

## TC Document

### I. Basic Information for TC

▪ Country:	Republic of Suriname
▪ TC Name:	Design and Implementation Support for Health Services Support Project
▪ TC Number:	SU-T1100
▪ Team Leader/Members:	Diana Pinto, Team Leader (SCL/SPH); Ian Ho-A-Shu (SPH/CTT); Frederico Guanais (SPH/CPE); Natalie Wegener Carmona (SCL/SPH); Rinia Terborg-Tel (FMP/CSU); Mariska Tjon A Loi (VPC/FMP); Lucas A Hoepel (CCB/CSU); Bettina Tirelli Hennig (LEG/SGO); and Martha Guerra (SCL/SPH)
▪ Taxonomy	Operational Support
▪ Number and name of Operation Supported by the TC:	Health Services Support Project (SU-L1054)
▪ Date of TC Abstract authorization:	February 12, 2018
▪ Beneficiary:	Republic of Suriname through its Ministry of Health
▪ Executing Agency:	Inter-American Development Bank
▪ Donors providing funding:	OC-SDP for Social Development (SOC)
▪ IDB Funding Requested:	US\$300,000
▪ Local counterpart funding, if any:	No
▪ Disbursement period:	30 months
▪ Required start date:	March 30, 2018
▪ Types of consultants:	Individual consultant and consulting firms
▪ Prepared by Unit:	SCL/SPH
▪ Unit of Disbursement Responsibility:	SCL/SPH
▪ TC Included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; gender equality and diversity; and institutional capacity and rule of law

### II. Description of the Associated Loan/Guarantee

- 2.1 **Health conditions and burden of disease.** The Government of Suriname (GoS) faces epidemiological challenges stemming from increasing rates of Non-Communicable Diseases (NCDs) and the persistence of Communicable Diseases (CDs). The 2014 NCD country profile report<sup>1</sup> shows NCDs have become the main cause of morbidity and mortality (68% of total deaths). Between 2005-2016 the incidence (new cases) of diabetes, ischemic heart disease and chronic kidney disease grew by 39%, 19% and 24% respectively.<sup>2</sup> The 2013 Suriname STEPS Survey highlighted the following risk factors driving increases in NCDs: high blood pressure, obesity and overweight, tobacco and alcohol consumption. Nearly 30% of adults, and 40-50% of those over age 55 suffer from high blood pressure. Overweight and obesity affect 18% of men,

<sup>1</sup> World Health Organization. Suriname Country Report. World Health Organization 2017: <http://www.who.int/countries/sur/en/>.

<sup>2</sup> Institute of Health Metrics and Evaluation. Suriname Statistics: <http://www.healthdata.org/suriname>.

31% of women and 26% of children aged 13-15.<sup>3</sup> Unhealthy diet and lack of exercise drive these figures.<sup>4</sup> From an economic perspective and drawing from recent comparable evidence from other Caribbean countries, NCDs have a significant impact at the household level from income loss and increased in out-of-pocket expenses, and at the national level from loss of skilled labor and productivity, lower competitiveness and higher government health and social expenditures (spending on hypertension and diabetes is between 1-8% of GDP in 4 Caribbean countries).<sup>5</sup> Regarding CDs, control of malaria, has been noteworthy and the GoS has committed to malaria elimination by 2020. A major challenge to achieving this goal is that recently most cases originate from migrant, multi-ethnic small-scale gold-mining communities in the border areas (Guyana Shield-GS).<sup>6</sup> Control of malaria transmission is difficult because of these communities' particular lifestyles and habits. Addressing other CDs, like HIV, Leishmaniasis and Tuberculosis is also a priority both in the GS border and at the national level

**2.2 Service Provision and Barriers to Accessing Care.** Surinamese healthcare is provided by a combination of public and private health care providers. (see [Figure 1](#)). There are both public and private providers for primary, secondary and tertiary care, and use depends on geographic area and type of insurance. Public primary healthcare services are provided by Regional Health Districts (RGDs), with the exception of the districts of the Interior<sup>7</sup>, whose service provision is provided by the not-for-profit organization, the Medical Mission (MZ). The RGD has 56 health facilities, including 15 health posts and 41 primary care clinics, while the MZ has 57 policlinics and health posts. There are 146 private clinics, 1 psychiatric hospital in Paramaribo, 40 dental units including 26 which are located in the RGD Clinics.<sup>8</sup> The RGD staffs its posts with 1 doctor and 2 nurses and its clinics with 1-4 doctors and 1-5 nurses<sup>9</sup>, while the MZ staffs their health posts and clinics with community health workers, which are supervised by a total of 5 doctors,<sup>10</sup> who are based in Paramaribo, rotating between health facilities and are always on-call with communication by radio. All hospitals are located on the coast (4 public and 2 private). The RDG refers patients to the public hospitals. Hospital care for the referral patients of the MZ is provided initially by the

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<sup>3</sup> World Health Organization. World health statistics 2009. World Health Organization, 2009.

<sup>4</sup> Ministry of Health. National Action Plan for the Prevention and Control of NCDs (2015-2020). Government of Suriname, 2014.

<sup>5</sup> World Bank. NCDs in the Caribbean: The New Challenge for Productivity and Growth. Caribbean Knowledge Series No 78596, World Bank; 2013. Abdulkadri, Abdullahi O., Colette Cunningham-Myrie, and Terrence Forrester. "Economic burden of diabetes and hypertension in caricom states." *Social and Economic Studies* 58, no. 3/4 (2009): 175-97. Four countries referenced are: The Bahamas, Barbados, Jamaica, and Trinidad and Tobago.

<sup>6</sup> Bureau of Public Health. Malaria in Suriname Analysis of the Trends Malaria Program. Malaria Program, Ministry of Health Government of Suriname. For example, MP studies show little knowledge about the potential health threats of malaria and low rates bed nets use. Insufficient health seeking behavior is associated with both self-treatment and low adherence to treatment, both of which contribute to development of drug-resistance of the malaria parasite

<sup>7</sup> Brokopondo and Sipaliwini.

<sup>8</sup> Health in the Americas, 2012 Edition: Suriname Country Volume. Pan-American Health Organization.

<sup>9</sup> RGD Health Posts are staffed with 1 doctor and 2 registered nurses; primary care clinics are staffed with 1-4 doctors, 1-5 registered nurses, 1-3 administrative personnel as well as a laboratory technician, 1 pharmacist and 1 midwife.

<sup>10</sup> This is the international equivalent to a "barefoot doctor", including training in obstetric care, dental extraction and preventative services. The MZ's health facilities are generally located within 30 minutes travel distance of their populations (60,000 total population). In addition to doctors, head nurses, health assistants, policlinic aids, paramedics and laboratory technicians also support the community health workers.

Diakonessen Hospital (private), with overflow directed to the Public S'Lands Hospital and the Academic Hospital in Paramaribo. There are 3 private medical laboratories as well as laboratories located in each hospital.

- 2.3 There are several barriers to accessing health services. For the coast, poor health worker capacity and infrastructure as well as a lack of supplies are major constraints for primary health services. Estimates are that 50% of the RGD's infrastructure is not adequate for general services. The RGD also suggests that the perceived poor quality of their services by the population, stemming from poor conditions of facilities, is a barrier to access and low uptake of their services. While a rigorous assessment of human resources for health capacity and needs has not been performed in the country, the RGD estimates that their health workers are working at full capacity and that they critically lack appropriate training.<sup>11</sup> In the Interior, there are transportation and socio-cultural barriers as well as a lack of equipment, supplies and human resources for health. Social and cultural barriers exist for communities in the Interior, with low uptake of services due to a lack of culturally or linguistically appropriate health information.<sup>12</sup> Both regions have constraints that include inadequate operating hours and lack of portability of coverage. For example, RGD operating hours are limited (e.g. 7-11am) and do not match the scheduling needs of the patient population, negatively affecting, for example, the offer of preventive services and the demand for services in general. With such a limited schedule, health professionals find it difficult to offer preventive services and revert to mainly treating people with sickness.
- 2.4 **Suriname's strategies to address health sector challenges.** Based on evidence of best practice, health systems that adopt a Chronic Care Model (CCM) within the Primary Care (PC) setting have shown to be more effective and efficient in managing and controlling not only NCDs, but also CDs.<sup>13</sup> The Ministry of Health (MOH), therefore, introduced the One Stop Shop (OSS) model in two centers. The OSS is an integrated care approach based on the CCM, targeting patients with diabetes and heart disease. Stroke, ischemic heart disease and diabetes are among the top 15 diseases and conditions with the highest disability-adjusted life years<sup>14</sup>, and are among the top four reasons of mortality rates in the country<sup>15</sup>, which is why these conditions were selected for the OSS. The OSS has been functioning in Paramaribo and Nickerie, serving a population of approximately 161,871.<sup>16</sup> Given increasing population with NCDs, the GoS plans to expand the OSS model to other districts, but to do so, needs to better understand and address structural, information and

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<sup>11</sup> Due to the fact that they had previously discontinued this training in the 90s and have in the past few years begun it again.

<sup>12</sup> The profile of the health assistant is LBGO diploma, connection with the Interior (for retention), understanding of the language and culture. Part of the work responsibilities of the health assistant is community outreach but it was suggested that they are only able to perform this to about 10-15% of what is expected.

<sup>13</sup> Hansen, Johan, Peter P. Groenewegen, Wienke GW Boerma, and Dionne S. Kringos. "Living in a country with a strong primary care system is beneficial to people with chronic conditions." *Health affairs* 34, no. 9 (2015): 1531-1537.

<sup>14</sup> Bodenheimer, Thomas, Edward H. Wagner, and Kevin Grumbach. "Improving primary care for patients with chronic illness." *Jama* 288, no. 14 (2002): 1775-1779.

<sup>15</sup> Ministry of Health (Suriname); Pan American Health Organization. *Suriname – Health in All Policies (HiAP) brief: health of the population, health of the country*. Paramaribo: MV; 2017.

<sup>16</sup> Leading causes of death (%), Suriname, Ministry of Health, Bureau of Public Health, 2013. Accessed from: <http://www.paho.org/salud-en-las-americanas-2017/?p=4307>.

<sup>16</sup> Estimate based on approximate population affected by targeted NCDs within OSS service area. OSS lacks data on number of patients served or demand in service area.

management deficiencies in the current service provision network, as outlined above.<sup>17,18</sup> Second, the MOH is carrying out public health interventions to address NCDs risk factors, through the adoption of a Health in All Policies (HiAP) approach, which entails coordinated action between both health and non-health ministries. Successful implementation of HiAP requires strengthening of the core stewardship and policy functions of the MOH, particularly improvement of the overall technical capacity in terms of planning, monitoring and evaluation, digital technology use and upgrade of the current MOH headquarters to meet current standards of accessibility, functionality and environmental requirements. Finally, the GoS developed a Malaria Elimination Strategic Plan (MESP), based on the World Health Organization's evidence-based recommendations for CD risk reduction, case management, standards of quality assurance for detection, treatment, and response, processes and data systems for disease surveillance as well as program monitoring and evaluation. A priority action to maintain and enhance the effectiveness of this program will be the development of relevant, standardized, routinely collected and digitalized data on CDs and corresponding analysis platforms.

- 2.5 **The Health Services Support Project-HSSP (SU-L1054)** seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. The target beneficiaries are the population of Suriname. Preparation of project SU-L1054 is well advanced with two IDB missions carried out in July and November 2017 in which the IDB and the MoH jointly: (i) held technical dialogue about key NCDs and CDs health challenges in Suriname and interventions to resolve them; (ii) identified key GoS focal points who will work closely with the IDB Project Team to complete the Proposal for Operations Development (POD); and (iii) convened a multi-stakeholder workshop to build trust and a strong working relationship with IDB as well as generate technical inputs for the project preparation. The SU-L1054 project preparation efforts are guided by key policy documents developed by the GoS, namely: (i) [The National Health Sector Plan \(2011-2018\)](#); (ii) [Suriname National Action Plan for the Prevention and Control of NCDs \(2015-2020\)](#); (iii) [The Health in All Policies Policy Package 2017-2018 Intersectoral Collaboration for Health and Development](#); (iv) Bureau of Public Health: Malaria in Suriname Analysis of the Trends Malaria Program; and (v) National Malaria Elimination Plan 2018-22. SU-L1054 received ERM approval on January 23, 2018.
- 2.6 To support Suriname's strategies to address health challenges, the project SU-L1054 has included the following components: (1) Institutional strengthening of the MoH to manage NCDs, with the objective of improving the MOH's stewardship and governance functions in setting priorities, designing effective policies and interventions, and ensuring their efficient implementation with a focus in the areas of prevention, management and control of NCDs. Expected results include improved use of information systems and of core business function performance within the MOH. (2) Organization of Primary Care (PC) for NCD prevention, management, and control with the objective of strengthening of an integrated, patient-centered healthcare model within PC in order to increase access, quality and efficiency of services for NCDs. Expected results include increased prevention activities, earlier case detection, improved case management and decreased complications of priority NCDs; and (3) Support for priority areas in CD programs with the objective of sustaining and improving the response to CDs. Expected results include reduced rates of CD transmission and increased treatment rates.

### III. Objectives and Justification of the TC

- 3.1 The general objective of the TC is to support the design and implementation of operation SU-L1054. The TC will finance technical studies required to develop key areas of the loan components described above, as well as institutional strengthening activities, focused on the MoH.
- 3.2 **Strategic Alignment.** This program is consistent with the Update of the Institutional Strategy 2010-2020 (AB-3008) and is strategically aligned with the development challenge of social inclusion and equality by improving access of the population to high quality primary care services. This TC is also aligned with the cross-cutting issues of: (i) gender equality and diversity, by improving women's and indigenous people's access to health services for diseases that affect them disproportionately; and (ii) institutional capacity and rule of law, by improving the quality of public health services and policy formulation and implementation. It contributes to the Corporate Results Framework 2016-2019 (GN-2727-4) by increasing the number of beneficiaries receiving health services. It also contributes to the objectives of the OC-SDP for Social Development (GN-2819-1) by strengthening technical and managerial capacity of public agencies in small and vulnerable countries in addition to improving quality of infrastructure projects in the LAC region. It is relevant to priority areas in the Suriname Country Strategy (2016-2020): (i) Modernizing the Public Sector, by strengthening the health sector's capacity for evidence-based policy making; and (ii) Protection of Human Capital by supporting interventions to address major causes of healthy life years lost. The project is consistent with the focus of the GoS's National Health Sector Plan (2011-2018) and Suriname National Action Plan for the Prevention and Control of NCDs (2015-2020), by supporting interventions that increase prevention and reduction of the burden of disease. It is consistent with the Health and Nutrition Sector Framework Document (GN-2735-7) and its dimension of success related to all people having timely access to quality health services and that health sector governance seeks efficiency and leadership in health and promotes intersectoral coordination.

### IV. Description of activities/components and budget

- 4.1 **Component 1. Infrastructure and Network Development Technical studies (US\$175,000).** This component will finance technical studies related to the design and start up execution of the physical, network and digital infrastructure investments of activities SU-L1054. Specifically, it will finance technical studies to develop the MOH building infrastructure plan for the loan, assess digital technology opportunities, provide a mapping and analysis of the Suriname healthcare network to generate a master plan for investment and implementation improvements of the CCM. Studies include:
1. **Technical Analyses and Preliminary Design of the MoH New Building**, which will consist of: (i) terrain analysis, including technical, legal and financial aspects; (ii) definition of architectural program and design criteria, in agreement with the MoH program of needs; (iii) assessment of the norms and regulations required for the building design and construction; and (iv) review of the preliminary design of the building, including architectural drawings, preliminary definition of technical specifications, equipment and materials; budget estimate; preliminary timetable for construction design, bidding and construction.
  2. **Digital Needs and Opportunities Assessment** to determine the specific digital opportunities, barriers and needs of the MOH to develop a health and information management system for the MOH and associated stakeholder organizations. It will

propose an overarching strategy, technical solutions and a roadmap for implementation, in accordance to existing policy framework and standards on the topic and a health in all policies approach.

3. **Integrated Health Network Analysis** to provide a mapping of the current health care network in Suriname including analysis of services, management, and organization, as well as human and physical resources, and digital infrastructure required for optimal care given Suriname's epidemiological profile. This study will apply tools used by the international community to provide insightful information to decision makers with a focus on providing care to chronic NCD patients. These tools may include but are not limited to the Service Availability and Readiness Assessment (SARA <sup>17</sup>), WHO Package of Essential NCDs Interventions Assessment (WHO PEN<sup>18</sup>).
- 4.2 **Component 2. Strengthening MoH capacity to implement an intersectoral and multi-sectoral approach to NCDs (US\$115,000).** This component will support technical assistance to: (i) Develop and implement a strengthening programme for the regulatory framework, technical, functional and operational capacities of the MoH; (ii) Develop an NCD investment case analysis using the WHO 4x4 NCD gap costing methodology, providing useful data to prioritize NCDs interventions at the population, clinical and policy level for the country; (iii) Perform an avoidable hospitalizations study which will analyze the number of hospital admissions each year that could be avoided by increasing primary care interventions in the health system for conditions sensitive to primary care (ACS), in accordance with international standards; and iv) Perform an ex-ante cost benefit analysis to generate information on the returns of the proposed areas for investment for the SU-L1054 loan.
- 4.3 **Other Costs: Project Administration (US\$10,000).** This will include financing for project monitoring and final evaluation.

#### Indicative Budget

No	Component	Description	IDB Funding (US\$)
1	Infrastructure and Network Development Technical studies	MOH Building Infrastructure Pre-Investment Technical Studies	35,000
		Digital Needs and Opportunities Assessment	65,000
		Integrated Health Network Analysis	75,000
		<b>Sub Total</b>	<b>175,000</b>
2	Strengthening MoH capacity to implement an intersectoral and multi-sectoral approach to NCDs	MOH Institutional Capacity Strengthening plan	60,000
		Avoidable Hospitalization	13,000
		NCD Gaps Cost Estimation and Prioritization	32,000
		Ex-Ante Cost Benefit Analysis	10,000
		<b>Sub Total</b>	<b>115,000</b>
Other Cost	Project Administration	Monitoring and Project Evaluation	10,000
<b>TOTAL</b>			<b>300,000</b>

<sup>17</sup> Service Availability and Readiness Assessment (SARA): an annual monitoring system for service delivery, September 2015, Available from: [http://www.who.int/healthinfo/systems/sara\\_implementation\\_guide/en/](http://www.who.int/healthinfo/systems/sara_implementation_guide/en/) Implementation guide, Version 2.2.

<sup>18</sup> Tools for implementing WHO PEN, World Health Organization, 2010, Available from: [http://www.who.int/ncds/management/pen\\_tools/en/](http://www.who.int/ncds/management/pen_tools/en/).



## **V. Executing agency and execution structure**

- 5.1 The executing agency is the IDB through the Social Protection and Health Division (SCL/SPH). This TC will provide support to the GoS towards preparing the Health Services Support Project Loan (SU-L1054). The Borrower of SU-L1054 has requested the Bank to be the executing agency of this project given that the IDB is positioned more objectively to provide execution and oversight of the consultancies that will be carried out under this TC. The results of these consultancies are intended to bring key and timely preparation inputs to the loan.
- 5.2 Procurement of consulting and non-consulting services will be carried out in accordance with IDB's Policy for the Selection and Contracting of Consulting Firms for Bank-executed Operational Work (GN-2765-1) and its corresponding Guidelines (OP-1155-4), the Complementary Workforce Policy (AM-650) for individuals and the Corporate Procurement Policy (GN-2303-20) for non-consulting services if required.
- 5.3 The IDB will monitor the quality and progress of the TC through the IDB's institutional systems, under the responsibility of the TC Project Team Leader and with the support of a consultant hired for monitoring and evaluation purposes. The final products will also be reviewed by the Project Team to ensure the quality of products and services funded under this TC.

## **VI. Major issues**

- 6.1 The main risk associated to the TC is related to the potential coordination challenges with other stakeholders, which may affect overall TC implementation. This risk will be mitigated by having the Bank as the executing agency. The TC will also closely coordinate with technical agencies such as PAHO to ensure the use of the most updated and reliable data available.

## **VII. Exceptions to Bank policy**

- 7.1 There are no exceptions to Bank policy.

## **VIII. Environmental and Social Strategy**

- 8.1 The safeguard policy filter report categorized the TC as a "B" project, as it will be focused on generating evidence and data on the health system and the burden of NCDs and VBDs for the Government. The net environmental and social impacts are therefore likely to be positive for the population which will benefit from this TC. (See [SSF](#) and [SPF](#) filters)

### **Required Annexes:**

- Annex I: [Request from the client](#)
- Annex II: [Results Matrix](#)
- Annex III: [Terms of Reference](#)
- Annex IV: [Procurement Plan](#)



**AIDE MEMOIRE**  
**Identification Mission**  
**SU-L1054: Health Services Support Project**  
*Suriname, 18<sup>th</sup>-22<sup>nd</sup> July 2017*

**I. Introduction**

In response to the request to the IDB from the Ministry of Finance of Suriname to explore the opportunity for a loan to enhance the effectiveness of the health sector through interventions to address communicable and non-communicable diseases, a mission from the Health and Social Protection Division of the Inter-American Development Bank (IDB) visited Paramaribo, Suriname from the 18<sup>th</sup> to the 22<sup>nd</sup> July 2017. The mission team led by Diana Pinto (SPH/SCL), included Ian Ho-A-Shu (SPH/CTT), Natalie Wegener (SPH/SCL) and Laura Giles Alvarez (SPH/SCL).

**II. Objectives and activities**

The mission team held meetings with the Ministry of Health (MOH), the Bureau of Public Health (BOG), the Regional Health Services (RGD), the Medical Mission (MZ), the State Health Insurance Company (SZF), Suriname Pharmaceutical Provider Company (BGVS), the Joint Desk and the Academic Hospital (AZP). The complete list of meetings and participants is contained in the final mission agenda (See Annex 1).

During the meetings, the IDB team explained the loan preparation process and held discussions with the different stakeholders about the current situation and challenges of the health sector in Suriname. The objectives of the meetings included reaching agreements about the respective role and responsibilities of the IDB and the Ministry of Health, scoping potential areas for investments and identifying information needs for development of the project profile.

The members of the mission would like to express their gratitude to the Minister of Health, H.E. Patrick Pengel and the government officials for a very fruitful dialogue and the country office staff for excellent support.

**III. Agreements and next steps**

The Ministry of Finance formally requests the IDB to prepare an investment loan for the Health Sector in Suriname, for possible approval in 2018, in the indicative amount of US\$20million. In addition, the Government of Suriname is also requesting the IDB to prepare a technical co-operation to support the preparation and execution of this loan. This technical cooperation will be Bank-executed.

The Ministry of Health designated the following persons as focal points for this project: Wendy Emanuelson, Miriam Naarendorp and Annette Tjon Si Fat. They will facilitate obtaining information for loan preparation (ie. reports, data, documents) that the IDB may request, channel communications with stakeholders, and assist in obtaining official approvals that may be required along the loan preparation process. A first query for information, which we kindly request to be made available by August 4, 2017, will be submitted by the IDB team on July 24, 2017. The list of requested documentation is included in Annex 2.

A second mission will be scheduled within a period of approximately 8 weeks. For this mission the IDB will make the necessary arrangements to conduct a workshop with relevant



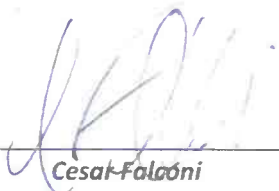
A second mission will be scheduled within a period of approximately 8 weeks. For this mission the IDB will make the necessary arrangements to conduct a workshop with relevant stakeholders with the purpose of defining project objectives and components for the elaboration of the project profile. By August 11, 2017 the IDB will provide a proposal of workshop methodology and content. A telephone conversation will be scheduled to jointly define dates and participants.



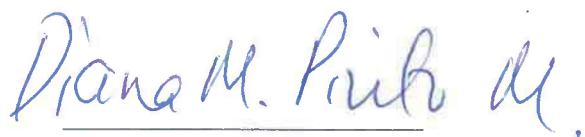
**H.E. Minister Gilmore Hoefdraad**  
Ministry of Finance



**H.E. Minister Patrick Pengel**  
Ministry of Health



**Cesar Falcóni**  
Country Representative  
Inter-American Development Bank Group



**Diana Pinto**  
Team Leader  
Inter-American Development Bank Group

## **ANNEX 1. Mission meetings participants, by institution**

### **IDB**

Cesar Falconi, Country Representative  
Leslie-Ann Edwards, Chief Operations Analyst  
Lucas Hoepel, Operations Associate  
Diana Pinto, Team Leader  
Ian Ho-A-Shu, Co-team Leader  
Natalie Wegener, Team Member  
Laura Giles Álvarez, Team Member

### **MOH**

Minister of Public Health H.E. Patrick Pengel  
Maureen Van Dyke, Director of health and chief medical officer  
Saskia Bleau, Coordinator of the M&E Unit  
Miriam Naarendorp, Pharmacy Policy Coordinator  
Wendy Emanuelson, Coordinator of the Planning Unit

### **BOG**

Dr Helene Hiwat, Program Coordinator  
Prim Ritoe, Head of Public Health Bureau  
Headley Cairo, Coordinator of Malaria Program

### **RGD**

Rijman Hanna, Nursing Director  
Heymans Marcia, Manager Medical Department  
Roep Pedro, RGD Physician  
Moesaheb Rashida, Finance Director  
Mohab Ali, RGD Physician  
Noordzee Edwin, Acting Director  
Gajadin Nishita, Public Health Officer.

### **MZ**

Danso Thimpson, Regional Coordinator  
Van Eer Edward, General Director

### **SZF**

Claudine Amattabri, Head of Department for Management Information Systems  
Mildred Lie Hong Fong, Medical-Technical Advisor  
Olivia Liu, Head of Pharmacy  
Humphry Hasrat, General Physician & SZF Advisor  
Bernard Pleisner, Head of Finance

### **BGVS**

Wilfred Balraadjsing, Deputy Managing Director

### **Joint Desk Ministry of Finance and Central Bank**

Iris Sandel, Head of the Joint Desk Ministry of Finance and Central Bank

### **AZP**

Marica-Redan, CEO  
Lindy Liauw-Kieta, Medical Director  
Faucia Niamut, Nurse Director  
Fauzia Poese, Assistant Medical Director

## **ANNEX 2. Documentation request, topics and responsible institution**

We kindly request the following information is submitted by August 4, 2017:

### **GOVERNANCE, POLICY AND REGULATION**

- MOH Permanent Secretary Concept note on request for support from IDB, describing priority impact, objective, outcomes, outputs and indicators of potential interventions
- MOH Strategic Plan, draft Aug 2017 (MOH Director Strategic Planning, Joint Desk)
- MOH Annual Plan, draft Aug 2017 (MOH Director Strategic Planning, Joint Desk)
- MOH National Development Plan, draft Aug 2017 (MOH Director Strategic Planning, Joint Desk)
- Bureau of Public Health (BOG) Organigram, draft July 2017 (MOH Director Strategic Planning, Joint Desk)
- Revised MOH Organigram, draft Aug 2017 (MOH Director Strategic Planning, Joint Desk)
- Legislation on State Owned Enterprise Laws 2014 (MOH Permanent Secretary)
- Health Insurance Reform Law, 2014 (MOH Permanent Secretary)

### **FINANCING**

- Donor Matrix of Current Projects, respective funding and progress or stage of operation (MOH Permanent Secretary)
- Health Sector Strategic Priorities Mapped to Current Donor Funding (MOH-Director of Pharmacy)
- Most recent national health accounts/expenditure assessment (MOH Director Strategic Planning, Joint Desk)

### **INFORMATION SYSTEMS**

- Description and current state of progress of Minister's Proposed Health Information Management System (MOH Director Strategic Planning)
- Report of progress on Patient Record Usage-Gestonbuku, developed under IDB NCD TC (MOH Director Strategic Planning)

### **HEALTH INDICATORS**

- Report of results from Paramaribo NCD One-Stop-Shop (MOH Director Strategic Planning)
- IDB Deliverables from NCD TC (MOH Director Strategic Planning)
- PAHO Suriname Health In All Policies documentation (MOH Director Strategic Planning)
- PAHO Draft Assessment of Suriname's NCDs plan implementation from Barbara Barnette (MOH Director Strategic Planning)
- Most recent epidemiological and demographic profile of the population (MOH Director Strategic Planning)
- Most recent assessment of health provision supply (infrastructure, human resources) population (MOH Director Strategic Planning)
- Most recent assessment of demand and health care use by levels of care population (MOH Director Strategic Planning)

### **INFRASTRUCTURE NEEDS**

- Blueprints for proposed new MOH headquarters building, architectural brief/design/budget (MOH Permanent Secretary) and respective legal documentation to perform construction such as proof of ownership or lease (MOH Permanent Secretary)
- Blueprints for proposed additional infrastructure needs of the AZP-parking area, pathology laboratory, eye care hospital, OBGYN mother and child center and respective legal documentation to perform construction such as proof of ownership or lease (AZP CEO)



Operation Number: **SU-T1100**  
 TCM Cycle: **TCM Period 2017**  
 Last Update: **3/14/2018**

Inter-American Development Bank - IDB

## Results Matrix

### Outcomes

Outcome: 1 Ministry of Health (MOH) strategic & operational capacity strengthened										
Indicators	Flags*	Unit of Measure	Baseline	Baseline	Means of verification		2018	2019	2020	EOP
1.1 Percentage of Strategic & operational targets achieved		%	0.00	2018	MOH Operational Reports	P	0.00	10.00	30.00	40
						P(a)	0.00	10.00	30.00	40
						A				
Outcome: 2 Loan operation SU-L1054 design and implementation informed by technical studies										
Indicators	Flags*	Unit of Measure	Baseline	Baseline	Means of verification		2018	2019	2020	EOP
2.1 Percentage of technical studies complete		% technical studies	0.00	2018	Technical studies documents delivered	P	40.00	60.00	0.00	100
						P(a)	40.00	60.00	0.00	100
						A				

CRF Indicator

### Outputs: Annual Physical and Financial Progress

1 Physical Infrastructure, Digital Technology, Health Network Analysis and Socio-Environmental Techni						Physical Progress					Financial Progress					
cal studies																
Outputs	Output Description	Unit of Measure	Baseline	Baseline Year	Means of verification	2018	2019	2020	EOP	2018	2019	2020	EOP	Theme		
1.1 Architectural/structural design completed	Architectural design for MOH Building Infrastructure Complete	Designs (#)	0	2018	Document approved by IDB & MOH	P	1	0	0	1	P	35000	0	0	35000	Institutional Development
						P(a)	1	0	0	1	P(a)	35000	0	0	35000	
						A					A					
1.2 Prefeasibility Studies undertaken	Technical, design and sustainable Energy study for MOH Building Infrastructure completed	Studies (#)	0	2018	Document approved by IDB	P	1	0	0	1	P	0	0	0	0	Sustainable Energy and Climate Change
						P(a)	1	0	0	1	P(a)	0	0	0	0	
						A					A					
1.3 Management information systems (MIS) designed	Digital Health and Management Information System Assessment complete	Systems (#)	0	2018	Document approved by IDB	P	1	0	0	1	P	65000	0	0	65000	Digital Economy
						P(a)	1	0	0	1	P(a)	65000	0	0	65000	
						A					A					
1.4 Diagnostics and assessments completed	Integrated health network analysis study completed	Diagnostics (#)	0	2018	Document approved by IDB	P	1	0	0	1	P	75000	0	0	75000	Institutional Development
						P(a)	1	0	0	1	P(a)	75000	0	0	75000	
						A					A					
2 Strengthening MoH capacity to implement an intersectoral and multi-sectoral approach to NCDs						Physical Progress					Financial Progress					

Outputs	Output Description	Unit or Measure	Baseline	Baseline Year	Means of verification	2018	2019	2020	EOP	2018	2019	2020	EOP	Theme		
2.1 Institutional capacity analysis conducted	Institutional Capacity Analysis conducted including results of IDB PACI tool	Assessments (#)	0	2018	Analyzed results document approved by IDB & MOH	P	1	0	0	1	P	0	0	0	Institutional Development	
						P(a)	1	0	0	1	P(a)	0	0	0		0
						A					A					
2.2 Institutional development plan implemented	Institutional strengthening plan for MOH implemented	Plans (#)	0	2018	Plan document approved by IDB & MOH	P	0	1	0	1	P	60000	0	0	60000	Institutional Development
						P(a)	0	1	0	1	P(a)	60000	0	0	60000	
						A					A					
2.3 Action plans designed	Plan of investments for the MoH to address NCDs within an innovative and multisectoral approach designed based on NCD gap analysis which measures the economic burden of illness to the Suriname society and provide useful data to determine and rank the NCDs population interventions priorities	Action Plans (#)	0	2018	Plan document approved by IDB & MOH	P	1	0	0	1	P	32000	0	0	32000	Institutional Development
						P(a)	1	0	0	1	P(a)	32000	0	0	32000	
						A					A					
2.4 Diagnostics and assessments completed	Avoidable hospitalization studies complete	Diagnostics (#)	0	2018	Document approved by IDB	P	0	1	0	1	P	13000	0	0	13000	Institutional Development
						P(a)	0	1	0	1	P(a)	13000	0	0	13000	
						A					A					
2.5 Diagnostics and assessments completed	Ex ante cost benefit analysis completed	Diagnostics (#)	0	2018	Document approved by IDB& MOH Suriname	P	1	0	0	1	P	10000	0	0	10000	Institutional Development
						P(a)	1	0	0	1	P(a)	10000	0	0	10000	
						A					A					

Other Cost
Final Evaluation
Project Monitoring

Total Cost

	2018	2019	2020	Cost
P	\$0.00	\$5,000.00	\$0.00	\$5,000.00
P(a)	\$0.00	\$5,000.00	\$0.00	\$5,000.00
A				
P	\$5,000.00	\$0.00	\$0.00	\$5,000.00
P(a)	\$5,000.00	\$0.00	\$0.00	\$5,000.00
A				
	2018	2019	2020	Total Cost
P	\$295,000.00	\$5,000.00		\$300,000.00

 CRF Indicator

 Standard Output Indicator

P(a)	\$295,000.00	\$5,000.00		\$300,000.00
A				



## SURINAME

### TECHNICAL SUPPORT TO MAP AND STRENGTHEN PRIMARY AND CHRONIC CARE CAPACITIES IN SURINAME

Design and Implementation Resources for Health Services Support Project (SU-T1100)

#### TERMS OF REFERENCE (CONSULTANCY 1)

- I. The government of Suriname (GoS) has requested a loan of US\$20M to fund the **Health Services Support Project (HSSP)** operation SU-L1054 which seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. A TC is also being funded to support the design and implementation of operation SU-L1054. The TC will finance technical studies required to develop key areas of the loan components described above, as well as institutional strengthening activities, focused on the MoH.

#### II. CONTEXT OF ACTIVITIES

In the past decades, the Government of Suriname has improved the health status of its population and is on track to reach its health-related Millennium Development Goals (MDGs). Since 1990, life expectancy at birth has increased from 66 to 72 years.<sup>1</sup>

**Health conditions and burden of disease.** The Government of Suriname (GoS) faces epidemiological challenges stemming from increasing rates of non-communicable diseases (NCDs) and the persistence of communicable diseases (CDs). The 2014 NCD country profile report<sup>2</sup> shows NCDs have become the main cause of morbidity and mortality (68% of total deaths). Between 2005-2016 the incidence (new cases) of diabetes, ischemic heart disease and chronic kidney disease grew by 39%, 19% and 24% respectively<sup>3</sup>. The 2013 Suriname STEPS Survey highlighted the following risk factors driving increases in NCDs: high blood pressure, obesity and overweight, tobacco and alcohol consumption. Nearly 30% of adults, and 40-50% of those over age 55 suffer from high blood pressure. Overweight and obesity affect 18% of men, 31% of women and 26% of children aged 13-15<sup>4</sup>. Unhealthy diet and lack of exercise drive these figures.<sup>5</sup> From an economic perspective and drawing from recent comparable evidence from other Caribbean countries, NCDs have a significant impact at the household level from income loss and increased in out-of-pocket expenses, and at the national level from loss of skilled labor and productivity, lower competitiveness and higher government health and social expenditures (spending on hypertension and diabetes is between 1-8% of GDP in 4 Caribbean countries).<sup>6</sup> Regarding CDs, control of malaria, has been noteworthy and the GoS has committed to malaria elimination by 2020. A major challenge to achieving this goal is that recently most cases originate from migrant, multi-ethnic small-scale gold-mining communities in the border areas (Guyana

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<sup>1</sup> WHO WHS 2011

<sup>2</sup> World Health Organization. Suriname Country Report. World Health Organization 2017: <http://www.who.int/countries/sur/en/>

<sup>3</sup> Institute of Health Metrics and Evaluation. Suriname Statistics: <http://www.healthdata.org/suriname>

<sup>4</sup> World Health Organization. World health statistics 2009. World Health Organization, 2009.

<sup>5</sup> Ministry of Health. National Action Plan for the Prevention and Control of NCDs (2015-2020). Government of Suriname, 2014.

<sup>6</sup> World Bank. NCDs in the Caribbean: The New Challenge for Productivity and Growth. Caribbean Knowledge Series No 78596, World Bank; 2013. Abdulkadri, Abdullahi O., Colette Cunningham-Myrie, and Terrence Forrester. "Economic burden of diabetes and hypertension in caricom states." Social and Economic Studies 58, no. 3/4 (2009): 175-97

Shield-GS.)<sup>7</sup> Control of malaria transmission is difficult because of these communities' particular lifestyles and habits. Addressing other CDs, like HIV, Leishmaniasis and Tuberculosis is also a priority both in the GS border and at the national level.

**Service Providers, Provision and Barriers to Accessing Care.** Surinamese healthcare is provided by a combination of public and private health care providers. See Figure 1. There are both public and private providers for primary, secondary and tertiary care, and use depends on geographic area and type of insurance. Public primary healthcare services are provided by Regional Health Districts (RGDs), with the exception of the districts of the Interior<sup>8</sup>, whose service provision is provided by the not-for-profit organization, the Medical Mission (MZ). The RGD has 56 health facilities, including 15 health posts and 41 primary care clinics, while the MZ has 57 polyclinics and health posts. There are 146 private clinics, 1 psychiatric hospital in Paramaribo, 40 dental units including 26 of these which are located in the RGD Clinics.<sup>9</sup> The RGD staffs its posts with 1 doctor and 2 nurses and its clinics with 1-4 doctors and 1-5 nurses<sup>10</sup>, while the MZ staffs their health posts and clinics with community health workers, which are supervised by a total of 5 doctors,<sup>11</sup> who are based in Paramaribo, rotating between health facilities and are always on-call with communication by radio. All hospitals are located on the coast (4 public and 2 private). The RGD refers patients to the public hospitals. Hospital care for the referral patients of the MZ is provided initially by the Diakonessen (private) Hospital, with overflow directed to the Public Lands Hospital and the Academic Hospital in Paramaribo. There are 3 private medical laboratories as well as laboratories located in each hospital. There are several barriers to accessing health services. For the coast, poor health worker capacity and infrastructure as well as a lack of supplies are major constraints for primary health services. Estimates are that 50% of the RGD's infrastructure is not adequate for general services. The RGD also suggests that the perceived poor quality of their services by the population, stemming from poor conditions of facilities, is a barrier to access and low uptake of their services. While a rigorous assessment of human resources for health capacity and needs has not been performed in the country, the RGD estimates that their health workers are working at full capacity and that they critically lack appropriate training.<sup>12</sup> In the Interior, there are transportation and socio-cultural barriers as well as a lack of equipment, supplies and human resources for health. Social and cultural barriers exist for communities in the Interior, with low up-take of services due to a lack of culturally or linguistically appropriate health information.<sup>13</sup> Both regions have constraints that include inadequate operating hours and lack of portability of coverage. For example, RGD operating hours are limited (e.g. 7-11am) and do not match the scheduling needs of the patient population, negatively affecting, for example, the offer of preventive services and the demand for services in

<sup>7</sup> Bureau of Public Health. Malaria in Suriname Analysis of the Trends Malaria Program. Malaria Program, Ministry of Health Government of Suriname. For example, MP studies show little knowledge about the potential health threats of malaria and low rates bed nets use. Insufficient health seeking behavior is associated with both self-treatment and low adherence to treatment, both of which contribute to development of drug-resistance of the malaria parasite

<sup>8</sup> Brokopondo and Sipaliwini.

<sup>9</sup> Health in the Americas, 2012 Edition: Suriname Country Volume. Pan-American Health Organization.

<sup>10</sup> RGD Health Posts are staffed with 1 doctor and 2 registered nurses; primary care clinics are staffed with 1-4 doctors, 1-5 registered nurses, 1-3 administrative personnel as well as a laboratory technician, 1 pharmacist and 1 midwife.

<sup>11</sup> This is the international equivalent to a "barefoot doctor", including training in obstetric care, dental extraction and preventative services. The MZ's health facilities are generally located within 30 minutes travel distance of their populations (60,000 total population). In addition to doctors, head nurses, health assistants, polyclinic aids, paramedics and laboratory technicians also support the community health workers

<sup>12</sup> Due to the fact that they had previously discontinued this training in the 90s and have in the past few years begun it again.

<sup>13</sup> The profile of the health assistant is LBGO diploma, connection with the Interior (for retention), understanding of the language and culture. Part of the work responsibilities of the health assistant is community outreach but it was suggested that they are only able to perform this to about 10-15% of what is expected.

general. With such a limited schedule, health professionals find it difficult to offer preventive services and revert to mainly treating people with sickness.

**Suriname's strategies to address health challenges.** Based on evidence of best practice, health systems that adopt a chronic care model (CCM) within the primary care (PC) setting have shown to be more effective and efficient in managing and controlling not only NCDs, but also CDs.<sup>14</sup> The MOH therefore introduced the One Stop Shop (OSS) model in primary care. The OSS is an integrated care approach based on the CCM, targeting patients with diabetes and heart disease. The OSS has been functioning in Paramaribo and Nickerie, serving a population of approximately 161,871.<sup>15</sup> Given increasing population with NCDs, the GoS plans expansion of the OSS model to other districts, but to do so, needs to better understand and address structural information and management deficiencies in the current service provision network.<sup>17 18</sup> Second, the MOH is carrying out public health interventions to address NCDs risk factors, through the adoption of a Health in All Policies (HiAP) approach which entails coordinated action between both Health and non-health Ministries. Successful implementation of HiAP requires strengthening of the core stewardship and policy functions of the MOH, particularly improvement of the overall technical capacity in terms of planning, monitoring and evaluation, digital technology use.

### III. CONSULTANCY SCOPE AND OBJECTIVES

The consultancy serves to provide the baseline data on the organization of all aspects of the Health Care Network in Suriname and to recommend improvements that will strengthen primary and chronic health care services in Suriname. The deliverables from this consultancy will be used directly or indirectly design the interventions in the primary and chronic care network in the project.

For the purpose of these terms of reference, the mapping and strengthening of the Primary and Chronic Care Network capacities is split into two separate consultancies:

- **Health Network Assessment (HNA) Consultancy 1** - Consultancy for data collection and compilation of the current structure and performance of the healthcare network of Suriname, with a focus on Primary and Chronic Care. The objectives of this consultancy are: (i) to map and categorize all level (tertiary, secondary, primary and community) public (supported by Government funding) health facilities in operation in the country; and (ii) to collect and analyze primary production data from the health facilities, with the aim to strengthen essential primary and chronic care capacities to address chronic non-communicable disease care (including curative, rehabilitative and preventative) in Suriname.
- **Health Network Assessment (HNA) Consultancy 2** - Consultancy for the analysis of the current Health Care Network with recommendations for improvement of the current organization, referral and counter-referral system. The objective of this consultancy is (i) to perform a general review of the primary and chronic care network in Suriname based on the information gathered during Phase 1 and (ii) propose a reorganization of the care and referral networks based on the parameters of national norms and international recommendations for care of chronic non-communicable diseases, including pillars of the

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<sup>14</sup> Hansen, Johan, Peter P. Groenewegen, Wienke GW Boerma, and Dionne S. Kringos. "Living in a country with a strong primary care system is beneficial to people with chronic conditions." *Health affairs* 34, no. 9 (2015): 1531-1537.  
12. Bodenheimer, Thomas, Edward H. Wagner, and Kevin Grumbach. "Improving primary care for patients with chronic illness." *Jama* 288, no. 14 (2002): 1775-1779.

<sup>15</sup> Estimate based on approximate population affected by targeted NCDs within OSS service area. OSS lacks data on number of patients served or demand in service area.

Chronic Care Model<sup>16</sup> and the WHO Package of Essential Noncommunicable (WHO PEN) Disease Interventions.

**This term of reference refers to HNA Consultancy 1** (henceforth HNA1). This consultancy will lead a team of local consultants who will support the process of mapping the health facilities, the performance survey and the infrastructure component of the current tertiary, secondary, primary and chronic care network. This consultancy will work in close coordination with an international consultant responsible for the analysis of the current the Health Care Network with recommendations for improvement of essential primary and chronic care capacities and referral and counter-referral system based on the parameters of the WHO PEN Strategy.

The WHO-PEN intervention is a prioritized set of cost-effective interventions that provides clinical decision support for assessment and management of NCDs at the primary care level in low resource settings.<sup>17</sup> It is designed to use cost-effective interventions for early detection, prevention and treatment of the major NCDs namely heart attacks and strokes, diabetes, cancer, renal diseases and asthma. The package uses simple algorithms to stratify patients' risk status based on age, clinical history, comorbidities and blood pressure for care.

## MAIN ACTIVITIES

The selected candidate will perform the following general activities. **The activities should include but are not limited to the following products:**

1. **Service Availability Readiness Assessment and Health Facilities Mapping.** This activity includes a mapping of all functioning health facilities beginning with Regions 1, 2 and 3 in the country, with a description of the type of facility (e.g. health posts, health centers, district hospitals, etc.). It should include pictures of the facilities and the collection of primary data on the following information:
  - a. Human resources available \*
  - b. Medical equipment available\*\*, including demonstration of continuous availability of medical supplies and equipment for the last three months including no stock out of medications, specifically drugs for major four NCDs<sup>18</sup> and relevant CDs such as diabetes, malaria in the pharmacy in the same time period. Excel tables, graphs and other visual aids may be added.
  - c. Patient capacity
  - d. Existence and status of operating theaters providing wound treatment; production data (quantitative and qualitative)
  - e. Existence and status of laboratories; list of exams provided in primary care exam; description of processes for sample collection, processing, and transmitting results to patients & providers
  - f. Chronic condition services currently provided (including dietary, optometry, podiatry services and prevention and management of cervical cancer)
  - g. Operating hours, available and used
  - h. Availability of ambulances and other means of transportation
  - i. Availability of the communication network

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<sup>16</sup> Davy et Al., Effectiveness of Chronic Care Models: Opportunities for Improving Healthcare Practice and Health Outcomes: a Systematic Review. BMC Health Services Research, 2015.

<sup>17</sup> World Health Organization. Package of essential noncommunicable (PEN) disease interventions for primary health care in low-resource settings. Geneva, Switzerland: 2010.

<sup>18</sup> Cardiovascular diseases, cancers, chronic respiratory diseases, diabetes mellitus, and cancers.

- j. General facility status (e.g. availability of water supply, telecommunications, electricity, beds, etc.)
- k. Catchment areas and population size in these areas
- l. Status of physical infrastructure and utilities including the GPS coordinates of each health facility.
- m. Others

This activity will apply the Service Availability and Readiness Assessment tool<sup>19</sup> to provide an assessment of the service network, and GIS tools to provide a health facilities mapping.

**Service Availability** refers the physical presence of the delivery of services and encompasses health infrastructure, core health personnel and aspects of service utilization.

**General service readiness** refers to the overall capacity of health facilities to provide general health services. Readiness is defined as the availability of components required to provide services, such as basic amenities, basic equipment, standard precautions for infection prevention, diagnostic capacity and essential medicines.

**Service-specific readiness** refers to the ability of health facilities to offer a specific service, and the capacity to provide that service measured through consideration of tracer items that include trained staff, guidelines, equipment, diagnostic capacity, and medicines and commodities. In this instance it will include services for NCDs. Part of this will include **Extracted primary care centers mapping**. Which will produce a separate product mapping **existing primary and chronic care centers** and their structure linked to the appropriate health network. This should include a description of the current infrastructure (including the GPS coordinates of the PCC) and patient capacity, current service utilization statistics (collected in a later section of this survey), catchment area coverage, available equipment, medical supplies and existing human resources.

An overview should be provided of processes that relate to the provision of primary care services with a focus on those serving chronic non-communicable diseases and their role in the healthcare network, applying the norms of care for Suriname or where there are none, the WHO Package of Essential Services for NCDs.

Please see Tables in Annex II for further guidance on minimum information that should be collected on WHO PEN services.

\*A targeted review of available **Human Resources for Health** as part of the data collected in this survey will be. It should include an overview of availability of HRH, specifically those with training to screen, diagnose and treat NCD patients in order to establish a baseline diagnosis on the availability and gap (based on demand) of HRH at the level of executing units. The analysis of this will be carried out by HNA 2. This consultant will be expected to work with HNA 2 to gather the required information for this analysis.

\*\*A targeted analysis of biomedical equipment and infrastructure required for screening, diagnosis and treatment of previously mentioned major 4 NCDs will be performed as part of HNA 2 workplan, therefore this data collection should include coordination with HNA 2 to ensure that necessary data is collected.

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<sup>19</sup> Service Availability and Readiness Assessment (SARA): an annual monitoring system for service delivery Implementation guide, Version 2.2, WHO, September 2015: [http://www.who.int/healthinfo/systems/sara\\_implementation\\_guide/ena/](http://www.who.int/healthinfo/systems/sara_implementation_guide/ena/)

2. **Health facilities performance review.** Perform a health facility performance indicator review to assess which health facilities have the necessary inputs for providing essential services for NCD care, as per the norms established by Suriname Government and WHO PEN. This will include a health facility survey and medical record review with site visits to every facility and should be combined with Activity 1 of this consultancy. This survey must capture data on the project indicators that relate to Component 2, (Results Matrix for SU-L1054 forthcoming). The consultancy is expected to assess Regions 1, 2, and 3 first in order to provide preliminary report as these are the primary target regions of the project, these are also the primary regions where the One-Stop-Shop operates. The health facilities in the remaining 7 regions may be assessed as feasible and agreed in the work plan. See Annex III for a regional map of Suriname.
3. **Referral network mapping.** This includes a mapping of the referral network amongst the facilities in the healthcare network including a description of the system used for referral and counter-referral of patients for chronic NCD services. The selected consultant will design tools to collect information on the system and processes of referral amongst the various levels of facilities in the healthcare network for NCD services including tobacco cessation support, nutrition and physical activity counseling, blood sugar screening (fasting and A1C), insulin injections, short-acting bronchodilators, blood pressure testing as well as aspirin, angiotensin-converting enzyme inhibitor, beta-blockers, statins and anti-hypertensives. The referral information includes but is not limited to (i) name and type of facility to which the referral is sent, (ii) what mechanism is used to transfer the patient information to the referral facility and (iii) how the referral facility provides counter-referral patient information.

The information collected will be used by HNA Consultant 2 to map the referral and counter-referral system process maps and GIS visual aids. HNA 2 consultant will provide a description of flow and processes for care. Therefore HNA 1 must work together with this consultant to design tools that collect all required information to perform this mapping. This should include a sample a description/display process per level (1, 2, 3 and 4) and provide the most common scenarios observed at those levels regarding:

- i. Primary prevention of heart attacks and strokes care processes (ambulatory and surgical methods)
  - ii. Prevention, screening and management of cervical and pancreatic cancer care processes
  - iii. Prevention, screening and management of Type 1 and 2 diabetes
  - iv. Prevention of onset and delay of progression of diabetic retinopathy
  - v. Prevention of foot complications through examination and monitoring
  - vi. Secondary prevention care processes for post-myocardial infarction, post stroke, and rheumatic heart disease
  - vii. Prevention of onset and delay in progression of chronic kidney disease
  - viii. Prevention of onset and delay of progression of neuropathy
  - ix. Prevention exacerbation of COPD and disease progression
4. **Conduct a Supply Side Review in collaboration with the MOH NCDs team and with data from the MoH information system, including:**
    - a. Collect primary data/estimate the number of persons at risk of NCDs in the country in, but not limited to, the following categories:
      - i. Distribution of the population by age and sex according to 10-year total CVD risk, by region, catchment area of care centers, and disaggregated by age group, and males and females



- ii. Incidence per 1,000 for Acute Myocardial Infarction (AMI) by region, catchment area of care centers, and disaggregated by age group, and males and female
- iii. Prevalence per 1,000 for Long Term survivors by region, catchment area of care centers, and disaggregated by age group, and males and females
- iv. Prevalence per 1,000 for First Ever Stroke Cases by region, catchment area of care centers, and disaggregated by age group, and males and females
- v. Incidence per 1,000 for First Ever Stroke Cases by region, catchment area of care centers, and disaggregated by age group, and males and females
- vi. Prevalence per 1,000 for First Stroke Long Term Survivors by region, catchment area of care centers, and disaggregated by age group, and males and females
- vii. \*Incidence per 1,000 for First Stroke Long Term Survivors by region, catchment area of care centers, and disaggregated by age group, and males and females
- viii. Distribution of the population (%) with Rheumatic Heart Disease by region, catchment area of care centers, and disaggregated by age group, and males and females
- ix. Incidence per 1,000 for Rheumatic Heart Disease Cases by region, catchment area of care centers, and disaggregated by age group, and males and female
- x. Prevalence per 1,000 for Asthma by region, catchment area of care centers, and disaggregated by age group, and males and females
- xi. Prevalence per 1,000 for Breast Cancer by region, catchment area of care centers, and disaggregated by age group, and males and females
- xii. Incidence per 1,000 for Breast Cancer by region, catchment area of care centers, and disaggregated by age group, and males and females
- xiii. Prevalence per 1,000 for State X (Cervical Cancer) by region, catchment area of care centers, and disaggregated by age group, and males and females
- xiv. Incidence per 1,000 for State X (Cervical Cancer) by region, catchment area of care centers, and disaggregated by age group, and males and females
- xv. Crude Prevalence for Diabetes Type 1 and Diabetes Mellitus by region, catchment area of care centers, and disaggregated by age group, and males and females
- xvi. Incidence per 1,000 for Diabetic foot by region, catchment area of care centers, and disaggregated by age group, and males and females
- xvii. Incidence per 1,000 for Amputation by region, catchment area of care centers, and disaggregated by age group, and males and females
- xviii. Prevalence (%) of very high cholesterol (Total Cholesterol $\geq$ 8mmol/l) by region, catchment area of care centers, and disaggregated by age group, and males and females
- xix. Prevalence (%) of very high blood pressure (SBP $\geq$ 160 OR DBP $\geq$ 100) by region, catchment area of care centers, and disaggregated by age group, and males and females
- b. Collect primary data on the number of current NCD cases per region and classification of NCD using categories listed above, time series of five years, if available.
- c. Calculate the historical and projected number of NCD cases all regions; determine where the cases from these regions are originating; and mortality rates
- d. Current production reported by health facilities/current service utilization statistics included (but not limited to, if available)
- e. Patient load statistics of NCDs per clinic/ service provided

Utilize tables in Excel format as a minimum starting point for providing data. All tables must be completed and provided with data source/collection and calculation methods.

5. **Coordinate and supervise the work of local consultants.** This selected candidate will lead a team of local consultants who will support the processes of: (i) mapping the health facilities and providing service availability and readiness assessment; (ii) supply side review and processes flows and (iii) health facilities performance review.

Local consultants will be hired to support the mapping of the health facilities, the health facilities performance review, and the collection of data for the supply side review. Other local consultants with a degree in engineering will be hired to support the review of the infrastructural and biomedical capacities of the health facilities and will be under the shared supervision of HNA 1 and 2 consultants.

This selected candidate will be responsible for: (i) preparing the terms of reference of the local consultants; (ii) preparing an exhaustive list of all the information that has to be collected by each individual local consultant; (iii) preparing the collection instruments and check-lists; (iv) preparing the field-visits plan for each team of local consultants; (v) supporting the government of Suriname, if needed, in the selection process of each individual consultant (e.g. reviewing candidate's CVs); (vi) supervising the work of the local consultants from remote and on selected dates during the field portion of this assignment; and (vii) preparing a final report consolidating all the tools developed and the work conducted by the local consultants.

6. **Others.** The selected candidate is expected to revise this terms of reference together with the consultant responsible for performing a general assessment of the primary and chronic care network in Suriname (HNA Consultancy 2), and to propose changes if necessary, which shall be agreed with the NCD Unit and the other consultant. He/she is also expected to prepare a detailed Work Plan of the consultancy, including a timeline for the execution of the consultancy; mission dates to Suriname; field visits dates per region of the country; and estimated date for delivering all products. This Work Plan should be prepared after the revision and update, if necessary, of this term of reference. In addition, the selected candidate will be expected to conduct weekly meetings (physical or virtual) with the IDB & Government of Suriname to inform of progress and challenges identified. He or she is expected to prepare aide memoires of all meetings.

#### IV. PRODUCTS/DELIVERABLES

The main expected deliverables are listed in the table below. The format in which products will be delivered will be agreed upon with the IDB & Government of Suriname.

Every report must be submitted to the IDB & Government of Suriname in an electronic file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final reports. On completion of the consultancy the final report should be accompanied by soft copies of all raw data and analyses used.

### Payment Schedule for Health Network Mapping & Analysis Consultancy 1

Products	Payment (% of total contract sum)
Signature of the contract	0
1. Submission and approval by the Government of Suriname of a Work Plan containing, among others: (i) revised terms of reference (ii) a timeline for the execution of the consultancy; (iii) mission dates to Suriname; (iv) field visits dates per region of the country; (iv) estimated date of deliverables for all the above- mentioned products	10
2. Submission and approval by the IDB & Government of Suriname of the following documents: (i) terms of reference of the local consultants; (ii) exhaustive list of information to be collected by each consultant; (iii) collection instruments and checklists along with flow/skip patterns to be converted to a digital format; and (iv) field-visit plan for each individual local consultant	15
3. Submission and approval by the Government of Suriname of <b>health facilities mapping, SARA &amp; health facilities performance</b> items	30
4. Submission and approval by the IDB & Government of Suriname of <b>referral network mapping</b>	15
5. Submission and approval by the IDB & Government of Suriname of <b>supply side review</b> items	15
6. Submission and approval by the IDB & Government of Suriname of <b>final report on the work of the individual consultant</b>	15

## V. QUALIFICATIONS

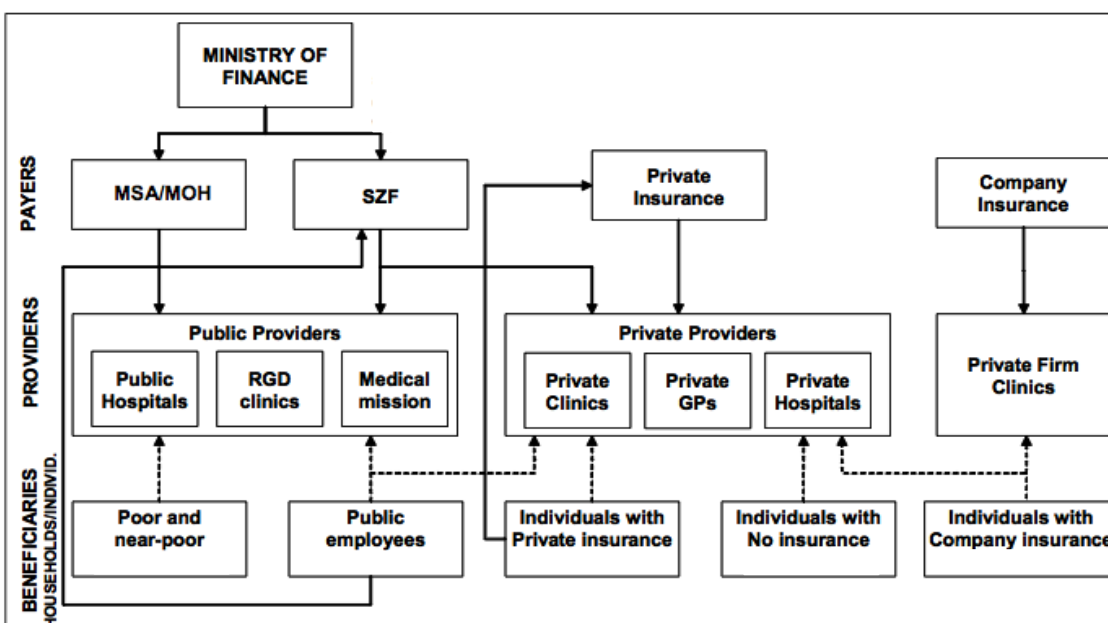
The candidate for this position should possess expertise and skills in the following areas:

- Academic Degree: A degree in medicine, nursing, public health, health informatics or related field. A graduate degree in public health, epidemiology, economics, mathematics, statistics or other social science would be desirable.
- Skills: Extensive experience in the health sector, including experience as a health professional and experience as manager/administrative/director of health facilities or lead health informatics director. Strong quantitative and qualitative skills, including previous experience with data collection and analysis and the conduction of surveys, preferably using electronic tools for data collection and aggregation. Previous experience with similar types of assessment highly desirable. Previous experience managing teams of consultants a plus. Availability to travel and to spend several weeks in Suriname a must. Strong written skills. Previous experience in the Dutch and English Caribbean a plus.
- Languages: Fluency in written and oral Dutch and English.

## VI. CHARACTERISTICS OF THE CONSULTANCY

- Contract duration: 120 non-consecutive working days between April 6<sup>th</sup>, 2018, and January 31<sup>st</sup>, 2019.
- Place(s) of work: Paramaribo, Suriname, and place of residency of the consultant.
- Coordinator: The consultant will work under the supervision of the Department of Planning Unit of the Ministry of Health of Suriname and in coordination with the Health Network Assessment 2 consultant.

Annex I: Figure 1



Source: IDB (2005). Suriname's Road to Health Sector Reform: An examination of the health care system and recommendation for change.

Annex II:

Table 1: Availability of basic diagnostic tests in surveyed health facilities, Suriname 2018

Diagnostic Test	Health Facility Type			
	CHPS	Health Centre	District Hospital	Regional Hospital
	n(%)	n(%)	n(%)	n(%)
Urine albumin/protein				
Urine glucose				
Urine ketones				
Blood glucose				
SerumTroponin				
Blood cholesterol				
Serum creatinine				

Table 2: Availability of basic equipment in surveyed health facilities, Suriname, 2018

Equipment	Health Facility Type			
	CHPS	Health Centre	District Hospital	Regional Hospital
	n (%)	n (%)	n (%)	n (%)
Functional oxygen cylinder				
Functional BPMD				

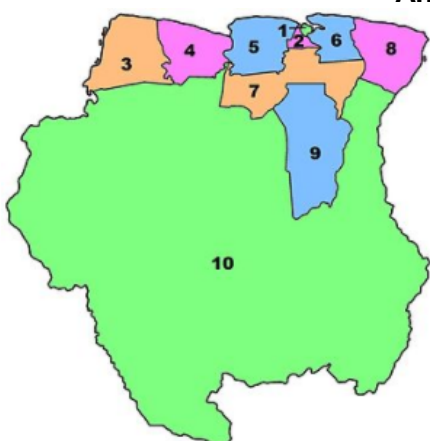
Equipment	Health Facility Type			
	CHPS	Health Centre	District Hospital	Regional Hospital
Functional weighing scale				
Functional Glucometer				
Functional Nebulizer				
Functional Spacer				
Functional Peak Flow Meter				
Functional Pulse oxymeter				
Functional Health education materials				
Functional tape measures				
Functional ECG				
Functional Stethoscopes				
Functional Thermometers				

**Table 3: Availability of selected essential medicines in surveyed facilities, Suriname 2018**

Selected Essential Medicine	Health Facility Type			
	CHPS	Health Centre	District Hospital	Regional Hospital
	n(%)	n(%)	n(%)	n(%)
Adrenaline injection				
Aspirin				
Atenolol/Beta blockers				
Beclomethasone inhaler				
Bendrofluazide				
Benzathine Penicillin				
Enalapril/ Lisinopril				
Erythromycin				
Furosemide				
Glibenclamide				
Hydrocortisone (injection)				
Insulin (long acting)				
Insulin (soluble)				
Ipratropium bromide				
Isosorbidedinitrate				
Statins				
Metformin				
Calcium channel blockers				
Sodium chloride infusion				
Phenoxymethyl Penicillin				
Prednisolone				

Selected Essential Medicine	Health Facility Type			
	CHPS	Health Centre	District Hospital	Regional Hospital
	n(%)	n(%)	n(%)	n(%)
Salbutamol inhaler				
Salbutamol tablet				
Salbutamol injection				
Paracetamol				
Ibuprofen				
Codeine				
Morphine (oral)				
Morpine (injection)				
Glyceryltrinitrate				
Heparin				
Amoxycillin				
Cotrimoxazole				
Promethazine injection				
Glucose injectable				

### Annex III: Regions of Suriname



◆	District	◆	Capital	◆
	<b>SURINAME</b>		<b>Paramaribo</b>	
1	Paramaribo		Paramaribo	
2	Wanica		Lelydorp	
3	Nickerie		Nieuw-Nickerie	
4	Coronie		Totness	
5	Saramacca		Groningen	
6	Commewijne		Nieuw-Amsterdam	
7	Para		Onverwacht	
8	Marowijne		Albina	
9	Brokopondo		Brokopondo	
10	Sipaliwini		none	



## SURINAME

### TECHNICAL SUPPORT TO ASSESS AND STRENGTHEN PRIMARY AND CHRONIC CARE CAPACITIES IN SURINAME

Design and Implementation Resources for Health Services Support Project (SU-T1100)

#### TERMS OF REFERENCE (CONSULTANCY 2)

- I. The government of Suriname (GoS) has requested a loan of US\$20M to fund the **Health Services Support Project (HSSP)** operation SU-L1054 which seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. A TC is also being funded to support the design and implementation of operation SU-L1054. The TC will finance technical studies required to develop key areas of the loan components described above, as well as institutional strengthening activities, focused on the MoH.

#### II. CONTEXT OF ACTIVITIES

In the past decades, the Government of Suriname has improved the health status of its population and is on track to reach its health-related Millennium Development Goals (MDGs). Since 1990, life expectancy at birth has increased from 66 to 72 years.<sup>1</sup>

**Health conditions and burden of disease.** The Government of Suriname (GoS) faces epidemiological challenges stemming from increasing rates of non-communicable diseases (NCDs) and the persistence of communicable diseases (CDs). The 2014 NCD country profile report<sup>2</sup> shows NCDs have become the main cause of morbidity and mortality (68% of total deaths). Between 2005-2016 the incidence (new cases) of diabetes, ischemic heart disease and chronic kidney disease grew by 39%, 19% and 24% respectively<sup>3</sup>. The 2013 Suriname STEPS Survey highlighted the following risk factors driving increases in NCDs: high blood pressure, obesity and overweight, tobacco and alcohol consumption. Nearly 30% of adults, and 40-50% of those over age 55 suffer from high blood pressure. Overweight and obesity affect 18% of men, 31% of women and 26% of children aged 13-15<sup>4</sup>. Unhealthy diet and lack of exercise drive these figures.<sup>5</sup> From an economic perspective and drawing from recent comparable evidence from other Caribbean countries, NCDs have a significant impact at the household level from income loss and increased in out-of-pocket expenses, and at the national level from loss of skilled labor and productivity, lower competitiveness and higher government health and social expenditures (spending on hypertension and diabetes is between 1-8% of GDP in 4 Caribbean countries).<sup>6</sup> Regarding CDs, control of malaria, has been noteworthy and the GoS has committed to malaria elimination by 2020. A major challenge to achieving this goal is that recently most cases originate from migrant, multi-ethnic small-scale gold-mining communities in the border areas (Guyana

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<sup>1</sup> WHO WHS 2011

<sup>2</sup> World Health Organization. Suriname Country Report. World Health Organization 2017: <http://www.who.int/countries/sur/en/>

<sup>3</sup> Institute of Health Metrics and Evaluation. Suriname Statistics: <http://www.healthdata.org/suriname>

<sup>4</sup> World Health Organization. World health statistics 2009. World Health Organization, 2009.

<sup>5</sup> Ministry of Health. National Action Plan for the Prevention and Control of NCDs (2015-2020). Government of Suriname, 2014.

<sup>6</sup> World Bank. NCDs in the Caribbean: the New Challenge for Productivity and Growth. Caribbean Knowledge Series No 78596, World Bank; 2013. Abdulkadri, Abdullahi O., Colette Cunningham-Myrie, and Terrence Forrester. "Economic burden of diabetes and hypertension in caricom states." Social and Economic Studies 58, no. 3/4 (2009): 175-97

Shield-GS.)<sup>7</sup> Control of malaria transmission is difficult because of these communities' particular lifestyles and habits. Addressing other CDs, like HIV, Leishmaniasis and Tuberculosis is also a priority both in the GS border and at the national level.

**Service Providers, Provision and Barriers to Accessing Care.** Surinamese healthcare is provided by a combination of public and private health care providers. See Figure 1. There are both public and private providers for primary, secondary and tertiary care, and use depends on geographic area and type of insurance. Public primary healthcare services are provided by Regional Health Districts (RGDs), with the exception of the districts of the Interior<sup>8</sup>, whose service provision is provided by the not-for-profit organization, the Medical Mission (MZ). The RGD has 56 health facilities, including 15 health posts and 41 primary care clinics, while the MZ has 57 polyclinics and health posts. There are 146 private clinics, 1 psychiatric hospital in Paramaribo, 40 dental units including 26 of these which are located in the RGD Clinics.<sup>9</sup> The RGD staffs its posts with 1 doctor and 2 nurses and its clinics with 1-4 doctors and 1-5 nurses<sup>10</sup>, while the MZ staffs their health posts and clinics with community health workers, which are supervised by a total of 5 doctors,<sup>11</sup> who are based in Paramaribo, rotating between health facilities and are always on-call with communication by radio. All hospitals are located on the coast (4 public and 2 private). The RGD refers patients to the public hospitals. Hospital care for the referral patients of the MZ is provided initially by the Diakonessen (private) Hospital, with overflow directed to the Public Lands Hospital and the Academic Hospital in Paramaribo. There are 3 private medical laboratories as well as laboratories located in each hospital. There are several barriers to accessing health services. For the coast, poor health worker capacity and infrastructure as well as a lack of supplies are major constraints for primary health services. Estimates are that 50% of the RGD's infrastructure is not adequate for general services. The RGD also suggests that the perceived poor quality of their services by the population, stemming from poor conditions of facilities, is a barrier to access and low uptake of their services. While a rigorous assessment of human resources for health capacity and needs has not been performed in the country, the RGD estimates that their health workers are working at full capacity and that they critically lack appropriate training.<sup>12</sup> In the Interior, there are transportation and socio-cultural barriers as well as a lack of equipment, supplies and human resources for health. Social and cultural barriers exist for communities in the Interior, with low up-take of services due to a lack of culturally or linguistically appropriate health information.<sup>13</sup> Both regions have constraints that include inadequate operating hours and lack of portability of coverage. For example, RGD operating hours are limited (e.g. 7-11am) and do not match the scheduling needs of the patient population, negatively affecting, for example, the offer of preventive services and the demand for services in

<sup>7</sup> Bureau of Public Health. Malaria in Suriname Analysis of the Trends Malaria Program. Malaria Program, Ministry of Health Government of Suriname. For example, MP studies show little knowledge about the potential health threats of malaria and low rates bed nets use. Insufficient health seeking behavior is associated with both self-treatment and low adherence to treatment, both of which contribute to development of drug-resistance of the malaria parasite

<sup>8</sup> Brokopondo and Sipaliwini.

<sup>9</sup> Health in the Americas, 2012 Edition: Suriname Country Volume. Pan-American Health Organization.

<sup>10</sup> RGD Health Posts are staffed with 1 doctor and 2 registered nurses; primary care clinics are staffed with 1-4 doctors, 1-5 registered nurses, 1-3 administrative personnel as well as a laboratory technician, 1 pharmacist and 1 midwife.

<sup>11</sup> This is the international equivalent to a "barefoot doctor", including training in obstetric care, dental extraction and preventative services. The MZ's health facilities are generally located within 30 minutes travel distance of their populations (60,000 total population). In addition to doctors, head nurses, health assistants, polyclinic aids, paramedics and laboratory technicians also support the community health workers

<sup>12</sup> Due to the fact that they had previously discontinued this training in the 90s and have in the past few years begun it again.

<sup>13</sup> The profile of the health assistant is LBGO diploma, connection with the Interior (for retention), understanding of the language and culture. Part of the work responsibilities of the health assistant is community outreach but it was suggested that they are only able to perform this to about 10-15% of what is expected.

general. With such a limited schedule, health professionals find it difficult to offer preventive services and revert to mainly treating people with sickness.

**Suriname's strategies to address health challenges.** Based on evidence of best practice, health systems that adopt a chronic care model (CCM) within the primary care (PC) setting have shown to be more effective and efficient in managing and controlling not only NCDs, but also CDs.<sup>14</sup> The MOH therefore introduced the One Stop Shop (OSS) model in primary care. The OSS is an integrated care approach based on the CCM, targeting patients with diabetes and heart disease. The OSS has been functioning in Paramaribo and Nickerie, serving a population of approximately 161,871.<sup>15</sup> Given increasing population with NCDs, the GoS plans expansion of the OSS model to other districts, but to do so, needs to better understand and address structural information and management deficiencies in the current service provision network.<sup>17 18</sup> Second, the MOH is carrying out public health interventions to address NCDs risk factors, through the adoption of a Health in All Policies (HiAP) approach which entails coordinated action between both Health and non-health Ministries. Successful implementation of HiAP requires strengthening of the core stewardship and policy functions of the MOH, particularly improvement of the overall technical capacity in terms of planning, monitoring and evaluation, digital technology use.

### III. CONSULTANCY SCOPE AND OBJECTIVES

The consultancy serves to provide the baseline data on the organization of aspects of the Health Care Network in Suriname and to recommend improvements that will strengthen primary and chronic health care services in Suriname. The deliverables from this consultancy will be used directly or indirectly design the interventions in the primary and chronic care network in the project.

For the purpose of these terms of reference, the mapping and strengthening of the Primary and Chronic Care Network capacities is split into two separate consultancies:

- **Health Network Assessment (HNA) Consultancy 1** - Consultancy for data collection and compilation of the current structure and performance of the healthcare network of Suriname, with a focus on Primary and Chronic Care. The objectives of this consultancy are: (i) to map and categorize all level (tertiary, secondary, primary and community) public (supported by Government funding) health facilities in operation in the country; and (ii) to collect and analyze primary production data from the health facilities, with the aim to strengthen essential primary and chronic care capacities to address chronic non-communicable disease care (including curative, rehabilitative and preventative) in Suriname.
- **Health Network Assessment (HNA) Consultancy 2** - Consultancy for the analysis of the current Health Care Network with recommendations for improvement of the current organization, referral and counter-referral system. The objective of this consultancy is: (i) to perform a general review of the primary and chronic care network in Suriname based on the information gathered during HNA1 and (ii) propose modifications to the care and referral networks based on the parameters of national norms and international recommendations for care of chronic non-communicable diseases, including pillars of the

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<sup>14</sup> Hansen, Johan, Peter P. Groenewegen, Wienke GW Boerma, and Dionne S. Kringos. "Living in a country with a strong primary care system is beneficial to people with chronic conditions." *Health affairs* 34, no. 9 (2015): 1531-1537.  
<sup>12</sup> Bodenheimer, Thomas, Edward H. Wagner, and Kevin Grumbach. "Improving primary care for patients with chronic illness." *Jama* 288, no. 14 (2002): 1775-1779.

<sup>15</sup> Estimate based on approximate population affected by targeted NCDs within OSS service area. OSS lacks data on number of patients served or demand in service area.

Chronic Care Model<sup>16</sup> and the WHO Package of Essential Noncommunicable (WHO PEN) Disease Interventions.

**This terms of reference refers to HNA Consultancy 2** (henceforth: HNA2). This consultancy will work closely with HNA Consultant 1 (henceforth HNA1) to select a team of local consultants who will support the process of collecting data for mapping the health facilities, the performance survey and the infrastructure component of the current tertiary, secondary, primary and chronic care network. HNA 2 is responsible for the analysis of the current the Health Care Network with recommendations for improvement of essential primary and chronic care capacities and referral and counter-referral system based on the parameters of the WHO PEN Strategy.

The WHO-PEN intervention is a prioritized set of cost-effective interventions that provides clinical decision support for assessment and management of NCDs at the primary care level in low resource settings.<sup>17</sup> It is designed to use cost-effective interventions for early detection, prevention and treatment of the major NCDs namely heart attacks and strokes, diabetes, cancer, renal diseases and asthma. The package uses simple algorithms to stratify patients' risk status based on age, clinical history, comorbidities and blood pressure for care.

## MAIN ACTIVITIES

The selected candidate will perform the following general activities. **The activities should include but are not limited to the following products:**

- 1. Analysis of service supply, and availability including current healthcare and referral networks.** This activity should describe and draw the different health networks by region, their organization, connections, types of services resolution including amounts of times NCD specific services area available, referral and counter-referral flows considering the required package of services that should be offered by each level (according to the WHO PEN and CCM strategies). In this package, include the list of human resources and biomedical equipment needed to provide the corresponding level of care per Surinamese Norms, WHO PEN and CCM Model. Examine the data to reveal situations in which services do not meet standards according to the norms and guidelines. This will be done based on the information provided from HNA Consultancy 1 Activities 1-4.
- 2. Demand characterization and projection including catchment area and current utilization.** This activity includes an analysis of the information on demographic, epidemiological and public health services production data including the population of the catchment area of each health facility in Suriname and the utilization of services, that is generated in HNA 1 and should prioritize NCD related events and services at all levels of the health system. Once service demand is established, it should offer a picture of service demand in a five-year time series and project it over a 10 year period to identify trends.

This activity will include a GIS mapping tool and a travel time approach to perform calculations of catchment areas/percent populations within 30 minutes and one hour of a health facility, especially in more dispersed regions and those that may rely more heavily on public transportation. The consultant should also propose any other approaches as deemed necessary. The consultant should develop a visual aid to display the location of health

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<sup>16</sup> Davy et Al., Effectiveness of Chronic Care Models: Opportunities for Improving Healthcare Practice and Health Outcomes: a Systematic Review. BMC Health Services Research, 2015.

<sup>17</sup> World Health Organization. Package of essential noncommunicable (PEN) disease interventions for primary health care in low-resource settings. Geneva, Switzerland: 2010.

facilities, especially those offering services for 4 major NCDs, with the at-risk population within the region overlaid. This activity includes estimated travel times to the main hospitals of Paramaribo (AZP, Medische Zending, Diakonessen Ziekenhuis, and S Lands) and from all regional and district hospitals and health centers and health posts in visual aid or accompanying table. See below for further information on GIS Mapping. See Annex I for sample GIS visual aids of studies done in this area.

**GIS mapping.** With the technical support of a local GIS mapping expert, the consultant will conduct the construction of a GIS Healthcare Network System using ARCGIS software to incorporate several layers of data (not less than seven layers), basically containing: 1) the geographical landscape, 2) GPS location of the facilities, 3) Pictures of the health facility, 4) infrastructural assessment (including building status, and potential repairs needed, power availability, water availability and proper drainage and waste disposal system) 5) access roads or tracks to the facility, 6) the available means for transport, 7) the estimated access and referral time (in different transport means from the households to the facility location and from the facility to the next or required level of complexity health facility, 8) referral flow description 9) the type of facility according to the level of complexity as is defined by the official classification of health facilities of the MoH, 10) the GIS system will also be linked to a set of Excel active worksheet which should contain the recommendations for improvement and/or enhancement/investment in each identified health facility 11) If it is possible (and the data is available) another layer should include other sociological data like poverty, epidemiological profile. etc

For this activity the consultant may need to work with an expert with knowledge and experience in the usage of ARC-GIS software. The consultant must provide an overview of data sources, time series, methods of collection and analysis (Methodology Document), as well as utilize tables in Excel format as a minimum starting point for providing data. All tables must be completed and provided with data source/collection and calculation methods. In instances where data is not publicly available, Bank will require consultant to provide the raw data.

3. **Recommendations for strengthening primary and chronic care service network.** Using the data obtained through HNA 1 Activities 1-4 and other data sources as necessary, identify gaps and bottlenecks in the service provision models for the NCDs considered. Quantify the critical input needs based on the gaps detected in the sample data and extrapolate to the universe of facilities in the catchment areas. Using technical knowledge consultant should propose options for adjusting or restructuring the current service provision system. If relevant, consider the elaboration of alternative service delivery mechanisms that could be tested through pilot projects. Estimate the costs associated with the acquisition of inputs or service adjustments.
4. **Coordinate and supervise the work of local consultants.** HNA 1 will primarily be responsible to lead team of local consultants who will support the processes of: (i) mapping the health facilities and providing service availability and readiness assessment; (ii) supply side review and processes flows and (iii) health facilities performance review. Other local consultants with a degree in engineering will be hired to support the review of the infrastructural and biomedical capacities of the health facilities and will be under the shared supervision of HNA 1 and 2 consultants.

This candidate will be responsible for: (i) reviewing the terms of reference prepared by HNA 1 for the local consultants to ensure; (ii) Reviewing list of all the information that has to be collected by each individual local consultant; (iii) Reviewing data collection instruments and

check-lists; (iv) Supporting the government of Suriname, if needed, in the selection process of each individual consultant (e.g. reviewing candidate's CVs).

5. **Others.** The selected candidate is expected to revise this terms of reference together with the consultant responsible for performing data collection supporting the assessment and strengthening of the primary and chronic care network in Suriname (HNA Consultancy 1), and to propose changes if necessary, which shall be agreed with the NCD Unit and the other consultant. He/she is also expected to prepare a detailed Work Plan of the consultancy, including a timeline for the execution of the consultancy; mission dates to Suriname; field visits dates per region of the country; and estimated date for delivering all products. This Work Plan should be prepared after the revision and update, if necessary, of this term of reference. products/deliverables.

The main expected deliverables are listed in the table below. The format in which products will be delivered will be agreed upon with the IDB & Government of Suriname.

Every report must be submitted to the IDB & Government of Suriname in an electronic file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final reports. On completion of the consultancy the final report should be accompanied by soft copies of all raw data and analyses used.

#### Payment Schedule for Health Network Mapping & Analysis Consultancy 2

Products	Payment (% of total contract sum)
Signature of the contract	0
1. Submission and approval by the Government of Suriname of a Work Plan containing, among others: (i) revised terms of reference (ii) a timeline for the execution of the consultancy; (iii) mission dates to Suriname; (iv) estimated date of deliverables for all the above- mentioned products	20
2. Submission and approval by the IDB & Government of Suriname of the <b>Analysis of service supply, and availability including current healthcare and referral networks</b>	30
3. Submission and approval by the Government of Suriname of <b>Demand characterization and projection including catchment area and current utilization</b> items	30
4. Submission and approval by the IDB & Government of Suriname of <b>Recommendations for strengthening primary and chronic care service network</b> items	20

#### IV. QUALIFICATIONS

The candidate for this position should possess expertise and skills in the following areas:

- Academic Degree: A degree in medicine, nursing, public health, health informatics or related field. A graduate degree in public health, epidemiology, economics, mathematics, statistics or other social science would be desirable.
- Skills: Extensive experience in the health sector, including experience as a health professional and experience as manager/administrative/director of health facilities or lead health informatics director. Strong quantitative and qualitative skills, including previous



experience with data collection and analysis and the conduction of surveys, preferably using electronic tools for data collection and aggregation. Previous experience with similar types of assessment highly desirable. Previous experience managing teams of consultants a plus. Availability to travel and to spend several weeks in Suriname a must. Strong written skills. Previous experience in the Dutch and English Caribbean a plus.

- Languages: Fluency in written and oral Dutch and English.

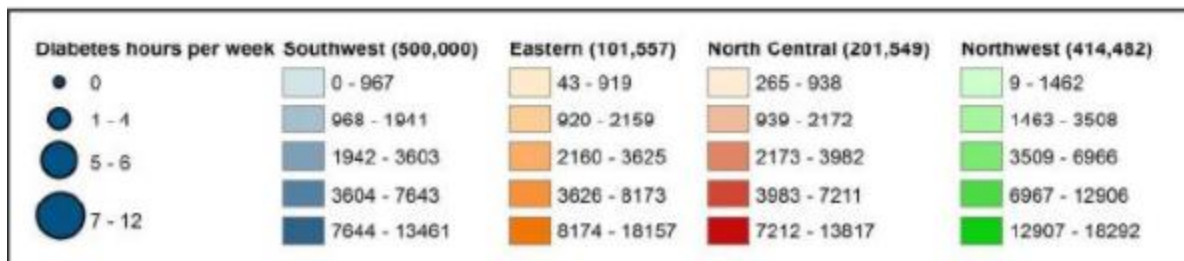
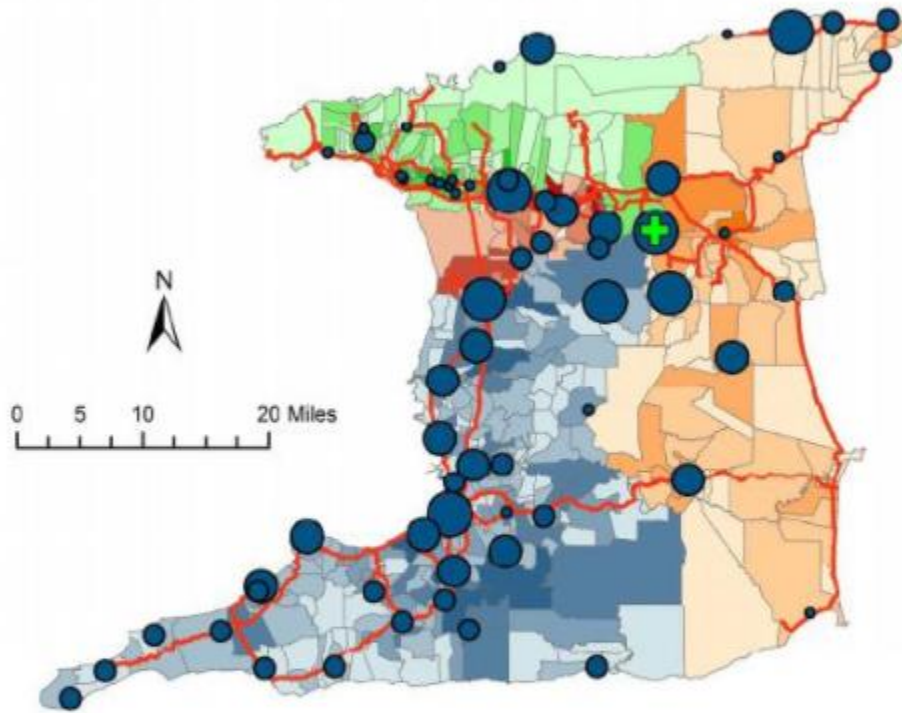
## **V. CHARACTERISTICS OF THE CONSULTANCY**

- Contract duration: 120 non-consecutive working days between April 6<sup>th</sup>, 2018, and January 31<sup>st</sup>, 2019.
- Place(s) of work: Paramaribo, Suriname, and place of residency of the consultant.
- Coordinator: The consultant will work under the supervision of the Department of Planning Unit of the Ministry of Health of Suriname and in coordination with the Health Network Assessment 2 consultant.

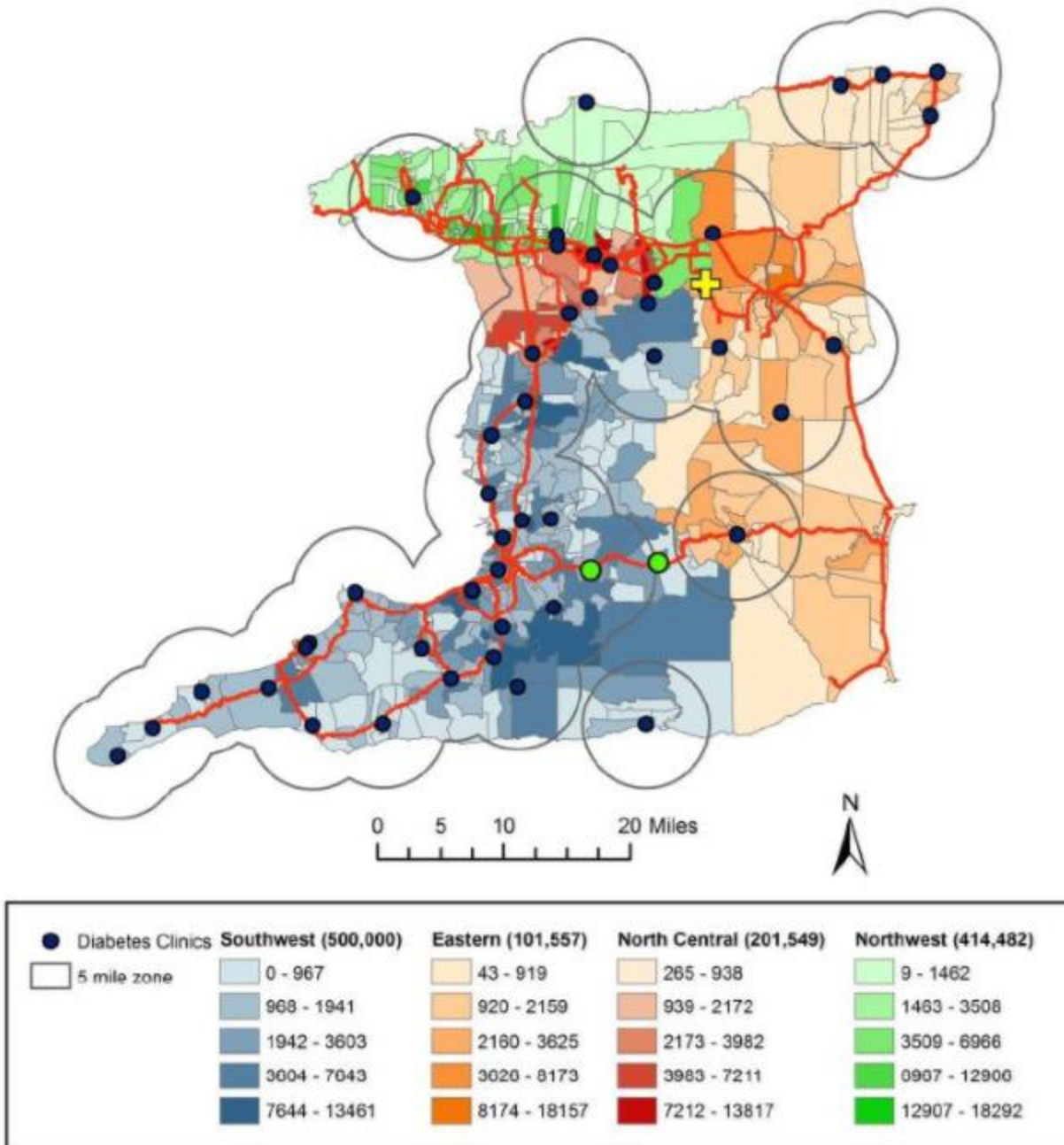
**Annex I: Sample GIS Visual Aids for mapping of catchment areas, care availability and travel time**

## Clinics with diabetes hours

Shown with health districts and community population



## Diabetes clinics with 5 mile buffer zones



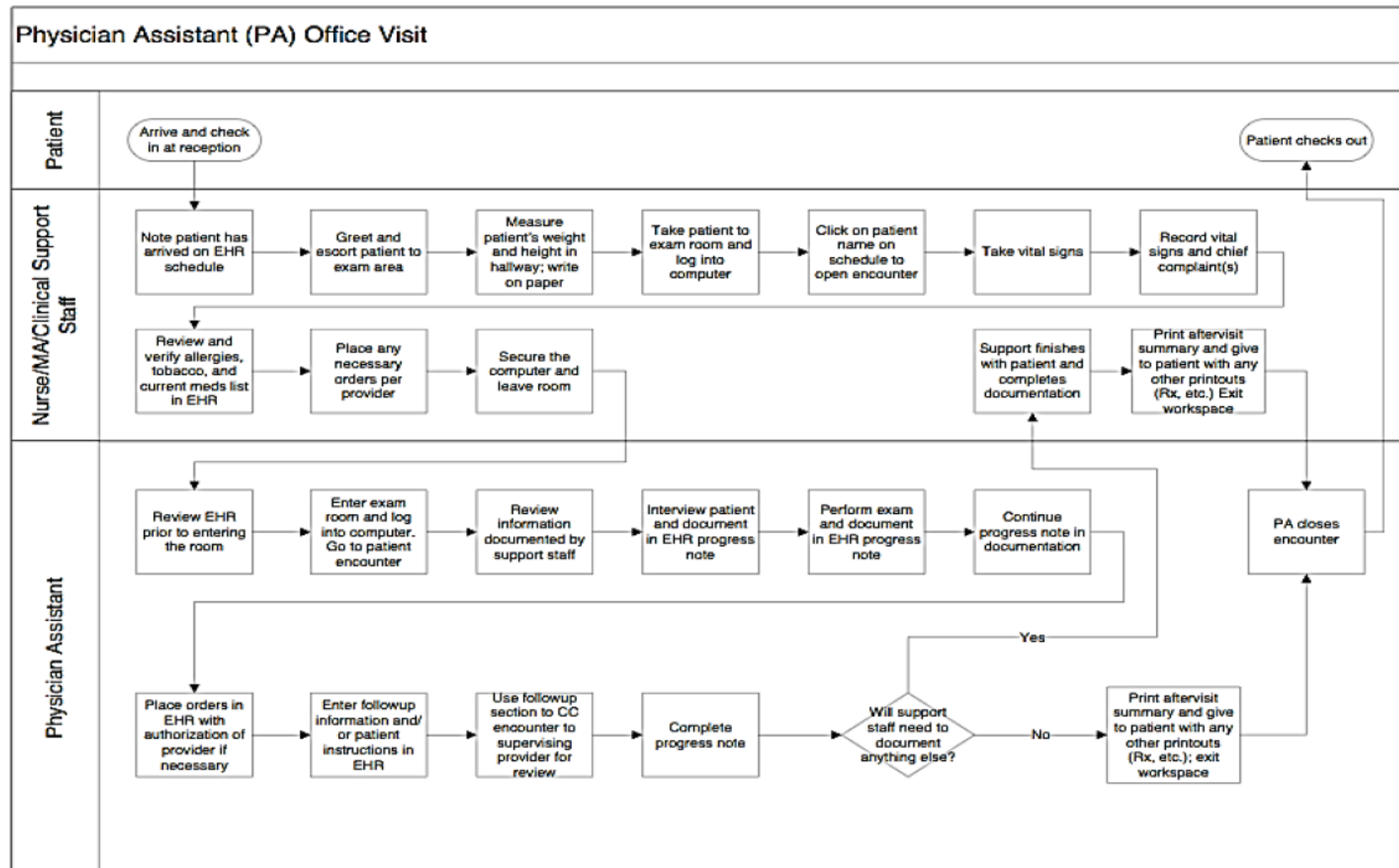
**Table 1.** Estimated population to provider ratios (P:P) of health districts. Based on estimated persons with diabetes and FTE of diabetes clinics.

	Southwest	Eastern	North Central	Northwest	Trinidad Total
Population 2000	500,000	101,551	201,549	414,452	1,217,552
Diabetes clinic FTE	2.85	1.625	1.25	0.325	6.05
Diabetes Population	76,250	15,487	30,736	62,208	1854,681
Diabetes P:P	26,754:1	9,530:1	128,991:1	191,409:1	30,525:1

Adaptions of this GIS visual aid such that colors can be used to display prevalence of various NCDs in the region while displaying an overlay of the clinics offering diabetes hours/how many hours based on size of circle representing the clinics are recommended.

## Annex II: Care process flows example

Figure 10.2. Sample Swimlane workflow map: office visit



Adapted from "Physician Assistant (PA) Office Visit," Health Resources and Services Administration.

## SURINAME

### TECHNICAL SUPPORT TO ASSESS DIGITAL HEALTH AND MANAGEMENT INFORMATION SYSTEMS NEEDS AND OPPORTUNITIES IN SURINAME

Design and Implementation Resources for Health Services Support Project (SU-T1100)

#### TERMS OF REFERENCE

- I. The government of Suriname (GoS) has requested a loan of US\$20M to fund the **Health Services Support Project (HSSP)** operation SU-L1054 which seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. A TC is also being funded to support the design and implementation of operation SU-L1054. The TC will finance technical studies required to develop key areas of the loan components, as well as institutional strengthening activities, focused on the MoH.

#### II. CONTEXT OF ACTIVITIES

In the past decades, the Government of Suriname has improved the health status of its population and is on track to reach its health-related Millennium Development Goals (MDGs). Since 1990, life expectancy at birth has increased from 66 to 72 years.<sup>1</sup>

**Health conditions and burden of disease.** The Government of Suriname (GoS) faces epidemiological challenges stemming from increasing rates of non-communicable diseases (NCDs) and the persistence of communicable diseases (CDs). The 2014 NCD country profile report<sup>2</sup> shows NCDs have become the main cause of morbidity and mortality (68% of total deaths). Between 2005-2016 the incidence (new cases) of diabetes, ischemic heart disease and chronic kidney disease grew by 39%, 19% and 24% respectively<sup>3</sup>. The 2013 Suriname STEPS Survey highlighted the following risk factors driving increases in NCDs: high blood pressure, obesity and overweight, tobacco and alcohol consumption. Nearly 30% of adults, and 40-50% of those over age 55 suffer from high blood pressure. Overweight and obesity affect 18% of men, 31% of women and 26% of children aged 13-15<sup>4</sup>. Unhealthy diet and lack of exercise drive these figures.<sup>5</sup> From an economic perspective and drawing from recent comparable evidence from other Caribbean countries, NCDs have a significant impact at the household level from income loss and increased in out-of-pocket expenses, and at the national level from loss of skilled labor and productivity, lower competitiveness and higher government health and social expenditures (spending on hypertension and diabetes is between 1-8% of GDP in 4 Caribbean countries).<sup>6</sup> Regarding CDs, control of malaria, has been noteworthy and the GoS has committed to malaria elimination by 2020. A major challenge to achieving this goal is that recently most cases originate

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<sup>1</sup> WHO WHS 2011

<sup>2</sup> World Health Organization. Suriname Country Report. World Health Organization 2017: <http://www.who.int/countries/sur/en/>

<sup>3</sup> Institute of Health Metrics and Evaluation. Suriname Statistics: <http://www.healthdata.org/suriname>

<sup>4</sup> World Health Organization. World health statistics 2009. World Health Organization, 2009.

<sup>5</sup> Ministry of Health. National Action Plan for the Prevention and Control of NCDs (2015-2020). Government of Suriname, 2014.

<sup>6</sup> World Bank. NCDs in the Caribbean: The New Challenge for Productivity and Growth. Caribbean Knowledge Series No 78596, World Bank; 2013. Abdulkadri, Abdullahi O., Colette Cunningham-Myrie, and Terrence Forrester. "Economic burden of diabetes and hypertension in caricom states." Social and Economic Studies 58, no. 3/4 (2009): 175-97

from migrant, multi-ethnic small-scale gold-mining communities in the border areas (Guyana Shield-GS).<sup>7</sup> Control of malaria transmission is difficult because of these communities' particular lifestyles and habits. Addressing other CDs, like HIV, Leishmaniasis and Tuberculosis is also a priority both in the GS border and at the national level.

**Service Providers, Provision and Barriers to Accessing Care.** Surinamese healthcare is provided by a combination of public and private health care providers. See Figure 1. There are both public and private providers for primary, secondary and tertiary care, and use depends on geographic area and type of insurance. Public primary healthcare services are provided by Regional Health Districts (RGDs), with the exception of the districts of the Interior<sup>8</sup>, whose service provision is provided by the not-for-profit organization, the Medical Mission (MZ). The RGD has 56 health facilities, including 15 health posts and 41 primary care clinics, while the MZ has 57 policlinics and health posts. There are 146 private clinics, 1 psychiatric hospital in Paramaribo, 40 dental units including 26 of these which are located in the RGD Clinics.<sup>9</sup> The RGD staffs its posts with 1 doctor and 2 nurses and its clinics with 1-4 doctors and 1-5 nurses<sup>10</sup>, while the MZ staffs their health posts and clinics with community health workers, which are supervised by a total of 5 doctors,<sup>11</sup> who are based in Paramaribo, rotating between health facilities and are always on-call with communication by radio. All hospitals are located on the coast (4 public and 2 private). The RGD refers patients to the public hospitals. Hospital care for the referral patients of the MZ is provided initially by the Diakonessen (private) Hospital, with overflow directed to the Public Lands Hospital and the Academic Hospital in Paramaribo. There are 3 private medical laboratories as well as laboratories located in each hospital. There are several barriers to accessing health services. For the coast, poor health worker capacity and infrastructure as well as a lack of supplies are major constraints for primary health services. Estimates are that 50% of the RGD's infrastructure is not adequate for general services. The RGD also suggests that the perceived poor quality of their services by the population, stemming from poor conditions of facilities, is a barrier to access and low uptake of their services. While a rigorous assessment of human resources for health capacity and needs has not been performed in the country, the RGD estimates that their health workers are working at full capacity and that they critically lack appropriate training.<sup>12</sup> In the Interior, there are transportation and socio-cultural barriers as well as a lack of equipment, supplies and human resources for health. Social and cultural barriers exist for communities in the Interior, with low up-take of services due to a lack of culturally or linguistically appropriate health information.<sup>13</sup> Both regions have constraints that include inadequate operating hours and lack of portability of coverage. For example, RGD operating hours are limited (e.g. 7-11am) and do not match the scheduling needs of the patient population,

<sup>7</sup> Bureau of Public Health. Malaria in Suriname Analysis of the Trends Malaria Program. Malaria Program, Ministry of Health Government of Suriname. For example, MP studies show little knowledge about the potential health threats of malaria and low rates bed nets use. Insufficient health seeking behavior is associated with both self-treatment and low adherence to treatment, both of which contribute to development of drug-resistance of the malaria parasite

<sup>8</sup> Brokopondo and Sipaliwini.

<sup>9</sup> Health in the Americas, 2012 Edition: Suriname Country Volume. Pan-American Health Organization.

<sup>10</sup> RGD Health Posts are staffed with 1 doctor and 2 registered nurses; primary care clinics are staffed with 1-4 doctors, 1-5 registered nurses, 1-3 administrative personnel as well as a laboratory technician, 1 pharmacist and 1 midwife.

<sup>11</sup> This is the international equivalent to a "barefoot doctor", including training in obstetric care, dental extraction and preventative services. The MZ's health facilities are generally located within 30 minutes travel distance of their populations (60,000 total population). In addition to doctors, head nurses, health assistants, policlinic aids, paramedics and laboratory technicians also support the community health workers

<sup>12</sup> Due to the fact that they had previously discontinued this training in the 90s and have in the past few years begun it again.

<sup>13</sup> The profile of the health assistant is LBGO diploma, connection with the Interior (for retention), understanding of the language and culture. Part of the work responsibilities of the health assistant is community outreach but it was suggested that they are only able to perform this to about 10-15% of what is expected.



negatively affecting, for example, the offer of preventive services and the demand for services in general. With such a limited schedule, health professionals find it difficult to offer preventive services and revert to mainly treating people with sickness.

**Suriname's strategies to address health challenges.** Based on evidence of best practice, health systems that adopt a chronic care model (CCM) within the primary care (PC) setting have shown to be more effective and efficient in managing and controlling not only NCDs, but also CDs.<sup>14</sup> The MOH therefore introduced the One Stop Shop (OSS) model in primary care. The OSS is an integrated care approach based on the CCM, targeting patients with diabetes and heart disease. The OSS has been functioning in Paramaribo and Nickerie, serving a population of approximately 161,871.<sup>15</sup> Given increasing population with NCDs, the GoS plans expansion of the OSS model to other districts, but to do so, needs to better understand and address structural information and management deficiencies in the current service provision network.<sup>17 18</sup> Second, the MOH is carrying out public health interventions to address NCDs risk factors, through the adoption of a Health in All Policies (HiAP) approach which entails coordinated action between both Health and non-health Ministries. Successful implementation of HiAP requires strengthening of the core stewardship and policy functions of the MOH, particularly improvement of the overall technical capacity in terms of planning, monitoring and evaluation, digital technology use.

In recognition of the importance of accurate and timely health information to health policy, planning, practice and ultimately health outcomes, HIS strengthening has become a priority area in many countries. As part of the health system strengthening strategy for Suriname, the government plans to begin a digital information and management roadmap and workplan to begin transforming data into information and evidence which can be used for policy making. A crucial early step in establishing this roadmap is the need for an effective assessment of the existing national HIS – both to establish a baseline and to monitor progress. In order to assist countries, the WHO Health Metric Network (HMN) has developed a Health Information System (HIS) assessment tool<sup>16</sup> which describes in detail how to undertake a first baseline assessment. This consultancy will use this tool as a crucial input. Included as part of this assessment is the goal to arrive at an understanding of:

*...users' current and perceived future requirements for statistical information; their assessment of the adequacy of existing statistics and of where there are gaps in existing and planned data; their priorities; and their ability to make effective use of statistical information.*<sup>17</sup>

These assessments are complex, overall system performance depends upon multiple determinants – technical, social, organizational and cultural. Assessment must therefore be comprehensive and cover the many subsystems of a national HIS, including public and private sources of health-related data. It must also address the resources available to the system (inputs), their methods of work and products (processes and outputs) and results in terms of data availability, quality and use (outcomes). Important “inputs” to assess include the institutional and policy environment, and the volume and quality of financial, physical and human resources, as well as the available levels of information and communications technology (ICT). In terms of

<sup>14</sup> Hansen, Johan, Peter P. Groenewegen, Wienke GW Boerma, and Dionne S. Kringos. "Living in a country with a strong primary care system is beneficial to people with chronic conditions." *Health affairs* 34, no. 9 (2015): 1531-1537.  
<sup>12</sup> Bodenheimer, Thomas, Edward H. Wagner, and Kevin Grumbach. "Improving primary care for patients with chronic illness." *Jama* 288, no. 14 (2002): 1775-1779.

<sup>15</sup> Estimate based on approximate population affected by targeted NCDs within OSS service area. OSS lacks data on number of patients served or demand in service area.

<sup>16</sup> Assessing the National Health Information System: An Assessment Tool Version 4.00, World Health Organization, Health Metrics Network, Available for download: <http://www.who.int/healthmetrics/tools/en/>

<sup>17</sup> PARIS21 Secretariat. *A Guide to Designing a National Strategy for the Development of Statistics* (NSDS), 2004. <http://www.paris21.org/pages/designing-nsds/NSDS-reference-paper/>



“outputs” the integrity of data is also determined by the degree of transparency of procedures, and the existence of well-defined rules, terms and conditions for collection, processing and dissemination. Assessing “outcomes” should include quantitative and qualitative approaches, such as document reviews and interviews with in-country stakeholders at central and peripheral levels, and with external actors.

### III. CONSULTANCY SCOPE AND OBJECTIVES

This consultancy will serve to provide a comprehensive assessment of the health and management information systems and recommend a plan improve the information systems for monitoring, evaluation and decision making in Suriname.

#### MAIN ACTIVITIES

Activities will be separated into the following phases:

Phase	Objective	Key Products
Introduction	1. Document the general description, objectives and expected results, phases and key products by phases, implementation model, general schedule, actors and their roles and responsibilities for health information and management systems in Suriname.	1. Document and powerpoint with overview of the project
Diagnostic	1. Assessments of the Surinamese Health Information and Management System using HMN tool including: <ol style="list-style-type: none"> <li>National HIMS coordination, policy and planning</li> <li>National HIMS financial and human resources</li> <li>National HIMS Infrastructure-current resource identification &amp; system mapping: map existing sources of information and standards applied, information flows, actors involved, and current users. See Annex II for list of minimum data sources that must be reviewed.</li> <li>National HIMS indicators</li> <li>National HIMS Data Sources (both population and institution based)</li> <li>National HIMS data management</li> <li>National HIMS data quality</li> <li>National HIMS information dissemination and use</li> </ol> 2. Identify and document bottleneck for each of the above	1. Comprehensive document with diagnostic results of each section including in the introduction a mapping of existing systems, flow of information, actors involved, current users and potential sources of information, and bottlenecks in current use. 2. PowerPoint overview of diagnostic results of each section, separate deck of 10 slides maximum for each section of the assessment

Strategy, Solution and Roadmap proposal	<ol style="list-style-type: none"> <li>1. Document key strategic objectives, initiatives or interventions for each and activities.</li> <li>2. Document the scope of the proposed solutions, timeline and budget. In this document, the logical model of the system is described where its components, functionalities and scopes are established, including the new processes, national policies and/or standards required within and to support the information system. It should explain the implementation model, any key policy or governance prerequisites for success, the actors, their roles and responsibilities.</li> <li>3. Roadmap for implementation with timelines This document is key to accountability and to evaluating the success of the project.</li> </ol>	<p>Documents with:</p> <ol style="list-style-type: none"> <li>1. Strategy including Digital Information overarching strategy, objectives, and interventions/initiatives and activities of each objective</li> <li>2. Solution, including               <ol style="list-style-type: none"> <li>a. Proposed modules/processes</li> <li>b. Conditions of success</li> <li>c. Technical inputs required for programming</li> <li>d. Policy or governance inputs required for success</li> <li>e. Architecture Proposal</li> <li>f. Process Frame diagram</li> <li>g. Flowchart/Map of the proposed process (information sent, information processing, use of information, etc.)</li> <li>h. Technical and functional specifications per module/process</li> </ol> </li> <li>3. Roadmap               <ol style="list-style-type: none"> <li>a. Implementation model, roles and responsibilities</li> <li>b. Ready-to-phase deliverables</li> </ol> </li> </ol>
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The selected candidate will perform the following general activities.

**1. Introduction/Workplan development.**

Consultant will perform initial consultations with MOH and other key stakeholder ministries, agencies and organizations to further develop and define key concepts of project with inputs from these participants. This phase should include identification of stakeholders to be reviewed in the following phase and establishment of focal points with each. Candidate is expected to revise this term of reference together with the GOS and propose changes if necessary, which shall be agreed with the MOH Planning Unit and IDB. A work plan and timeline should be prepared after the revision and update, if necessary, of this term of reference and include inputs from initial consultations with the MOH. In addition, the selected candidate will be expected to conduct bi-weekly meetings (physical or virtual) with the IDB & Government of Suriname to inform of progress and challenges identified. He or she is expected to prepare aide memoires of all meetings.

**2. Diagnostic: Application of HMN HIS Assessment Tool Version 4.00.**

Working with focal points established in previous phase, implement at a minimum the HMN Assessment Tool Version 4.00. Other tools may be used or developed such as assessment of use of standards and best practices for data sources, published by MEASURE Evaluation in January 2018 to provide a more comprehensive assessment of data sources and quality than that of HMN tool. Consultant may sub-contract local consultants to work with focal points to aide in data collection. A strategy combining self-assessment by Ministries or Organizations and in-person verification by consultant should be applied in data collection. Scores should

be combined from assessments to provide written and visual analysis of each section of assessment. Recommendations based on results and international best practices should be developed for each section.

The selected candidate is expected to work with HNA Consultancy 2 to include inputs from the results of the Health Network Assessment which will be performed from April 2018 that may be useful for the purposes of this health and information management systems assessment including but not limited to assessment of availability and quality of data sources in health facilities reviewed by HNA Consultancy.

Utilize tables in Excel format as a minimum starting point for providing data. All tables must be completed and provided with data source/collection and calculation methods. It is preferred that a type of open source software be used to gather and combine data. Candidate should propose solutions for this option. Specifics will be decided at a later date.

3. **Strategy, Solution and Roadmap Proposal.** Based on the results of the assessment performed in activity 2, candidate must submit a document containing (a) strategy and (b) roadmap for development of a health information and management solution for Suriname. This document should include areas of strategic priorities agreed and defined with the GOS and other key stakeholder agencies such as Central Statistics Agency and Bureau of Standards and Labeling. Strategic priorities must include strategic objectives, initiatives or interventions per objective and associated actions. The Solution proposal should include proposed technical solutions and requirements for each. Roadmap Proposal should be submitted as a combination of (i) a Gantt chart with main workstreams, sub activities and timelines of each, and (ii) a table which includes the following: Action (which should correspond to areas of strategic work), Description of Key Activities, Roles, Technical Support Required, Proposed Timeline and Status of any current work in this area, Funding Requirements and Funding Status of any current work.
4. **Coordinate and supervise the work of local consultants.** Local consultants may be hired to support the HMN Assessment data collection.  
If local consultants will be sub-contracted, the selected candidate for this consultancy will be expected to supervise local consultants work and deliverables.  
Therefore, selected candidate will be responsible for: (i) preparing the terms of reference of the local consultant(s); (ii) preparing an exhaustive list of all the information that has to be collected by each individual local consultant; (iii) preparing the collection instruments and the check-lists; (iv) preparing the field-visits plan for each team of local consultants; (v) supporting the GOS, if needed, in the selection process of each individual consultant (e.g. reviewing candidate's CVs); (vi) supervising the work of the local consultants from remote and on selected dates during the field portion of this assignment; and (vii) preparing a final report consolidating all the tools developed and the work conducted by the local consultants.
5. **Others.** Consultant should prepare a final report which gives a comprehensive overview of the project performed as well as any key lessons learned as part of implementation.

#### IV. PRODUCTS/DELIVERABLES

The main expected deliverables are listed in the table below. The format in which products will be delivered will be agreed upon with the Government of Suriname.

Every report must be submitted to the Government of Suriname in an electronic file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final

reports. On completion of the consultancy the final report should be accompanied by soft copies of all raw data and analyses used.

### **Payment Schedule for DIGITAL HEALTH AND MANAGEMENT INFORMATION SYSTEMS NEEDS AND OPPORTUNITIES ASSESSMENT**

<b>Products</b>	<b>Payment (% of total contract sum)</b>
1. Signature and Submission and approval by the IDB & Government of Suriname, of a Work Plan containing, among others: (i) revised terms of reference (ii) a timeline for the execution of the consultancy; (iii) mission dates to Suriname; (iv) Field or organizational visits and dates/virtual meetings; (iv) estimated date of deliverables for all the above-mentioned products	20
2. Submission and approval by the IDB & Government of Suriname of the following documents: (i) terms of reference of the local consultant(s) if required; (ii) exhaustive list of information to be collected by each consultant, including main consultancy; (iii) collection instruments and checklists along with flow/skip patterns to be converted to a digital format; and (iv) visit plan for each individual consultant, including local consultants if necessary	0
3. Submission and approval by the IDB & Government of Suriname of <b>Diagnostic</b>	40
4. Submission and approval by the IDB & Government of Suriname of <b>Digital Information Strategy, Solutions and Roadmap</b>	30
5. Submission and approval by the IDB & Government of Suriname of <b>Final report with lessons learned</b>	10

## **V. QUALIFICATIONS**

The candidate for this position should possess expertise and skills in the following areas:

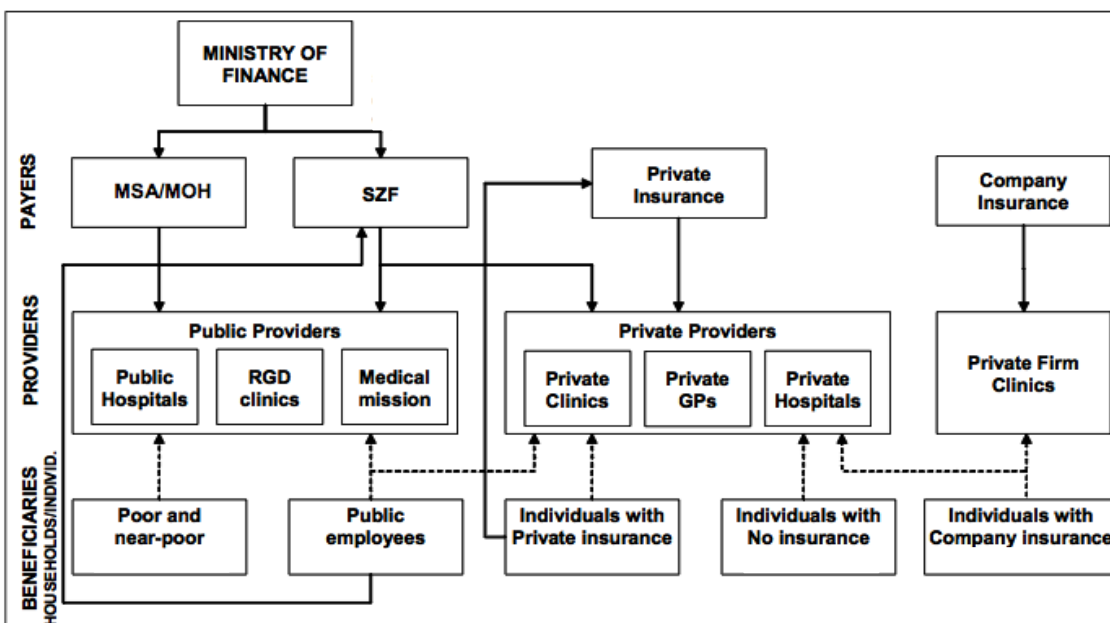
- Academic Degree: A degree in medicine, nursing, public health, health informatics, information systems or related field. A graduate degree in public health, epidemiology, economics, mathematics, statistics, information systems or other social science is highly desired. A professional certification or qualification in programming and database management.
- Skills: Extensive experience in the health sector, including experience as a health professional and experience as manager/administrative/director of health facilities or lead health informatics director. Strong quantitative and qualitative skills, including previous experience with data collection and analysis and the conduction of surveys, preferably using electronic tools for data collection and aggregation. Previous experience with similar types of assessments within the last five years. Previous experience managing teams of consultants a plus. Availability to travel and to spend several weeks in Suriname a must. Strong written skills. Previous experience in the Dutch and English Caribbean a plus.
- Languages: Fluency in written and oral Dutch and English.

## **VI. CHARACTERISTICS OF THE CONSULTANCY**

- Type: individual consultant or firm
- Contract duration: 120 non-consecutive working days between July 6<sup>th</sup>, 2018, and April 30<sup>th</sup>, 2019.

- Place(s) of work: Paramaribo, Suriname, and place of residency of the consultant.
- Coordinator: The consultant will work under the supervision of the Department of Planning Unit of the Ministry of Health of Suriname and in coordination with the Health Network Assessment 2 consultant.

Annex I: Figure 1



Source: IDB (2005). Suriname's Road to Health Sector Reform: An examination of the health care system and recommendation for change.

## Annex II: Data Sources to be included in review

Data source			Type of data generated	Unit of analysis	Disaggregation	Standards
Institution-based data sources	1.	Individual records	<ul style="list-style-type: none"> <li>Morbidity and health conditions</li> <li>Service interventions</li> </ul>	Patient or client	Sociodemographic characteristics	ICD-10, GBD, ICPC-2, ICHI, ISHMT
	2.	Health infrastructure information system	<ul style="list-style-type: none"> <li>Infrastructure and amenities</li> <li>Types of services</li> <li>Equipment</li> </ul>	Facility	Geography, type of facility, type of management, other	MFL
	3.	Human resources information system	<ul style="list-style-type: none"> <li>Health occupations</li> </ul>	Health worker	Sociodemographic characteristics	ISCO-08, HWR
	4.	Logistics management information system	<ul style="list-style-type: none"> <li>Essential medicines and commodities</li> </ul>	Medicine or commodity	Geography, type of facility	NEML, ATC
	5.	Financial management information system	<ul style="list-style-type: none"> <li>Budget estimates</li> <li>Revenue and expenditures</li> </ul>	Budget item	(National level)	Not applicable
	6.	Health facility assessments	<ul style="list-style-type: none"> <li>Health resource inventories</li> </ul>	Facility	Geography, type of facility	SPA, SARA
Population-based data sources	7.	Population census	<ul style="list-style-type: none"> <li>Population estimates and projections</li> </ul>	Person	Sociodemographic characteristics	United Nations Statistics Division Principles and Recommendations for a Population and Housing Census
	8.	Population-based surveys	<ul style="list-style-type: none"> <li>Risk factors</li> <li>Knowledge, attitudes, and practices</li> <li>Coverage of services</li> </ul>	Person or household	Sociodemographic characteristics, socioeconomic stratifiers	DHS, MICS, SILC, HIS
	9.	Civil registration vital statistics system	<ul style="list-style-type: none"> <li>Births</li> <li>Deaths</li> <li>Stillbirths</li> <li>Causes of death</li> </ul>	Person	Sociodemographic characteristics	United Nations Statistics Division Principles and Recommendations for a Vital Statistics System ICD-10
Other, mixed data sources	10.	Public health surveillance system	<ul style="list-style-type: none"> <li>Reportable conditions</li> <li>Potential public health threats</li> </ul>	Disease or event	Geography, other	IHR
	11.	Collective intervention records	<ul style="list-style-type: none"> <li>Community (not clinical) interventions</li> </ul>	Community	Geography, other	ICHA-HC6
	12.	Health accounts	<ul style="list-style-type: none"> <li>Health financiers</li> <li>Health providers</li> <li>Healthcare services or resources consumed</li> </ul>	Health expenditure	(National level)	SHA ICHA

### Key:

ICD-10 - International Classification of Diseases, Tenth Revision  
 GBD - Global Burden of Disease (classification of morbidity & mortality groups)  
 ICPC-2 - International Classification for Primary Care, 2nd Revision  
 ISHMT - International Shortlist for Hospital Morbidity Tabulation (classification of morbidity & mortality groups)  
 ICHA-HC6 - Classification of Health Care Functions, Preventive Care  
 MFL - Master Facility List (minimal data elements in signature and service domains)  
 ISCO-08 - International Standard Classification of Occupations, 2008 revision  
 HWR - Health Workforce Registry (minimal data elements)

NEML - National Essential Medicines List  
 ATC - Anatomical Therapeutic Classification  
 SPA - Service Provision Assessment (tools and methodology)  
 SARA - Service Availability and Readiness Assessment (tools and methodology)  
 SILC - Statistics on Income and Living Conditions (tools and methodology)  
 HIS - Health Interview Survey (tools and methodology)  
 DHS & MICS - Demographic and Health Survey, Multiple Indicator Cluster Survey (tools and methodology)  
 IHR - International Health Regulations  
 SHA ICHA - System of Health Accounts, International Classification for Health Accounts

## **ANNEX**

### **Suriname**

#### **Social Protection and Health Division (SCL/SPH)**

#### **Consultancy to Develop the Preliminary Design for the Ministry of Health New Building**

## **TERMS OF REFERENCE**

### **Background**

Established in 1959, the Inter-American Development Bank (“IDB” or “Bank”) is the main source of financing for economic, social and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.

**The Health Services Support Project (HSSP)** operation SU-L1054 seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. As part of its support for Suriname’s strategies to address health challenges, SU-L1054 has included a component for Institutional strengthening of the MoH to manage NCDs, with the objective of improving the MOH’s stewardship and governance functions in setting priorities, designing effective policies and interventions, and ensuring their efficient implementation with a focus in the areas of prevention, management and control of NCDs. Expected results include improved use of information systems and of core business function performance within the MOH. To support project design and implementation, TC SU-L1100 will finance technical studies required to develop key areas of the loan components described above, as well as institutional strengthening activities, focused on the MoH. One of these is development of the MOH building infrastructure plan for the loan, for which this consultancy is required.

### **Consultancy objective(s)**

The objective of this consultancy is to undertake technical analysis and develop the architectural preliminary design for the Ministry of Health New Building, to be located in Paramaribo, Suriname.

### **Main activities**

The main activities of the consultancy will be developed in five phases, as follows:

- a. Review and analyze existing documents, including previous studies and designs proposals for the MoH building.
- b. Meet with representatives from the MoH, in order to review and define their program of needs;
- c. Define the architectural program and design criteria, in agreement with the MoH program of needs;
- d. Undertake a terrain analysis, including:



- i. Technical aspects: undertake site visit in order to access ground conditions and stability for construction, analyzing soil type, history of the site, flood risks, etc. and evaluate existing site building to be demolished, in order to better estimate timing for starting the construction;
  - ii. Legal aspects: assess the legal condition of the site, in order to better estimate timing for starting the construction;
  - iii. financial aspects: analyze cost of land acquisition (if any) as well as any additional costs required prior to starting the construction (demolitions and site cleaning, etc.).
- e. Assess the norms and regulations required for the building design and construction;
- f. Develop the preliminary design of the building, which will include:
  - i. General site plan
  - ii. Architectural floor plans drawings,
  - iii. Architectural elevations and sections
  - iv. Preliminary definition of technical specifications
  - v. Preliminary definition of construction materials.
- g. Estimate costs of construction.
- h. Estimate phases and timetable for construction design, bidding process and construction, comparing and analyzing pros and cons the following two options:
  - i. design and construction in one contract
  - ii. construction design in a first contract and construction in a second contract.

## **Reports / Deliverables**

The following will be the deliverables of this consultancy.

1. Work plan;
2. Architectural program and design criteria;
3. Report on terrain conditions;
4. Draft of the Preliminary Design;
5. Final Preliminary Design with cost and time estimated.

Every report must be submitted to the Bank in a digital file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final reports, due to Records Management Section regulations.

## **Payment Schedule**

There will be three payments.

- The first payment of 20% of the consultancy at the time the Product 1 is delivered.
- The second payment of 40% will be provided at the time Product 2, 3 and 4 are submitted to the Bank.
- The remaining 40% will be released at the time the final Preliminary Design of the Product 5 is submitted, incorporating all comments and suggestions provided by the IDB.

## **Qualifications**

- Academic level: Masters in architecture or engineering.
- Work experience: At least 5 years of experience in architectural design and construction.
- Experience in the design, supervision, and construction of architectural works, including experience in the design and construction of public buildings and offices.

- Languages: Fluent English, spoken and written, required. Fluent Dutch is preferable.

### **Characteristics of the Consultancy**

- Contract category and modality: Products and External Services Contractual, Lump Sum
- Duration: 30 days, to be completed within three months of signing this contract.
- Place(s) of work: External contract, with trips to Paramaribo, from place of residency.
- Division Leader or Coordinator: Diana Pinto ([dpinto@iadb.org](mailto:dpinto@iadb.org)), Health Lead Specialist (SCL/SPH), with the support of Livia Minoja ([liviam@iadb.org](mailto:liviam@iadb.org)), Social Infrastructure Unit (INE/INE)

### **Payment and Conditions:**

Compensation will be determined in accordance with Bank's policies and procedures. In addition, candidates must be citizens of an IDB member country.

**Consanguinity:** Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce contractuels, will not be eligible to provide services for the Bank.

**Diversity:** The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afro-descendants and persons of indigenous origins to apply.

## ANNEX

**Suriname  
SCL/SPH**

**Economic Analysis CONSULTANT for the Health Services Support Project (SU-T1100)**

### TERMS OF REFERENCE

#### Background

Established in 1959, the Inter-American Development Bank (“IDB” or “Bank”) is the main source of financing for economic, social and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries. The Health Services Support Project (HSSP) operation SU-L1054 seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges.

The Government of Suriname (GoS) faces epidemiological challenges stemming from increasing rates of non-communicable diseases (NCDs) and the persistence of communicable diseases (CDs). The 2014 NCD country profile report<sup>1</sup> shows NCDs have become the main cause of morbidity and mortality (68% of total deaths). Between 2005-2016 the incidence (new cases) of diabetes, ischemic heart disease and chronic kidney disease grew by 39%, 19% and 24% respectively<sup>2</sup>. The 2013 Suriname STEPS Survey highlighted the following risk factors driving increases in NCDs: high blood pressure, obesity and overweight, tobacco and alcohol consumption. Nearly 30% of adults, and 40-50% of those over age 55 suffer from high blood pressure. Overweight and obesity affect 18% of men, 31% of women and 26% of children aged 13-15<sup>3</sup>. Unhealthy diet and lack of exercise drive these figures.<sup>4</sup> From an economic perspective and drawing from recent comparable evidence from other Caribbean countries, NCDs have a significant impact at the household level from income loss and increased in out-of-pocket expenses, and at the national level from loss of skilled labor and productivity, lower competitiveness and higher government health and social expenditures (spending on hypertension and diabetes is between 1-8% of GDP in 4 Caribbean countries).<sup>5</sup>

Regarding CDs, control of malaria, has been noteworthy and the GoS has committed to malaria elimination by 2020. A major challenge to achieve this goal nowadays is that most cases originate from migrant, multi-ethnic small-scale gold-mining communities in the border areas (Guyana Shield-GS). Control of malaria transmission is difficult because of these communities’ particular traditions and habits. Addressing other CDs, like HIV, Leishmaniasis and Tuberculosis is another priority both in the GS border as at the national level.

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<sup>1</sup> World Health Organization. Suriname Country Report. World Health Organization 2017: <http://www.who.int/countries/sur/en/>

<sup>2</sup> Institute of Health Metrics and Evaluation. Suriname Statistics: <http://www.healthdata.org/suriname>

<sup>3</sup> World Health Organization. World health statistics 2009. World Health Organization, 2009.

<sup>4</sup> Ministry of Health. National Action Plan for the Prevention and Control of NCDs (2015-2020). Government of Suriname, 2014.

<sup>5</sup> World Bank. NCDs in the Caribbean: The New Challenge for Productivity and Growth. Caribbean Knowledge Series No 78596, World Bank; 2013. Abdulkadri, Abdullahi O., Colette Cunningham-Myrie, and Terrence Forrester. "Economic burden of diabetes and hypertension in caricom states." Social and Economic Studies 58, no. 3/4 (2009): 175-97

To support Suriname's strategies to address health challenges SU-L1054 has included the following components: 1. Institutional strengthening of the MoH to manage NCDs, with the objective of improving the MOH's stewardship and governance functions in setting priorities, designing effective policies and interventions, and ensuring their efficient implementation with a focus in the areas of prevention, management and control of NCDs. Expected results include improved use of information systems and of core business function performance; 2. Organization of PC for NCD prevention, management, and control with the objective of strengthening of an integrated, patient-centered healthcare model within PC, with the objectives of increasing access, quality and efficiency of services for NCDs. Expected results include increased prevention activities, earlier case detection and decreased complications of disease; and 3. Support for priority areas in CD programs with the objective of sustaining and improving the response to CDs. Expected results include reduced rates of CD transmission and increased treatment rates.

To determine the monetary returns the proposed investments, an ex ante cost benefit analysis is proposed.

### **Consultancy objective(s)**

The objective of this consultancy is to support the preparation of an investment loan in Suriname through the preparation of an ex-ante cost benefit economic analysis of the main interventions proposed in the operation.

### **Main activities**

3.1 The selected candidate will perform the following activities:

- a) Review all documents related to the project and the epidemiological landscape in Suriname;
- b) Review the Bank's policies and guidelines related to economic analysis;
- c) Review the literature on cost effectiveness of interventions for NCDs and malaria;
- d) Select the appropriate methodology for the study (cost-effectiveness or cost-benefit analysis), the outcomes, and collect the relevant available data on key interventions, costs, and expected benefits;
- e) Perform the economic analysis with the main interventions proposed in the operation, considering all possible alternatives;
- f) Perform sensitivity analysis with key variables;
- g) Write a report that will feed into the project preparation documents, including a paragraph for the Proposal for Operation Development (POD);
- h) Contribute with the definition of the final indicators of the Results Matrix; and
- i) Participate via electronic/phone connection in team meetings for project preparation.

### **Reports / Deliverables**

- i. A preliminary report with the corresponding methodological proposal;
- ii. An interim report of the consultancy; and
- iii. A final report, including a paragraph with a synthesis of the results to be included in the POD.

*Every report must be submitted to the Bank in an electronic file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final reports, due to Records Management Section regulations.*

## Payment Schedule

Activity	Payment (% of total contract sum)
Preliminary Report	15
Interim Report	40
Final Report	45

## Qualifications

The consultant should possess:

- i. Academic Degree: A graduate degree in economics, business administration, financial management or related field is required.
- ii. Skills: (ii) advanced quantitative skills; and (iii) minimum of five years of experience conducting cost-benefit analyses/cost-effectiveness analysis in the health sector. Previous experience with IDB projects would be an asset.
- iii. Languages: Fluency in written and oral English.

## Characteristics of the Consultancy

- Consultancy category and modality: Products and External Services Contractual, Lump Sum.
- Contract duration: 25 non-consecutive days. The consultancy is expected to begin by March 30, 2018.
- Place(s) of work: Consultant's place of residence.
- Division Leader or Coordinator: The consultant will work under the supervision of Diana Pinto (SCL/SPH) and Ian Ho-a-shu (SPH/CCB).

**Payment and Conditions of Employment:** Remuneration will be determined in accordance with Bank regulations and criteria.

**Consanguinity:** Individuals with relatives working for the IDB within, and including the fourth degree of consanguinity and the second degree of affinity are not eligible for employment as staff or consultants. Candidates must be citizens of a member country of the Inter-American Development Bank.

**Diversity:** The IDB is committed to diversity and inclusion and to providing equal opportunities in employment. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afro-descendants and persons of indigenous origins to apply.

## **ANNEX**

**Suriname**

**SCL/SPH**

**Consultancy to conduct a study on avoidable hospitalizations for primary care sensitive conditions**

**SU-T1100**

## **TERMS OF REFERENCE**

### **1. Background**

Established in 1959, the Inter-American Development Bank (“IDB” or “Bank”) is the main source of financing for economic, social and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.

The Health Services Support Project (HSSP) operation SU-L1054 seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. The project will support the organization of Primary Care (PC) for NCD prevention, management, and control with the objective of strengthening of an integrated, patient-centered healthcare model within PC in order to increase access, quality and efficiency of services for NCDs.

Based on evidence of best practice, health systems that adopt a chronic care model (CCM) within the primary care (PC) setting have shown to be more effective and efficient in managing and controlling not only NCDs, but also CDs. The MOH therefore introduced the One Stop Shop (OSS) model in primary care. The OSS is an integrated care approach based on the CCM, targeting patients with diabetes and heart disease. Given increasing population with NCDs, the GoS plans expansion of the OSS model to other districts, but to do so, needs to better understand and address quality the current service provision network. For this purpose, a study on the rate of avoidable hospitalizations for primary care sensitive conditions (AHP CSC) will be conducted.

Studies on AHP CSC have been used to monitor the performance of the health system in the US, Canada and several European countries (Billings et al 1996; Billings et al. to 1993, Bindman et al 1995). The idea behind this indicator is that hospitalizations for specific health problems represent inefficiencies in the health system to provide access to primary care of good quality. ACS may indicate deficiencies to detect diseases early in their progression and reduce their severity, and / or to prevent the appearance of complications, which would avoid the need for hospitalization. Hospitalization rates due to the conditions of the ACS have been associated with access and quality of primary care in several countries, including Australia, Canada, Spain and the United States Ménéci (et al 2006; Roos et al 2005; Magan et al. 2008, Márquez-Calderón et al 2003, Valenzuela et al, 2007, Ansari et al 2006).

The methodology to generate ACS indicators has been well standardized and applied in the Latin American context. Evidence in Latin America has been generated from IDB financed studies in Argentina, Colombia, Costa Rica and Paraguay. Building on this previous experience, application

of these methods will provide insights about the adequacy of processes that need to take place at the PC level and point towards areas for improvement.

## **2. Consultancy objective(s)**

The objectives of this consultancy are: (i) to design and process a national database of avoidable hospitalizations in Suriname for conditions sensitive to primary care (ACS) in accordance with international standards; (ii) perform an analysis of the ACS conditions to explore the relationship of the ACS hospitalizations with programs and primary care interventions in the health system in the country.

## **3. Main activities**

The main activities of the consultancy will be developed in four stages, as follows:

### **3.1 First stage: Bibliographic review and definition of data sources**

- a. Review of international and national literature related to ACS
- b. Prepare an inventory of previous studies in Suriname
- c. Define the sources of hospital discharge data, analyze the quality of the data, the advantages over other types of sources and their limitations

### **3.2 Second stage: Define the list of avoidable hospitalizations**

- a. Identify, apply and adapt, if necessary, the criteria to obtain a list of codes, based on the criteria defined by Alfradique et al 2009.
- b. Define the criteria to exclude certain diagnoses and conditions
- c. Determine hospitalization rates for at least 1 / 10,000 or a problem associated with a health risk
- d. Clearly establish the definition and coding of diagnoses
- e. Explain the criteria used for the final selection of codes

### **3.3 Third stage: Develop a database of preventable hospitalization conditions for conditions sensitive to primary care (ACS) for the date closest to the year 2017 that information is available containing at least the following information regarding each hospitalization record:**

- a. Diagnostic codes ICD-10. There must be at least one diagnostic code and additional ones that can be identified (co-morbidities)
- b. Age. Make an adjustment for age that allows regional comparisons taking into account the epidemiological profile of the population
- c. Sex
- d. Ethnicity
- e. Address of the patient's residence. There must be at least the political-administrative unit where the patient resided on the date of admission, such as the state, province, district, parish, canton or others.
- f. Duration of hospitalization in days (or dates of admission and discharge)
- g. Address where the hospitalization took place.
- h. Type of health provider (public, private, university, non-profit hospital or others)
- i. Estimated population data, by sex, age and by administrative political unit defined in (iv), obtained from census sources available in the country

### **3.4 Fourth stage: Processing and analysis of information: The consultant should make an analysis of the ACS conditions that includes at least:**

- a. A descriptive analysis of the minimum variables indicated in point 3.3, by gender and ethnicity
- b. Calculation of the number of hospitalizations associated with each of the diagnostic groups established in 3.2 and the proportion of these in relation to the total number of hospitalizations in the year.
- c. Calculate the number of hospitalizations associated with each of the diagnostic groups established in Alfradique et al (2009) and the proportion of these in relation to the total number of hospitalizations in the year.
- d. For the results obtained in 3.4b and c, determine the avoidable hospitalization rates per 10,000 inhabitants in each of the political-administrative units used in 3.3.
- e. and. Calculate the trends over time of avoidable hospitalizations for conditions sensitive to primary care (ACS)

#### **4. Reports / Deliverables**

4.1 Database of avoidable hospitalizations due to conditions sensitive to primary care (ACS) with all physical and electronic supports.

The consultant must provide the database in electronic format with all the parameters and guides used, as well as the methodology and commands used. It must include a report on the processing of the information that includes quality evaluation and completeness of the same, handling of shortcomings, and other adjustments that are made to the data, with recommendations for future improvement.

4.2 Reports with the results of each stage described above.

Every report must be submitted to the IDB in a digital file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final reports, due to Records Management Section regulations.

#### **Payment Schedule**

There will be three payments.

- The first payment of 20% of the consultancy at the time of signing of the contract and a workplan delivered.
- The second payment of 40% will be provided at the time deliverables of stages one to three above.
- The remaining 40% will be released upon completion of stage 4.

#### **Qualifications**

Training in health sciences, with a master's degree in epidemiology, public health, health policy or related health areas. Must have experience in assessments of health provider performance, measurement of health indicators. Demonstrated skills and experience with health database management, and health coding. Excellent writing skills. Fluency in dutch is desirable.

#### **Characteristics of the Consultancy**

- Contract category and modality: Products and External Services Contractual, Lump Sum



- Duration: 45 days, to be completed within three months of signing this contract.
- Place(s) of work: External contract, Paramaribo place of residency.
- Division Leader or Coordinator: Diana Pinto ([dpinto@iadb.org](mailto:dpinto@iadb.org)), Health Lead Specialist (SCL/SPH)

**Payment and Conditions:**

Compensation will be determined in accordance with Bank's policies and procedures. In addition, candidates must be citizens of an IDB member country.

**Consanguinity:** Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce contractuels, will not be eligible to provide services for the Bank.

**Diversity:** The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afro-descendants and persons of indigenous origins to apply.

## **ANNEX A**

**Suriname**

**SCL/SPH**

**Consultancy to conduct an investment case for non-communicable diseases in Suriname  
SU-T1100**

## **TERMS OF REFERENCE**

### **1. Background**

Established in 1959, the Inter-American Development Bank (“IDB” or “Bank”) is the main source of financing for economic, social and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.

The Health Services Support Project (HSSP) operation SU-L1054 seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. The Government of Suriname (GoS) faces epidemiological challenges stemming from increasing rates of non-communicable diseases (NCDs) and the persistence of communicable diseases (CDs). The 2014 NCD country profile report<sup>1</sup> shows NCDs have become the main cause of morbidity and mortality (68% of total deaths). Between 2005-2016 the incidence (new cases) of diabetes, ischemic heart disease and chronic kidney disease grew by 39%, 19% and 24% respectively<sup>2</sup>. The 2013 Suriname STEPS Survey highlighted the following risk factors driving increases in NCDs: high blood pressure, obesity and overweight, tobacco and alcohol consumption. Nearly 30% of adults, and 40-50% of those over age 55 suffer from high blood pressure. Overweight and obesity affect 18% of men, 31% of women and 26% of children aged 13-15<sup>3</sup>. Unhealthy diet and lack of exercise drive these figures.<sup>4</sup> From an economic perspective and drawing from recent comparable evidence from other Caribbean countries, NCDs have a significant impact at the household level from income loss and increased in out-of-pocket expenses, and at the national level from loss of skilled labor and productivity, lower competitiveness and higher government health and social expenditures (spending on hypertension and diabetes is between 1-8% of GDP in 4 Caribbean countries).<sup>5</sup>

With NCDs holding back not just health but social and economic objectives more broadly, the high burden of NCDs remains a major challenge for social and economic development in Suriname. Reducing this high burden of NCDs requires increased and targeted investments, engagement of all stakeholders across government, and mutual accountability of different spheres of public policy making that have a bearing on NCDs. More importantly, the ability of Ministries of Health to make

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<sup>1</sup> World Health Organization. Suriname Country Report. World Health Organization 2017: <http://www.who.int/countries/sur/en/>

<sup>2</sup> Institute of Health Metrics and Evaluation. Suriname Statistics: <http://www.healthdata.org/suriname>

<sup>3</sup> World Health Organization. World health statistics 2009. World Health Organization, 2009.

<sup>4</sup> Ministry of Health. National Action Plan for the Prevention and Control of NCDs (2015-2020). Government of Suriname, 2014.

<sup>5</sup> World Bank. NCDs in the Caribbean: The New Challenge for Productivity and Growth. Caribbean Knowledge Series No 78596, World Bank; 2013. Abdulkadri, Abdullahi O., Colette Cunningham-Myrie, and Terrence Forrester. "Economic burden of diabetes and hypertension in caricom states." Social and Economic Studies 58, no. 3/4 (2009): 175-97

a compelling, evidence-informed advocacy case for NCD investments is crucial for reversing the current NCD trends. The motivation of this project is to validate the linkages between NCDs and national social and economic development priorities to highlight the importance of investing in NCD prevention and control. Overall, the project aims to develop evidence and guidance to support the development, financing and implementation of national multisectoral NCD prevention and control strategies. The products will serve as a tool for the country's Ministry of Health to advocate with highest level of Government and with other Ministries to invest in prevention and control of NCDs and to ensure appropriate level of domestic resources allocated for NCDs.

## **2. Consultancy objective(s)**

The objectives of this consultancy are to elaborate an investment case for NCDs in Suriname. The investment case will include the following elements:

- Estimates of the economic impact of NCDs (direct costs to government and indirect costs to the economy).
- Cost of a selected package of interventions, and determine their respective return of investment (ROI) in the short and medium terms.
- Evidence of the benefits of scaled up action.
- A tailored, compelling and clear case outlining the economic benefits of strengthening the national NCD response utilizing feasible and context-specific policy options.
- An agreed road map for assessing and agreeing priority recommendations and actions arising from the investment case.

## **3. Main activities**

### **3.1 Establish a National Team.**

Beyond providing Ministries of Health with evidence to advocate for funds, this project also aims to strengthen local competencies to allow Suriname to independently carry out investment cases in the future. As such, a key component of the project is establishing a strong national team to work jointly throughout the development of the investment case with the consultant.

It is encouraged that the national team consists primarily of a designated team within the Ministry of Health, designated by the Minister himself, to support the data collection process and the development of estimates. It is suggested that the National Team is comprised by:

health economist (1)

epidemiologist – (1) - it is strongly suggested to be a staff member of the MOH Epidemiology unit or equivalent

a staff member of the statistical unit or equivalent (1).

### **3. Data Gap assessment**

A Data Gap assessment will be conducted to evaluate the availability of country-specific data for the investment case analysis, and to highlight data gaps as to inform:

- (a) national authorities where proxies may be necessary for the analysis,
- (b) the discussion of which proxies can be used, and
- (c) the potential implications of using said proxy data on the results of the Investment

### 3. Data Collection.

The analytical model used in this project is data intensive. Once the National Team has been established, an excel sheet with the data input requirements will be handed to the designated National Team for purposes of populating with available information.

### 4. Investment Case & Institutional Context Analysis

a. Conducting the Investment Case Analysis. In collaboration with the National Team, the scaled-up interventions will be selected, the model will be tested and refined, and preliminary estimates (prevalence, costs, ROI, etc.) will be obtained. In addition, the Ministry of Health will be briefed on how to use, adapt, and update the NCD investment case.

b. Conducting the Institutional Context Analysis. Even when the economic case for increased investment is clear, there may still be political and economic barriers to action. The Institutional Context Analysis will evaluate the existing NCD governance arrangements, and the key stakeholders' incentives for putting appropriate policies into practice, to ultimately inform both the context-specific feasibility of policy options and a route to achieving the recommended policy changes.

c. Stocktaking of Initial Findings. Initial findings will be discussed, and preliminary recommendations will be agreed upon.

5. Gathering Stakeholder Support. The fourth objective is to meet with key stakeholders and sectors to discuss the purpose of the investment case, seek their inputs and ultimately secure the endorsement of the case.

### 5. Develop and Finalize Reports.

A draft report will be developed based on the information collected and the analysis conducted during the Investment Case & Institutional Context Analysis, and will be submitted within three months to the Ministry of Health for comments. This report will contain the findings of the calculations made under the investment case (economic costs, economic benefits, ROI, etc.), relevant components of the institutional context analysis, policy implications, and note any limitations. The draft will be edited according to the comments received from Ministry of Health.

### 6. Dissemination of Results.

Final products will be shared with the Governments officials at the highest possible level (preferably President, Prime Minister, Minister of Finance, Minister of Health, Chair of the Parliament), representatives of civil society and development partners. Additional support for dissemination of results at a country-level can be provided at an ad-hoc basis.

## 4. Reports / Deliverables

The products delivered will serve as tools for the country's Ministry of Health to advocate with highest level of Government, other Ministries, and civil society to raise awareness and promote investment in the prevention and control of NCDs.

(1) Data Gap Summary. A brief summary of the data gaps will be delivered within two weeks of the Data Gap Mission. The purpose of this report is to document the availability of country-specific data for the investment case analysis, and highlight data gaps as to inform (1) Ministry of Health Officials where proxies will be necessary for the analysis, (2) inform the discussion of which proxies can be used in the Investment Case analysis, and (3) the potential implications of using said proxy data on the results of the Investment Case analysis.

(2) Draft and Final Reports. A preliminary draft report will be delivered within three months of the Investment Case & Institutional Context Analysis. This report will contain the findings of the

calculations made under the investment case (economic costs, economic benefits, ROI, etc.), the institutional context analysis, policy implications, and note any limitations. Refinements to the draft report can be made according to Ministry of Health comments.

(3) **Executive Summary.** The executive summary along with deliverables 4-6 will be available a month after the final report has been finalized. The executive summary will be a short and targeted document that will contain a summary of the key findings of the report, including country-specific: prevalence of NCDs, premature deaths per year attributable to NCDs, direct costs to government and indirect costs to the economy of NCDs, costs and projected savings of a package of NCD interventions (selected “best buys”), return of investment (ROI) of selected best buys, the cost to the country of inaction, a short description of the methodology, and key policy implications.

(4) **PowerPoint.** A set of slides will be developed for national policy makers to facilitate advocacy efforts and to further intersectoral dialogues.

(5) **Summary Infographic.** An infographic with a summary of the report findings will be developed to assist in the dissemination and socialization of the project findings.

(6) **Excel Model.** An excel model with the calculations used in the investment case will be delivered. This model can continue to be edited by the country team for future analyses.

### **Payment Schedule**

There will be three payments.

- The first payment of 30% of the consultancy at the time of signing of the contract and a workplan and working team agreement delivered.
- The second payment of 40% will be provided at the time deliverables 1 and 2 (preliminary report) above
- The remaining 30% will be released upon completion of final report of deliverable 2, and deliverables 3-6.

### **Qualifications**

International firm with experience in international health costing and economic studies, and a trajectory working jointly with public sector in NCD stakeholder analyses.

### **Characteristics of the Consultancy**

Type of consultancy: Firm

Contract duration: 7 months

Coordinator: Team leader of SU-L1054 in coordination with Management Staff Suriname MOH.

Location(s) where services are to be provided: Suriname

Approval of deliverables: The consultancy will deliver formal written documentation of the products for approval by the contract coordinator. All deliverables must have the IDB approval.

Start date and execution period: April 15, 2018.

Copyrights of the documents, tools or deliverables: The copyrights, distribution of documents or any intellectual property related to this contract belongs to the IDB. Any future use by the consultancy firm must be approved by the IDB under its information management policies.

### **Payment and Conditions**

Payment and Conditions: Compensation will be determined in accordance with Bank's policies and procedures. The Bank, pursuant to applicable policies, may contribute toward travel and moving expenses. In addition, candidates must be citizens of an IDB member country.

**Visa and Work Permit:** The Bank, pursuant to applicable policies, may submit a visa request to the applicable immigration authorities; however, the granting of the visa is at the discretion of the immigration authorities. Notwithstanding, it is the responsibility of the candidate to obtain the necessary visa or work permits required by the authorities of the country(ies) in which the services will be rendered to the Bank. If a candidate cannot obtain a visa or work permit to render services to the Bank the contractual offer will be rescinded

**Consanguinity:** Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce contractuels, will not be eligible to provide services for the Bank.

**Diversity:** The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afro-descendants and persons of indigenous origins to apply.

## **Annex A: Overview of Data Requirements**

### **A. Intervention information**

1. Coverage data
  - a. Current coverage of NCD interventions \*
  - b. Population in need data (how many people need the intervention) \*
  - c. Target coverage of NCD interventions over plan period \*
2. Delivery channels (level at which interventions are delivered, ex: Clinic, hospital, etc.)
3. Drug and supply prices \*
4. Population wide intervention costs
  - a. Human resource salaries (director, manager, public health specialist, legal officer, etc.)
  - b. Cost of workshops, training, staff incentives, mass media campaigns, etc.

### **B. Program costs**

*These are the non-patient level costs that are required to run the program.*

1. Program specific human resources (Number of people employed in NCD specific positions at national, regional and district level Ministry of Health)
2. Training plan
  - a. Number and length of training course
  - b. Number of people to be trained
  - c. Training of trainers
3. Supervision visits from national to regional and district levels.
4. Monitoring and Evaluation costs
5. Transportation (Program specific vehicles)
6. Communication, Media and Outreach (General – not intervention specific, which is included in section)
7. Advocacy
8. General Program Management
  - a. Design and Review of Country Strategy
  - b. Development and Review of Annual Work Plan
  - c. Development/Review of Human Resource Plan
  - d. Program Coordination Meetings
  - e. Commodity Regulation and Policies
  - f. Situation Analysis

### **C. Health Systems Costs**

1. Human Resources for Health
  - a. Number of staff employed within WHOLE health system
  - b. Salary and benefits
  - c. Time utilization (days and hours worked, etc.)
2. Infrastructure
  - a. Number of facilities available
  - b. Number of beds
  - c. Number of outpatient visits available
  - d. Occupancy rates
  - e. Construction costs for new facilities (not mandatory)

### **D. Health Outcomes & Epidemiological Information**

1. Epidemiological Information
  - o Incidence, Prevalence and Mortality by age and gender \*

2. Intervention Impact size \*

**E. Economic Data\***

1. GDP
2. Labor force
3. Labor force (working age only)
4. Employed labor force
5. Employed labor force (working age only)
6. Unemployment rate
7. Labor force participation rate
8. Labor force participation rate (working age only)
9. GDP per employed person

\*note: default data is present for all countries



## SURINAME

### INSTITUTIONAL CAPACITY STRENGTHENING TO MINISTRY OF HEALTH SURINAME

Design and Implementation Resources for Health Services Support Project (SU-T1100)

#### TERMS OF REFERENCE

- I. The government of Suriname (GoS) has requested a loan of US\$20M to fund the **Health Services Support Project (HSSP)** operation SU-L1054 which seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. A TC is also being funded to support the design and implementation of operation SU-L1054. The TC will finance technical studies required to develop key areas of the loan components, as well as institutional strengthening activities, focused on the MoH.

#### II. CONTEXT OF ACTIVITIES

In the past decades, the Government of Suriname has improved the health status of its population and is on track to reach its health-related Millennium Development Goals (MDGs). Since 1990, life expectancy at birth has increased from 66 to 72 years.<sup>1</sup>

**Health conditions and burden of disease.** The Government of Suriname (GoS) faces epidemiological challenges stemming from increasing rates of non-communicable diseases (NCDs) and the persistence of communicable diseases (CDs). The 2014 NCD country profile report<sup>2</sup> shows NCDs have become the main cause of morbidity and mortality (68% of total deaths). Between 2005-2016 the incidence (new cases) of diabetes, ischemic heart disease and chronic kidney disease grew by 39%, 19% and 24% respectively<sup>3</sup>. The 2013 Suriname STEPS Survey highlighted the following risk factors driving increases in NCDs: high blood pressure, obesity and overweight, tobacco and alcohol consumption. Nearly 30% of adults, and 40-50% of those over age 55 suffer from high blood pressure. Overweight and obesity affect 18% of men, 31% of women and 26% of children aged 13-15<sup>4</sup>. Unhealthy diet and lack of exercise drive these figures.<sup>5</sup> From an economic perspective and drawing from recent comparable evidence from other Caribbean countries, NCDs have a significant impact at the household level from income loss and increased in out-of-pocket expenses, and at the national level from loss of skilled labor and productivity, lower competitiveness and higher government health and social expenditures (spending on hypertension and diabetes is between 1-8% of GDP in 4 Caribbean countries).<sup>6</sup> Regarding CDs, control of malaria, has been noteworthy and the GoS has committed to malaria elimination by 2020. A major challenge to achieving this goal is that recently most cases originate from migrant, multi-ethnic small-scale gold-mining communities in the border areas (Guyana

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<sup>1</sup> WHO WHS 2011

<sup>2</sup> World Health Organization. Suriname Country Report. World Health Organization 2017: <http://www.who.int/countries/sur/en/>

<sup>3</sup> Institute of Health Metrics and Evaluation. Suriname Statistics: <http://www.healthdata.org/suriname>

<sup>4</sup> World Health Organization. World health statistics 2009. World Health Organization, 2009.

<sup>5</sup> Ministry of Health. National Action Plan for the Prevention and Control of NCDs (2015-2020). Government of Suriname, 2014.

<sup>6</sup> World Bank. NCDs in the Caribbean: The New Challenge for Productivity and Growth. Caribbean Knowledge Series No 78596, World Bank; 2013. Abdulkadri, Abdullahi O., Colette Cunningham-Myrie, and Terrence Forrester. "Economic burden of diabetes and hypertension in caricom states." Social and Economic Studies 58, no. 3/4 (2009): 175-97

Shield-GS.)<sup>7</sup> Control of malaria transmission is difficult because of these communities' particular lifestyles and habits. Addressing other CDs, like HIV, Leishmaniasis and Tuberculosis is also a priority both in the GS border and at the national level.

**Service Providers, Provision and Barriers to Accessing Care.** Surinamese healthcare is provided by a combination of public and private health care providers. See Figure 1. There are both public and private providers for primary, secondary and tertiary care, and use depends on geographic area and type of insurance. Public primary healthcare services are provided by Regional Health Districts (RGDs), with the exception of the districts of the Interior<sup>8</sup>, whose service provision is provided by the not-for-profit organization, the Medical Mission (MZ). The RGD has 56 health facilities, including 15 health posts and 41 primary care clinics, while the MZ has 57 polyclinics and health posts. There are 146 private clinics, 1 psychiatric hospital in Paramaribo, 40 dental units including 26 of these which are located in the RGD Clinics.<sup>9</sup> The RGD staffs its posts with 1 doctor and 2 nurses and its clinics with 1-4 doctors and 1-5 nurses<sup>10</sup>, while the MZ staffs their health posts and clinics with community health workers, which are supervised by a total of five doctors,<sup>11</sup> who are based in Paramaribo, rotating between health facilities and are always on-call with communication by radio. All hospitals are located on the coast (4 public and 2 private). The RGD refers patients to the public hospitals. Hospital care for the referral patients of the MZ is provided initially by the Diakonessen (private) Hospital, with overflow directed to the Public Lands Hospital and the Academic Hospital in Paramaribo. There are 3 private medical laboratories as well as laboratories located in each hospital. There are several barriers to accessing health services. For the coast, poor health worker capacity and infrastructure as well as a lack of supplies are major constraints for primary health services. Estimates are that 50% of the RGD's infrastructure is not adequate for general services. The RGD also suggests that the perceived poor quality of their services by the population, stemming from poor conditions of facilities, is a barrier to access and low uptake of their services. While a rigorous assessment of human resources for health capacity and needs has not been performed in the country, the RGD estimates that their health workers are working at full capacity and that they critically lack appropriate training.<sup>12</sup> In the Interior, there are transportation and socio-cultural barriers as well as a lack of equipment, supplies and human resources for health. Social and cultural barriers exist for communities in the Interior, with low up-take of services due to a lack of culturally or linguistically appropriate health information.<sup>13</sup> Both regions have constraints that include

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<sup>7</sup> Bureau of Public Health. Malaria in Suriname Analysis of the Trends Malaria Program. Malaria Program, Ministry of Health Government of Suriname. For example, MP studies show little knowledge about the potential health threats of malaria and low rates bed nets use. Insufficient health seeking behavior is associated with both self-treatment and low adherence to treatment, both of which contribute to development of drug-resistance of the malaria parasite

<sup>8</sup> Brokopondo and Sipaliwini.

<sup>9</sup> Health in the Americas, 2012 Edition: Suriname Country Volume. Pan-American Health Organization.

<sup>10</sup> RGD Health Posts are staffed with 1 doctor and 2 registered nurses; primary care clinics are staffed with 1-4 doctors, 1-5 registered nurses, 1-3 administrative personnel as well as a laboratory technician, 1 pharmacist and 1 midwife.

<sup>11</sup> This is the international equivalent to a "barefoot doctor", including training in obstetric care, dental extraction and preventative services. The MZ's health facilities are generally located within 30 minutes travel distance of their populations (60,000 total population). In addition to doctors, head nurses, health assistants, polyclinic aids, paramedics and laboratory technicians also support the community health workers

<sup>12</sup> Due to the fact that they had previously discontinued this training in the 90s and have in the past few years begun it again.

<sup>13</sup> The profile of the health assistant is LBGO diploma, connection with the Interior (for retention), understanding of the language and culture. Part of the work responsibilities of the health assistant is

inadequate operating hours and lack of portability of coverage. For example, RGD operating hours are limited (e.g. 7-11am) and do not match the scheduling needs of the patient population, negatively affecting, for example, the offer of preventive services and the demand for services in general. With such a limited schedule, health professionals find it difficult to offer preventive services and revert to mainly treating people with sickness.

**Suriname's strategies to address health challenges.** Based on evidence of best practice, health systems that adopt a chronic care model (CCM) within the primary care (PC) setting have shown to be more effective and efficient in managing and controlling not only NCDs, but also CDs.<sup>14</sup> The MOH therefore introduced the One Stop Shop (OSS) model in primary care. The OSS is an integrated care approach based on the CCM, targeting patients with diabetes and heart disease. The OSS has been functioning in Paramaribo and Nickerie, serving a population of approximately 161,871.<sup>15</sup> Given increasing population with NCDs, the GoS plans expansion of the OSS model to other districts, but to do so, needs to better understand and address structural information and management deficiencies in the current service provision network.<sup>17 18</sup> Second, the MOH is carrying out public health interventions to address NCDs risk factors, through the adoption of a Health in All Policies (HiAP) approach which entails coordinated action between both Health and non-health Ministries. Successful implementation of HiAP requires strengthening of the core stewardship and policy functions of the MOH, particularly improvement of the overall technical capacity in terms of planning, monitoring and evaluation, digital technology use.

### **Consultancy objective(s)**

The objective of this consultancy is to identify areas for organizational strengthening at the MOH and propose an action plan to strengthen systems, processes and establish new organizational arrangements at the MOH that will facilitate smooth implementation of large scale health systems strengthening programs, in this instance loan operation SU-L1054.

The institutional capacity assessment should bring rigor and a systematic, adaptable method to determine desired capacities (capacity needs), assess existing capacities (capacity assets), and establish capacity development priorities. With this information the consultants will make recommendations and develop a roadmap to prioritize operational capacity development interventions and measures to mitigate threats to this roadmap.

### **Main activities**

*Working under the overall supervision of and providing support to the SU MOH, the selected candidate will:*

1. In line with the objectives of the consultancy, clarify the scale and scope of the assessment, including:
  - a. Whose capacities need to be assessed?
    - i. At a minimum the following areas of responsibility (units) in the MOH must be included in the assessment: Finance (including budget

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community outreach but it was suggested that they are only able to perform this to about 10-15% of what is expected.

<sup>14</sup> Hansen, Johan, Peter P. Groenewegen, Wienke GW Boerma, and Dionne S. Kringos. "Living in a country with a strong primary care system is beneficial to people with chronic conditions." *Health affairs* 34, no. 9 (2015): 1531-1537. 12. Bodenheimer, Thomas, Edward H. Wagner, and Kevin Grumbach. "Improving primary care for patients with chronic illness." *Jama* 288, no. 14 (2002): 1775-1779.

<sup>15</sup> Estimate based on approximate population affected by targeted NCDs within OSS service area. OSS lacks data on number of patients served or demand in service area.

- creation/approval, financial transaction/liquid asset management), Procurement/Tender Notices, Logistics, Project Management, Human Resources, Health Policy, Research & Planning, Public Health Bureau, Pharmaceuticals, Non-Communicable Diseases Unit, Health Promotion, Communications, Public Health.
- b. Which capacities need to be assessed per unit?
  2. Form a Stakeholder Mapping and Engagement:
    - a. Map key stakeholders
    - b. Prepare a stakeholder engagement plan
  3. Engage stakeholders appropriately at the following stages of the process:
    - a. Scoping and designing the assessment
    - b. Data collection
    - c. Validation of results
    - d. Sharing results and planning next steps
  4. Design and Plan the Assessment
  5. Review assessment tools available and identify tool(s) that match the objectives
  6. Adapt the tools to match the objectives
  7. Plan the data collection approach and map data sources to the assessment tool
  8. Prepare a workplan for the assessment exercise including outputs to be achieved, activities, due dates, roles and responsibilities and budget.
  9. Conduct the Assessment
  10. Prepare interview/self-assessment questionnaires, data collection checklists etc.
  11. Collect data as appropriate (e.g. review documents, interviews, workshops, self-assessment instruments etc)
  12. Record findings
  13. Compile and analyze data collected by indicator
  14. Assign ratings according to the assessment approach
  15. Debrief key stakeholders on findings
  16. Facilitate validation of findings with key stakeholders (e.g. through a workshop or series of workshops)
  17. Prepare Assessment Report and propose a road map with timeline to mitigate the bottlenecks and inefficiencies identified
  18. Prepare a sustainability plan which includes an assessment of current partnerships and identifies potential and new strategic alliances contributing to operational capacity strengthening

### **Reports / Deliverables [If applicable]**

1. Assessment workplan including:
  - a. Objectives of the assessment
  - b. Scale and scope of the assessment
  - c. Stakeholder mapping and engagement plan
  - d. Assessment approach (tools and data collection)
  - e. Assessment workplan including outputs to be achieved, activities, due dates, roles and responsibilities and budget.
2. Preliminary findings
3. Final report including:
  - a. Introduction and background
  - b. An executive summary
  - c. A description of the approach
  - d. A presentation of the context

- e. A report of the assessment findings along with recommendations for organizational changes
- f. A road map to implement the changes with timeline to mitigate the bottlenecks and inefficiencies identified

### **Payments**

There will be three payments.

- The first payment of 30% of the consultancy at the time of signing of the contract and a workplan and working team agreement delivered.
- The second payment of 40% will be provided at the time deliverable 2
- The remaining 30% will be released upon completion of final report of deliverable 3

### **Qualifications**

- **Education:** Post graduate degree in Operations Research, Health Services Organization, Leadership and Organizational Change, or Management Science and Engineering;
- **Language:** Fluency in English, effective communication skills and excellent analytical and report writing skills.
- **Areas of Expertise:** The selected consultant should have experience developing and executing operational systems for large organizations. Experience with strategic planning and human resource management, and organizational change management. Experience directing an organization that oversees delivery of healthcare services is preferred but not mandatory. Consultant should have at least five (5) years supervisory capacity experience in a health services setting.

### **Characteristics of the Consultancy**

- *Consultancy category and modality:* Defined Term Contractual
- *Contract duration:* Eight (8) weeks from the commencement of contract
- *Place(s) of work:* Paramaribo, Suriname, Ministry of Health Headquarters (MOH)
- *Responsible person:* Diana Pinto-Masis, IDB and Permanent Secretary, SU MOH

**Payment and Conditions:** Compensation will be determined in accordance with Bank's policies and procedures. The Bank, pursuant to applicable policies, may contribute toward travel and moving expenses. In addition, candidates must be citizens of an IDB member country.

**Visa and Work Permit:** The Bank, pursuant to applicable policies, may submit a visa request to the applicable immigration authorities; however, the granting of the visa is at the discretion of the immigration authorities. Notwithstanding, it is the responsibility of the candidate to obtain the necessary visa or work permits required by the authorities of the country(ies) in which the services will be rendered to the Bank. If a candidate cannot obtain a visa or work permit to render services to the Bank the contractual offer will be rescinded

**Consanguinity:** Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce contractuels, will not be eligible to provide services for the Bank.

**Diversity:** The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDS status. We encourage women, Afro-descendants and persons of indigenous origins to apply.

**SURINAME**  
**FINAL PROJECT EVALUATION AND COMPLETION REPORT FOR SU-L1054**  
Design and Implementation Resources for Health Services Support Project (SU-T1100)

**TERMS OF REFERENCE**

- I. The government of Suriname (GoS) has requested a loan of US\$20M to fund the **Health Services Support Project (HSSP)** operation SU-L1054 which seeks to contribute to the reduction of the burden of disease in Suriname by improving access to high quality, integrated primary care services and enhancing the effectiveness of the health sector to address priority epidemiological challenges. A TC is also being funded to support the design and implementation of operation SU-L1054. The TC will finance technical studies required to develop key areas of the loan components, as well as institutional strengthening activities, focused on the MoH.

**II. CONTEXT OF ACTIVITIES**

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### **Consultancy Objective(s)**

As stipulated within the Technical Cooperation Document, an ex-post evaluation of this project is to be undertaken jointly by the Ministry of Health/Project Execution Unit (MOH/PEU) and the Bank to assess the program's success in obtaining the objectives of the Programme and derive lessons and share experiences which would guide the design and implementation of further reforms. Moreover, this exercise aims to provide the MOH/PEU and the Bank with an assessment of the TC and include lessons learnt for adoption during the implementation of similar reform programmes.

As such, the objective of this consultancy exercise will be to perform an ex-post evaluation, producing a Project Completion Report for the TC as per the Bank's reporting format and guidelines and a comprehensive Project Outcome Assessment Report. It is expected that the Bank's Project Completion Report will be a summary of the larger outcome document.

In this regard, a model outline for the Bank's Project Completion Report is the following:

1. The Project
  - a. Project Context
  - b. Project Description
  - c. Development Objectives
  - d. Components
2. Results
  - a. Outcomes
  - b. Externalities
  - c. Outputs
  - d. Project Costs
3. Project Implementation

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<sup>14</sup> Hansen, Johan, Peter P. Groenewegen, Wienke GW Boerma, and Dionne S. Kringos. "Living in a country with a strong primary care system is beneficial to people with chronic conditions." *Health affairs* 34, no. 9 (2015): 1531-1537. 12. Bodenheimer, Thomas, Edward H. Wagner, and Kevin Grumbach. "Improving primary care for patients with chronic illness." *Jama* 288, no. 14 (2002): 1775-1779.

<sup>15</sup> Estimate based on approximate population affected by targeted NCDs within OSS service area. OSS lacks data on number of patients served or demand in service area.



- a. Analysis of Critical Factors
- b. Performance of contracted parties
- c. Bank Performance
  
- 4. Sustainability
  - a. Analysis of Critical Factors
  - b. Potential Risks
  - c. Institutional Capacity
  
- 5. Monitoring and Evaluation
  - a. Information on Results
  - b. Future Monitoring and Ex-Post Evaluation
  
- 6. Lessons Learned

**Main activities**

A methodology for the structure of this ex-post evaluation, combined with the deliverables required for it, is suggested below. The Consultant may submit a revised methodology with an application, should it be desired, but this is subject to approval by the Client.

**TASK A: Inception Stage.**

Consultant will be expected to: Review available project documentation; conduct initial meetings with all stakeholders; perform a project background analysis; and clarify/confirm project requirements.

**TASK B: Planning Stage.**

At this stage, the Consultant is expected to develop a draft work plan for the Project Completion Reporting Consultancy Service, detailing a schedule of documents required, stakeholder and other meeting schedules and required Client deliverables.

Deliverables at this stage include: Initial Report of Consultation meeting minutes and a draft work plan, due at the end of the second week of the commencement of the contract. The work plan shall be reviewed and agreed upon by the Client.

**TASK C: Implementation Stage.**

The Consultant implements the assessment methodology in this stage, providing the required services for the provision of a draft Bank Project Completion Report, firstly, and secondly a draft Project Outcome Assessment Report for the more substantial outcome paper.

Specific inputs which may be required include documentation on:

Project achievements;  
Parties involved in the TC components;  
Progress on the implementation of action and strategic plans developed under the TC  
Achievements via the Implementation of Services Agreements

Deliverables at this stage include the presentation of drafts or interim Reports of the two documents as described in Section 3 on Consultancy Objectives, in accordance with the approved/amended work plan and/or defined tasks approved by the MoH personnel.

#### **TASK D: Reporting Stage.**

The Consultant shall prepare and submit the Project Completion Report, which is according to Bank format and guidelines.

The Consultant shall also prepare and formally present to client representatives a draft report of the findings and recommendations as per the Project Outcome Assessment Report objectives.

Further, the Consultant is to review comments made at the presentation, and conduct any additional studies recommended and present a final report after consultation with stakeholders.

#### **Reports / Deliverables**

The consultant shall present reports in accordance with requirements stated in the deliverables as follows:

- i. An Initial Report as per the Planning Stage, giving details of the initial works and the proposed work plan
- ii. Progress Reports as is necessary to communicate the progress of the services and the interim findings.
- iii. Draft Reports of both the Bank Project Completion Report and the Project Outcome Assessment Report
- iv. Final Reports as per Task D and report on the Methodology and Deliverables Framework.

#### **Payments**

There will be three payments.

- The first payment of 30% of the consultancy at the time of signing of the contract and a workplan and working team agreement delivered.
- The second payment of 40% will be provided at the time of deliverable (iii) listed in the above section.
- The remaining 30% will be released upon completion of final report and deliverables in item (iv)

Education: Graduate degree or technical certification in project management, monitoring and evaluation, and strategic planning

Language: Fluency in English, effective communication skills and excellent analytical and report writing skills.

Areas of Expertise: The selected consultant should have international consulting or work experience, demonstrated skills and experience in project planning and management with a background in strategic project planning and implementation, evaluation of projects and an intimate knowledge of human resource management and health planning.

The consultant should possess experience in dealing with senior decision-makers in the public and private sector. The consultant is expected to possess strong analytical and organizational skills. Efficient computer and communication skills are a must. The consultant should have experience and understanding of TT country setting and the Caribbean Region.

#### **Characteristics of the Consultancy**

- *Consultancy category and modality:* Defined Term Contractual
- *Contract duration:* 30 non-consecutive days from the commencement of contract
- *Place(s) of work:* Paramaribo, Suriname, Ministry of Health Headquarters (MOH)
- *Responsible person:* Diana Pinto-Masis, IDB and Permanent Secretary, SU MOH

**Payment and Conditions:** Compensation will be determined in accordance with Bank's policies and procedures. The Bank, pursuant to applicable policies, may contribute toward travel and moving expenses. In addition, candidates must be citizens of an IDB member country.

**Visa and Work Permit:** The Bank, pursuant to applicable policies, may submit a visa request to the applicable immigration authorities; however, the granting of the visa is at the discretion of the immigration authorities. Notwithstanding, it is the responsibility of the candidate to obtain the necessary visa or work permits required by the authorities of the country(ies) in which the services will be rendered to the Bank. If a candidate cannot obtain a visa or work permit to render services to the Bank the contractual offer will be rescinded

**Consanguinity:** Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce contractuels, will not be eligible to provide services for the Bank.

**Diversity:** The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afro-descendants and persons of indigenous origins to apply.

PROCUREMENT PLAN FOR BANK EXECUTED OPERA					
Country: Suriname					
Project number: SU-T1100				Title of Project:	
Period covered by the Plan: 24 months				Total Project Arr	
Component	Procurement Type (1) (2)	Service type (1) (2)	Description	Estimated contract cost (US\$)	Selection Method (2)
Component 1	A. Consulting services	Individual Consultant (AM-650)	MOH Building Infrastructure Pre-Investment Technical Studies	\$ 35,000	IICQ
Component 1	A. Consulting services	Individual Consultant (AM-650)	Digital Needs and Opportunities Assessment	\$ 65,000	IICQ
Component 1	A. Consulting services	Individual Consultant (AM-650)	Integrated Health Network Analysis	\$ 75,000	IICQ
Component 2	A. Consulting services	Individual Consultant (AM-650)	MOH Institutional Capacity Strengthening Plan	\$ 60,000	IICQ
Component 2	A. Consulting services	Individual Consultant (AM-650)	NCD Gaps Assessment	\$ 32,000	IICQ
Component 2	A. Consulting services	Individual Consultant (AM-650)	Ex-Ante Cost Benefit Analysis	\$ 10,000	IICQ
Component 2	A. Consulting services	Individual Consultant (AM-650)	Avoidable Hospitalization Studies	\$ 13,000	IICQ
Component 3	A. Consulting services	Individual Consultant (AM-650)	Project Monitoring & Final Evaluation	\$ 10,000	IICQ

<b>Prepared by:</b>		<b>TOTALS</b>	<b>\$ 300,000</b>	
(1) Grouping together of similar procurement is recommended, such as publications, travel, etc. If there are a number of similar individual contracts to be executed at different times, the contract would be executed. For example: an export promotion project that includes travel to participate in fairs would have an item called "airfare for fairs", an estimate of the cost of the travel, and a separate item for the cost of the fairs.				
(2) (i) <b>Individual consultants:</b> ICQ: Individual Consultant Selection Based on Qualifications; SSS: Single Source Selection. Selection process to be done in accordance with AM-100.				
(2) (ii) <b>Consulting firms:</b> Per GN-2765-1, Consulting Firm selection methods for Bank-executed Operations are: Single Source Selection (SSS); Simplified Competitive Selection (SCS); and Convergence.				
(2) (iii) <b>Goods:</b> Per GN-2765-1, par. A.2.2.c: "The procurement of goods and related services, except when such goods and related services are necessary to achieve the objective of the project."				

Inter-American Development Bank  
 ORP/GCM

CTIONS									
Executing Agency: IDB							UBR: CCB/CTT		
Design and Implementation Support for the Health Services Support Project									
ount:	\$	300,000							
Type of Contract	Source of Financing and Percentage				Estimated date of the procurement notice	Estimated contract start date	Estimated contract length	Comments	
	IDB/MIF		Other External Donor						
	Amount	%	Amount	%					
Lump Sum	\$	35,000	100%	\$ -	0%	N/A	March 9 2018	2 months	
Lump Sum	\$	65,000	100%	\$ -	0%	N/A	April 9 2018	2 months	
Lump Sum	\$	75,000	100%	-	0%	N/A	March 12 2018	6 months	
Lump Sum	\$	60,000	100%	\$ -	0%	N/A	2-Apr-18	3 months	
Lump Sum	\$	32,000	100%		0%	N/A	2-Apr-18	2 months	
Lump Sum	\$	10,000	100%		0%	N/A	April 9 2018	12 months	
Lump Sum	\$	13,000	100%		0%	N/A	March 26 2018	6 months	
Lump Sum	\$	10,000	100%		0%		1-May-18	12 months	
					0%				
					0%				
					0%				
					0%				
					0%				



DESIGN AND IMPLEMENTATION SUPPORT FOR HEALTH SERVICES SUPPORT PROJECT

SU-T1100

CERTIFICATION

I hereby certify that this operation was approved for financing under the **Ordinary Capital Strategic Development Program for Social Development (SOC)** through a communication dated February 14, 2018 and signed by Mariana Mendoza (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$300,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of six (6) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, represent a risk that will not be absorbed by the Fund.

CERTIFIED BY:

Signed Original

3/19/18

Sonia M. Rivera

Date

Chief

Grants and Co-Financing Management Unit

ORP/GCM

APPROVED BY:

Signed Original

3/23/18

Ferdinando Regalia

Date

Division Chief

Social Protection and Health Division

SCL/SPH