#### DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

## DOMINICAN REPUBLIC

# STRENGTHENING THE HEALTH SYSTEM TO PREVENT AND MANAGE CHRONIC NONCOMMUNICABLE DISEASES: DIABETES AND CARDIOVASCULAR DISEASES

(DR-L1167)

LOAN PROPOSAL

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- 1. Economic analysis of the project
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#### **ABBREVIATIONS**

CPN Centros de Primer Nivel de Atención (First-level care centers)

DxC Diagnostic centers

GABSA Guías Alimentarias Basadas en Sistemas Alimentarios (Food

systems-based dietary guidelines)

GDP Gross domestic product

ICAP Institutional Capacity Assessment Platform

ICB International competitive bidding
MISPAS Ministry of Public Health and Welfare

NCB National competitive bidding NCD Noncommunicable disease

PAHO Pan American Health Organization

PROMESE-CAL Program to Supply Essential Medicines and Office of Logistical

Support

QCBS Quality- and cost-based selection

SENASA Seguro Nacional de Salud (National Health Insurance Authority)
SIPNA Sistema de Información del Primer Nivel Atención (First-level-of-

care information system)

SIUBEN Sistema Único de Beneficiarios (Consolidated System of

Beneficiaries)

SNS Servicio Nacional de Salud (National Health Service)
SRS Servicios Regionales de Salud (Regional Health Services)

SUGEMI Sistema Único de Gestión de Medicamentos e Insumos (Integrated

Management System for Medicines and Supplies)

UNAP Unidades de Atención Primaria (Primary care units)

WHO World Health Organization

#### **EXECUTIVE SUMMARY**

# DOMINICAN REPUBLIC STRENGTHENING THE HEALTH SYSTEM TO PREVENT AND MANAGE CHRONIC NONCOMMUNICABLE DISEASES: DIABETES AND CARDIOVASCULAR DISEASES (DR-L1167)

Financial Terms and Conditions											
Borrower:		Flexible Financing Facility <sup>(a)</sup>									
Dominican Republic		Amortization period:	25 years								
Co-executing agencies:			Disbursement period:	5 years							
Ministry of Public Health and W	elfare (MISPAS) and N	lational	Grace period:	5.5 years <sup>(b)</sup>							
Health Service (SNS)			Interest rate:	SOFR-based							
Source	Amount (US\$)	%	Credit fee:	(c)							
IDB (Ordinary Capital):	50,000,000	100	Inspection and supervision fee:	(c)							
Total:	50,000,000	100	Weighted average life:	15.23 years							
			Approval currency:	U.S. dollars							

#### **Project at a Glance**

**Project objective/description:** The general objective of the project is to improve the health of the population in the Dominican Republic through the promotion of health and the prevention and management of chronic noncommunicable diseases (NCDs), with an emphasis on diabetes and hypertension. The specific objectives are: (i) to help reduce the prevalence of risk factors for chronic NCDs by expanding the coverage of interventions to promote healthy habits and prevent risky behaviors; and (ii) to improve the care network for prompt diagnosis, treatment, and management of chronic NCDs.

Special contractual conditions precedent to the first disbursement of the loan: The first disbursement of the loan resources will be subject to fulfillment, to the satisfaction of the Bank, of the following conditions: (i) formation by each co-executing agency of a project execution unit that is exclusively dedicated to the project and has the following personnel: (a) technical coordinator; (b) financial specialist; (c) procurement specialist; (d) monitoring specialist; and (e) a coordination unit member or liaison; (ii) signature of an interagency agreement between the Ministry of Public Health and Welfare (MISPAS) and the National Health Service (SNS) defining the scope and responsibilities of each institution in execution of the project; and (iii) approval of the Program Operating Regulations by both executing agencies under the terms previously agreed upon by the Bank (paragraph 3.4).

**Special contractual conditions of execution:** Prior to disbursement of resources allocated to Component 2: (i) an interagency agreement will have been signed, to the satisfaction of the Bank, between the National Health Service (SNS) and the Program to Supply Essential Medicines and Office of Logistical Support (PROMESE-CAL) defining the roles and respective responsibilities for the project activities; and (ii) an agreement will have been signed between the National Health Service (SNS) and each Regional Health Service (SRS) defining the roles and responsibilities for the project activities (paragraph 3.5).

Exceptions to Bank policies: None.

Strategic Alignment											
Objectives:(d)		01 ⊠			02 □		03 □				
Operational focus areas:(e)	EO1 □	EO2-G ⊠ EO2-D ⊠	Е	:O3 ⊠	EO4 ⊠	EO5 □		EO6 □	E07 □		

- (a) Under the terms of the Flexible Financing Facility (FN-655-1), the borrower has the option of requesting changes to the amortization schedule as well as currency, interest rate, commodity, and catastrophe protection conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.
- (b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.
- (c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.
- (d) O1 (Reduce poverty and inequality); O2 (Address climate change); and O3 (Bolster sustainable regional growth).
- (e) EO1 (Biodiversity, natural capital, and climate action); EO2-G (Gender equality); EO2-D (Inclusion of diverse population groups); EO3 (Institutional capacity, rule of law, and citizen security); EO4 (Social protection and human capital development); EO5 (Productive development and innovation through the private sector); EO6 (Sustainable, resilient, and inclusive infrastructure); EO7 (Regional integration).

## I. DESCRIPTION AND RESULTS MONITORING

# A. Background, problem addressed, and rationale

- 1.1 **Epidemiological profile.** The Dominican Republic is experiencing an increase in chronic noncommunicable diseases (NCDs).1 The mortality rate corresponding to chronic NCDs increased by 30% from 2019 to 2000, accounting for 70% of the country's total deaths, with 43% of deaths corresponding to individuals between the ages of 30 and 70, mainly due to complications from diabetes and cardiovascular diseases.<sup>2</sup> In 2023, 11.6% of the adult population suffered from diabetes, 22.2% were prediabetic,3 and 33% had hypertension.4 Those diseases are associated with risk factors such as overweight and obesity, sedentarism, the consumption of ultra-processed foods, salt, and tobacco, and excessive alcohol consumption. In the Dominican Republic, 60% of the adult population is overweight and obese, 5 40% do not do enough physical activity (59.2% in the case of persons with disabilities), and 20% consume excessive alcohol. That prevalence is present over the life course. In all, 7.3% of children and adolescents are obese, whereas 13.6% are overweight.6 Among adolescents, 15.5% consume alcohol and 7.4% use tobacco products.
- 1.2 These diseases reduce productivity due to premature mortality, early exit from the labor force, and absenteeism. In Latin America and the Caribbean, it is estimated that these diseases<sup>7</sup> will cause a loss of US\$2,170 in gross domestic product (GDP) per capita between 2015 and 2030.8 In the Dominican Republic, annual costs associated with diabetes due to mortality and disability are estimated at US\$464 million (0.64% of GDP).9 These diseases can also increase rates of disability and functional dependency. Diabetic retinopathy is the primary cause of blindness in working-age adults<sup>10</sup> and affects one in every three people with diabetes. Cardiovascular diseases and diabetes correlate to approximately 25% of years of healthy life lost due to premature death or the disability that they cause.<sup>11</sup>
- 1.3 Organization of the health sector in the Dominican Republic. As the governing body, the Ministry of Public Health and Welfare (MISPAS) updates and monitors compliance with clinical care guidelines and protocols for chronic NCDs. It also implements health promotion strategies through educational campaigns, training, and the development of monitoring tools. In its role as the provider of health services, the National Health Service (SNS) offers diagnostic and treatment

<sup>&</sup>lt;sup>1</sup> "Chronic NCDs" and "NCDs" are used interchangeably.

<sup>&</sup>lt;sup>2</sup> Pan American Health Organization (2021a).

<sup>&</sup>lt;sup>3</sup> Government of the Dominican Republic (2023).

<sup>&</sup>lt;sup>4</sup> Government of the Dominican Republic (2022).

<sup>&</sup>lt;sup>5</sup> WHO (2017).

<sup>6</sup> Center for Social and Demographic Studies of the Dominican Republic (2014).

<sup>&</sup>lt;sup>7</sup> Pan American Health Organization (2021)

<sup>&</sup>lt;sup>8</sup> Bloom et al. (2018).

<sup>9</sup> Barcelo et al. (2017).

<sup>&</sup>lt;sup>10</sup> American Academy of Ophthalmology (2016).

<sup>11</sup> Global Burden of Disease Collaborative Network (2020).

services through an integrated services network made up of nine Regional Health Services offices (SRS) responsible for coordinating and supervising facilities. First-level care services are provided through first-level care centers (CPNs), which are made up of primary care units (UNAPs) consisting of a healthcare team (physician, nurse, health promoters) serving a maximum of 750 families, mainly the population enrolled with the National Health Insurance Authority (SENASA). Lastly, the role of the Program to Supply Essential Medicines and Office of Logistical Support (PROMESE-CAL) is responsible for the purchase, distribution, and outpatient dispensation of essential medicines included in the Essential Medicines List (see optional link 5).

1.4 **Health sector response to chronic NCDs.** The country's main strategy to prevent and manage hypertension and diabetes at the primary care level is the HEARTS program, an initiative launched by the World Health Organization (WHO) to support countries<sup>16</sup> in reducing the risk of cardiovascular diseases through prevention, detection, and standardized treatment protocols for hypertension and diabetes at the first level of care. The HEARTS strategy includes: (i) healthy-lifestyle counseling for patients: 17 (ii) standardized evidence-based treatment protocols; (iii) training and updating of healthcare personnel on blood pressure measurement and risk-based cardiovascular disease management; and (iv) access to essential medicines and technologies. 18 By May 2024, 29% (621) of UNAPs were implementing the HEARTS model, with the greatest progress in the Enriquillo (46%), Norcentral (40%), and Metropolitano (31%) regions. An expansion is planned to 80%19 of UNAPs nationwide. Based on the most recent assessment of the HEARTS strategy, the Dominican Republic is at level 2 out of 5 on the Maturity Index (level 1, initial; level 5, mature).20 Continuity of care and follow-up were scored the highest, while the areas of greatest weakness were: (a) diagnosis, due to the lack of validated automated devices at the CPNs evaluated; and (b) task shifting, which involves measurement and patient follow-up by a non-physician health worker.<sup>21</sup> The SRS<sup>22</sup> with the lowest performance scores

SRS are the regional branches of the SNS, i.e., they are deconcentrated public entities of the SNS.

SENASA provides insurance to those affiliated with the subsidized system, which includes self-employed workers with incomes below the national minimum wage, the unemployed, and other vulnerable populations. Article 7, Law 87-01.

Legally incorporated institution attached to the MISPAS, established for the purchase and provision of pharmaceuticals and supplies for the SNS, as well as outpatient prescriptions through the State-owned pharmacies network Farmacias del Pueblo, which has 636 pharmacies nationwide. <u>Decree 168-13</u>, Article 3.

<sup>15</sup> The products recommended for HEARTS are acquired by PROMESE-CAL and distributed monthly to the SRS branches and Farmacias del Pueblo.

The HEARTS technical package has six modules to strengthen management of NCDs at primary care facilities https://www.paho.org/en/hearts-americas/hearts-americas-technical-package.

<sup>17</sup> See HEARTS package module <a href="https://iris.paho.org/handle/10665.2/50805">https://iris.paho.org/handle/10665.2/50805</a>, which presents behavioral risk factors.

<sup>&</sup>lt;sup>18</sup> The HEARTS package requires continuous availability of 13 medicines, including insulin.

<sup>&</sup>lt;sup>19</sup> There are a total of 2,174 UNAPs, of which 1,807 are managed by the SNS.

<sup>&</sup>lt;sup>20</sup> MISPAS (2023). Maturity Index for implementation of the HEARTS strategy in the Dominican Republic.

<sup>&</sup>lt;sup>21</sup> MISPAS (2023).

There are nine SRS in the Dominican Republic: Metropolitano, Valdesia, Norcentral, Nordeste, Enriquillo, Este, El Valle, Cibao Occidental, and Cibao Central.

were Norcentral, Cibao Central, Este, and Valdesia. In January 2024, the authorities announced implementation of a program<sup>23</sup> to provide hypertension and diabetes medications free of charge to the population enrolled with SENASA.

- The main challenges for ensuring comprehensive treatment of chronic 1.5 NCDs include: (i) insufficient investment in primary care leading to inefficient spending: total health expenditure equates to 4.9% of GDP in the Dominican Republic, which is among the lowest in Latin America and the Caribbean (8.6%).<sup>24</sup> Although 53% of that spending was allocated to curative care, just 3% was invested in health promotion and preventive care, compared with 4.6% on average for Latin America and the Caribbean.<sup>25</sup> In 2023, 13% of hospitalizations and 17% of emergency visits in the public network were for diabetes and hypertension,<sup>26</sup> which are largely preventable and costly for the system;<sup>27</sup> (ii) deficiencies in the case resolution capacity of CPNs due to high turnover and poor training of healthcare professionals,28 which affects isolated or rural zones, shortages of drugs and medical supplies, inadequate infrastructure, and lack of equipment;29 (iii) a fragmented information system that is not interconnected;30 and (iv) lack of a financing model that ensures continuous availability of medicines for those diseases, 31 as well as a lack of evidence and information for decision-making.
- 1.6 Gender and diversity gaps in prevention and management of chronic NCDs. The prevalence of risk factors varies by gender: 67% of women are overweight or obese, compared with 58.7% of men, while 32.8% of men consume excess alcohol versus 7.2% of women; it is estimated that 14.7% of men use tobacco products compared with 6.8% of women.<sup>32</sup> Although there is no gender difference in the prevalence of hypertension, men are more likely to go undiagnosed or untreated.<sup>33</sup> Certain risk factors also have a significant impact on persons with disabilities. For instance, 66.3%<sup>34</sup> of the population with disabilities report difficulties participating in sports and recreational activities. Thus, policy strategies are required that consider the unique needs of women, men, and persons with disabilities in order to effectively address risk factors and prevent chronic NCDs in those populations. The lack of data reflecting those determinants impedes efforts to address chronic

<sup>&</sup>lt;sup>23</sup> The Dominican Republic updated the <u>Essential Medicines List</u> in April 2024, adding medicines to treat hypertension and diabetes.

<sup>&</sup>lt;sup>24</sup> WHO Global Health Expenditure database (2024).

<sup>25 &</sup>lt;u>Ibid (2019)</u>.

<sup>&</sup>lt;sup>26</sup> SNS (2023).

More efficient public health expenditure could increase life expectancy by 6.7 years (Goyeneche et al., 2023).

<sup>&</sup>lt;sup>28</sup> A total of 67% of human resources were nursing assistants, medical interns, or health promoters.

<sup>&</sup>lt;sup>29</sup> Just 54% of UNAPs have access to family and population data for the territory. Of 1,348 public centers, just 328 are authorized and 15 have a current authorization. MISPAS (2022a).

<sup>30</sup> The patient registration process is manual and is not standardized. Plenitud Foundation, 2022.

<sup>&</sup>lt;sup>31</sup> In 2018, 37.5% of households paid out of pocket for drugs to treat diabetes and hypertension.

WHO (2023). Age-standardized estimated prevalence of smoking among those aged 15 years or more: Year 2021.

A total of 68% of men go untreated compared with 54% of women. MISPAS (2024) and Pan American Health Organization (2021b).

<sup>&</sup>lt;sup>34</sup> Consolidated System of Beneficiaries (SIUBEN) (2018).

NCDs by identifying gender gaps and gaps for persons with disabilities and responding in a timely manner. For this reason, a diagnostic assessment of existing challenges is crucial. Although the government has incorporated a gender perspective in its healthcare policies and strategies, a diagnostic assessment of this problem and of the challenges faced by persons with disabilities will provide data for informed decision-making to address those differences effectively and equitably by developing inclusive policies focused on the needs of the various population groups (see optional link 6).

- 1.7 Low coverage of interventions to reduce risk factors for chronic NCDs. The capacity of first-level services to diagnose overweight and obesity in the at-risk population and to provide nutritional services is limited due to the lack of adequate equipment and trained personnel to measure, weigh, and provide nutritional counseling.<sup>35</sup> The MISPAS has developed strategies like the Saludable y Sabroso (SALSA) dietary guidelines<sup>36</sup> and the Food Systems-based Dietary Guidelines<sup>37</sup> (GABSA) to promote balanced diets among the population. However, they have not yet been implemented due to their relatively recent release and the lack of funding for the design of materials and training. Additionally, while progress has been made in tracking the height and weight of children under 5, there is no system for monitoring the population ages 6 to 18, which prevents early risk identification and intervention. This situation, combined with the low coverage of educational campaigns for the population or community strategies, limits the coverage of these interventions.<sup>38</sup>
- 1.8 Limited capacity to detect, diagnose, and prevent NCD complications in the first level of care. In the Dominican Republic, 53% of people with hypertension are undiagnosed, 61% are untreated, and just 57% continue with partial treatment.39 It is also estimated that 34% of diabetics are undiagnosed and 40% are untreated,40 leaving a significant portion of the population exposed to complications from those diseases. Challenges include: (i) low level of detection and screening of persons at risk for chronic NCDs in the communities;41 (ii) lack of updated information on the population registered with UNAPs due to low coverage of the household survey; (iii) lack of equipment and medical supplies so that CPNs, UNAPs, and diagnostic centers (DxCs) can conduct diagnostic tests for chronic NCDs according to clinical guidelines. None of the CPNs have automatic blood pressure monitoring devices. Despite the fact that diagnosis and clinical monitoring of diabetes in the Dominican Republic at the first level of care requires a glycosylated hemoglobin (HbA1c) test, currently patients who require that service have to be referred to DxCs<sup>42</sup> or hospitals, which delays diagnosis, particularly for those in remote areas. For example, 49% of CPNs in the Enriquillo region are hard

<sup>&</sup>lt;sup>35</sup> Of 248 nutritionists on staff with the SNS, just 15% work in the first level of care.

<sup>&</sup>lt;sup>36</sup> SALSA promotes healthy eating habits with a focus on Dominican culinary culture.

<sup>&</sup>lt;sup>37</sup> The purpose of <u>GABSA</u> is to provide technical nutritional recommendations that are specific to the national context and the epidemiological profile of the Dominican population.

<sup>&</sup>lt;sup>38</sup> Propuesta para la implementación de la estrategia de atención primaria y PNA en el Seguro Familiar de Salud. Superintendency of Health and Labor Risks, 2018.

<sup>39</sup> Diez Pérez (2021).

<sup>&</sup>lt;sup>40</sup> Government of the Dominican Republic (2021).

<sup>&</sup>lt;sup>41</sup> There is a gap in trained promoters equipped to cover the demand for these services.

<sup>&</sup>lt;sup>42</sup> In all, 82% of DxCs lack equipment to measure HbA1c (SNS analysis).

to reach. Equipped DxCs keep a manual log of results, which delays the start of treatment. Lastly, (iv) untrained healthcare personnel and limited task shifting results in the referral of patients to the second level of care.

- Weaknesses in the supply chain of medicines and supplies for chronic 1.9 NCDs.43 Access to HEARTS medicines is insufficient, and supply to ensure availability is limited. In 2024, just 31% of the 636 Farmacias del Pueblo<sup>44</sup> operate with the HEARTS strategy, i.e., they have information systems to track patients and a stable drug supply. In addition, 30% of prioritized CPNs face limitations in supply from the SRS and in their own storage and dispensation capacity (see optional link 7). In 2023, a shortage of hypertension medications was reported in seven of nine SRS and most warehouses issued an alert on insulin availability (less than one month of inventory),45 which is considered sufficient,46 This was due to the lack of adequate processes for quantification and forecasting of needs, as well as insufficient storage capacity in the SRS, in PROMESE-CAL, and in the CPNs. The most significant gaps are: (i) lack of storage, loading, and temperature control equipment; (ii) limitations on security and warehouse capacity in physical warehouse facilities; (iii) problems with medication logistics and transport due to low transport capacity and disruptions in the cold chain during transport; and (iv) manual processes for CPN medication requirements.<sup>47</sup>
- 1.10 Information system challenges at the first level of care. The first level of care has an information system developed by the SNS. However, its implementation is limited. While 73% of CPNs report information, most use paper forms that are then digitized at the regional level. One significant shortcoming is the lack of integration of the information system with DxC and hospital systems, which complicates follow-up on patient diagnoses, referrals, and counter-referrals. Using the Scorecard tool,48 areas of strengthening were identified to enhance efficiency and the quality of care for users of the system, including: (i) gaps in clinical functionality. such as chronic patient management, which prevents patient follow-up per the HEARTS protocol; (ii) gaps in information security and usability, which justifies a thorough review to improve the information system; (iii) redesign of architecture; and (iv) strengthening of technology infrastructure and process optimization. There are also gaps in regulatory frameworks to enable digital health services. Existing regulations on the secondary use of data and patient rights to their own information lack clear definitions related to cybersecurity, electronic clinical history, and telehealth, and the national digital health strategy is under development.49
- 1.11 **Programmatic approach in health.** For 15 years, the Bank has provided support to improve the efficiency, effectiveness, and quality of health services in the Dominican Republic, helping to strengthen the sector both in terms of governance

<sup>44</sup> PROMESE-CAL (2024). For a list of Farmacias del Pueblo, click here.

<sup>&</sup>lt;sup>43</sup> GIS (2024).

None of the nine regional warehouses reported three months of inventory or more than five products necessary for managing hypertension and/or diabetes according to the HEARTS protocol.

<sup>&</sup>lt;sup>46</sup> Integrated Management System for Medicines and Supplies (SUGEMI) as of May 2024.

<sup>&</sup>lt;sup>47</sup> Just 8% of CPNs fulfill their SUGEMI requirements electronically.

<sup>&</sup>lt;sup>48</sup> Based on international standards and profiles <a href="https://socialdigital.iadb.org/es/sph/resources/kits-de-herramientas/19002">https://socialdigital.iadb.org/es/sph/resources/kits-de-herramientas/19002</a>.

<sup>49</sup> https://socialdigital.iadb.org/en/sph/dashboard.

and service delivery. Through operations 3585/OC-DR and 3382/OC-DR, the Bank contributed to the separation of the sector's functional governance structure (responsibility of the Ministry of Health) and service delivery, resulting in the creation of the SNS, as well as the reorganization of service delivery under a new care model based on integrated networks with a focus on primary care, under which this operation will operate. The Bank has also placed special emphasis on strengthening primary care services and on improving access to quality health care, especially for chronic NCDs and mother and child health care. With that goal in mind, operations between 2009 and 2020 helped improve the quality of primary care services by authorizing CPNs, training healthcare professionals in clinical management and administration, and promoting the use of information for decision-making. Moreover, 2973/OC-DR and 3207/OC-DR focused on improving treatment of chronic NCDs in the SRS by promoting performance incentives.51 Lastly, GRT/MM-17254-DR and GRT/MM-17255-DR strengthen epidemiological detection and surveillance capabilities in the first level of care. This operation is consistent with the Bank's prior support in the sector and contributes to the development of health systems based on curative primary care by: (i) consolidating the information system for the first level of care and its interconnection with other systems; (ii) strengthening the human resources strategy in health care through policies on training, planning, retention, and distribution; (iii) improving the quality of chronic NCD services at the first level of care; and (iv) conducting and updating the household survey digitally and updating the service delivery model, both as part of the Bank's prior support.

1.12 Project strategy. In order to address these challenges, the project, which is aligned with the National Strategic Health Plan 2030 and with the IDB's programmatic sector approach (paragraph 1.11), will focus on expanding the coverage of interventions for prevention of risk factors and strengthening of primary care for those with hypertension and/or diabetes in each phase of the disease cycle (prevention, diagnosis, and treatment), particularly in the most atrisk groups (children and adolescents, poor and vulnerable population, persons with disabilities) in the priority areas<sup>52</sup> covered by the HEARTS model with a strengthened package. Paragraphs 1.14-1.19 detail the interventions that will be this operation to address financed by the problems identified paragraphs 1.5-1.10. International evidence shows that a focus on primary care services in the context of an integrated network of providers increases prompt access to quality services and facilitates the continuity of care across providers and levels of care (see optional link 9). Most interventions for health promotion and prevention of risk factors will be implemented in all regions. However, only the community strategies will be applied in the following SRS regions: Metropolitano, Enriquillo, Este, and Cibao Central. Strengthening of human resources and improvements in the information system, as well as generation of evidence, will benefit the entire country (optional link 8.)

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<sup>&</sup>lt;sup>50</sup> 2176/OC-DR, 2426/OC-DR, 2623/OC-DR, 2733/OC-DR, and 2972/OC-DR.

The project completion report for 2973/OC-DR can be found at <a href="https://www.iadb.org/es/proyecto/DR-L1067">https://www.iadb.org/es/proyecto/DR-L1067</a>, and the project completion report for 3207/OC-DR is in preparation.

<sup>&</sup>lt;sup>52</sup> Prioritization criteria for the areas of intervention include elevated rate and prevalence of chronic NCDs (%), level of poverty, and low level of maturity of the HEARTS strategy.

- 1.13 Value added of the Bank. The Bank's value added for this project includes innovative digital solutions and tools, as well as experience implementing actions to strengthen the primary care system, which will be reflected in the scaling of the HEARTS strategy. At the regional level, one example of network management is 2788/OC-AR, where services at the first level of care were improved for patients with chronic NCDs through (i) strengthening of the service networks at the first level of care; and (ii) logistics management of pharmaceutical networks for chronic NCDs, the lessons of which are being applied to the program. The Bank will also contribute knowledge acquired related to health promotion and prevention activities at the local level in the Dominican Republic. Lastly, the Bank has experience adapting digital health tools to promote good habits, like the "Pilas" program, electronic prescriptions for patients, and the diagnosis of diabetic retinopathy.
- 1.14 Interventions to improve health promotion and prevent NCD risk factors. In order to reduce knowledge gaps and promote healthy habits in the population, a national communication strategy via mass media for the prevention of chronic NCDs will be financed. Those efforts will be strengthened with a digital services tool for the prevention of risk factors using behavioral design.53 The national campaign will be complemented by community projects and behavioral strategies in prioritized municipios54 with a life course and gender perspective. The project will address limited access to nutritional services by financing, equipping, and training healthcare personnel in nutritional counseling and the prescription of physical activity, with an emphasis on nutritional surveillance for children and adolescents. This will permit prompt diagnosis of cases of poor nutrition, including overweight and obesity. The project will also help close gaps in access by persons with disabilities by designing and implementing a health promotion model with an emphasis on that population. The model will include a diagnostic assessment of barriers, nutritional guidelines for the school-age population with disabilities, and personnel training.
- Interventions to strengthen the capacity to detect, diagnose, and manage chronic NCDs. In order to reduce detection and diagnosis gaps, community screening actions will be financed that generate updated information on the epidemiological profile of the population, such as design of a database platform and electronic tablets for community screening. At the same time, support will be given to help reduce diagnostic limitations by financing medical equipment and supplies. Lastly, in the area of detection actions, the project will finance the gradual expansion of HEARTS (see paragraph 1.3) to 1,673 UNAPs (77% of the total) with a strengthened package. Pilot interventions will also help improve the efficacy of sample collection in remote areas, as well as facilitate prompt detection and treatment through telediagnosis and teleconsultation (see optional link 4, List of interventions).
- 1.16 Interventions to strengthen the supply chain of medicines and supplies for chronic NCDs. In order to reduce challenges in the provision of medicines and supplies for chronic NCDs, the Bank will finance the strengthening of the drug

https://blogs.iadb.org/salud/es/ponerse-las-pilas-contra-la-prediabetes-3-lecciones-sobre-behavioral-design/.

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<sup>&</sup>lt;sup>54</sup> Includes activities such as training circuits or other activities designed to encourage community participation.

forecasting process, as well as installation of the Information System for Logistics Management of Drugs and Medical Supplies in CPNs<sup>55</sup> of the SRS that do not have the system. The project will help reduce gaps in storage capacity through actions aimed at ensuring good practices in inventory management, improving storage and distribution capacity in the warehouses of SRS and PROMESE-CAL, and dispensation capacity in CPNs through the procurement of furniture and equipment, as well as physical upgrades to warehouse facilities. The project will also help improve medicine distribution through a vehicle fleet suitable for medication transport (see optional link 7).

- Interventions to strengthen the information system in the first level of care. In order to reduce the challenges in information security, architecture, infrastructure, and information system processes, actions will be financed for their optimization, 56 including diagnostic assessments and proposed upgrades that will enhance interoperability with other information systems, governance, the secondary use of data for healthcare decision-making, report generation, dashboards, and stronger cybersecurity. Those investments support the country by preparing it to connect to the Pan American Highway for Digital Health. 57 Actions will also be financed to reduce gaps in the analysis and secondary use of information by procuring the equipment needed to use the system (hardware) and building capacity for use of the system and reporting among CPN users.
- Interventions to strengthen the human resources policy in health care, governance, and financing and supply mechanisms for medicines to treat chronic NCDs. In order to reduce the gaps in the availability of healthcare professionals in isolated or rural areas, diagnostic studies will be financed to identify actions that incentivize retention. The project will also develop strategies that strengthen the financial forecasting and planning capacity for HEARTS medications, the inventory information system, and nominal dispensation by the Farmacias del Pueblo prioritized for HEARTS. Updating, implementation, and dissemination of strategic plans and protocols for the prevention and control of chronic NCDs will also be included.
- 1.19 In order to close the gaps in training and health management capacities and the lack of information and evidence on chronic NCDs, the project will finance actions focused on training healthcare personnel in areas such as health research, management of chronic NCDs, and data mining, as well as activities focused on generating and collecting information on risk factors and the prevalence of diabetes and hypertension through national health surveys and the STEPS survey,<sup>58</sup> thus helping to improve health management. In order to produce evidence related to chronic NCDs, research studies will be financed on barriers to

56 The dimensions of the IDB's digital house are being applied to ensure balanced and sustainable

<sup>&</sup>lt;sup>55</sup> CPNs without electricity or connectivity are excluded.

investments: <a href="https://publications.iadb.org/es/la-gran-oportunidad-de-la-salud-digital-en-america-latina-y-el-caribe">https://publications.iadb.org/es/la-gran-oportunidad-de-la-salud-digital-en-america-latina-y-el-caribe</a>.

<sup>&</sup>lt;sup>57</sup> The Pan American Highway for Digital Health is an initiative led by the IDB, PAHO, and the region's countries to facilitate the secure, efficient, and interoperable exchange of health data, enabling individuals to share and obtain access to their health information. This initiative leverages investment by the countries to accelerate interconnectedness in the region.

<sup>&</sup>lt;sup>58</sup> The STEPwise method of the WHO is used for surveillance of risk factors and NCDs https://iris.who.int/handle/10665/43580.

- access, determinants, and interventions for those diseases, as well as actions to improve the recording and analysis of chronic NCD data.
- 1.20 Synergies with other operations. Synergies were identified with the Program to Improve Connectivity for Digital Transformation in the Dominican Republic (5297/OC-DR), which will bring connectivity to prioritized CPNs in order to scale HEARTS, making it possible to reduce the investment in technology infrastructure upgrades, and with the IDB Lab and IDB Invest program MEDS: Open Innovation for Primary Care and Predictive Diagnostics (SP/OC-22-46-DR and ATN/OC-19790-DR) in implementing innovative digital solutions for telediagnosis, such as for diabetic retinopathy, as well as the development of ecosystems that promote investment in the health sector, especially for chronic NCDs.
- 1.21 Work coordinated with other donors. Areas of complementarity with World Bank support were identified for strengthening the first level of care, such as the authorizing of 255 CPNs in its <a href="Program to Support the Strengthening of the National Health System P180349">P180349</a> and the scaling of HEARTS in this project, as well as ensuring the interoperability of information subsystems. There is also complementarity with operations of the Japan International Cooperation Agency, which is supporting the HEARTS strategy in the Nordeste region, and with the areas of equipment procurement, training, and good practices. Lastly, this project falls in the framework of the <a href="Alliance for Primary Health Care in the Americas">Americas</a> between PAHO, the IDB, and the World Bank.
- 1.22 **Lessons learned.** The relevant lessons learned from <u>2733/OC-DR</u> and <u>3207/OC-DR</u> that are reflected in this new operation include the following. For the proposed execution mechanism (see paragraph 3.1): (i) it is important to have effective execution and interagency coordination mechanisms in place that involve the beneficiaries starting with the design phase of the project in order to prevent procurement and contracting delays. For Components 1 and 2: (ii) it is important to focus on digital health and on an information system that permits tracking of the patient from the first level of care to specialized care. In identifying risks and mitigation measures such as preparation of market studies: (iii) it is important to anticipate delays in the procurement of medical supplies and key equipment such as glucose meters, test strips, and blood pressure monitors, with an understanding of market barriers.
- 1.23 **Strategic alignment.** The project is consistent with the IDB Group's Institutional Strategy: Transforming for Scale and Impact (CA-631) and is aligned with the objective of reducing poverty and inequality, given that it seeks to improve the prevention and management of chronic NCDs, which have a greater impact on vulnerable groups. The project is also aligned with the following operational focus areas: (i) gender equality and inclusion of diverse population groups; (ii) institutional capacity, rule of law, and citizen security; and (iii) social protection and human capital development.
- 1.24 It is aligned with the IDB Group Country Strategy with the Dominican Republic 2021-2024 (GN-3084) in the strategic objective of "Improve the efficiency, quality, and coverage of health services," with the expected result of "First level of care strengthened," and because it aims to achieve "equal rights and opportunities, such as universal access to health care and social security." It is consistent with the Health Sector Framework Document (GN-2735-12) inasmuch as it will "improve the organization and quality of healthcare service delivery." It is also

- aligned with the talent pillar of the Employment Action Framework with a Gender Perspective (GN-3057).
- 1.25 Gender equality and inclusion of diverse population groups. The project will help close gender gaps by: (a) conducting a diagnostic assessment of gender to address risk factors and chronic NCDs in the life course, focusing on the determinants of obesity and overweight for women and excess alcohol consumption and tobacco use for men (paragraphs 1.14 and 1.19); and (b) outreach campaigns and behavioral change in the community for health promotion to address chronic NCDs with a gender perspective (paragraph 1.14). In terms of diversity, the project will focus on persons with disabilities by reducing barriers to prompt diagnosis and treatment through: (a) an outreach strategy for health promotion and the prevention of risk factors for chronic NCDs, which will include the definition of content and a strategy for the approach and dissemination (paragraph 1.14); and (b) the design of an inclusive nutritional guide for the life course and its dissemination, the production of materials, and training in healthy eating habits for school-age persons with disabilities (paragraph 1.14) with the goal of reducing obesity through nutrition (paragraph 1.30). See optional link 6.
- 1.26 **Government strategy.** The program is aligned with the <u>Strategic National Health Plan 2030</u> and with the <u>Multiyear National Public Sector Plan 2021-2024</u> by supporting implementation of the Primary Care Strategy, improvement in access to essential medicines, and strengthening of health prevention and promotion services. It is further aligned with <u>Digital Agenda 2030</u>, which promotes the digital transformation of the national healthcare system to improve quality and expand coverage.
- 1.27 **Paris alignment.** The operation has been analyzed using the <u>Joint MDB Assessment Framework</u> for Paris Alignment and the <u>IDB Group Paris Alignment Implementation Approach</u> (GN-3142-1), and it is deemed to be: (i) aligned with the adaptation objective of the Paris Agreement; and (ii) universally aligned with the mitigation objective of the Paris Agreement.
- 1.28 Climate finance. An estimated 1.91% of the operation's resources are invested in adaptation to climate change activities, according to the joint methodology of the multilateral development banks for tracking climate finance inasmuch as financing will be provided to prepare contingency plans for hydrometeorological events affecting warehouses. This includes a vulnerability assessment, proposed measures to increase infrastructure resilience, and personnel training.

## B. Objectives, components, and cost

- 1.29 The general objective of the project is to improve the health of the population in the Dominican Republic through the promotion of health and the prevention and management of chronic noncommunicable diseases (NCDs), with an emphasis on diabetes and hypertension. The specific objectives are: (i) to help reduce the prevalence of risk factors for chronic NCDs by expanding the coverage of interventions to promote healthy habits and prevent risky behaviors; and (ii) to improve the care network for prompt diagnosis, treatment, and management of chronic NCDs.
- 1.30 Component 1. Strengthening of the strategy for health promotion and prevention of risk factors for chronic NCDs (US\$8,000,000). This component will finance expansion of coverage of interventions for nutritional surveillance and

counseling, physical activity, and prevention of risky behaviors in priority areas by: (i) strengthening the height and weight surveillance system with protocols for children ages 6-18; (ii) training healthcare personnel in nutritional counseling and healthy eating strategies (SALSA and GABSA), along with prescribing physical activity (see paragraph 1.7); (iii) implementing outreach and behavioral change campaigns in the community for health promotion related to chronic NCDs with a gender perspective; (iv) establishing cross-sector municipal roundtables on health to define community interventions; (v) conducting a gender diagnostic assessment to address risk factors and chronic NCDs over the life course (see paragraph 1.25); (vi) designing and implementing an inclusive outreach strategy for health promotion and prevention of risk factors for persons with disabilities, as well as designing an inclusive nutritional guide for the life course and its dissemination (see paragraph 1.25); and (vii) developing and implementing a digital tool for health promotion that includes alerts, digital tracking, maintenance, monitoring, and materials.

- 1.31 Component 2. Improvement of the healthcare network for prompt diagnosis, treatment, and management of chronic NCDs (US\$29,000,000). This component will finance measures to strengthen the detection, prompt diagnosis, and access to quality treatment for chronic NCDs.
- 1.32 Subcomponent 2.1. Access to prompt diagnosis and management of chronic NCDs at the primary care level. This component will finance actions to improve the detection, diagnosis, and secondary prevention of complications in patients with hypertension and/or diabetes by: (i) providing support for the implementation and scaling of the HEARTS strategy by means of a needs assessment, training for healthcare personnel, provision of medical and computer equipment, printing of educational materials, and a strengthened package that includes validated equipment, printed materials and clinical guidelines, and supplies; (ii) expanding diabetes diagnosis capabilities at CPNs and DxCs through the purchase of equipment and medical supplies and the transport of samples; (iii) strengthening supervision and monitoring actions; (iv) designing and implementing two telediagnosis pilots for diabetes and/or hypertension; (v) carrying out community screening actions for the at-risk population not using healthcare services, particularly men; and (vi) creating and updating the registry of the population enrolled in the first level of care in prioritized regions, which will include analysis and updating of the household survey, as well as the design of a digital application for data capture and analysis.59
- 1.33 Subcomponent 2.2. Strengthening of the supply chain of medicines and supplies for chronic NCDs. This component will finance actions to ensure prompt access to the medicines and supplies necessary to treat and manage chronic NCDs by: (i) strengthening the medicine and supplies logistics system in prioritized CPNs through operational planning, training, and computer equipment, including a list of priority medical devices for chronic NCDs, and procurement of computer equipment and the design of an expansion plan for the logistics system; (ii) improving medicine storage, logistics, distribution, and dispensation capacity in the SRS, CPNs, and PROMESE-CAL, including minor infrastructure (see

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Digital investments under Component 2 apply the six dimensions of the digital house, including diagnostic assessments and investments with a focus on ensuring cybersecurity.

- paragraph 2.2), equipment, improvements in the information system, furniture, shelving, personnel training, temperature control equipment, security equipment, and procurement of transport vehicles; (iii) providing support for planning for purchases of medicines and supplies for chronic NCDs; and (iv) providing technical consulting services to develop a contingency plan for emergencies and disasters affecting those warehouses.
- 1.34 Subcomponent 2.3. Improvement in the information system for the first level of care and digital solutions for the patient/user. This subcomponent will finance actions to improve the management and quality of health information from the first level of care for decision-making by: (i) reengineering the information system through the diagnostic assessment and improvements in processes for capturing information, interoperability, and dashboards for decision-making; (ii) implementing the enhanced information system in the prioritized CPNs through procurement of computer equipment, connectivity, training, and change management; and (iii) standardizing and defining the reporting process for information required on chronic NCDs in the first level of care, which will include the processing of report analyses, training, and data audits.
- 1.35 Component 3. Strengthening of coordination of health system functions to address chronic NCDs (US\$8,000,000). This component will finance studies, surveys, and training to develop strategies for improving areas such as human resources in health care, management and financing of care for chronic NCDs, and information for decision-making.
- 1.36 Subcomponent 3.1. Strengthening of the financing model, human resources in health care, and management of services and medicines for chronic NCDs. This subcomponent will finance studies and strategies to improve healthcare management, development of human resources in health care, efficient spending, and access to medicines for chronic NCDs, including: (i) studies to improve the processes of distribution and retention of healthcare professionals for chronic NCDs; (ii) design of a nursing specialization for the first level of care; (iii) a plan to supply medicines and supplies for chronic NCDs through improvement in planning capacity and financial forecasting for HEARTS medications, computer equipment, and training for Farmacias del Pueblo; and (iv) updating of the framework document for the network care model, and a healthcare map showing supply and demand for chronic NCD services.
- 1.37 **Subcomponent 3.2. Generation of evidence, monitoring, and chronic NCD health indicators.** This subcomponent will finance the generation of evidence and information on chronic NCDs such as: (i) national health surveys at both the household and healthcare center level using <a href="STEPS">STEPS</a>; (ii) health research studies on chronic NCDs; (iii) development of an annual training plan for health research, economic evaluations, and data analysis; and (iv) design of a national diabetics registry.
- 1.38 **Project management, audit, monitoring, and evaluation (US\$5,000,000).** This component will finance the operating and administrative expenses of the co-executing agencies, including incentives for key personnel such as the project coordinator and technical specialists supporting the components at the co-

executing agencies to work full-time on the program, 60 and evaluations and audits of the program.

## C. Key results indicators

- 1.39 **Expected results.** The project is expected to have a favorable impact on reducing premature mortality caused by cardiovascular diseases and diabetes, as well as on reversing the growth trend in the prevalence of diabetes and hypertension in the adult population and in the risk factors for overweight and obesity. 61 The first expected result is a reduction in the risk factors for chronic NCDs by expanding the coverage of interventions to promote healthy habits, which is verifiable through the following key indicators: (i) percentage of at-risk individuals who receive nutritional counseling; (ii) number of CPNs that implement nutritional surveillance for children ages 6 to 18; and (iii) percentage of people with hypertension and/or diabetes who receive a meal plan that follows the guidelines. The second expected result is improvement in the care network for prompt diagnosis, treatment, and management of chronic NCDs, which is verifiable through the following key indicators: (i) number of adults with diagnosed hypertension and/or diabetes disaggregated by gender; (ii) percentage of patients with controlled hypertension; and (iii) the percentage of CPNs and Farmacias del Pueblo with a supply of HEARTS tracer drugs (see Annex II, Results Matrix).
- 1.40 **Beneficiaries.** In general, the proposed interventions will benefit an estimated one million people over 18 years of age<sup>62</sup> with hypertension and/or diabetes who remain undiagnosed and/or do not have continuous access to treatment by expanding the HEARTS strategy to 77% of the country's UNAPs. For these interventions, the priority was to start with the poorest regions (Enriquillo, El Valle, and Cibao Occidental) and gradually incorporate others until coverage was expanded to all nine of the country's health regions. The project is also expected to benefit the population in general through educational campaigns, digital services, and behavioral change strategies to encourage adoption of healthy habits. The community-based strategies will be carried out in 10 municipios in the SRS regions of Metropolitano, Enriquillo, Este, and Cibao Central (see paragraph 1.12). Lastly, nutritional surveillance for children ages 6 to 18 will be implemented in 155 CPNs (one per municipio in the country).<sup>63</sup>
- 1.41 **Economic analysis.** The cost-benefit analysis considers the project costs (including future maintenance costs) and two main benefits: (i) reduction in premature mortality caused by cardiovascular diseases and diabetes due to better control of diabetes and hypertension; and (ii) a reduction in risk factors for development of chronic NCDs. Benefits were measured in terms of years of life lost and disability-adjusted life years and were monetized in terms of specific

Over the past 10 years, these indicators have been rising. The rate of annual growth is 1.6% for overweight and obesity, 2.9% for diabetes, and 0.5% for hypertension, based on data from the WHO. The project seeks to halt growth in these indicators and begin to reduce them.

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To be considered on a case-by-case basis and will require the Bank's prior authorization. A marginal incentive is considered for specified personnel that will not exceed the salary percentage stipulated in national regulations and that complies with recurrent cost policies (see Annex III).

<sup>&</sup>lt;sup>62</sup> Estimate based on the poorest segments of the population (quintiles I and II) in SIUBEN over age 18, a diabetes prevalence of 12%, a hypertension prevalence of 33%, and expected coverage by the intervention of 77%.

<sup>63</sup> Eleven percent of all the CPNs in the country.

opportunity costs for the Dominican Republic.<sup>64</sup> The analysis was made using a time horizon of 2025 to 2035 to capture the cumulative effects on health outcomes. Based on that analysis, it is estimated that by 2035, the project's net present value would be US\$130.5 million, assuming a discount rate of 3%.<sup>65,66</sup> The estimated internal rate of return for the project is 49.7%. The internal rate of return is high despite the fact that the benefit calculations are conservative because cardiovascular diseases are one of the main causes of mortality in the working-age population. Therefore, the HEARTS strategy interventions are considered cost-effective.<sup>67</sup> The results are robust to a probabilistic sensitivity analysis of the key parameters (see optional link 1, Ex Ante Economic Analysis).

#### II. FINANCING STRUCTURE AND MAIN RISKS

# A. Financing instruments

2.1 This operation is a specific investment loan because it has a fully defined scope and the components cannot be separated without affecting the logic of the project. The total cost of the investment program is US\$50,000,000, which will be financed by the Bank with a charge against the Ordinary Capital resources, as shown in Table 2.1. The execution and disbursement period will be five years. This period may be extended by mutual agreement, in writing, by the Bank and the Dominican Republic.

Table 2.1 Estimated program costs (US\$000)

Components	IDB	%
Component 1. Strengthening of the strategy for health promotion and prevention of risk factors for chronic NCDs	8,000	16
Training in promotion of healthy lifestyles	1,423	3
Outreach plans for prevention of risk factors	2,046	4
Behavioral change	1,531	3
Digital health services	3,000	6
Component 2. Improvement of the healthcare network for prompt diagnosis, treatment, and management of chronic NCDs	29,000	58
CPN and DxC equipment	3,666	7
Training, materials, and supervision for HEARTS and SUTMER	2,311	5
Family health survey	6,634	13
Telediagnosis pilots	1,032	2
Medicines and supplies logistics system	424	1
Pharmacy equipment	505	1
Warehouse infrastructure upgrades	3,686	7
Storage and distribution equipment	1,203	2
Contingency plan for emergencies	200	0
Training in warehouse practices	257	1

<sup>&</sup>lt;sup>64</sup> Ochalek J. et al. (2018).

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The 3% rate is recommended by the Panel on Cost Effectiveness in Health and Medicine (Basu and Ganiats, 2017) for economic evaluations in health care. This is the average used for the social sector in Latin America and the Caribbean (optional link 1).

<sup>66</sup> In the sensitivity analysis, the net present value remains positive with a discount rate of 12%.

<sup>67</sup> Bloom et al. (2011).

Table 2.1 Estimated program costs (US\$000)

Components	IDB	%
Information system reengineering and training	6,520	13
Connectivity	2,562	5
Component 3. Strengthening of coordination of health system functions to address chronic NCDs	8,000	16
Policies, plans, and strategies	2,096	4
Surveys and research	4,971	10
Training in health research	933	2
Project management, audit, monitoring, and evaluation	5,000	10
Total	50,000	100

Costs by main activity are indicative.

Table 2.2 Disbursement timetable (US\$000)

	Source		Year 1		Year 2		Year 3		Year 4	Year 5	
	Source	%	Amount	Amount % Amount			Amount	% Amount		%	Amount
Ī	IDB	6	US\$2,878	25	US\$12,428	34	US\$17,086	20	US\$10,055	15	US\$7,553

#### B. Environmental and social risks

2.2 According to the Environmental and Social Policy Framework, the program was classified as a category "C" operation since it is expected to have minimal or no adverse environmental or social impacts. The bidding documents for warehouse infrastructure improvements<sup>68</sup> (see paragraph 1.33) will include environmental and social management and occupational health and safety requirements in order to comply with the applicable requirements of the Environmental and Social Policy Framework. See required link 3.

## C. Fiduciary risks

2.3 The Institutional Capacity Assessment Platform (ICAP) was applied in April 2024 to analyze the operational performance of the MISPAS and the SNS, and findings were satisfactory for both executing agencies. The MISPAS has extensive experience implementing Bank-financed projects (Dominican Republic - Regional Initiative to Eliminate Malaria in Mesoamerica and the Dominican Republic DR-G0002 and Program to Support Strengthening of Health Sector Management 3207/OC-DR) and effectively administers operational and financial management policies. However, the need was identified to ensure that the project execution unit has the manuals and operational and technical structure necessary for project management and supervision, and that the Program Operating Regulations include processes related to technical supervision and management. The fact that the SNS does not have prior experience with financial management of Bank-financed projects was identified as a medium-high risk. The ICAP analysis determined that the SNS has the necessary functionalities for effective financial

Minor infrastructure work will be completed on the two existing warehouses owned by SNS, including the Metropolitano SRS, which was built in 2016 with financing from the Global Fund.

<sup>&</sup>lt;sup>69</sup> The MISPAS has had medium-high performance in physical and financial execution and has attained over 75% of expected results in more than 80% of the projects executed in the last three years.

management of the IDB project.<sup>70</sup> However, to mitigate this risk, the SNS should be strengthened with experienced personnel trained in the Bank's policies who are assigned to work full time on the program (see paragraph 3.4), and SNS personnel should be trained in project procurement in accordance with IDB policies.

## D. Other key issues and risks

- 2.4 One high level risk and four medium-high level risks were identified, as follows: (i) Service delivery would be affected by the high turnover of personnel<sup>71</sup> in the UNAPs. This will be mitigated through annual training given to medical and nursing personnel in UNAPs that do not have permanent medical staff; (ii) The lack of health promoters equipped to carry out fieldwork could affect the identification. screening, and enrollment of patients in the household health survey. To mitigate this risk, the household health survey will be outsourced, and screening days will be financed; (iii) If the UNAPs do not have digital equipment for measuring blood pressure because no bids are presented in the bidding process, diagnosis and monitoring will not be conducted according to protocol. To mitigate this risk, an international market study will be conducted to identify vendors; (iv) If the number of patients diagnosed and included in the program exceeds the budget projections of PROMESE-CAL, there could be a medicine shortage, which would affect dispensation. To mitigate this risk, consulting services will be included to support planning and financial forecasting for HEARTS medicines; and (v) If the SRS are not familiar with, or do not prioritize, execution of the project activities agreed upon with the SNS, implementation of the local interventions could be affected. To mitigate this risk, an intra-agency (SNS-SRS) agreement will be included as an execution clause.
- 2.5 Sustainability. The project includes a number of elements that support the technical and financial sustainability of the interventions. The interventions will be conducted with existing healthcare personnel, who will be strengthened through training and improvements in efficiency and effectiveness via task shifting, standardized clinical processes, and simplification of registration and monitoring of first level of care information. Additionally, capabilities will be created in the system to manage and maintain the interventions since they improve the process of supplying medicines and supplies, technical capacities for maintaining equipment are being developed locally, existing information systems for monitoring and tracking are being adapted and made more robust, and management skills related to medication planning and financial forecasting are being developed. In financial terms, the economic analysis included a simple estimate of the costs the country will have to assume once the project ends in 2030 for information technology, equipment maintenance, and medical supplies, which is equivalent to less than 1% of the SNS annual budget. The project will also include studies of sustainable financing structures for medicines and supplies to treat chronic NCDs. which will help ensure coverage over time. Lastly, investments made in diagnostic equipment, electronic equipment, and transport vehicles will be integrated into the existing institutional maintenance plans of the MISPAS and the SNS.
- 2.6 **Scalability.** The project includes elements to build the technical capacity of the MISPAS and the SNS so as to facilitate the scalability of services or areas not

<sup>&</sup>lt;sup>70</sup> SNS ICAP pp. 10-11.

<sup>&</sup>lt;sup>71</sup> Most UNAP personnel are interns working for a maximum of one year.

covered by the project. Firstly, crosscutting interventions are included to incorporate new areas into the project, such as making the information system and supply chain of medicines and supplies more robust. Secondly, the MISPAS and the SNS prioritize UNAPs and CPNs for intervention in all of the SRS, in order to build local capacity for implementing, monitoring, and managing interventions so that any units that are lacking can be incorporated in the future. Lastly, the financing studies to be completed as part of the project will include estimates for coverage of the entire population enrolled in the SNS.

## III. IMPLEMENTATION AND MANAGEMENT PLAN

## A. Summary of implementation arrangements

- 3.1 Execution mechanism. The borrower will be the Dominican Republic, and there will be two executing agencies: (i) the MISPAS will be the lead agency responsible for formulating and updating care regulations and protocols, as well as for implementing health promotion strategies, policies for healthcare professionals, and drug regulation. It will be responsible for executing Component 1 and Component 3 with the Vice Ministry of Health Sector Strengthening and Development (VMFDS) as the fiduciary entity. The Vice Ministry of Collective Health (VSC) will be responsible as the technical leader for coordination with the offices under its control needed to carry out the activities; and (ii) the SNS72 will be responsible for providing healthcare services through the integrated public services network. It will have fiduciary responsibility for executing Component 2 and will coordinate execution of the activities in the nine SRS responsible for coordination and supervision of the facilities in their respective territory. A coordination unit under the MISPAS will be formed to coordinate the actions of the two executing agencies.
- 3.2 Two project execution units will be set up. The first will be under the Office of Sector Operation (DCS) in the VMFDS, and the second will be under the Office of Planning and Development (DPD) of the SNS. The project execution units will develop and present the following to the Bank: the multiyear execution plan and/or annual work plan, procurement plans, semiannual progress reports, financial plans, and other instruments required by the Bank to oversee project execution. The project execution units will have a technical team supported by experts based on specific needs related to project execution. Audits of the project will be contracted and subsequently presented to the Bank by the MISPAS. The responsibilities of the project execution units and other entities involved, along with coordination mechanisms, will be detailed in the Program Operating Regulations.
- 3.3 **Program Operating Regulations.** The detailed policies, procedures, rules, and responsibilities of the executing agencies during the project are defined in the Program Operating Regulations (optional link 3), which establishes the standards and guidelines for all areas of project execution, including programming, execution and financial plan, fiduciary agreements, monitoring, presentation of reports, etc. The Program Operating Regulations also describe the functions and means of coordination between the executing agencies.

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<sup>72</sup> A public institution attached to the MISPAS with legal personality, administrative, financial, and technical autonomy, and own resources.

- 3.4 Special contractual conditions precedent to the first disbursement of the loan. The first disbursement of the loan resources will be subject to fulfillment, to the satisfaction of the Bank, of the following conditions: (i) formation by each co-executing agency of a project execution unit that is exclusively dedicated to the project and has the following personnel: (a) technical coordinator; (b) financial specialist; (c) procurement specialist; (d) monitoring specialist; and (e) a coordination unit member or liaison; (ii) signature of an interagency agreement between the Ministry of Public Health and Welfare (MISPAS) and the National Health Service (SNS) defining the scope and responsibilities of each institution in execution of the project; and (iii) approval of the Program Operating Regulations by both executing agencies under the terms previously agreed upon by the Bank. Those conditions are justified because it would not otherwise be feasible to disburse the resources, which are intended to facilitate and ensure proper execution of the operation.
- 3.5 Special contractual conditions of execution: Prior to disbursement of resources allocated to Component 2: (i) an interagency agreement will have been signed, to the satisfaction of the Bank, between the National Health Service (SNS) and the Program to Supply Essential Medicines and Office of Logistical Support (PROMESE-CAL) defining the roles and respective responsibilities for the project activities; and (ii) an agreement will have been signed between the National Health Service (SNS) and each Regional Health Service (SRS) defining the roles and responsibilities for the project activities.
- 3.6 **Disbursements and financial management.** Frameworks are established for financial management, planning, and supervision of procurement planned for the program. The loan resources may be disbursed to each executing agency through advances of funds, reimbursement of expenditures, or direct payment to the vendor. In the case of advances of funds, disbursements will be based on the program's financial plan covering up to six months. The Bank may make a new advance payment when at least 80% of total funds advanced have been substantiated. The financial review of disbursement requests will be ex post (Annex III).
- 3.7 **Procurement.** Procurement of goods, works, and services financed by the project will adhere to the Bank's procurement policies: Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (GN-2349-15) and Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-15), or those in effect at the time of project execution. To date, no exceptions to the Bank's policies on recognition of expenditures, retroactive financing, or advance procurement have been identified. Annex III presents the general management framework for procurement. Bank supervision of procurement will adhere to the provisions of each procurement plan.
- Audits. The project will be audited by an external audit firm deemed eligible by the Bank. The independent external audit will be commissioned and financed with program resources, pursuant to the procedures, terms of reference, and proposal request that have obtained the Bank's no objection. During execution, the program's audited financial statements will be presented: (i) annually to the Bank, within 120 days after the end of each fiscal period; and (ii) at the end of the project,

no later than 120 days after the final disbursement. Each project execution unit will be audited and will present its audited financial statements to the Bank.

# B. Summary of arrangements for results monitoring

- 3.9 **Monitoring.** In addition to the multiyear execution plan (<u>required link 1</u>) and the procurement plans, the project execution unit will present semiannual progress reports within 60 days of the end of each six-month period (<u>required link 2</u>, monitoring and evaluation plan). The project execution unit will ensure that all relevant administrative information is available to facilitate this review.
- 3.10 **Evaluation.** The borrower will conduct a midterm evaluation of the program's progress of execution by month 30 or when 50% of funds have been disbursed, whichever occurs first, and will present an evaluation report to the Bank within 30 days of completion of that evaluation. A quasi-experimental impact evaluation will be made at the end of the project to estimate the effect of strengthening and expansion of the HEARTS strategy in the prioritized areas on early detection, treatment, and control of hypertension and diabetes. As part of the evaluation, survey information will be used for a baseline, intermediate, and final review of a sample of beneficiary and non-beneficiary UNAPs for comparison purposes. Information collected at those three points in time will be useful for both the impact evaluation and for reporting on program implementation (see required link 2).

Development Effectiveness Matrix										
Summary	DR-L1167									
I. Corporate and Country Priorities										
Section 1. IDB Group Institutional Strategy Alignment										
Operational Focus Areas	-Gender equality and inclusion of diverse population groups -Institutional capacity, rule of law, citizen security -Social protection and human capital development									
[Space-Holder: Impact framework indicators]										
2. Country Development Objectives										
Country Strategy Results Matrix	GN-3084	"Improve the efficiency, quality, and coverage of health services", "First level of care strengthened" and "equal rights and opportunities, such as universal access to health care".								
Country Program Results Matrix	GN-3207	The intervention is included in the 2024 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 10.0								
Ex ante Economic Analysis     4.1 Program has an ERR/NPV, or key outcomes identified for CEA		1.5								
4.1 Frogram has an Environ V, or key outcomes identified for CEA  4.2 Identified and Quantified Benefits and Costs		3.0								
4.3 Reasonable Assumptions		2.5								
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 6.0								
5.2 Evaluation Plan III. Risks & Mitigation Monitoring Matrix		6.0								
Overall risks rate = magnitude of risks*likelihood		Low								
Environmental & social risk classification		C								
IV. IDB's Role - Additionality										
The project relies on the use of country systems										
Fiduciary (VPC/FMP Criteria)	Yes	Budget, Treasury, Accounting and Reporting, External Control.  Procurement: Price Comparison, 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 an investment project for US\$50 million. The overall objective of this operation is to improve the health of the population through health promotion, prevention and management of chronic noncommunicable diseases (NCDs), with emphasis on diabetes and hypertension in the Dominican Republic. The operation will finance the expansion of the coverage of interventions for the promotion of healthy habits and prevention of risk behaviors, as well as improvements in the primary health care system for the timely diagnosis, treatment and management of NCDs.

The diagnosis is adequate and is supported by international evidence, highlighting the challenges posed by the increase in the prevalence of chronic noncommunicable diseases (NCDs) observed in recent decades in the Dominican Republic. The main problem identified lies in the deficiencies of the primary health care system for the detection, diagnosis, and prevention of NCD complications.

The results matrix is consistent with the vertical logic of the operation. It presents reasonable impact, result and output indicators that are well-specified and appropriate for measuring the achievement of the general and specific objectives. The evaluation of the results will be carried out by means of an impact evaluation (quasi-experimental). The cost-benefit analysis shows that the investment is socially profitable at a discount rate appropriate for this type of investment.

The project received an Environmental and Social rating in category C, as it is estimated that the interventions financed will cause minimal or no negative environmental and social impacts. The project has a low overall risk rating. A total of 14 risks have been identified and assessed at levels ranging from medium-low to high. The risks assessed at medium-high and high levels are associated with the human resources required for the success of the project, procurement of goods and services required for project implementation, and coordination challenges with the regions. Appropriate mitigation measures have been proposed for all identified high and medium-high risks, which can be monitored throughout the project.

## **RESULTS MATRIX**

# Project objective:

The **specific objectives** for this operation will be: (i) to help reduce the prevalence of risk factors for chronic noncommunicable diseases (NCDs) by expanding the coverage of interventions to promote healthy habits and prevent risky behaviors; and (ii) to improve the care network for prompt diagnosis, treatment, and management of chronic NCDs. Achieving these objectives will contribute to the following **general objective**: to improve the health of the population in the Dominican Republic through the promotion of health and the prevention and management of chronic NCDs, with an emphasis on diabetes and hypertension.

## **GENERAL DEVELOPMENT OBJECTIVE**

Indicators	Unit of measure	Baseline value	Baseline year	Expected year achieved	Target	Means of verification	Comments				
<b>General development objective:</b> To improve the health of the population in the Dominican Republic through the promotion of health and the prevention and management of chronic NCDs, with an emphasis on diabetes and hypertension											
Premature mortality rate due to cardiovascular disease and diabetes	Deaths per 100,000 inhabitants 30-69 years CIE-10/I00-I99 and E10-E14	Total: 171.7* Male: 219* Female: 125.6*	2023	2029	Total: 166.5 Male: 212.4 Female: 121.8	Ministry of Public Health and Welfare (MISPAS)/ National Death Registry databases	At the end of the project, the most recent preliminary figures will be used.				
Prevalence of diabetes mellitus in adults over 18	% of the population over 18	11.6%	2023	2029	11.3%	National conferences or health surveys					
Prevalence of hypertension in adults over 18	% of the population over 18	33.7%	2022	2029	32.7%	National conferences or health surveys					
Prevalence of overweight and obesity in adults over 18	% of the population over 18	Total: 70.8% Male: 69.8% Female: 71.6%	2022	2029	Total: 67.3% Male: 66.3% Female: 68%	National conferences or health surveys					

# SPECIFIC DEVELOPMENT OBJECTIVES

Indicators	Unit of measure	Baseline value	Baseline year	2025	2026	2027	2028	2029	End of project	Means of verification	Comments	
Specific development objecti prevent risky behaviors												
Indicator 1.1: Percentage of at-risk individuals who receive nutritional counseling at prioritized first level care centers (CPNs)	Percentage	0%	2024						30%	First level of care information system (SIPNA) or MISPAS		
Indicator 1.2: Number of CPNs that implement nutritional surveillance for children ages 6-18	Number	0	2024						155	MISPAS monitoring reports		
Indicator 1.3: Percentage of people with hypertension and/or diabetes who receive a meal plan that follows the guidelines	Percentage	0%	2024						30%	SIPNA or similar		
Indicator 1.4: Number of provinces with strategies for health promotion and prevention of risk factors for chronic NCDs implemented in priority areas	Number	0	2024	0	32	32	32	0	32	Reports on progress of the outreach plan and the healthy municipios strategy of MISPAS	This indicator will measure the extent to which the outreach campaign has reached the provinces (through radio, television, print, and social networks) to reduce risk factors and implement the healthy municipios strategy in priority areas.	
Indicator 1.5: Number of people using digital services tools designed for health promotion and the prevention of risk factors	Number	0	2024	0					5,000	Reports from application administrator		

Indicators	Unit of measure	Baseline value	Baseline year	2025	2026	2027	2028	2029	End of project	Means of verification	Comments
Specific development objecti	ve 2: To improv	e the care network for pror	mpt diagnosis,	treatment	, and mar	nagemen	t of chron	ic NCDs			
Indicator 2.1: Number of individuals over 18 registered with primary care units (UNAPs) who have been diagnosed with hypertension and/or diabetes and are included in the NCD program based on HEARTS	Number	Total: 357,486 Diabetes:110,800 Hypertension: 246,686	Oct 2023						Total: 522,486 Diabetes: 148,800 Hypertension: 373,686	SIPNA or similar	The target has been calculated to close the gap among the poorest undiagnosed individuals by 30% (see survey for details).
Indicator 2.2: Percentage of patients with hypertension controlled at UNAPs that follow the HEARTS protocol	Percentage	78%	2024						90%	SIPNA or similar	Refers to the percentage of patients with controlled hypertension out of those who had their blood pressure taken in the last six months.
Indicator 2.3: Percentage of prioritized CPNs and Farmacias del Pueblo with a supply of HEARTS tracer drugs	Percentage	Total: 20.5% CPN: 10% Farmacias del Pueblo: 197 (51%)	2024						Total: 85.2% CPN: 80% Farmacias del Pueblo: 388 (100%)	Quarterly reports from the Integrated Management System for Medicines and Supplies (SUGEMI)	
Indicator 2.4: Number of UNAPs that report the full record for NCD program patients to the first level of care information system	Number	0	2024	143	389	690	1,673	1,673	1,673	SIPNA or similar	The patient record must include the information required for HEARTS in order to monitor patients.
Indicator 2.5: Number of individuals trained in key areas for managing chronic NCDs	Number	0	2024	0	55	55	55	55	220	List of certified individuals (MISPAS)	Key areas include health research, health care economic evaluation, evaluation of interventions and health care technology, and data analysis.

# **O**UTPUTS

Indicators	Unit of measure	Baseline value	Baseline year	2025	2026	2027	2028	2029	End of project	Means of verification	Comments		
Component 1: Strengthening	Component 1: Strengthening of the strategy for health promotion and prevention of risk factors for chronic NCDs												
Output 1.1: Nutritional surveillance module for children ages 6-18, designed and implemented	Number	0	2024						1	MISPAS progress and monitoring reports			
Output 1.2: Healthcare personnel are certified in nutritional counseling for prevention of NCD risk factors	Number	0	2024	0	372	373	373	0	1,118	Annual list of certified personnel (MISPAS)			
Output 1.3: Personnel are trained in tools that promote healthy lifestyles to prevent NCD risk factors	Number	0	2024	0	837	837	837	0	2,511	Annual list of trained personnel (MISPAS)			
Output 1.4: Behavioral change strategies are designed and implemented for health promotion for chronic NCDs, focused on priority population groups and with a gender perspective	Number	0	2024	0	2	3	3	2	10	Meeting reports and strategy document (MISPAS)			
Output 1.5: Communication strategy for health promotion and prevention of risk factors for chronic NCDs for persons with disabilities, designed and implemented	Number	0	2024	0	0	1	0	0	1	Strategy document and implementation reports (MISPAS)			
Output 1.6: Outreach plan for the prevention of risk factors with a gender perspective implemented	Number	0	2024	0	1	1	1	1	1	Communication plan and implementation reports (MISPAS)			
Output 1.7: Digital services tool for health promotion, developed and operational	Number	0	2024	0	1	1	1	1	1	Reports from application administrator			

Indicators	Unit of measure	Baseline value	Baseline year	2025	2026	2027	2028	2029	End of project	Means of verification	Comments
Output 1.8: Diagnostic assessment on gender- related challenges in addressing chronic NCDs in the life course	Number	0	2024	1	0	0	0	0	1	Diagnostic assessment document	
Component 2: Improvement of	of the health	care networl	k for prompt	t diagno	sis, trea	tment, a	nd mana	gement	of chronic	NCDs	
Subcomponent 2.1: Access to	o prompt dia	gnosis and	managemer	nt of chr	onic NC	Ds at the	primar	y care le	vel		
Output 2.1.1: UNAPs implementing the NCD program have case-resolving capacity to diagnose and treat patients per the HEARTS protocol	Number	621	2024	693	850	1,065	1,674	1,674	1,674	SIPNA or similar reports	
Output 2.1.2: CPNs and diagnostic centers can conduct glycosylated hemoglobin (HbA1c) tests and report to the corresponding UNAP	Number	0	2024	0	20	25	0	0	45	SIPNA or similar reports	
Output 2.1.3: Tracking, monitoring, and evaluation system for the NCD program strengthened	Number	0	2024	0	1	1	1	1	1	Monthly monitoring reports on the NCD program	
Output 2.1.4: Telediagnosis pilot programs for diabetes and/or hypertension, designed and implemented	Number	0	2024	0	0	1	1	0	2	Pilot implementation reports	
Output 2.1.5: Community screening of the at-risk population and digital update of the registry for the population registered with the first level of care	Percent- age	0	2024	0	2%	4%	6%	8%	10%	Reports from the household survey information system	Percentage of adults over 45 included for the first time or updated in the survey who were screened for NCD risk

Indicators	Unit of measure	Baseline value	Baseline year	2025	2026	2027	2028	2029	End of project	Means of verification	Comments
Subcomponent 2.2: Strength	Subcomponent 2.2: Strengthening of the supply chain of medicines and supplies for chronic NCDs										
Output 2.2.1: CPNs have a strengthened logistics system for medicines and supplies in the Metropolitano Region and Cibao Occidental	Number	0	2024	0	70	70	70	0	210	Reports from the Medicine and Supplies Logistics System	
Output 2.2.2: Regional warehouses have better capacity and conditions to ensure the quality of NCD products being stored	Number	0	2024	0	2	2	4	0	8	Reports from the Medicine and Supplies Logistics System	
Output 2.2.3: Regional warehouse fulfills the requirements for Good Warehouse Practices certification	Number	0	2024	0	0	0	1	0	1	National Health Service and MISPAS reports	
Output 2.2.4: Planning for the purchase of medicines and supplies to treat chronic NCDs is strengthened	Number	0	2024	0	1	1	1	1	1	Reports on medication forecasting and purchasing	
Output 2.2.5: Contingency plan for warehouse disasters and emergencies updated	Number	0	2024	0	1	0	0	0	1	Contingency plan	
Subcomponent 2.3: Improver	nent in the in	formation s	ystem for th	ne first le	evel of c	are and	digital s	olutions	for the pa	tient/user	
Output 2.3.1: Reengineering of the information system for the first level of care implemented	Number	0	2024	0	1	1	1	1	1	SIPNA reports	
Output 2.3.2: CPNs prioritized for treating chronic NCDs are linked with adequate and interconnected hardware	Number	0	2024	0	372	373	373	0	1,118	SIPNA reports	

Indicators	Unit of measure	Baseline value	Baseline year	2025	2026	2027	2028	2029	End of project	Means of verification	Comments
Output 2.3.3: Reporting process standardized and defined for required information related to chronic NCDs at the first level of care	Number	0	2024	0	1	1	1	1	1	Information reports on chronic NCDs at the first level of care	
Component 3: Strengthening	Component 3: Strengthening of coordination of health system functions to address chronic NCDs										
Subcomponent 3.1: Strengthe	ening of the f	financing m	odel, humar	resour	ces in he	ealth car	e, and n	nanagen	nent of ser	vices and medicines t	for chronic NCDs
Output 3.1.1: Documents prepared to strengthen health policy at the first level of care	Number	0	2024	0	1	1	1	0	3	Policy documents	
Output 3.1.2: Updating and implementation of strategic plans and protocols for prevention and control of chronic NCDs	Number	0	2024	0	3	3	0	0	6	Strategic planning and protocol documents	
Output 3.1.3: Plan implemented for the supply of medicines and supplies, particularly for NCDs	Number	0	2024	1	1	1	1	1	1	Reports from Farmacias del Pueblo that dispense NCD medications	
Subcomponent 3.2: Generation	on of evidence	e, monitori	ng, and chro	nic NCI	) health	indicato	rs				
Output 3.2.1: Heath surveys conducted	Number	0	2024	1	1	0	0	1	3	Surveys	
Output 3.2.2: Research studies on chronic NCDs	Number	0	2024	0	1	1	1	0	3	Research study documents	
Output 3.2.3: Annual plan for training in health research, economic evaluations, and data analysis implemented	Number	0	2024	0	1	1	1	1	1	Annual list of trained personnel	
Output 3.2.4: Support strategy for recording and analyzing NCD information strengthened	Number	0	2024	0	0	0	1	0	1	MISPAS report	

Country: Dominican Republic Division: SPH Operation No.: DR-L1167 Year: 2024

#### FIDUCIARY AGREEMENTS AND REQUIREMENTS

Co-executing agencies: Ministry of Health (MISPAS) and National Health Service (SNS)

Operation name: Strengthening the Health System to Prevent and Manage Chronic

Noncommunicable Diseases: Diabetes and Cardiovascular Diseases

#### I. FIDUCIARY CONTEXT OF THE CO-EXECUTING AGENCIES

1. **Use of country systems in the operation** (Any system or subsystem that is subsequently approved could be applicable to the operation depending on the terms of the Bank's approval).

▶ Budget	♦ Reports	♦ Information systems	National competitive bidding (NCB)
<b>♦</b> Treasury		♦ Price comparison	• Other
♦ Accounting	External control	Individual consultants	• Other

## 2. Fiduciary execution mechanism

subexecuting procurement will be managed independently for each pagencies execution unit.			The project will be co-executed through two project execution ur one in MISPAS and the other in the SNS. Resource flow a procurement will be managed independently for each project execution unit.	and
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#### 3. Fiduciary capacity

Fiduciary capacity of the executing agencies

The most recent institutional capacity assessment was made in March 2024. Based on the results of that evaluation and experiences with project management, in general a medium level of fiduciary risk has been identified for project execution. The project execution unit of the MISPAS is considered adequate to execute the project due to its knowledge and experience implementing Bank-financed projects, as well as its familiarity with the Bank's financial management and procurement policies. It previously executed operation DR-L1067, Strengthening of Results-Based Management in the Dominican Republic's Health Sector (2973/OC-DR). In the case of the project execution unit of the SNS, greater support and training are necessary given that it does not have prior experience managing Bank loans.

Based on the findings of evaluations of the country's Public Finance Management Systems (August 2017 and October 2019), those systems have an average degree of development overall. That information is consistent with the findings of the Public Expenditure and Financial Accountability (PEFA) exercise in 2023. The updated diagnostic assessment of the procurement system conducted in February 2016 using the methodology of the Development Assistance Committee of the Organisation for Economic Co-operation

and Development determined an average level of sophistication, with
certain improvement opportunities in the areas of approvals and control measures.

#### 4. Fiduciary risks and risk response

Risk category	Risk	Risk level	Risk response
Organizational structure	If the project execution unit of the SNS is not strengthened with experienced personnel trained in the Bank's policies, the success of Component 2 would be at risk, with an impact on project execution of approximately 29 million.	Medium- high	The SNS will hire qualified personnel, who will also receive the required training on Bank policies.

5. **Policies and guidelines applicable to the operation:** Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (GN-2349-15) and Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-15).

## II. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE LOAN CONTRACT

## Special contractual conditions precedent to the first disbursement:

**Exchange rate:** For the purposes of Article 4.10 of the General Conditions, the parties agree that the exchange rate to be used will be the rate stipulated in Article 4.10(b)(ii). The exchange rate will be the rate in effect on the date the borrower, the co-executing agency, or any other person or corporation with delegated authority to incur expenditures makes the respective payments to the contractor, vendor, or beneficiary.

**Type of audit:** The program's audited financial statements will be issued on an annual basis no later than 120 days after the end of each fiscal year. At the end of the project, the program's final audited financial statements will be issued by no later than 120 days after the date of the final disbursement.

# III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

•	Bidding documents	For procurement of works, goods, and nonconsulting services in accordance with the Bank's procurement policies (GN-2349-15) and subject to international competitive bidding (ICB), the standard bidding documents issued by the Bank will be used, or those agreed upon by the executing agency and the Bank for the specific procurement. Consulting services will be selected and contracted in accordance with the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-15) and will use the standard request for proposals issued by the Bank or agreed upon by the executing agency and the Bank for the specific selection. The project's sector specialist is responsible for reviewing the technical specifications and terms of reference for procurements in preparation for the selection processes. The technical review may be ex ante and is independent of the procurement review method.
•	Use of country systems	The price comparison and minor purchase subsystems will be used for procurement of standard goods that are readily available and for nonconsulting services based on approval by the Bank's Board of Executive Directors. The procurement plan for the operation will indicate which contracts will be executed using the country system according to the approved scope. In the event the scope approved by the Board for use of the country system is expanded, the new scope will apply to the operation.
•	Recurrent costs	Recurrent costs incurred to implement the project that are approved by the project team leader and financed will adhere to the executing agency's administrative procedures. Those procedures will be reviewed and accepted by the Bank provided they do not violate the principles of economy, efficiency, and competition. At the borrower's request, those costs will include the financing of compensation for project execution unit personnel working on the program. That expense falls under policy GN-2331-11 and complies with eligibility and sustainability criteria.
•	Procurement supervision	Depending on the level of fiduciary risk identified for the project and the complexity of the specific processes, the supervision method may be ex ante or ex post. Ex post reviews will be made according to the annual supervision plan. Ex post review reports will include at least one physical inspection visit for procurement processes subject to such review. (The inspection verifies the existence of the items procured, and the project's sector specialist is responsible for verifying the quality and compliance with the technical specifications.)
•	Records and files	The executing agencies will be responsible for maintaining files and supporting documentation for procurement processes and all receipts for payments made with project resources, as well as for following established procurement procedures.

# Main procurements:

Description	Selection method	New procedures / tools	Estimated date	Estimated amount (US\$000)
Goods				
Procurement of technology equipment for chronic noncommunicable diseases (NCDs) at first level care centers, a local backup server for SNS, and regional warehouse equipment	ICB		Q1-Y2	3,855,000
Procurement of medical equipment for nutritional surveillance and prompt diagnosis of chronic NCDs under the HEARTS protocol	ICB		Q2-Y1	3,948,000
Works				
Remodeling and upgrading of regional warehouse infrastructure	ICB		Q2-Y1	3,654,000
Nonconsulting services				
Implementation of the digital services tool	ICB		Q3-Y2	1,600,000
Firms				
Consulting services to develop the digital services tool for health prevention, including content generation	QCBS		Q3-Y1	900,000

See procurement plan.

# IV. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

•	Programming and budget	The annual budget is prepared by the Ministry of Finance through the Budget Office, in coordination with the Ministry of Economy, Planning, and Development.  The plan for the first 18 months of the project will be remitted to the
		Office of Public Credit at least 3 months before beginning to prepare the annual investment budget.
•	Treasury and disbursement management	Programming of the project's cash flow will be consistent with the annual work plan and procurement plan that have obtained the Bank's no objection and will cover a period of at least six months.
		The project will use a special bank account in the project's name and in dollars of the United States of America for each project execution unit. The account will be held in the Central Bank, managed through a subaccount of the National Treasury Single Account. The currency for the operation will be U.S. dollars.
		The exchange rate to be used in the operation will be the exchange rate in effect on the date of settlement of the expense in local currency, i.e., option (b)(ii) of Article 4.10 of the General Conditions of the Loan Contract.
		Program disbursements will mainly use the advance of funds method based on financial planning of up to six months. For reporting purposes, supporting documentation will be provided for 80% of cumulative balances pending substantiation.
•	Accounting, information systems, and reporting	The technology platform used to keep the operation's accounting records will be the integrated financial management module for project execution units with external financing pertaining to the country's Integrated Financial Management System. Accounts will be kept on the cash basis. All of the project's key financial reports, including disbursement requests, will be generated directly by this system.
		The program Operating Regulations will supplement the policies and guidelines applicable to the operation, providing a documented definition of workflows and internal controls.
•	Internal control and internal audit	The internal audit function of the national government is the responsibility of the Office of the Comptroller General of the Dominican Republic. To carry out that function, that Office is supported by Internal Audit Units in each area of the Public Administration of the Dominican Republic.
•	External control and financial reports	The borrower and/or the executing agency will select and contract external audit services according to the terms of reference previously agreed by the executing agencies and the Bank. Those terms will stipulate the type of review, timing, and scope. The external auditor selected and the audit standards to be applied will be acceptable to the Bank. The type of audit and level of eligibility required for the auditors may be modified over the life of the project depending on the results of the Bank's review. Audited financial statements for the program will be

		submitted annually: presented to the Bank no later than 120 days after the end of each fiscal year (31 December) and at the end of the project: presented to the Bank no later than 120 days after the date of the final disbursement. For such purposes, an eligible audit firm will be contracted to audit each co-executing unit. The information included in the audited financial statements will be prepared by each co-executing unit and will be presented on a consolidated basis.
•	Financial supervision	Under the responsibility of the financial specialist, onsite or desk reviews and monitoring may be conducted on an annual basis or more often if deemed necessary.

## DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

## PROPOSED RESOLUTION DE-\_\_/24

Dominican Republic. Loan \_\_\_\_/OC-DR to the Dominican Republic.

Strengthening the Health System to Prevent and Manage Chronic

Noncommunicable Diseases: Diabetes and

Cardiovascular Diseases

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 Dominican Republic, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the project "Strengthening the Health System to Prevent and Manage Chronic Noncommunicable Diseases: Diabetes and Cardiovascular Diseases". Such financing will be for the amount of up to US\$50.000.000, 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 on	2024
(Auopieu on	2024

LEG/SGO/CID/EZIDB0000366-1818689733-8473 DR-L1167