Malawi
	Guinea	Rwanda	Gabon	Mauritius
	Guinea-Bissau	Seychelles		Mozambique
	Liberia	Somalia		Namibia
	Mali	South Sudan		South Africa
	Niger	Sudan		São Tomé & Príncipe
	Nigeria	Tanzania		Zambia
	Senegal	Uganda		Zimbabwe
	Sierra Leone			
	Togo			

⁸ See <https://www.afdb.org/en/countries>