

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

GUYANA

**CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP)
HEALTH CARE NETWORK STRENGTHENING IN GUYANA
(GY-O0010)**

AND

**FIRST INDIVIDUAL OPERATION FOR
HEALTH CARE NETWORK STRENGTHENING IN GUYANA
(GY-L1080)**

LOAN PROPOSAL

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OEL#3	Sustainable Infrastructure Analysis
OEL#4	Project Operations Manual (POM)
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ABBREVIATIONS	
CCLIP	Conditional Credit Line for Investment Projects
DALY	Disability-Adjusted Life Years
DH	Digital Health, including teleradiology, teleophthalmology, telehealth, and hardware and software support
DR	Diabetic Retinopathy
EA	Executing Agency
EHR	Electronic Health Record
EPR	Emergency Preparedness/Response
ESRS	Environmental and Social Review Summary
GBV	Gender-Based Violence
GHG	Greenhouse Gasses
GPHC	Georgetown Public Hospital Corporation
HR	Human Resources (in health)
HSDU	Health Sector Development Unit
ICU	Intensive Care Unit
IHR	International Health Regulations
LAC	Latin American and the Caribbean
LH	Linden Hospital
MOH	Ministry of Health
NAH	New Amsterdam Hospital
PAHO	Pan American Health Organization
PEU	Project Executing Unit
POM	Project Operating Manual
TC	Technical Cooperation
WHO	World Health Organization

PROJECT SUMMARY
GUYANA
CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP)
HEALTH CARE NETWORK STRENGTHENING IN GUYANA
(GY-00010)
FIRST INDIVIDUAL OPERATION FOR
HEALTH CARE NETWORK STRENGTHENING IN GUYANA (GY-L1080)

Financial Terms and Conditions					
Borrower				Flexible Financing Facility ^(a)	
Co-Operative Republic of Guyana				Amortization Period:	25 Years
Executing Agency				Disbursement Period:	5 Years
The Borrower, through its Ministry of Health (MOH)				Grace Period:	5.5 Years ^(b)
Source	CCLIP (US\$)	1 st Operation (US\$)	%	Interest rate:	SOFR Based
IDB (OC):	160,000,000	97,000,000	100	Credit Fee:	(c)
				Inspection and supervision fee:	(c)
Total:	160,000,000	97,000,000	100	Weighted Average Life (WAL):	15.25 Years
				Currency of Approval:	Dollars of the United States of America
Project at a Glance					
Project Objective/Description: The objective of the CCLIP and of the first operation is to improve the health of the Guyanese population through increased access, quality, and efficiency of health services. The specific objectives of the first operation are: (i) improve health outcomes associated with low and high complexity procedures, by expanding the capacity of strategic hospitals; (ii) extend coverage of diagnostic, medical consultation, and patient management services, inclusive of the country's hinterlands, through digital health (DH); and (iii) increase the efficiency of the public health system, by strengthening key logistic, management, and support processes and inputs.					
Special contractual conditions precedent to the first disbursement: (i) the approval of the Project Operating Manual (POM) by the Executing Agency (EA) in accordance with the terms and conditions previously agreed upon with the Bank, and the entry into force of such POM which shall include, among other elements, the environmental and social requirements and include as annexes the Project's ESMS, ESA/ESMP, and the ESAP; and (ii) the assignment or appointment of the Project Execution Unit's (PEU) key personnel, including one project manager, one environmental and social specialist, one procurement management specialist, and one financial management specialist, pursuant to the terms of reference agreed upon with the Bank (¶3.5).					
Special Contractual Clauses of execution: Prior to execution of any works under Component 1, the Borrower, directly or through the EA, must present evidence to the Bank that: (i) a supervisory consultant/firm to oversee environmental, social, and occupational health and safety (ESHS) implementation and monitoring of the project has been hired; (ii) for any selected hospital/healthcare facility, an Environmental and Social Audit has been undertaken and operational ESAs and ESMPs are completed; and (iii) Contractors' Environmental and Social Management Plan (C-ESMP) including labor assessment have been prepared (¶3.6). See Annex B of the ESRS for other special contractual conditions.					
Strategic Alignment					
Challenges ^(d) :		SI <input checked="" type="checkbox"/>	PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>	
Cross-Cutting Issues ^(e) :		GE <input checked="" type="checkbox"/> and DI <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/> and ES <input checked="" type="checkbox"/>	IC <input checked="" type="checkbox"/>	

^(a) Under the Flexible Financing Facility (document FN-655-1), the borrower has the option to request modifications to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. In considering such requests, the Bank will take into account operational and risk management considerations.

^(b) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long as the Original Weighted Average Life (WAL) and the last payment date, as documented in the loan agreement, are not exceeded.

^(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during its review of the Bank's lending charges, in accordance with the relevant policies.

^(d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(e) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and justification

1. Health and social conditions

- 1.1 **Socioeconomic situation.** A low-income country with a small, commodity-based economy and population of less than 800,000, Guyana has faced challenges in converting its rich natural resources into sustained and inclusive growth. In 2018 its per capita GDP was slightly under US\$5,000, the second lowest in South America, and its national poverty headcount rate at 43.4 percent was among the highest in the Latin America and the Caribbean (LAC) region.¹ However, the recent production of extensive offshore oil and gas reserves has the potential to transform the economy and permit a dramatic increase in fiscal revenue. By 2030 Guyana's GDP could rise to US\$14.0 billion from US\$4.3 billion in 2019, and its per capita GDP could grow to US\$16,900. Still, the country faces the challenge of ensuring that the economic expansion benefits all Guyanese, especially the rural population (75% of the total) on the coast (45% poverty rate) and in the interior (57% poverty rate).[1]
- 1.2 **Demographic context.** Despite improvement in the past two decades, the life expectancy at birth in Guyana (70 years in 2019) is the second lowest in the region. The population is relatively young, and only 7% is aged 65 years or older, although this portion may grow quickly in coming years as the country progresses to the final stage of the demographic transition with lower birth and mortality rates.[2] Overall population size is stable, due to a very high emigration rate, especially among female professionals (including healthcare workers), that combined with the mortality rate, essentially maintains population growth near zero.² The main ethnic groups in the country are the Indo-Guyanese (40%), Afro-Guyanese (29%), mestizo (20%), Amerindians (11%), and others (less than 1%).[3]
- 1.3 **Epidemiological profile: non-communicable disease and maternal and child health.** The principal causes of death for both women and men in 2019 were chronic conditions (cardiovascular disease, diabetes, and cancers), associated with the population aging process and unhealthy lifestyles. This pattern holds in terms of the general burden of disease (measured in Disability Adjusted- Life Years – DALYs) for females and males, except for violence and suicide, the latter of which disproportionately affects men, at one of the highest rates in the world.[4] In addition, over half of Guyanese women who have ever had a male partner have experienced intimate partner violence, significantly more than the global average of 1 in 3 women, and 20% of women have experienced non-partner sexual abuse.[5] Maternal and infant mortality rates (< 1 year of age) have declined but remain high, at 101 deaths/100,000 live births and 24 deaths/1,000 live births,

¹ The highest poverty rates are encountered in the hinterland areas, where the indigenous Amerindian population is concentrated, 78% of which lives in poverty.

² There has been a recent substantial influx of Venezuelan migrants, estimated at around 22,000 (see <https://r4v.info/en/situations/platform>).

respectively, which present challenges for achieving the respective Sustainable Development Goal targets.³

2. Health sector challenges

- 1.4 **Health system.** Guyana has a national public health system that pursues universal coverage free of charge to all Guyanese. However, out-of-pocket payments comprised an estimated 32% of total health spending in 2019. Only around 5% of the population use voluntary private health insurance. Public health expenditures represented 3.7% of GDP in 2018, below the LAC average of 4.1%. Furthermore, expressed in per capita terms, this spending (US\$317 current PPP) is less than half that of the regional average (US\$648 current PPP).⁴ The Ministry of Health (MOH) is responsible for policy-setting, regulation, health surveillance, and supervision of services provided by the 10 Regional Democratic Councils. The health care network includes 208 health posts, 138 health centers, 18 district hospitals, seven regional hospitals, three specialty hospitals⁵ and the national referral hospital, the Georgetown Public Hospital Corporation (GPHC).
- 1.5 **Access and quality of health services.** According to an index of access and quality of health care, Guyana placed 126th of 195 countries and next to last in the Caribbean, after Haiti.⁶ Similarly, it ranks 137th out of 195 in the global health security index and is particularly weak in early detection and reporting of epidemics, which came to attention in the COVID-19 pandemic.⁷ While the country has an extensive offer of primary care through its numerous health posts and centers, hospital care is more constrained, with only 1.6 beds per 1,000 persons, lower than the averages in LAC (2.2) and the Caribbean (2.3). It also faces human resource limitations, with just 0.8 doctors and 1.0 nurses per 1,000 persons, far below the LAC averages of 2.0 and 2.8, respectively.^[7] Given the concentration of health professionals in the coastal and urban areas, these indices are even worse in the rural interior with indigenous peoples who face higher mortality rates, increased incidence of diabetes, unique mental health concerns, and low access to maternal care (See [Gender and Diversity Assessment \(GDA\) of the Health Sector in Guyana](#)).
- 1.6 **Infrastructure deficits and need for rehabilitation, expansion and upgrading.** A recent (2018/9) nationwide assessment of 341 health facilities⁸ showed that many of them require infrastructure rehabilitation, construction and/or upgrade and equipment replacement or provision. Twenty percent of the buildings had no electricity, and only 60% of buildings received water continuously during operating hours. In addition, just 20 buildings (6%) received treated water. Regarding structural, architectural, and operational integrity, 24 of the buildings were judged

³ Guyana's goal is to reduce the maternal mortality ratio to less than 70 per 100,000 live births, and the neonatal mortality rate to less than 12 per 1,000 live births.

⁴ World Bank Indicators <https://data.worldbank.org/indicator>.

⁵ National Ophthalmology Center, National Psychiatric Hospital and Cheddi Jagan National Dental Center.

⁶ On the scale from 0-100, Iceland scored highest (97.1), the Central African Republic, lowest (18.6), and the Caribbean region near the middle (54.2), with Barbados (70.8) at the top and Guyana (49.8) near the bottom.^[6]

⁷ <https://www.ghsindex.org/>.

⁸ Internal IDB consultancy reports produced from data collected by a Bank-financed survey.

to require immediate rehabilitation and/or construction.⁹ A study of 3 regional and 6 district hospitals revealed that 6 of the 9 hospitals reported routine medication shortages, and 4, routine water or electricity shortages, while all district hospitals showed insufficient capacity for emergency surgery.^[8] The country's national reference hospital, the GPHC, requires significant infrastructure investments. Similarly, at the time of evaluation in 2018/19, the New Amsterdam (NAH) and Linden (LH) regional hospitals, which provide specialized reference services to the country's interior, where the underserved Amerindian populations are predominant, were deemed to require rehabilitation in multiple service areas within three years. In the hinterlands, the current – and depreciated – infrastructure of key district hospitals limits the supply of services that should be provided to the population at the local level, such as basic imaging and diagnostic services, which in turn forces people to travel or to be transferred to other regions. Much of the country's health infrastructure, including the hospital facilities, presents access difficulties for persons with disabilities based on physical limitations in the current infrastructure and lack of protocols for providing services to them (See [Gender and Diversity Assessment \(GDA\) of the Health Sector in Guyana](#)).

- 1.7 **GPHC: the national reference hospital.** GPHC is the main national referral hospital (level 5),¹⁰ as well as the premier medical teaching and research facility. However, it also functions as the regional hospital for region 4 and the district hospital for Georgetown, and it operates several satellite health centers and polyclinics. It has over 600 beds and sees an average of approximately 200,000 clinic visits, outside of the visits to the six off-site health centers, and 24,000 admissions annually. In addition, the GPHC conducts almost a million diagnostic testing/examinations, including radiology. For GPHC to focus on its core mission as a level 5 facility, it would need to reduce its offer of lower-level services while other selected facilities begin to assume the corresponding case load. In addition, the referral system would have to be administered more rigorously so that GPHC receives only the more complex cases corresponding to its level of service.
- 1.8 Key functional areas of GPHC require investment to overcome capacity gaps, expand service provision and operate according to prevailing safety standards. Inpatient bed supply is inadequate, with some wards experiencing over 100% occupancy rates. The general Intensive Care Unit (ICU) has only seven beds,¹¹ and specialized ICUs and high dependency units frequently have waiting lists. With more sophisticated minimally invasive surgery techniques and noninvasive procedures, the lack of specific outpatient day recovery beds is becoming an important constraint. The main operating theater currently has just six suites, which is insufficient to attend to the growing quantity of elective surgeries requested by an expanded array of medical specialists.¹² The accident and emergency

⁹ Health facilities' buildings were classified in one of three categories: (i) gold, requires only routine maintenance (207); (ii) silver, requires rehabilitation within 2-5 years (99); and (iii) bronze, requires immediate rehabilitation and/or construction (24).

¹⁰ There are five levels of health facilities by level of service complexity: health posts (level 1), health centers (level 2), district hospitals (level 3), regional hospitals (level 4), and specialty and reference hospitals (level 5). Facilities often provide services below their indicated level and may not have capacity to deliver the full array of services that they should.

¹¹ In 2019 the OECD average number of ICU beds per 100,000 population was 14.1, compared to less than two in Guyana.^[9]

¹² Guyana's deficit in surgical capacity (fewer than 1,000 annual operations per 100,000 population) is evident when compared to its neighbor Brazil or Colombia (more than 10,000).^[10]

department (AED) has a bed assignment that covers merely 50% of demand and no areas for pediatric and psychological examination and isolation. Additional physical deficiencies exist in laboratory, pharmacy, imaging (e.g., radiology), and support services (administration, warehousing, and staff environments). Outpatient clinics are limited, contributing to less-than-optimal disease management, such as an estimated treatment rate of only 42% for hypertension patients. Finally, over the years, in the absence of a master plan, the spontaneous addition of services in improvised infrastructure and settings on the GPHC campus has created a situation of improper patient flows, supply provision, and medical waste disposal, in which transfers occur in the open environment and sometimes across public thoroughfares. This generates risk for accidents and cross-contamination. In the most extreme cases, such as the maternity ward, wood buildings from the 19th century are still operational and represent fire hazards due to faulty electrical installations.

- 1.9 **Regional hospitals: NAH and LH.** So that GPHC can fulfill its mission as a level 5 referral facility, regional hospitals will have to be strengthened to provide the full contingent of level 4 services and reduce the transfer of patients whose needs they should be able to resolve. The top priority hospitals to begin this effort are the NAH, the second largest hospital after GPHC, and the LH, both of which are in regions that cover large expanses of the hinterlands and receive patients from other regions in the interior. These hospitals possess limited capacity in their AEDs, ICUs, high dependency units, surgical suites, and imaging departments. Moreover, NAH was constructed nearly twenty years ago and has undergone minimal renovation and expansion since then. It lacks sufficient installations for outpatient clinics, inpatient wards, and the pathology laboratory and has no buildings to house a central sterilization unit, administration, and medical and paramedical staff on call. For its part, the LH is unable to properly deliver the full contingent of obstetric, neonatal and child health services. It also does not have a burn unit to attend to accident patients from natural resource extraction industries in the country's interior. The two hospitals, because of their unique locations, have the potential to become important telemedicine hubs.
- 1.10 **District hospitals: Moruca, Kamarang, Kato and Lethem.** Amerindian populations located in the country's interior face important challenges to access quality health services that could be provided at the local level, in district hospitals. Moruca Hospital (region 1), Kamarang Hospital (region 7), Kato Hospital (region 8), and Lethem Hospital (region 9)¹³ serve multiple indigenous communities as well as a growing influx of immigrants from countries like Venezuela. These facilities are currently unable to provide basic services that should be available in district hospitals, such as outpatient clinics for NCDs and mental illnesses, gynecology and obstetrics services, emergency care, and basic imaging and diagnostic services, among others. As a result, people often must travel, or be transferred, to regional hospitals outside of the hinterlands or GPHC, contributing to overcrowding at these facilities with cases that could be resolved at a lower level of care, increasing out-of-pocket expenditures and/or public spending with medical evacuations that could be avoided, and affecting timely access to healthcare. None of these facilities have access to reliable sources of electricity 24/7, and all of them could benefit from more appropriate medical waste systems. Furthermore, none of

¹³ Lethem Hospital is being converted into a regional hospital.

these facilities are adapted for the use of telemedicine – which could contribute to increase accessibility to specialist consultations –, and all of them have very limited medical storage and staff housing – which affect the storage of medicines and other essential medical supplies and the retention of health professionals.

- 1.11 **The promise of digital health (DH) transformation for Guyana.** The COVID-19 pandemic has evidenced the importance of DH worldwide to increase access and quality of health services and help countries move towards Universal Health Coverage. While bolstering its hospital network, Guyana also must search for innovative ways to expand the availability of more types of diagnostic services and specialist consultations. Furthermore, it should make a concerted effort to improve the recording, storage, and analysis of patient clinical data to promote efficiency in patient management and continuity of care within facilities and amongst different levels of service. To a large degree, DH approaches such as telehealth and electronic health record (EHR) systems can contribute to these goals while mitigating some of the challenges related to human resources (HR) limitations such as wait times to see specialists or receive test results, reducing medical errors, and improving the quality of care.¹⁴ Furthermore, physicians who use telemedicine can improve efficiency and achieve quicker diagnoses, faster and better patient management, more accurate triage, higher confidence, and fewer unnecessary procedures.^[12] Despite these potential benefits, DH is still at an incipient stage of development in Guyana.
- 1.12 **DH implementation issues.** One of the barriers to adopting DH technologies relates to connectivity and capability to transfer large volumes of information electronically. The [Broadband Development Index](#), published periodically by the Bank, ranks Guyana 59th out of 65 countries analyzed. Barely 42% of the population is covered by 4G networks, much lower than the average for the Bank countries (87%) and the OECD countries (99%).¹⁵ Although NAH and LH can access the existing limited fiber optics network, most health facilities in the interior would require deployment of VSAT or LTE technologies. W3C accessibility standard application of government websites are also nascent.¹⁶ In the public health sector, fewer than 50 of 341 health facilities have formal institutional internet provision. Thereby, implementing connectivity in most facilities would require a complete package of IT equipment, cabling, installation, and the contracting of internet service provision. Establishing telemedicine centers would also necessitate specialized medical equipment and software procurement (imaging diagnostics through teleophthalmology¹⁷ and teleradiology) to address existing gaps. For example, it is estimated that fewer than 10% of diabetic patients currently receive retinopathy screening. From a conceptual perspective, most of the foundational elements for the governance and sustainability of a DH transformation

¹⁴ A review of 47 studies associates EHR systems with a lower number of medical errors (risk ratio [RR] = 0.46); shorter documentation times (-24%), and fewer adverse drug reactions (RR = 0.66).^[11]

¹⁵ [IDB studies](#) have demonstrated that countries have gender gaps in access to cellphones and internet; information for Guyana is not available.

¹⁶ [Egovernment and web accessibility in South America](#).

¹⁷ In Guyana, due in part to diabetic retinopathy (DR), around 14,000 people are visually impaired and almost 3,000 people are blind. The Guyana Eye Care Strategic Framework estimates that 18,630 people suffer from DR, which threatens the sight of 4,658 of those patients. Since 2015, the country began to formalize screening for this condition; in 2019, the GPHC screened 4,923 patients and treated 1,361 with laser therapy. Still, there is an urgent need to expand screening capacity to the entire country.

in Guyana are absent including: preparedness assessment, core HR, architecture, data privacy norms, cybersecurity, interoperability norms and guides, [EHR norms and strategy](#), [telehealth strategy and norms](#), change management strategy, and total cost of ownership estimations.

- 1.13 **Health HR constraints.** As indicated in ¶1.5, the availability of health sector HR is generally very limited. According to the World Health Organization (WHO), the Density of Health Professionals indicator, which is the number of doctors, nurses, and dentists per 10,000 persons, is in the medium low group in Guyana, at 32.9.¹⁸ The supply of nurses is quite low, and the situation is even worse for allied health professionals. It is estimated that less than one professional is active per 10,000 persons for workers such as pharmacy assistants, medical laboratory and pathology technicians, and physical therapists. Although there are several options for training these types of health professionals—most importantly through the University of Guyana and the GPHC—there is a need to take stock of the quantity and quality of training, project future needs, and expand and enhance curriculums, all considering the adoption of new technologies.
- 1.14 **Gaps in provision of medical materials and medicines: supply chain management.** To ensure the quality and timeliness of patient care, it is essential that health facilities have continuous adequate stock of medications and medical items. However, in Guyana there are often problems with the provisioning of these key inputs. For example, the IDB assessment of facilities found that less than 20% of hospitals had continuous availability of medicines such as anticonvulsants, antibiotics, and uterotonics in the three months that preceded the survey. Common medicines for diabetes treatment (hypoglycemic agents) were available in only 40% of health posts. Additionally, in 2020 the MOH had to dispose of nearly \$47 million of expired medical stores. These situations resulted from serious flaws in supply chain management, involving procurement, storage, distribution, dispensing, stock control, and logistics software systems.
- 1.15 **Health system disruptions from public health events and emergency preparedness.** The provision of health services has suffered in the Latin America and Caribbean region in recent years from shocks such as epidemics/pandemics of viral disease, such as Zika (2014), Chikungunya (2016), and COVID-19 (2020-22), as well as natural disasters (for example, flooding, to which Guyana is very susceptible). As a result of COVID-19, in many countries preventive care fell sharply, especially regarding vaccinations, cancer screenings, and chronic conditions. Emergency visits also experienced reductions, in particular for pediatric patients, and hospitalizations saw declines in multiple countries, despite the surge due to the COVID-19 pandemic, as care for non-urgent procedures was postponed.^[13] As seen in ¶1.5, Guyana ranks low in terms of pandemic preparedness, and a recent project revealed significant gaps in its capacity to meet the International Health Regulations (IHR 2005) core competencies.¹⁹ In this context, preparing for the future will require further investments in emergency and disaster prevention and risk management in which countries will have to fully

¹⁸ Classification ranges; low (0-20), medium-low (20.1-40), medium-high (40.1-44.4), and high (44.5 and up).

¹⁹ Strengthening Regional Health Security: Technical Support to Caribbean Countries towards the Enhancement and Maintenance of their IHR Core Competencies (ATN/OC-15879-RG, RG-T2870).

comply with the IHR, if they were poorly implemented, or go beyond them, if they are too limited.[14]

- 1.16 **Essential health services package and maternal and child health.** With technical assistance from the Pan American Health Organization (PAHO), the MOH is finalizing a package of essential services for over 200 health conditions. Maternal and child health and women's sexual and reproductive health (SRH) (§1.3) remains a priority area for deploying the package and addressing gaps in point-of-service care, such as the lack of basic medical and laboratory equipment.^{20, 21} The IDB project "Support to Improve Maternal and Child Health" (3779/BL-GY) has financed additional interventions, such as patient transport, the community health platform, and maternal waiting homes, but only in three of the country's 10 regions, including only one hinterland region.

3. Project strategy

- 1.17 **Government priorities and plans in health.** The government has been working on a National Strategic Plan for Health 2022-2030 (still unpublished), which intends to promote a model based on Primary Health Care through an Integrated Health Service Delivery Network to achieve universal access and coverage. Essential functions include healthcare delivery model, governance, financing, HR, evidence informed decision making, supply chain, emergency preparedness, strategic partnerships, occupational safety and health, and preferred health programs and determinants. The MOH is also preparing a Health Infrastructure Transformation Plan and a Human Resource Development Plan, with assistance from PAHO. Considering these plans and other strategic priorities, the government has requested IDB financing to target the areas of investment described below, which relate directly to the determinants of the situation described in the previous section.
- 1.18 **Health facilities' infrastructure improvement at all service levels.** The 2022 budget incorporates financing for improvements to primary level care infrastructure (levels 1 and 2, approximately US\$5 million) and to initiate construction of six general hospitals and one specialty hospital as well as replacement of four existing hospitals (levels 3 and 4, approximately US\$90 million). To contribute to these strategies and plans, the government requested that the present operation focus on infrastructure improvement and expansion in one national and two regional hospitals that have benefited from investments under previous IDB projects (GPHC, NAH, and LH), as well as the rehabilitation and/or reconstruction of four district hospitals located in the hinterlands (Moruca, Kamarang, Kato, and Lethem). Areas of intervention will vary by facility, but the national and regional hospitals anticipate the implementation of additional surgery and ICU capacity, while the four district hospitals anticipate new construction/improvements in general infrastructure and/or expansion to provide medical storage and staff housing,

²⁰ The IDB-financed assessment found that only 76% of hospitals were equipped with a doppler machine, 68% with a sterilizer/autoclave, and 48% with an ultrasound machine. Equipment and sets for uterine evacuation with Manual Vacuum Aspiration (MVA) were present in 32% of hospitals, and IUD insertion sets were available in 28% of hospitals.

²¹ A recent survey showed that, for an indicator like "lack of performance of all required laboratory tests in at least one antenatal visit," the highest score of the hinterland regions was 20.1%, compared to 87.3% for the coastland regions.[15]

among others.^{22,23} All infrastructure improvements and expansion will incorporate universal access for persons with disabilities, based on a specific assessment of their needs, and will meet the cultural and linguistic needs of patients. In upcoming years, the government will finance the purchase of medical and non-medical equipment and furniture so that the new and rehabilitated infrastructure can function as efficiently and effectively as possible. The project includes the purchase of essential medical equipment, other equipment, and furniture for the facilities to be intervened (¶1.30).

- 1.19 **Building on DH experiences.** In recent years, the MOH has put in place the basis for a national teleradiology system.²⁴ With the help of the non-profit organization RAD-AID, Guyana has obtained three CT scan machines, and 14 hospitals will soon have digital x-ray capability. RAD-AID also assisted in obtaining and implementing a cloud-based Picture Archiving and Communication System, which allows for the storage, backup, and easy retrieval of digital images anywhere with the proper IT equipment and connection. In a manner similar to teleradiology, the MOH also has installed a teleophthalmology program in three centers, with primary eye care and diabetic retinopathy (DR) screening. Finally, several attempts have been made to adopt an EHR system, but at this point, before moving forward, it is necessary to conduct more extensive groundwork (e.g., development of strategy and applicable legislation). The government has requested that the project support all these areas in DH, in addition to piloting differentiated teleconsultations to improve access to mental health services²⁵ based on existing and improved IT platforms.
- 1.20 **Preparation of additional allied health HR.** The acute shortage of health professionals whose work complements that of doctors and nurses and is essential for health sector functioning requires a comprehensive situation analysis and the development of a proposal to train additional HR. The government has created training programs over the years at GPHC, but it now intends to accurately project HR needs, take stock of existing training capacity, review and improve curricula, and prepare a proposal for adequately addressing the sector's HR needs.

²² The Lancet Commission on Global Surgery states that "surgery is an 'indivisible, indispensable part of health care'" and investing in surgical services in low- and middle-income countries is "affordable, saves lives, and promotes economic growth".[16]

²³ A supply and demand study, as well as a healthcare network analysis, will be conducted in the hinterland regions to inform the interventions in the district hospitals.

²⁴ Radiology is vital medical imaging (x-ray, CT, ultrasound, MRI, mammography, fluoroscopy, etc.) used in the diagnosis and treatment of multiple conditions. Studies have shown a trend of convergence in terms of diagnostic accuracy and reliability between teleradiology and conventional radiology. Additional benefits of teleradiology include reductions in patient transfer, rehospitalization, and length of stay.[17]

²⁵ This will improve equitable access to primary and specialized care in rural areas and it will also test the acceptability of differentiated digital mental health services, considering patient gender and cultural identification. A recent review found that telemedicine interventions can improve glycemic control in diabetic patients; reduce mortality and hospitalization due to chronic heart failure; help patients manage pain and increase their physical activity; improve mental health, diet quality and nutrition; and reduce exacerbations associated with respiratory diseases.[18]

The government has interest in establishing an allied health professional training campus that could be financed under a future operation or with own resources.²⁶

- 1.21 **Logistics and supply chain management to improve sector efficiency.** Almost ten years ago, the MOH began to operate a state-of-the-art warehouse for drugs, reagents, and medical supplies at Diamond in Georgetown, in addition to an existing facility in the Kingston neighborhood. The new storage complex was financed by USAID and other donors and benefited from technical assistance for the deployment of a supply chain management system software. Now, central storage is straining existing capacity and requires investments, as does regional warehousing. Moreover, the MOH intends to expand the use of the supply chain software to more facilities through additional licensing, IT hardware installation, and staff training. It also plans to contract supply chain and procurement specialists to overcome current deficiencies.
- 1.22 **Building health system resilience to pandemics and emergencies.** In the aftermath of the first two years of the COVID-19 pandemic, Guyana, as other countries, has realized that preparedness for shocks and disasters can help to avoid consequences affecting health system efficiency and efficacy, such as service interruptions. Therefore, the government proposes to take stock of performance during the pandemic, map risks, examine institutional arrangements and resources, develop an Emergency Operations Center plan, and conduct simulation exercises. Another integral part of readiness for infectious disease crises is sufficient laboratory response capacity, and the MOH recognizes that to accomplish this, it needs to acquire and distribute more laboratory equipment and diagnostics tests, as well as perform biosafety and biosecurity assessments.
- 1.23 **Initiating roll-out of essential health services package.** Delivering an integral, evidence-based set of services for different groups can aid in managing patients effectively and reducing costs for unnecessary treatment. Given its positive experience with operation 3779/BL-GY, the MOH considers it appropriate to start implementation of the package of maternal and child health²⁷ in three more regions (hinterland regions 1, 7, and 8), including the procurement of laboratory and medical equipment. The MOH also judges it important to finance new maternal waiting homes and set up and train community health committees to help monitor and refer patients.
- 1.24 **Bank's support to the health sector and lessons learned.** The Bank has been working with the government to improve the institutional capacity of the health

²⁶ These activities will complement other efforts that are currently taking place with the support of partners such as PAHO, The Mount Sinai Group, and McMaster, Dalhousie, and Calgary University Hospitals aimed at increasing the availability of doctors and nurses in Guyana, in line with the Human Resource Development Plan. These include, among others: increased intake in the number of candidates at local universities, accreditation of private medical schools, scholarships for students to pursue medical degrees and specializations in other countries, increase in the number of teaching hospitals in Guyana, increase in the number of residency programs available in the country, and increase in the number of scholarships for online training programs, among others. The government is also working on a set of incentives to encourage Guyanese doctors and nurses to remain in the country and work in under-served areas.

²⁷ This incorporates women's sexual and reproductive, which will include measures for the reduction of gender-based violence (GBV). The community health committees will receive training for the detection and referral of GBV cases. Evidence shows that GBV interventions in these types of services can reduce re-exposure to some types of GBV and improve health outcomes.[19]

sector and the health services delivery system for over 15 years, through diverse projects.²⁸ In this period, the capacity of the MOH to execute IDB and other donor-funded operations has strengthened, as discussed in the institutional capacity assessment that was carried-out (see ¶13.1). More recently, it has provided supported through operation 3779/BL-GY for US\$8 million, which was approved in 2016 and is currently in its last year of execution, and technical cooperation (TC) “Support for Maternal and Child Health Improvement Program” (ATN/OC-15820-GY) for US\$300,000, which closed in October 2021. A mid-term evaluation of the loan showed important progress on key indicators such as the percentage of pregnant women with anemia at first antenatal visit (hemoglobin under 11 g/dl) which declined from 21.1% in 2014 (baseline) to 9.8% in 2019. The main lessons learned from the Bank’s experience in the sector relate to the importance of establishing adequate project management capacity within the MOH, commensurate with the requirements of the operation, as well providing continuous technical support to the executing agency (EA) throughout implementation, to ensure that activities are carried out according to plan. This will be addressed both through the loan Project Executing Unit (PEU) (administration budget) and additional client-support TC resources that were mobilized for program preparation and implementation, mainly regarding assistance for environmental and social safeguard implementation and monitoring and digital health (ATN/JF-19325-GY Support for Health Care Network Strengthening in Guyana for US\$500,000). Furthermore, the project draws on orientation from IDB Health Sector Framework Document regarding: (i) the strengthening and reconfiguration of hospital functions and their integration in care networks (Component 1); (ii) the use of a holistic approach toward the incorporation of digital health, including governance concerns (Component 2); (iii) the need to increase capacity for the maintenance and sustainability of health infrastructure (Component 1); and (iv) the preparation for investment in HR through improved training of allied health professionals (Component 3).

- 1.25 **Justification and characteristics of the Conditional Credit Line for Investment Projects (CCLIP).** The improvement of the health sector, through complex investments in infrastructure, digital health, and national health plan priorities, demands a medium-term approach that is difficult to address in a single investment operation. Therefore, the government is adopting a stepwise approach in which an initial investment operation will finance a group of prioritized improvements in key hospitals (¶1.30), a first group of telemedicine centers (¶1.31), and selected interventions from the national health plan (¶1.32). A second operation will continue to finance the investment plans in the hospitals, expand the telemedicine initiative, and provide continuity for the next stage of development of the national health plan’s provisions for promoting sector management and efficiency. In this context, the CCLIP is the appropriate instrument to assist the government in reaching its medium-term goals with the required degree of flexibility.
- 1.26 **Strategic alignment.** This project is consistent with the Second Update to the Institutional Strategy (AB-3190-2) and is aligned with the development challenge of “Social Inclusion and Equality,” as it promotes access to quality health care to the population, including those in the poorest income quintiles. It is also aligned with the challenge of “Productivity and Innovation” through its financing for innovative digital

²⁸ 1548/SF-GY, 1120/SF-GY and 2270/BL-GY.

solutions (¶1.19). This project is also aligned with the cross-cutting themes of “Gender Equality and Diversity,” by addressing gaps in mental health issues between men and women and in access to services among the indigenous populations in the hinterlands; “Climate Change and Environmental Sustainability”, as it promotes infrastructure that considers measures to improve resource efficiency (e.g., energy and water) and reduce Greenhouse Gasses (GHG) emissions, along with interventions to reduce climate change and disaster risk; and, “Institutional Capacity and Rule of Law”, by improving the management and efficiency of the health sector through investments in digital health (¶1.19) and key areas in sector strengthening, such as supply chain management (¶1.21). Additionally, this operation will contribute to the Corporate Results Framework (CRF) 2020-2023 (GN-2727-12) by increasing the number of beneficiaries receiving health services and agencies with strengthened digital technology and managerial capacity. Finally, it addresses issues identified in the Country Development Challenges diagnosis and contributes towards the Bank’s country strategy with the Cooperative Republic of Guyana 2017-2021 (GN-2905-2). The first specific objective of this project is in line with the country strategy strategic area of “Delivering critical infrastructure”, as expressed in the action area of “upgrading selected infrastructure (identified in the national strategy and planning process) to support climate resilience, social improvement, and structural transformation”. In addition, the third specific objective of this operation is consistent with the first strategic area of the country strategy, “Strengthening public sector institutions and planning”, and in particular one of the lines of action in the third component (focusing on improving “HR quality and availability”) is directly aligned with the expected result of “improve civil service quality”. The program is included in the Annex III of the 2022 Operational Program Report (GN-3087).

- 1.27 **Gender and diversity alignment.** A [gender and diversity assessment](#) was conducted during project preparation to identify and address health disparities by gender, ethnicity, and disability status. Mental health and GBV (¶1.3) figure as areas with important gender gaps that will be considered in project activities (¶1.19 and ¶1.23). Infrastructure (¶1.18) and telemedicine (¶1.19) investments will help overcome service provision gaps for the populations in the interior of the country, which are predominantly Amerindian. The rollout of the essential maternal and child health services package will also prioritize three of the country’s four hinterland regions. This assessment will include socio-cultural adaptations to meet the specific needs of indigenous peoples.
- 1.28 **Climate change alignment.** This program contributes to climate change mitigation and adaptation by financing health infrastructure that is environmentally sustainable and resilient to climate change (see [Sustainable Infrastructure Analysis](#)). It is estimated that 80.21% of the operation’s resources will be invested in climate change mitigation and adaptation activities, according to the [Multilateral Development Banks’ Joint Methodology](#).

B. Objective, components, and cost

- 1.29 **Objective of the CCLIP and of the first individual operation.** The Bank will support Health Care Network Strengthening in Guyana through a CCLIP. The objective of the CCLIP and the first individual operation is to improve the health of the Guyanese population through increased access, quality, and efficiency of

health services. The specific objectives of the first individual operation are: (i) improve health outcomes associated with low and high complexity procedures, by expanding the capacity of strategic hospitals; (ii) extend coverage of diagnostic, medical consultation, and patient management services, inclusive of the country's hinterlands, through DH; and (iii) increase the efficiency of the public health system, by strengthening key logistic, management, and support processes and inputs. The first individual operation and CCLIP are structured in three components.

1.30 Component 1. Supporting hospital health services networks (US\$85 million).

This component will finance inputs to allow the hospital network to function more efficiently, and equitably, by expanding capacity at seven hospitals, of which four will be hinterland hospitals. The activities to be funded by this component include: (i) infrastructure rehabilitation, expansion or reconstruction at seven hospitals, considering energy and water efficiency and climate change risk reduction features, as well as accessibility provisions for disabled persons (see [Sustainable Infrastructure Analysis](#))²⁹ and patients' cultural and linguistic needs; (ii) demand and supply assessments as well as health care network analysis, particularly in the hinterlands; (iii) purchase of essential medical equipment and furniture for these facilities; (iv) services for architectural and engineering design and construction supervision; and (v) equipment inventorying, corrective and preventive maintenance of infrastructure works and medical equipment and improvement of installed maintenance capacity (including training and manuals revision/development).³⁰

1.31 Component 2. Strengthening digital health (US\$7.2 million). This component will ensure financing for the country's plans for a digital transformation in health, including: (i) DH governance and sustainability (assessments of preparedness, national strategy and budget, and DH foundations: core team, architecture, data privacy norms, cybersecurity, interoperability guidelines, EHR strategy, telehealth strategy and norms, change management strategy, training in new technologies, total cost of ownership); (ii) strengthening and expansion of the current teleradiology and teleophthalmology networks, plus other telemedicine services (tele-therapy, triage, mental health pilot), to the country's hinterland areas, including its socio-cultural adaptations for indigenous peoples and persons with disabilities based on the prevalence of certain diseases and communications preferences; (iii) telehealth infrastructure and connectivity; (iv) preparedness for the selection and implementation of an EHR system; and (v) software maintenance and support. DH can reduce GHG emissions by reducing travel for health care and hardware purchases and following best practices to reduce information and communications technology emissions.³¹

²⁹ This considers accessible spaces and information for people with all types of disabilities (mobility; blind or have low visibility; people who are deaf, hard of hearing, or have a hearing loss; people with speech or language disorders, people with cognitive, developmental, or intellectual disabilities) (see [Gender and Diversity Assessment \(GDA\) of the Health Sector in Guyana](#)).

³⁰ As per the Country Financing Parameters (CP-2402-8), "external financing of both routine and periodic maintenance expenditures should take place on a temporary basis only, in support of a medium-term transition towards adequate levels of domestic financing". Therefore, Bank financing will be limited and on a temporary basis as the government strengthens capacity in this area.

³¹ Healthcare facilities can purchase environmentally friendly equipment that has fewer components, is less toxic, and has options for disposal at the end of its useful life. Using green cloud computing and green software engineering practices can benefit healthcare systems and the planet's health (see [NHS community of practice for sustainable healthcare technology](#)).

- 1.32 **Component 3. Promoting health sector management and efficiency (US\$3 million).** The National Strategic Plan for Health targets several key parts of the health system that promote improved quality and efficiency in the delivery of health services, and this component will support the following: (i) HR quality and availability (allied health professional assessment, including current supply, gaps, and projected demand; stock-taking of existing training capacity; curricula review and improvement, including socio-cultural dimensions in health for indigenous peoples and persons with disabilities; proposal for addressing sector's HR needs, considering training center that could be financed in second operation); (ii) supply chain management (expansion of warehouse capacity; software and hardware for electronic supply chain management system; training of staff in supply chain management); (iii) pandemic and emergency—including climate emergencies—preparedness (analysis of COVID-19 response, Emergency Operations Center plan, simulation exercises, laboratory equipment and diagnostic tests procurement, and biosafety/biosecurity assessments); and (iv) essential services package for maternal and child health (laboratory and medical equipment, maternal waiting homes, community health committees set-up and training).
- 1.33 **Administration and program monitoring and evaluation (US\$1.8 million).** These resources will support the MOH in program management and assessment of its effects. It will finance specialized consulting services for project implementation, costs associated with the PEU, and evaluations of project implementation and impact.
- 1.34 **Project beneficiaries.** Through the program Guyana's population will have greater access to improved clinical and diagnostic services. The seven hospitals benefiting from the project have a catchment population of around 406,000 persons, over 50% of the population. In addition, the telemedicine activities installed in 18 hospital and polyclinic sites will reach all ten of the country's regions, including the hinterlands. The maternal and child essential health services package will be rolled out in hinterland regions 1, 7, and 8, which have a total population of around 57,777 inhabitants, according to the 2021 projections by the Bureau of Statistics.

C. Key results indicators

- 1.35 In terms of its general objective, it is expected that the project, will have a favorable impact on the following indicators: crude mortality rate, risk of premature death from NCDs, death rate due to self-harm, and blindness due to DR. At the level of specific objectives, some of the key indicators are total surgeries and ICU discharges in target hospitals, the diabetes treatment rate, the institutional delivery rate in target hospitals, diabetic patients screened for DR, telemedicine mental health patients with improved symptoms, and availability of hypoglycemic agents in health posts. The data for these indicators will be collected from the routine health information system, Guyana's vital statistics, and surveys in health facilities performed as part of this operation.
- 1.36 **Economic analysis.** A [cost-effectiveness analysis](#) was conducted for some of the main elements of the project that will result in improved health outcomes (surgeries, ICU discharges, DR screening through teleophthalmology). The effectiveness data derives from the corresponding literature and relates to the goals expressed in the

Results Matrix (RM). The costs were obtained from the project budget; in the case of costs not directly financed by the project, parameters were adopted from the relevant literature. The analysis applied a discount rate of 3%, recommended by the WHO for health projects.³² An incremental cost-effectiveness ratio of US\$2,394 per disability-adjusted life years (DALY) averted was estimated for the base scenario. The comparison of this value with the estimated 2022 GDP per capita (US\$17,107) indicates that this project is very cost effective. Sensitivity analysis with different time horizons and discount rates were conducted, and the model was found to be robust vis-à-vis the changes in these variables. Given the results of the base case, the sensitivity analysis, and the limitations and assumptions of the model, this operation can be considered very cost-effective, and its implementation will generate an increase in net welfare for the population.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 This proposed sector CCLIP will be for an amount of up to US\$160 million through the Ordinary Capital (OC) of the Bank that will finance up to two projects during a period of ten years. The amount of the CCLIP is estimated to cover the priority financing needs of the MOH, and the period of execution is necessary to allow for the implementation of complex infrastructure works. The first individual operation is a specific investment loan for an amount of up to US\$97 million from the OC of the Bank, with a disbursement period of five years. This instrument is considered to be appropriate due to its fixed scope, logical interdependence of the components and its physical and technical individuality.

Table 1. Summary of Program costs (in US\$, thousands)

Components	IDB
Component 1. Supporting hospital health services networks	85,000
Hospitals infrastructure upgrades	77,700
Hospitals equipment (provision and maintenance)	7,300
Component 2. Strengthening digital health	7,200
National digital health foundation	2,709
Teleophthalmology centers	943
Teleradiology centers	785
Telehealth centers	2,763
Component 3. Promoting health sector management and efficiency	3,000
Allied health professionals' assessment and training plan	400
Supply chain management	170
Pandemic preparedness	880
Maternal and child essential health services package	1,550
Administration and program monitoring and evaluation	1,800
Total	97,000

Costs by activity are indicative.

Table 2. Disbursements (in US\$, thousands)

	2023	2024	2025	2026	2027	Total
IDB	782	8,012	42,410	44,202	1,594	97,000
%	0.8	8.2	43.7	45.6	1.6	100

³² There is extensive theoretical and empirical literature that justifies using relatively low discount rates for the analysis of social projects, since these projects have important externalities, are carried out in the medium and long term, and the monetization of benefits is not so direct.[20]

B. Environmental and social risks

- 2.2 The first individual operation is classified as Category “B” due to moderate direct, indirect, and cumulative negative environmental and social (E&S) impacts. Impacts will be localized, temporary/short-term linked to activities primarily under Component 1 encompassing the construction/renovation phases for the selected healthcare facilities. Several waste streams will contribute to pollution during daily operations of these facilities along with those from construction/renovation activities. There are health and safety impacts to workers and project-affected people (PAPs) associated with/or occurring in the course of works, inclusive of third-party actions, and disruption of health services. The E&S Risk Rating (ESRR) has therefore been classified as Substantial.
- 2.3 A draft E&S Management System (ESMS) and E&S Analysis and Management Plan (ESA/ESMP) framework with a Stakeholder Engagement Plan (SEP) and grievance mechanism, have been prepared to manage and mitigate these impacts. A first round of consultations was held on August 2022 (with an accompanying report disclosed in the Bank’s website) with over 60 stakeholders representing key groups and sectors identified from the mapping analysis (in GPHC, NAH, and LH). Feedback on the project was generally positive with recommendations made to ensure considerations for persons from the deaf community, identify additional facilities for rehabilitation, ensure proper waste management procedures for all phases of the project, and create a communications strategy. A second round of consultations was initiated in October 2022, targeting stakeholders from hinterland district hospitals, beginning with Lethem Hospital. Approximately 20 representatives of diverse groups and sectors participated in the session, including Indigenous Peoples’ (IP) representatives and members of the general public. Feedback was generally positive, with participants emphasizing the importance of ensuring the availability of key health services in the hospital, more inpatient beds, and telemedicine, as well as ensuring proper waste management and attention to socio-cultural aspects. The feedback from this process was included in the ESA/ESMP framework and the accompanying report was disclosed in the Bank’s website. Category A projects and activities resulting in involuntary settlement or causing significant negative impacts to Indigenous Peoples and critical natural habitats/biodiversity have been excluded. As part of the Environmental and Social Action Plan (ESAP) of the operation, an E&S audit for each hospital must be carried out prior to the start of civil works for the facilities in operation, site-specific ESAs/ESMPs must be developed for each hospital for renovations of a substantial nature or for any new construction, and these must include Consultation Reports including the results of public consultations (including culturally-appropriate consultations with indigenous peoples for those interventions in hinterland indigenous villages). The framework ESA/ESMP includes measures to address key issues linked to occupational health and safety, energy efficiency, wastewater, hazardous waste management, and forced labor in the supply chain/procurement of materials (e.g., medical equipment, solar panels). The Disaster and Climate Resilience Risk is classified as Moderate due to flooding likely to occur in the project areas which can exacerbate risk due to poor drainage and proximity of some facilities to the coast/rivers. Thus, a simplified qualitative disaster risk narrative with mitigation measures alongside an emergency preparedness/response (EPR) plan has been prepared as part of the ESA/ESMP.

- 2.4 EA capacity and performance have demonstrated some deficiencies in the implementation of the operational ESMP for the GPHC financed with resources from operation 3779/BL-GY. Appropriate corrective measures have been adopted to complete this document and incorporate it within the ESMP framework (see ¶3.6), including external technical assistance and monitoring.

C. Fiduciary risk

- 2.5 An analysis has identified relevant risks related to: (i) low capacity of the local market regarding the availability of medical equipment, medicines, and laboratory equipment; (ii) low participation of engineering consultants and construction firms specially in projects located in remote areas in Guyana; (iii) consensus-building over technical inputs for the preparation of tender documents; and (iv) lengthy timeframes for receiving approvals at tender evaluation stage. These fiduciary risks considered medium-high will be mitigated through: (i) preparing the bidding processes so that they are of interest to international and local firms, which could work in consortia (i-ii); (ii) analyzing and identifying adequate roles and workflows to expedite processes (iii-v); (iii) strengthening procurement planning, management, evaluation, contract award and procedures best practices through the incorporation of lessons learnt from delays/bottlenecks encountered in previous procurement processes (iii-iv); and (iv) including in the Operating Manual adequate guidance and mitigation measures to discharge all fiduciary duties in accordance with the Bank's rules and procedures (iii; iv).

D. Other risks and key issues

- 2.6 The MOH has historically allocated less than two percent of its budget for infrastructure and equipment maintenance. Existing internal capacity in the MOH for performing preventive and corrective maintenance is limited due to the lack of trained staff; hence, often, installations and equipment are repaired only when they have stopped working properly. Because the health facilities located in the hinterlands or coastal regions have limited maintenance staff or access to adequate maintenance services, it could prove difficult to sustain both new construction and equipment financed by the project. Therefore, the project includes financing for contracting routine maintenance and strengthening MOH installed capability in this area.
- 2.7 **Sustainability.** The prioritization by the government of activities supported in the project and reflected in the draft National Strategic Plan for Health 2022-2030, Health Infrastructure Transformation Plan, and Human Resource Development Plan, will help ensure their continuity and sustainability. The use of the CCLIP instrument reinforces the commitment of the government to the activities proposed. The estimated incremental recurrent costs generated by the project (see [economic analysis](#)) have been anticipated by the government and will be absorbed in the expanded annual budgets permitted by the increased oil and gas revenues. The infrastructure financed through the project will incorporate sustainability criteria in terms of efficiency in energy and water usage and resiliency to natural disasters. The responsibility of the borrower/EA regarding the maintenance of the

goods and works financed by the project will be reflected in a contractual clause in the Loan Contract.³³

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 The Borrower, acting through the MOH, shall be the **executing agency** of the first operation and CCLIP. The Health Sector Development Unit (HSDU) within the MOH, which is responsible for the implementation of all donor-funded development projects, will hold the PEU and will maintain staff proficient in Bank procedures as well as hire additional staff with exclusive dedication to the project, as necessary. The EA has satisfactory experience³⁴ in the sector for which the CCLIP is being requested, in the current execution of similar projects financed by the Bank and World Bank. It maintains the same structure, technical and implementation capacity, and institutional context (norms and regulations) since the conduction of the last institutional capacity analysis. The institutional capacity of the EA, as determined in this exercise, is adequate to execute the project, and it will be continuously monitored.
- 3.2 The PEU will be responsible for all aspects of project administration, including planning, budgeting, accounting, procurement, application of social and environmental safeguards, monitoring, and progress reporting. The PEU will include a project manager and specialists (at least one per area) in civil engineering, health informatics, procurement, financial management, monitoring and evaluation, environmental and social management, as well as project support staff. Specialized external consulting services will be contracted by the PEU for the preparation of infrastructure renovation and building plans, supervision of construction including environmental and social aspects, and development of technical specifications for medical equipment procurement³⁵. Technical and fiduciary staff from the MOH will work closely with PEU specialists so that the MOH benefits from knowledge transfer and capacity strengthening.
- 3.3 Specific responsibilities of the PEU will entail all activities necessary for project execution, including: (i) serving as project liaison with the Bank; (ii) preparing, submitting, updating, and implementing the Annual Operating Plans (AOP) and financial plans; (iii) drawing up budgets and disbursement requests; (iv) preparing and updating the Pluriannual Execution Plan (PEP), Procurement Plan (PP), Risk Matrix, and the Project Monitoring Report (PMR); (v) financial administration of the project according to accepted accounting principles and presenting audited financial statements; (vi) preparing and obtaining Bank approval for all bidding documents, including those required to hire civil work contractors and consulting

³³ The clause will reflect that (i) maintenance will be performed according to generally accepted technical standards; and (ii) a report will be delivered annually to the Bank on the status of the works and equipment with a maintenance plan for that year, up to three years following the completion of the first works of the project and within the first quarter of each calendar year. Also, if from the inspections conducted by the Bank or from the reports it receives, it is determined that maintenance does not meet the levels agreed upon, the Borrower and the EA shall undertake the necessary measures to fully correct these shortcomings.

³⁴ As determined by the Progress Monitoring Report for loan 3779/BL-GY.

³⁵ ATN/JF-19325-GY has been approved to support PEU operational capacity and institutional strengthening during execution (see ¶ 1.24).

firms; (vii) carrying out procurement processes; (viii) conducting the environmental and social management of the program; (ix) monitoring the civil works and construction contracts through consulting firms specifically hired to that effect; (x) ensuring the consistent alignment of project activities with expected results as well as periodic data collection to enable the monitoring of project indicators; and (xi) presenting semi-annual progress reports.

- 3.4 **Project Operating Manual (POM).** The policies, procedures, rules, and detailed responsibilities of the PEU during project execution are defined in the [POM](#), which sets forth standards and guidelines for the EA regarding all areas of project execution, including programming, execution and financial plan, fiduciary arrangements, monitoring, and reporting, among others. The POM also describes the roles and means of coordination among stakeholder agencies.
- 3.5 **Special contractual conditions precedent to the first disbursement:** (i) the approval of the POM by the EA in accordance with the terms and conditions previously agreed upon with the Bank, and the entry into force of such POM which shall include, among other elements, the environmental and social requirements and include as annexes the Project's ESMS, ESA/ESMP, and the ESAP; and (ii) the assignment or appointment of the PEU's key personnel, including one project manager, one procurement management specialist, one environmental and social specialist, and one financial management specialist, pursuant to the terms of reference agreed upon with the Bank. These conditions are essential to guarantee that the rules of operation and an adequate team will be in place to initiate and conduct project execution.
- 3.6 **Special Contractual Clauses of execution:** Prior to execution of any works under Component 1, the Borrower, directly or through the EA, must present evidence to the Bank that: (i) a Supervisory consultant/firm to oversee environmental, social, and occupational health and safety (ESHS) implementation and monitoring of the project has been hired; (ii) for any selected hospital/healthcare facility, an Environmental and Social Audit has been undertaken and operational ESAs and ESMPs are completed; and (iii) Contractors' Environmental and Social Management Plan (C-ESMP) including labor assessment have been prepared. These conditions are necessary to ensure compliance with the Bank's ESG guidelines. In addition, see special contractual clauses of execution included in Annex B of the [ESRS](#).
- 3.7 **Procurement.** The PEU will apply the Policies for the Procurement of Works and Goods Financed by the Bank (GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the Bank (GN-2350-15), in addition to the dispositions contained in the Fiduciary Agreements and Arrangements. The PEU will follow procurement processes as described in the Procurement Plan (PP) to be approved by the Bank. The PP will be updated through the semi-annual progress report, or whenever necessary or as required by the Bank.
- 3.8 **Disbursement and financial management.** The disbursement period for the loan resources is five years. The Bank will provide an advance of funds according to project liquidity needs substantiated by its current and anticipated commitments for a period of not less than 90 days and not more than 180 days. The PEU will control the utilization of the advance of funds and limit expenditure to planned and

eligible activities, and it will maintain records of financial transaction in accordance with Bank fiduciary policies (OP-273-12). When 80% of the advance of funds has been spent, the PEU may submit a justification of expenditures for review by the Bank and request a new disbursement.

- 3.9 **Auditing.** The PEU will be responsible for submitting the following documents to the Bank: (i) Annual Audited Financial Statements (AFS) of the project, to be submitted within 120 days after the close of each fiscal year; and (ii) final audited financial statements, to be submitted within 120 days after the final disbursement date of the project, or any of its extensions. Audits will be conducted by the Audit Office of Guyana and will follow the Bank's guidelines and terms of reference.

B. Summary of arrangements for monitoring results

- 3.10 **Monitoring.** The project will be monitored according to the dispositions of the Monitoring and Evaluation Plan and referring principally to the results and output indicators. The monitoring of the project will employ the following standard Bank instruments: (i) PEP and AOP; (ii) PP; (iii) RM; (iv) PMR; and (v) AFS. Semi-annual progress reports will be presented by the EA, through the PEU, within thirty (30) days after the end of the corresponding semester and should include a description of the physical and financial execution of activities as well as issues relating to implementation, risks, mitigation measures, and environmental and social safeguards.
- 3.11 **Evaluation.** An impact evaluation will use ex-ante and ex-post calculations and differences in differences models, which compare treatment units with units not treated and data from before and after the implementation. The main comparison will be between the treated hospitals and controls that most closely resemble them. The evaluation will also include a longitudinal survey that will be designed and implemented to measure the perception, acceptability, and barriers that patients and mental health providers have about the use of technology for mental health services. Complementary information on the program results will be captured through a qualitative evaluation. A mid-term evaluation (90 days following the date on which 50% of the loan resources have been disbursed) and a final evaluation report (90 days after the date of the last disbursement) will be prepared by the MOH.

IV. ELIGIBILITY CRITERIA

- 4.1 **CCLIP eligibility.** The proposed CCLIP meets the eligibility criteria set forth in ¶3.2 of Annex III of document GN-2246-13 and ¶3.6 of its operational guidelines (GN-2246-15), considering that its objectives are within the priorities of the Bank's country strategy with the Cooperative Republic of Guyana 2017-2021 (GN-2905-2), as detailed in ¶1.26.
- 4.2 **Eligibility criteria of the first individual operation.** The first individual loan operation complies with the eligibility criteria established in ¶3.5 (i) through (iv) of Annex III of document GN-2246-13 and its operational guidelines, as follows: (i) a simplified assessment of the institutional capacity of the EA was performed since it is executing similar projects financed by the Bank and other multilateral institutions; (ii) the objective of the first individual loan operation contributes to the

achievement of the sector objectives of the CCLIP; (iii) the first individual loan operation falls under the sectors and components of the CCLIP; and (iv) the first individual loan operation includes the actions of improvement as identified by the institutional capacity assessment (¶2.5).

Development Effectiveness Matrix		
Summary		GY-L1080 / GY-O0010
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Social Inclusion and Equality -Productivity and Innovation -Gender Equality and Diversity -Climate Change -Institutional Capacity and the Rule of Law	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Beneficiaries receiving health services (#) -Agencies with strengthened digital technology and managerial capacity (#)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-2905-2	Support investments in infrastructure for private sector growth; Establishing a modern national strategy and planning framework.
Country Program Results Matrix	GN-3087	The intervention is included in the 2022 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		
		Evaluable
3. Evidence-based Assessment & Solution		10.0
3.1 Program Diagnosis		2.5
3.2 Proposed Interventions or Solutions		3.5
3.3 Results Matrix Quality		4.0
4. Ex ante Economic Analysis		10.0
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		2.0
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		2.0
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		10.0
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		6.0
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Medium High
Environmental & social risk classification		B
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, External Control. Procurement: Contracting Individual Consultant.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

Evaluability Assessment Note: The document presents both a Conditional Credit Line for Investment Projects and the first individual operation of this CCLIP, both defined with the goal of strengthening the Health Care Network in Guyana. This first operation, with a total investment of US\$97 million of ordinary capital from the IDB, will expand the capacity in seven hospitals, contribute to the governance, infrastructure and sustainability of Digital Health and promote improved management and efficiency of the health system in terms of human resources, supply chain management, emergency preparedness and essential maternal health service packages.

The specific objectives of the first operation are: (i) improve health outcomes associated with low and high complexity procedures, by expanding the capacity of strategic hospitals; (ii) extend coverage of diagnostic, medical consultation, and patient management services, inclusive of the country's hinterlands, through digital health (DH); and (iii) increase the efficiency of the public health system, by strengthening key logistic, management, and support processes and inputs. The diagnosis is adequate and well documented by international evidence, highlighting the specific problems of Guyana's health system. The main problems are related to limited access and quality of health services (especially in the hinterland), explained in part by hospital infrastructure deficits, limited development of digital health services, human resource constraints and supply chain management issues.

The results matrix is consistent with the vertical logic of the operation and presents impact and result indicators that are reasonable, well specified, and adequate to measure the achievement of the specific objectives. The assessment includes a difference in difference approach a longitudinal survey to measure perceptions on mental health services. The economic analysis includes a cost-effectiveness analysis was conducted for some of the main elements of the project, concluding that its implementation will generate an increase in net welfare for the population. The project has received a medium-high global risk rating, mainly due to potential risks related to availability of engineering firms and medical suppliers, the maintenance resource limitations in the hinterland. Appropriate and monitorable mitigation or escalation measures have been proposed throughout the project.

RESULTS MATRIX

Project Objective	The specific objectives for this operation will be: (i) improve health outcomes associated with low and high complexity procedures, by expanding the capacity of strategic hospitals; (ii) extend coverage of diagnostic, medical consultation, and patient management services, inclusive of the country's hinterlands, through digital health; and (iii) increase the efficiency of the public health system, by strengthening key logistic, management, and support processes and inputs. The achievement of these objectives will contribute to the general objective of improve the health of the Guyanese population through increased access, quality, and efficiency of health services.
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General Development Objective

Indicators	Unit of measure ment	Baseline value	Baseline year	Expected year for achievement	Target	Means of verification	Comments
General development objective: Improve the health of the Guyanese population through increased access, quality, and efficiency of health services							
Crude mortality rate	Per 1,000	9.8	2022	2027	6.6	Vital statistics registry	Target modeled on surgery and ICU investments
Risk of premature death from NCDs ¹	%	29.2 total 32.1 male 26.4 female	2019		25.0 ² 27.9 (male) 22.2 (female)	who.int/data	Populations aged 30 to 70 years
Age-standardized death rate due to self-harm	Per 100,000	40.9 total 65.0 male 17.0 female	2019		37.0 ³ 61.1 (male) 13.1 (female)	who.int/data	
Vision impairment and blindness due to diabetic retinopathy	#	3,985	2022		2,000	IHME Global Burden of Disease	Target modeled on cumulative effect of glucose control and DR screening and treatment

¹ Non-communicable disease: cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases.

² Targets adapted from IHME projections. Values by sex to be validated.

³ Ibid.

Specific Development Objectives

Indicators	Unit of measurement	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of Project	Means of verification	Comments
Corporate results framework											
Beneficiaries receiving health services	#	0	2022	3,000	20,000	50,000	120,000	213,000	406,000 ⁴	MOH statistics	
Specific development objective 1: Improve health outcomes associated with low and high complexity procedures, by expanding the capacity of strategic hospitals											
Total surgeries in three target hospitals	#	10,378 ⁵	2021	11,598	12,818	14,038	14,038	14,038	14,038	Hospital information system	17 to 23 surgery theaters (GPHC, New Amsterdam and Linden Hospitals) (regions 4, 6 and 10)
ICU discharges (alive) in three target hospitals	#	702 ⁶	2017	810	1,188	1,566	1,944	2,106	2,106	Hospital information system	54 annual discharges /bed; 13 to 39 ICU beds (GPHC, New Amsterdam and Linden Hospitals) (regions 4, 6 and 10)
Hypertension treatment rate in seven target hospitals	%	41.9% ⁷	2015	50%	55%	60%	70%	80%	80%	Med. record review	Patients treated/ diagnosed
Diabetes treatment rate in seven target hospitals	%	56.6 ⁸	2015	60%	65%	70%	75%	80%	80%	Med. record review	Patients treated/ diagnosed
Institutional deliveries in four target hospitals	%	84% ⁹	2022	84%	84%	84%	87%	95%	95% ¹⁰	MOH statistics	Moruca, Kamarang Kato and Lethem Hospitals (regions 1, 7, 8 and 9)

⁴ Calculated based on the catchment area of intervened hospitals.

⁵ MOH data from 2021 is consistent with reported value of 10,340 surgeries cited in H.J. Vansell, J.J. Schlesinger, A. Harvey, J.P. Rohde, S. Persaud, K.A. McQueen (2015) Anaesthesia, surgery, obstetrics, and emergency care in Guyana, *Journal of Epidemiology and Global Health* 5:1, 75–83, DOI: <https://doi.org/10.1016/j.jegh.2014.08.003>.

⁶ Calculated from Henry, O. & Amata, A., 2017. A Two-year Review of Admissions to the Intensive Care Unit of the Georgetown Public Hospital Corporation, Guyana. *West Indian Medical Journal*, 66(6), pp. 368-633.

⁷ Guyana 2016. STEPS in Supplement to: Basu S, Flood D, Geldsetzer P, et al. Estimated effect of increased diagnosis, treatment, and control of diabetes and its associated cardiovascular risk factors among low-income and middle-income countries: a microsimulation model. *Lancet Glob Health* 2021; published online Sept 22. [http://dx.doi.org/10.1016/S2214109X\(21\)00340-5](http://dx.doi.org/10.1016/S2214109X(21)00340-5).

⁸ Ibid.

⁹ Preliminary data from 2022.

¹⁰ The goal is to bring the percentage of institutional deliveries in these hinterland areas closer to the average on the coastal regions (98.5%).

Indicators	Unit of measurement	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of Project	Means of verification	Comments
Specific development objective 2: Extend coverage of diagnostic, medical consultation, and patient management services, inclusive of the country's hinterlands, through digital health											
Patients whose diagnostic imaging scan was completed within the target wait time ¹¹	%	TBD	2022	+2 PP	+4 PP	+6 PP	+8 PP	+10 PP	+10 PP	Radiology reports	Baseline will be collected at the start of the project
Diabetic patients screened for diabetic retinopathy	%	7	2022	7	15	30	45	60	60	Hospital information system	Patients over 40 years; 74,000 total estimated diabetes patients
Telemedicine mental health patients with improved social functioning/symptoms ¹²	%	0	2022	5	8	12	17	25	25	Med. record review	Age, gender, ethnicity, mental health condition
Specific development objective 3: Increase the efficiency of the public health system, by strengthening key logistic, management, and support processes and inputs											
Availability of hypoglycemic agent (diabetes medication) in health posts	%	40	2018	40	42	44	47	50	50	IDB facilities assessment	metformin
Global Health Security Index	points	30.8	2021	32	32	34	34	36	36	www.ghsiindex.org	100 scale
Pregnant women with complete lab work in targeted regions	%	12.9	2019	14	16	19	22	28.7	28.7	Med. record review	Hinterland regions 1,7,8

¹¹ Depending on priority, turn-around time from the request for imaging to the time the image is recorded. An example of the Canadian standards is [found here](#). Quality standards will be developed with the Ministry of Health and RAD-AID and a baseline will be developed at the start of the project.

¹² Standard screening tool questionnaire applied at presentation and after treatment to measure effect of intervention.

Outputs

Indicators	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of Project	Means of verification	Comments
Component 1: Supporting hospital health services networks											
Hospitals with plans and designs for infrastructure improvements that are sustainable, resilient, culturally sensitive, and accessible for persons with disabilities, prepared	Hospital	0	2022	0	7	0	0	0	7	Project audit report	
Hospitals with infrastructure upgrades completed that achieve EDGE certification equivalency					0	2	5	0	7		
Hospitals with equipment inventory completed					0	7	0	0	7		
Hospitals with priority equipment and furniture supplied					0	0	2	5	7		
Hospitals with corrective/preventive maintenance on infrastructure and equipment performed					0	0	0	7	7		Annual output, non-aggregate EOP

Component 2: Strengthening digital health											
National Digital Health Strategy approved	Strategy	0	2022	0	1	0	0	0	1	Project audit report	
National Telehealth Strategy approved	Strategy				1	0	0	0	1		including provisions for culturally appropriate and gender specific pilot in mental health
National Data Privacy and Cybersecurity Strategy approved	Strategy				0	1	0	0	1		
Electronic health record system strategy approved	System				0	1	0	0	1		
National Digital Health Governance Structure adopted and team in place	Structure/ team				1	0	0	0	1		
Telehealth change management, communication and adoption plan approved	Plan				0	1	0	0	1		
Health facilities with teleophthalmology centers installed and functioning	Health facility				4	7	0	5	16		
Health facilities with teleradiology centers installed and functioning	Health facility				5	7	0	5	17		
Health facilities with telehealth centers including socio-cultural adaptations for indigenous peoples, installed and functioning	Health facility				5	6	2	5	18		
Component 3: Promoting health sector management and efficiency											
Allied health (AH) professional assessment conducted	Assessment	0	2022	0	1	0	0	0	1	Project audit report	
Plan to improve AH training capacity completed	Plan				0	1	0	0	1		
Facilities with supply chain management package (software, hardware, training warehousing) implemented	Facilities				0	2	1	0	3		
Plan for pandemic preparedness implemented	Plan				0	1	0	0	1		
Health facilities with maternal/child essential services package adopted	Health facilities				30	30	29	0	89		Hinterland regions 1,7 and 8

Country: Guyana

Division: SPH

Operation No.: GY-L1080

Year: 2022

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Executing Agency (EA): Ministry of Health (MOH)

Operation Name: Conditional Credit Line for Investment Projects and First Operation for Health Care Network Strengthening in Guyana

I. Fiduciary Context of Executing Agency

1. Use of country system in the operation¹

<input checked="" type="checkbox"/> Budget	<input type="checkbox"/> Reports	<input type="checkbox"/> Information System	<input type="checkbox"/> National Competitive Bidding (NCB)
<input checked="" type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input type="checkbox"/> Shopping	<input type="checkbox"/> Others
<input type="checkbox"/> Accounting	<input checked="" type="checkbox"/> External Control	<input type="checkbox"/> Individual Consultants	<input type="checkbox"/> Others

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Particularities of the fiduciary execution	For this project, the EA is the Ministry of Health (MoH). The Health Sector Development Unit (HSDU), will serve as the PEU and will be responsible for the overall administration of the proposed operation, including planning, budgeting, execution, monitoring and evaluation and financial and procurement activities. The Purchasing Department and the Finance and Administration Department part within the MoH and part of the HSDU, will be responsible for managing respectively procurement and financial management activities for the IDB-financed project.
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3. Fiduciary Capacity

Fiduciary Capacity of the EA	<p>An institutional capacity assessment of the (MoH) was carried-out during the period June-July 2022 using the PACI methodology. Over the last three years, the MoH has executed several public investment projects using reimbursable international cooperation funds and non-reimbursable international cooperation funds. These projects were the World Bank's COVID Emergency Loan and The Global Fund Grants to fight HIV, Malaria and Tuberculosis (TB). Over the last three years, the average performance of the MoH's projects during the execution phase can be rated as medium-high.</p> <p>The MoH has indicated that the most challenging issues experienced during projects' execution and affecting procurement timelines /outcomes over the last three years are the limited range of local suppliers and to some degree, the weak supplier capacity regarding the availability of medical equipment, medicines, and laboratory equipment on the local market; delays observed at evaluation and contract award stages and difficulties achieving consensus on technical requirements.</p> <p>Following the assessment of the executing agency's fiduciary capacity, the fiduciary risk level is classified as medium-high. Financial management capacity is considered high. It is considered that the PEU has experience managing projects financed under IDB financing and has a good grasp of procurement policies and procedures. Supervision and mitigation actions will be focused on efforts to strengthen the fiduciary capacity.</p>
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¹ Any system or subsystem that is subsequently approved may be applicable to the operation, in accordance with the terms of the Bank's validation.

4. Fiduciary risks and risk response

Risk Taxonomy	Risk	Risk level	Risk response
Planning	The HSDU has previous experience executing IDB financed project under IDB Procurement and Financial Management policies and procedures. The institution's past performance in managing the technical quality of its procurement has been satisfactory. However, bottlenecks are experienced essentially at procurement planning and management stages as follows: (i) the procurements for which there is a limited range of local suppliers and low capacity of the local market regarding the availability medical equipment, medicines, and laboratory equipment on the local market; (ii) low participation of engineering consultants and construction firms specially in projects located in remote areas in Guyana; (iii) the obtention of consensus over technical inputs for the preparation of tender documents; and (iv) at tender evaluation stage due to the lengthy timeframes for receiving approvals and associated turn-around times.	Medium-High	(i) designing bidding documents and advertisement strategies fostering wider participation of local, regional and international firms which could enhance their capacities through joint-ventures/consortia; (ii) strengthening procurement planning, management, evaluation, contract award and procedures best practices through the incorporation of lessons learnt from delays/bottlenecks encountered in previous procurement processes; (iii) identifying workflows including: clear and realistic timelines; clear definition of roles and responsibilities of personnel/entities involved at each stage of the procurement process from planning through contract signing; and (iv) including in the Operating Manual adequate guidance and mitigation measures to discharge all fiduciary duties in accordance with the Bank's rules and procedures.

5. Policies and Guides applicable to operation: The procurement of goods works and services, and the selection of consultants financed by the Bank will be carried out in accordance with the Policies for the Procurement of Goods and Works financed by the IDB (GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-15), respectively. The Procurement Plan (PP) includes all the details on program procurement. The PEU will follow procurement processes of the program as described in the PP to be approved by the Bank, which will cover the entire duration of the program starting on the date that this program enters into effect. The PP will be updated through the semi-annual progress report, or whenever necessary or as required by the Bank.

As it relates to financial management under the program, the Financial Management Guidelines for IDB-financed projects (OP-273-12) will be applicable as well as the Disbursement Handbook 2021.

6. Exceptions to Policies and Rules: not applicable

II. Aspects to be considered in the Special Conditions of the Loan Agreement

Pre-first disbursement conditions: (i) the approval of the POM by the EA in accordance with the terms and conditions previously agreed upon between the MOH and the Bank; and (ii) the creation of the PEU, including the assignment or hiring of its project manager, as well as one procurement management specialist and one financial management specialist
Exchange Rate: For purposes of Article 4.10 of the General Conditions, the Parties agree that the applicable exchange rate shall be indicated in paragraph (b)(i) of said Article. For purposes of determining the equivalency of expenditures incurred in Local Currency chargeable to the Additional Resources or of the reimbursement of expenditures chargeable to the Loan, the agreed exchange rate shall be the exchange rate on the effective date on/in which the Borrower, the EA, or any other person or legal entity in whom the power to incur expenditures has been vested makes the related payments to the contractor, supplier, or beneficiary.
Type of Audit: Project audited financial statements during project execution period and a final project audited financial statement. Throughout the loan disbursement period, the EA will submit to the Bank annual audited

financial statements within 120 days after the close of the fiscal year, April 30th, and the final AFS will be submitted 120 days after the last disbursement date or any extension thereof. The audit will be conducted by a Bank-eligible independent audit firm or the Audit Office of Guyana. The audit's scope and related considerations will be governed by the Financial Management Guidelines (document OP-273-12) and the Guide for Financial Reports and Management of External Audit. Audit costs will be financed with project resources.

III. Agreements and Requirements for Procurement Execution

☒	Bidding Documents	<p>For procurement of Works, Goods and Services Different of Consulting executed in accordance with the Procurement Policies (GN-2349-15), subject to ICB, the Bank's Standard Bidding Documents (SBDs) or those agreed between EA and the Bank will be used for the particular procurement. Likewise, the selection and contracting of Consulting Services will be carried out in accordance with the Policies for the Selection and Contracting of Consultants (GN-2350-15) and the Standard Request for Proposals (SRFP) issued by the Bank or agreed between the EA and the Bank will be used for the particular selection. The revision of the technical specifications, as well as the terms of reference of the procurements during the preparation of selection processes, is the responsibility of the sectorial specialist of the project. This technical review can be ex-ante and is independent of the procurement review method.</p> <p>In the procurement processes that include the supply and/or installation of solar panels, the Borrower, directly or through the EA, shall ensure that all bidding documents and contracts include provisions that require applicants, bidders, contractors, consultants, representatives, staff members, subconsultants, subcontractors, goods suppliers and their representatives, contractors, consultants, staff members, subcontractors, subconsultants, service providers, concessionaires, and supervising entities, among other aspects, to comply with the ESHS Plans and the environmental and social instruments referred to therein, including procedures to prevent child labor and forced labor. Specific criteria will be defined on a case-by-case basis, considering market conditions and industry standards. Procurement processes that include silicon-based solar modules will be subject to ex-ante review and centralized monitoring to ensure that the EA performs due diligence on the bidders' compliance with criteria related to prevent child labor and forced labor and mitigate reputational impact.</p>
☒	Recurrent Expenses	<p>The recurrent expenses required to put the project into operation approved by the Project Team Leader, which are financed, will be made following the executing agency's administrative procedures. Such procedures will be reviewed and accepted by the Bank, provided that they do not violate the principles of value for money, economy, efficiency, equality, transparency and integrity in keeping with GN 2331-5 Expense Eligibility Policy and updates.</p>
☒	Procurement supervision	<p>The method of supervision shall be ex-ante. The supervision method must be determined for each selection process. All procurement processes will be launched once all technical specifications and/or terms of reference are validated by the Bank's Sector Specialist; and will be documented in accordance with the Bank's general filing guidelines.</p> <p>All modifications to the present arrangement are subject to a prior written agreement between the EA and the Bank. The evaluation of capacity and the level of risk may vary during the project's execution depending on the findings of the regular supervision activities that will be conducted during the project's lifespan. As such, supervision modalities may vary as capacity increases.</p>
☒	Records and Archives	<p>All records and files will be maintained by the Borrower according to accepted best practices and to the general guidelines provided by the Bank. All records must be kept for (7) years beyond the end of the operation's execution period. It is also recommended that the Executing Agencies develop electronic filing to avoid losing project files.</p>

Main Acquisitions

Description of the procurement	Selection Method	New Procedures/ Tools	Estimated Date	Estimated Amount US\$
Goods				
Purchase of laboratory equipment (multiple lots)	International Competitive Bidding (ICB)		TBD	750,000
Purchase of laboratory equipment	ICB		TBD	400,000
IT Infra equipment	ICB		TBD	1,821,017
Hospitals Priority equipment and furniture goods	ICB		TBD	1,951,000
Works				
Construction of maternity waiting homes (4 lots)	National Competitive Bidding		TBD	800,000
Hospitals infrastructure upgrades contractor(s)	International Competitive Bidding (ICB)		TBD	70,584,000
Non-consulting services				
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Consulting Firms				
Consumer Digital Health Application consultancy	Quality-and Cost-Based Selection (QCBS)		TBD	400,000
IT Infra consultancy	QCBS		TBD	301,293
Telehealth (specialty consultation) stations consultancy	QCBS		TBD	241,416
Health teleradiology stations consultancy	QCBS		TBD	785,114
Teleophthalmology stations consultant	QCBS		TBD	943,100
National Telehealth Strategy consultancy	QCBS		TBD	210,000
National Digital Health Strategy Consultancy	QCBS		TBD	455,000
Supervision for infrastructure upgrades	QCBS		TBD	3,554,000
Corrective and preventive maintenance (training and financing experts to carry-out the maintenance of the equipment)	QCBS		TBD	1,777,000
Hospitals Equipment inventory	QCBS		TBD	1,951,000
Plans and designs for Hospitals infrastructure improvement consultancy(ies)	QCBS		TBD	3,554 ,000
Individuals				
Assessment and Training of Software & Hardware for Electronic Supply Chain Management system	Selection of individual consultant (by open invitation)		TBD	90,000

Description of the procurement	Selection Method	New Procedures/ Tools	Estimated Date	Estimated Amount US\$
Supply Chain capacity Analysis individual consultant	Selection of individual consultant (by open invitation)		TBD	50,000

To access, [18-month procurement plan [link](#)]

IV. Agreements and Requirements for Financial Management

<input checked="" type="checkbox"/>	Programming and Budget	The budget preparation process begins each year with the budget call whereby the MOF distributes a circular outlining the timeline and required forms to be completed by each ministry, department, and agency. It ends with the tabling of the national Budget Estimates in Parliament by September 30. The Executing Agencies will liaise with the MoF to have a Budget Line established in the National Estimates. The Borrower has committed to allocate, for each fiscal year of project execution, adequate fiscal space to guarantee the unfettered execution of the project as determined by normal operative instruments such as the Annual Operating Plan and the PP.
<input checked="" type="checkbox"/>	Treasury and Disbursement Management	The operation will generally work with a financial period of 6 months due to planning cycle for the project. The advance of funds methodology will be utilized under this operation and the operation is expected to justify 80% of accumulated balances pending justification before requesting new advances. Whenever resources from the financing are requested through an Advance of Funds, it will be deposited into a Special Account, denominated in US\$, established exclusively for the project at the Central Bank of Guyana. Required resources from this Special Account will be transferred to another bank account, denominated in Guyanese Dollars to be utilized for payment of expenditures in local currency. Manual processing of Disbursement Requests is currently in effect for Guyana. However, efforts will be made to transition the Country to an e-disbursement platform in the short to medium term. Disbursement Methods: The Executing Agencies may submit disbursement requests, within the disbursement period, under the following modalities: (i) Advances of Funds to finance future eligible expenses supported by the Program's plans based on a Planning Horizon of (6) months. Justification of the Fund Advance. For the Borrower to request a new Advance of funds, each EA must have justified to the Bank at least 80% of the total accumulated balances of unjustified advances outstanding. (ii) Reimbursements of expenses to the Borrower for payments made with its own resources for eligible expenses as previously defined. The Borrower's own resources shall exclude expenditure from other Bank-financed operations or of other multilateral financing entity. (iii) Direct Payments made by the Bank to third parties on behalf of and at the request of the Borrower, for amounts agreed between the Borrower and the Bank. This modality will be restricted to transactions that are substantial in nature. To request disbursements from the Bank, the applicable forms and supporting documents shall be submitted.
<input checked="" type="checkbox"/>	Accounting, information systems and reporting	It is expected that IFMIS accounting system will facilitate the recording and classification of all financial transactions, supported by an off-shelf accounting system.
<input checked="" type="checkbox"/>	Internal Control and Internal Audit	The management of the project will assume the responsibility for designing and implementing a sound system of internal controls for the project.
<input checked="" type="checkbox"/>	External control: external financial audit and project reports	For each fiscal year during project execution, the Execution Agency will be responsible to produce semi-annual financial reports for the project due at 60 days after each semester (February 28th and August 31st), annual Audited Financial Reports of the Program due 120 days after each calendar year (on April 30th) and one final Audited Financial Report at the end of the Program (due within 120 days after the last disbursement date or any extension thereof), audited by the Auditor General of Guyana, under terms of Reference previously approved by the Bank.

<input checked="" type="checkbox"/>	<p>Project Financial Supervision</p>	<p>The financial supervision plan of the project, to be informed of the current and future assessed risk of the Project and will focus on: (i) activities related to the implementation and follow-up of arrangements and systems being implemented for the fiduciary management of the project; (ii) follow-up on the implementation status of risk mitigating measures; Review of amounts claimed in Disbursement Requests; (iii) compliance the contractual conditions of the loan contract as well as (iv) the local regulatory and fiduciary legislative frameworks; (v) review of the bank reconciliation and supporting documentation for Advances and Justifications; (vi) compliance with financial management procedures; (vii) review of compliance with the lending criteria; and (viii) ex-post review of disbursements.</p>
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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/22

Guyana. Conditional Credit Line for Investment Projects (CCLIP)
Health Care Network Strengthening in Guyana
(GY-O0010)

The Board of Executive Directors

RESOLVES:

1. To authorize the President of the Bank, or such representative as he shall designate, to enter into such agreement or agreements as may be necessary with the Co-operative Republic of Guyana, to establish the Conditional Credit Line for Investment Projects (CCLIP) "Health Care Network Strengthening in Guyana" (GY-O0010) (the "Line") for an amount of up to US\$160,000,000, chargeable to the resources of the Ordinary Capital of the Bank.

2. To establish that the resources allocated to the Line shall be used to finance individual operations under the Line, in accordance with: (a) the objectives and regulations of the Conditional Credit Line for Investment Projects approved by Resolution DE-58/03, as amended by Resolutions DE-10/07, DE-164/07, DE-86/16 and DE-98/19; (b) the provisions set forth in documents GN-2564-3 and GN-2246-13; and (c) the terms and conditions included in the proposal for the corresponding individual operation.

(Adopted on __ _____ 2022)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/22

Guyana. Loan ____/OC-GY to the Co-operative Republic of Guyana. Health Care Network Strengthening in Guyana. First Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) GY-O0010

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Co-operative Republic of Guyana, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the project "Health Care Network Strengthening in Guyana", which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) GY-O0010, approved by Resolution DE-___/22 on _____, 2022. Such financing will be for the amount of up to US\$97,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted ____ 2022)