# HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT

September 2018-September 2025











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# **LIST OF ACRONYMS**

AEC	Assessment of Essential Conditions	IYCF	Infant and Young Child Feeding
BAT	Baseline Assessment Tool	KHMHA	Karl Heusner Memorial Hospital Authority
BERT	Belize Emergency Response Team	LEG	Legal Department (PAHO)
BFLA	Belize Family Life Association	MCM	Mass Casualty Management
BHIS	Belize Health Information System	M&E	Monitoring and Evaluation
ССН	Corozal Community Hospital	MoHW	Ministry of Health and Wellness
CDEP	Clinical Data Exchange Platform	MPUELE	Ministry of Public Utilities, Energy, Logistics, and E-Governance
CHW	Community Health Worker	NCD	Non-Communicable Disease
CITO	Central Information Technology Office	NEMO	National Emergency Management Organization
CML	Central Medical Laboratory	NIC	National Implementation Committee
COVID-19	Coronavirus Disease 2019	NHI	National Health Insurance
EDF	European Development Fund	NRH	Northern Regional Hospital
EPHF	Essential Public Health Functions	<b>PAGoDA</b>	Pillar Assessed Grant or Delegation Authority
ER	Expected Results	PAHO	Pan American Health Organization
EU	European Union	PGCH	Punta Gorda Community Hospital
GOPA	Gesellschaft für Organisation, Planung und Ausbildung	PHE	PAHO Health Emergencies
<b>HEARTS</b>	Healthy Lifestyle Counseling, Evidence-based Treatment	<b>PMIS</b>	PAHO Management Information System
	Protocols, Access to Essential Medicines and Technology,	PRO	Procurement Unit (PAHO)
	Risk-Based Care, Team-Based Care, and Systems	PSC	Project Steering Committee
	Monitoring	PV	Photovoltaic
HEDMP	Health Emergency and Disaster Management Project	<b>RAWA</b>	Registration of Clinical Activities Web-based Application
HR	Human Resources	RBM	Results-Based Management
HSI	Hospital Safety Index	RFP	Request for Proposal
HSRP	Health Sector Reform Project	RFQ	Request for Quotation
HSS	Health Systems Strengthening	SIF	Social Investment Fund
HSSP	Health Sector Support Programme	SO	Strategic Objective
HVAC	Heating, Ventilation, and Air Conditioning	SRH	Southern Regional Hospital
ICD-11	International Classification of Diseases 11th Revision	SSB	Sugar-sweetened Beverages
ICS	Incident Command System	TOR	Terms of Reference
IDB	Inter-American Development Bank	UHC	Universal Health Coverage
IHSDN	Integrated Health Service Delivery Networks	UNGM	United Nations Global Marketplace
IPC	Infection, Prevention, Control	WHO	World Health Organization
IS4H	Information Systems for Health	WRH	Western Regional Hospital

# **Executive Summary**

### **Background**

The 11th European Development Fund (EDF) Cooperation Agreement between Belize and the European Union (EU), in its Multiannual Indicative Programme for the period 2014-2020, identified the health sector as one of the focal areas for cooperation. As a result, the Health Sector Support Programme (HSSP) was developed as a comprehensive and strategic initiative aimed at transforming the nation's health system to better meet the needs of its population. The HSSP was built upon previous reform efforts and was designed to address persistent challenges in the health sector while aligning with international frameworks.

The project's overarching objective, as stated consistently throughout its implementation, was "to improve the structure, organization, and management of health services" in Belize. This objective reflected the recognition that effective health service delivery requires not only adequate resources but also well-designed systems, structures, and processes that ensure equitable access, quality care, and efficient resource utilization.

Furthermore, to ensure alignment with the general objective, the project focused on three strategic objectives (SOs) aimed at enhancing disaster-resilience and environmentally friendly health facilities, improving the structure and management of health services, and establishing an integrated data exchange platform to optimize health system decision-making.

Of note was the impact of the global COVID-19 pandemic. This singular event emerged as an unprecedented global health crisis in early 2020, challenging healthcare systems worldwide and requiring rapid, strategic responses. As the impact of the pandemic intensified, there was an urgent need to reorient existing health programme funding to support Belize's immediate emergency response efforts, while ensuring continued essential health service delivery amidst global disruptions.

### **Key Achievements**

From 2018 to 2025, Belize embarked on a transformative journey to strengthen and modernize its health system. This final report captures that journey, highlighting significant achievements, challenges, and impacts on the nation's health system, under the three SOs:

- SO1 To develop efficient, effective, disasterresilient, and environmentally friendly health facilities.
- 2. **SO2** To improve the structure, organization, and management of health services.
- 3. SO3 To support tender, installation, and operationalization of a Supply Data Exchange Warehouse and Analytics Platform software (referred to as CDEP).

In a country prone to natural disasters and vulnerable to the impacts of climate change, the need for resilient, environmentally friendly health infrastructure was clear. Under **SO1**, the project led strategic assessments and retrofitting of five major hospitals and the Central Medical Laboratory (CML). Facilities were retrofitted to be safer, greener, and more resilient in the face of disasters and emergencies. At the same time, healthcare workers received training, and new plans were developed to ensure the

improvements could be maintained long into the future. The result was a stronger and more prepared health system.

Under **SO2**, Belize took major steps to improve the way health services were managed and delivered. A comprehensive assessment of the health sector laid the groundwork. National policies were introduced and implemented, including the Belize Health Sector Strategic Plan 2025-2034 and its Operational Plan 2025-2026, the National Nutrition and Human Resources for Health Policies. and the adoption of the HEARTS Initiative to address cardiovascular diseases and Diabetes. Mental Health services were also expanded and strengthened through the Mental Health Gap Action Programme (mhGAP), emphasizing the integrated approach to non-communicable diseases and mental health into primary health care, bringing muchneeded support to vulnerable areas. The project emphasized collaboration between sectors, communities, and among healthcare workers, ensuring that changes were informed, inclusive, and impactful. Even during the immense challenges of the COVID-19 pandemic, Belize's health system showed resilience and adaptability to stay on course towards the project's goals.

Under SO3, the focus was on building a more interconnected, health information system for data-driven decision making. The creation of a Clinical Data Exchange and Data Warehouse and Analytics Platform (known as the CDEP) represented a major step forward in the digital transformation of the health sector. A dedicated Technical Working Group for Information Systems for Health (IS4H) was formed, bringing together experts to develop technical specifications and guide vendor selection. Implementation began with the integration of key systems, including the

Belize Health Information System (BHIS), the Real-time Automated Web-based Application (RAWA) of the National Health Insurance, and the National Cancer Registry, utilizing the data format of the CanReg5 system. This will help decision-makers to analyze health statistics faster, enact policies, allocate resources more effectively, and ultimately provide better care for the people of Belize.

### **Lessons Learned**

# 1. Multi-Sectoral Collaboration Enhances Project Impact

The involvement of multiple stakeholders, including the MoHW, PAHO/WHO, Social Security Board, National Health Insurance, and international partners, was instrumental in achieving project goals. Cross-sector partnerships enabled resource mobilization, expertise sharing, and sustainability planning.

### 2. Flexibility and Adaptive Planning are Crucial

The COVID-19 pandemic demonstrated the necessity of adaptable project management. The ability to pivot toward emergency response without compromising long-term health system goals ensured continued progress despite global disruptions.

# 3. Digital Health Systems Require Strong Governance and Capacity Building

While the implementation of CDEP marked a significant milestone in Belize's digital health journey, its sustainability depends on continued investment in IT infrastructure, data governance, and workforce capacity development.

# 4. Infrastructure Investments Must Be Paired with Policy and Training

Sustainable healthcare improvements require not only physical infrastructure enhancements but also capacity-building initiatives, maintenance protocols, and supportive policy frameworks. The success of health facility retrofitting was reinforced by training maintenance personnel and revising emergency response policies.

# 5. Community Engagement is Essential for Public Health Initiatives

Programmes such as the HEARTS Initiative and the strengthened capacity of community health workers (CHWs) demonstrated the importance of community-level engagement in improving health outcomes. Empowering local healthcare workers and integrating them into formal healthcare systems fostered trust, increased service accessibility, and improved patient adherence to medical recommendations.

Engaging community members through building awareness, knowledge and skills on healthy lifestyle practices such as regular exercise, healthy diets, and avoiding unhealthy substances such as tobacco, excess alcohol, sugar, and salt are very important for addressing the risk factors of noncommunicable diseases and empowering individuals to take responsibility for their own health.

Through a strategic and evidence-based approach, the EU-HSSP evolved through various phases, adapting to emerging priorities and challenges, including the unprecedented impact of the COVID-19 pandemic. Most importantly, the project made substantial progress across multiple domains, including:

- Healthcare facilities infrastructure;
- Health sector assessment and reform;
- Strengthening of integrated health service delivery networks, enhancement of non-communicable disease (NCD) prevention and control mechanisms;

- Advancement of national nutrition and human resources for health policies;
- Development of the ten-year national health sector strategic plan;
- Improvement of mental health services; and
- Reinforcement of essential public health functions.

### Conclusion

As Belize transitions beyond the initial implementation of HSSP, the progress made through the HSSP laid the foundation, but sustainability will require continued care, commitment, and collaboration. From keeping newly retrofitted health facilities in good condition through regular maintenance, to advancing the country's digital health tools like the CDEP and telehealth kits, the next steps are about ensuring lasting impact. Strengthening financial pathways toward universal health coverage, expanding integrated, community-based care, and preparing for future emergencies are efforts that positioned Belize to build a health system that is not only resilient and efficient, but also fair and accessible to all.

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# PROJECT DESCRIPTION



This seven-year project (originally five years), funded by the European Union (EU) and implemented as a collaborative partnership between the Ministry of Health and Wellness (MoHW) of Belize and the Pan American Health Organization/World Health Organization (PAHO/WHO), aimed to "achieve a better quality of life for all Belizeans, living now and in the future."

With the amendment of the EU-PAHO PAGoDA contract in March 2021, the project expanded to three strategic objectives (SOs), namely:

- (SO1) To develop efficient, effective, disaster-resilient, and environmentally friendly health facilities.
- (SO2) To improve the structure, organization, and management of health services.
- (SO3) To support the tender, installation, and operationalization of a Supply Data Exchange Warehouse and Analytics Platform software (referred to as CDEP) for the Ministry of Health and Wellness.

Strategic Objective 1 listed the following as expected results:

- (ER1) Five health facilities and one laboratory (Central Medical Laboratory) retrofitted based on the smart hospitals concept and climate-disaster resiliency.
- (ER2) National multi-hazard management capacity enhanced.

Strategic Objective 2 listed the following as expected results:

- (ER1) Integrated Health Service Delivery Network approach implemented in all regions, including primary care services.
- (ER2) Health system reorganized with improved efficiencies and organizational management, fostering partnerships with different stakeholders.
- (ER3) National Nutrition Policy designed and promoted.
- (ER4) Training in results-based management, strategic planning, programme budgeting, and the Monitoring and Evaluation system.



Strategic Objective 3 listed the following as expected results:

- **(ER1)** Clinical Data Exchange Warehouse and Analytics Platform (CDEP) installed and operational.
- (ER2) Cancer Registry enhancement facilitated.
- (ER3) Health management teams/staff trained in CDEP, surveillance and epidemiology, and ICD-11.

With the advent of the COVID-19 pandemic during Year 2 of the project, the following expected results were aligned with the above strategic objectives and identified under the Reoriented COVID-19 Funds:

- (ER1): Enhance national laboratory network diagnostic capacity for early detection of COVID-19.
- (ER2): Enhance infection prevention and control, with a focus on medical waste management for COVID-19.
- (ER3): Improve integrated healthcare at the community level for co-morbidity in the context of COVID-19, including outreach services, health communications, self-care and management, and community engagement.



As the Pan American Health Organization, our role and responsibility is to support the Ministry of Health to implement their strategic direction for the health sector."

- Dr. Karen Lewis-Bell, PAHO/WHO Representative in Belize.







Photo Credit: Ministry of Health and Wellness

# HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT September 2018–September 2025

# PROJECT ACHIEVEMIENTS AND KEY ACTIVITIES



# A. SO1: To Develop Efficient, Effective, Disaster-Resilient, and Environmentally Friendly Health Facilities

### I. Strategic Objective 1: 2018-2025

### 1.1 SO1 Context and Background

The Health Sector Support Programme (HSSP) prioritized the transformation of Belize's health infrastructure through Strategic Objective 1 (SO1): "To develop efficient, effective, disaster-resilient, and environmentally friendly health facilities." Over the seven years (2018–2025), this objective addressed systemic vulnerabilities in healthcare infrastructure, integrating disaster resilience, energy efficiency, and climate adaptation into national health systems.

Through strategic assessments, carefully planned retrofitting activities, implementation of green initiatives, capacity building, and disaster planning, this component substantially improved the resilience, safety, and sustainability of Belize's healthcare infrastructure. The initiative transformed five major health facilities (three regional hospitals and two community hospitals) and the Central Medical Laboratory (CML), enhanced the disaster preparedness capabilities of the health system, trained health care workers in the maintenance of the built environment and equipment, and established foundational systems and policies for ongoing maintenance and sustainability.

### 1.2 Scope and Facilities

SO1 encompassed a comprehensive approach to infrastructure improvement across the six districts of Belize, focusing on seven key health facilities:

- Corozal Community Hospital (CCH)
- Northern Regional Hospital (NRH)
- Western Regional Hospital (WRH)
- Central Medical Laboratory (CML)

- Southern Regional Hospital (SRH)
- Punta Gorda Community Hospital (PGCH)
- Karl Heusner Memorial Hospital Authority (KHMHA), (capacity building component)

### 1.3 Methodology and Approach

SO1 followed a systematic methodology consisting of:

- Assessment Phase: Utilizing the Hospital Safety Index (HSI) and Green Checklist from the Smart Hospitals Toolkit to evaluate facilities.
- 2. Baseline Documentation: Employing the Baseline Assessment Tool (BAT) to gather comprehensive facility information.
- 3. Design Phase: Developing detailed retrofitting scopes of work and plans based on assessment findings.
- 4. Implementation Phase: Executing retrofitting works to enhance facility resilience and sustainability.
- Capacity Building: Training healthcare personnel and maintenance staff.
- Policy Development: Updating emergency response protocols and maintenance policies.

# II.Year 1(2019): Laying the Foundation and Health Facility Assessment

### 2.1 Training of Evaluators: Building a Multisectoral Workforce

The first year of SO1, commencing in 2019, established a solid foundation through comprehensive assessments of 24 health facilities using the Hospital Safety Index (HSI) and Green Checklist from the Smart Hospitals Toolkit.

These tools helped uncover hidden vulnerabilities that could

compromise care in times of crisis. However, the real impact of this phase was not just the assessments, but the people.

A diverse team of 20 professionals from the Ministry of Health and Wellness (MoHW), Energy Department, Ministry of Infrastructure Development & Housing (MIDH), National Fire Service, and Social Investment Fund (SIF) underwent refresher training on the Hospital Safety Index (HSI) and Green Checklist. This training emphasized cross-sector collaboration, equipping evaluators to assess structural safety, energy efficiency, and water conservation. Through interactive simulations and field evaluations, the participants learned to spot weak points such as inadequate emergency exits or inefficient HVAC systems, fostering a shared understanding of what resilience standards should look like in Belize's healthcare system.



# 2.2 Health Facility Assessments: A Baseline for Transformation

Each of the 24 health facilities across six districts underwent detailed evaluations that served as a critical baseline. The HSI looked at elements of structural integrity, emergency protocols, and equipment readiness. The Green Checklist,

meanwhile, analyzed the sustainability side, including energy and water use, waste management, and sustainable practices.

In addition to the general assessments, specific attention was given to key facilities:

### **Central Medical Laboratory (CML):**

The Green Checklist, which was applied in June 2019, revealed that while some green measures were in place, many needed improvements to truly reduce energy consumption. Later that year (October 2019), the HSI assessment was conducted in collaboration with the National Engineering and Maintenance Center (NEMC) of the MoHW, which provided further insights to guide the retrofitting.

### **Regional Hospitals:**

 At Northern and Western Regional Hospitals, early assessments using the Baseline Assessment Tool (BAT) gave decision-makers critical information for major upgrades.



### 2.3 Capacity Building in Disaster Management

Recognizing that resilient facilities require trained personnel, 76 responders from the MoHW, Karl Heusner Memorial Hospital Authority (KHMHA), National Fire Service, and Belize Emergency Response Team (BERT) underwent intensive training in Mass Casualty Management (MCM), Incident Command System (ICS), and Emergency Care in Disasters.

Through simulations, these healthcare workers and emergency responders practiced real-world scenarios, learning how to act fast, work together, and save lives. This enhanced coordination to reduce hypothetical response times.

After sitting written and practical examinations, 19 participants were successful and became PAHO Certified Emergency First Responders of Belize.

Damaris Tacen, Public Health Worker for the MoHW believed she could now share with others in her village the knowledge she received in the training. "This training, yes, is very important for not just myself, but my family too, and of course for my community," said Tacen. "As a community health worker, this is very helpful and I'm sure that I can teach other members of the village so they can learn; this will help them at any time of their life."

### 2.4 Policy Development and Planning

SO1 also recognized that long-term change needs to be supported by policy. In its first year, the project began updating key sections of the MoHW's Multi-hazard Emergency Action Plan and initiated a review of the Maintenance Policy. Work also started on the development of a Repository System that would help preserve and share critical information for sustainability.

### 2.5 Procurement Preparations

By the end of 2019, SO1 progressed to the procurement stage for design services. A key contract was ready to be awarded to Mitchell-Moody Associates to design retrofitting plans for three priority facilities: Corozal Community Hospital (CCH), Punta Gorda Community Hospital (PGCH), and Southern Regional Hospital (SRH). This marked the transition from planning to implementation.







# III.Year 2 (2020): Design Development and COVID-19 Adaptation

### 3.1 Design Completion for Initial Facilities

The year 2020 was one of the most challenging for the HSSP because of the COVID-19 pandemic. But, despite the challenges, SO1 saw significant progress in the design phase. One of the year's significant milestones was the completion of the final design plans.

### Complete Designs:

- Punta Gorda Community Hospital (PGCH)
- Corozal Community Hospital (CCH)
- · Southern Regional Hospital (SRH)

These designs were shaped by lessons learned in the previous year's assessments and incorporated the principles of disaster resilience, energy efficiency, and environmental sustainability. At the same time, the design tender process began for two more health facilities.

### Design Tender Process:

- · Northern Regional Hospital (NRH)
- Western Regional Hospital (WRH)



# 3.2 Baseline Assessment Tool (BAT) in CML: Identifying Critical Gaps

Another crucial achievement happened at the Central Medical Laboratory (CML). Working alongside LeadingEdge Synergy, the team conducted a detailed assessment using the Baseline Assessment Tool (BAT). This detailed assessment uncovered several areas in need of improvement, including:

- Outdated or insufficient drainage systems
- High energy consumption patterns
- Poor ventilation infrastructure
- Inadequate wastewater treatment
- Limited storage capabilities

With this data, the team gained the insights and guidance needed to design and make retrofitting decisions for the laboratory.





The association EU/PAHO with the Government of Belize is a remarkable illustration of the importance of shared values among partners, as it can create opportunities to better work and achieve more for the benefit of the people."

— H.E. Dr. Erja Askola, EU Ambassador to Jamaica, Belize, and the Bahamas.

### 3.3 Pandemic Response and Plan Adaptation

The emergence of the COVID-19 pandemic in 2020 necessitated a strategic shift in some project activities. One of the most immediate changes was a revision of the MoHW's Multi-Hazard Plan, which was updated to focus on infectious disease response. This adaptation demonstrated the project's flexibility and commitment to addressing emerging health security concerns.

Although some training activities were scaled back or used the virtual modality due to public health restrictions, the pandemic reinforced the urgency and importance of what SO1 aimed to achieve: a resilient health infrastructure and emergency preparedness.

# IV. Year 3 (2021): Procurement Advancement and Design Progression

# 4.1 Retrofitting Bids: Ensuring Value for Money

Year 3 marked a transition from planning to implementation preparation with significant procurement milestones. The team evaluated bids from contractors for the retrofitting of three hospitals with features built to withstand disasters and operate sustainably.

- Bid Evaluation:
  - Punta Gorda Community Hospital (PGCH)
  - Corozal Community Hospital (CCH)
  - Southern Regional Hospital (SRH)

### **4.2 Design Phase Progress**

Meanwhile, design work progressed steadily for other critical facilities.

- Western Regional Hospital (WRH): Progressed through the design phase.
- Central Medical Laboratory (CML) and Northern Regional Hospital (NRH): Completed tendering process to select contractors for design work.

This staggered approach to design implementation allowed lessons learned from earlier facilities to inform the design process for subsequent facilities.

### **4.3 Policy Development**

The project team completed the revision of the Maintenance Policy and Procedures, submitting it to the MoHW for review and comments. This policy document represented a critical component of the project's sustainability strategy, ensuring that investments in facility improvements would be protected through appropriate maintenance protocols.

# V. Year 4 (2022): Implementation Initiation and Design Finalization

### **5.1 Retrofitting Works Commencement**

Year 4 saw the transition from planning to active implementation with the commencement of retrofitting works at three health facilities:

- Punta Gorda Community Hospital (PGCH)
- Corozal Community Hospital (CCH)
- Southern Regional Hospital (SRH)

This marked a significant milestone in the project's timeline, with physical transformations designed to make the facilities stronger, greener, and safer.









During an emergency, before, we had to close all the doors to provide privacy and care. We even had to treat some patients in the corridor because the number was too overwhelming. We can now accommodate seven patients without any issue."

Darla Stain, Nursing Supervisor at PGCH



Before the upgrade, we would have to have patients seated in a wheelchair while they receive medical attention. Now, patients can be more relaxed and at ease on a bed."

- Amberly Heredia, Nurse at CCH

### **5.2 Design Completion and Progress**

Design executed by Young's Engineering Consultancy Ltd. continued to advance across the remaining facilities:

- Western Regional Hospital (WRH): Finalized Phase II/Final design.
- Central Medical Laboratory (CML) and Northern Regional Hospital (NRH): Continued progress on Phase II design..

The completion of designs for all target facilities represented the culmination of extensive assessment, planning, and engineering work to create comprehensive retrofitting specifications.

# 5.3 Policy Implementation and Knowledge Management

Two important system-wide developments have taken place:

- Maintenance Policy and Procedures were approved by the MoHW, and training began for relevant personnel.
- Electronic Repository System: Initiated establishment at the MoHW to safeguard documentation, blueprints, and knowledge for the future.

These developments laid the groundwork for the sustainable operation of the improved facilities beyond the project timeframe.



# VI. Year 5 (2023): Retrofitting Progress and Design Finalization

### **6.1 Retrofitting Implementation**

By 2023, substantial progress in the physical transformation of health facilities was visible:

- Punta Gorda Community Hospital (PGCH):
   Completed retrofitting works, including the installation of a rainwater harvesting system and a hybrid energy system (solar + battery storage ready), reducing diesel dependence.
- Corozal Community Hospital (CCH) and Southern Regional Hospital (SRH): Achieved near completion of retrofitting works.

These improvements enhanced the structural integrity, operational efficiency, disaster resilience, and environmental sustainability of these facilities.

### 6.2 Design Refinement

Design work for the remaining facilities continued to progress:

- Western and Northern Regional Hospitals: Revised Design Phase II/Final design.
- Central Medical Laboratory (CML): Completed final design and bid documents.

These design refinements ensured that lessons learned from earlier retrofitting projects were incorporated into plans for subsequent facilities.





### 6.3 Knowledge Management

The electronic repository system was officially completed and handed over to the MoHW, ensuring that future teams could build on this project's progress and achievements.

# VII. Year 6 (2024): Retrofitting Completion

### 7.1 Retrofitting Completion

The sixth year of SO1 saw the successful completion of retrofitting works at:

- Corozal Community Hospital (CCH)
- Southern Regional Hospital (SRH)

These facilities now stand as models of what disasterresilient, environmentally friendly healthcare infrastructure can look like in Belize.





### 7.2 Advanced Design and Procurement

At the same time, design and tender processes were advanced for the remaining health facilities:

- Northern Regional Hospital (NRH)
- Western Regional Hospital (WRH)
- Central Medical Laboratory (CML)

These designs incorporated all lessons learned from previous facilities and represented state-of-the-art approaches to healthcare facility resilience and sustainability.

### 7.3 Capacity Building for Sustainability

Ensuring long-term sustainability meant investing in maintenance. Maintenance and engineering staff from the National Engineering and Maintenance Center (NEMC), regional hospitals, and the Ministry of Infrastructure, Development, and Housing received handson training focused particularly on the built environment, complementing the equipment and operational systems training provided in 2021.

# VIII. Year 7 (2025): Project Completion and Sustainability Measures

### **8.1 Retrofitting Completion**

In the final year of SO1, the final three facilities completed retrofitting/greening works.

- Northern Regional Hospital (NRH)
- Western Regional Hospital (WRH)
- Central Medical Laboratory (CML)

These facilities, once aging and vulnerable, are now disasterready, energy-smart, and equipped to provide safe, reliable care.







### 8.2 Renewable Energy Integration

The year also saw a major step towards reducing the carbon footprint and reliance on fossil fuels, and a move towards renewable energy. SO1 culminated with the design, installation, and training on Solar Photovoltaic Systems for all six health facilities, including the installation of battery back-up systems for CML, SRH, PGCH, and NRH, enhancing the environmental sustainability and operational resilience of the facilities while reducing ongoing energy costs.

Over 1000 panels have been installed, generating 1800 to 2000 kilowatt hours of electricity per day.









Power shortages were a regular problem here. We used to rely on a small generator that could only provide electricity for one person. Now we have a reliable energy backup system that makes our planning much simpler. In addition, we are now able to withstand a Category 3 hurricane."

— Dr. Jorge Sajia, Deputy Regional Health Manager South of MoHW.

# 8.3 Re-Assessment of the HSI and Green Checklist

The latest assessment results demonstrated meaningful strides in strengthening both safety and sustainability across the six facilities. These facilities have either achieved or are in close reach of the target benchmarks of an HSI "A" classification and a Green Score of 70.

The most notable gains were seen at CCH, PGCH, and CML, where comprehensive retrofitting produced significant improvements. CCH advanced from a "C" to a "B" classification, moving its HSI by 72 percent and boosting its Green Score by 123%. PGCH showed parallel progress, with its HSI rising to 0.64 and its Green Score surpassing 70, leaving it just shy of the HSI "A" threshold. CML stands out as a flagship example, with its HSI jumping from 0.38 to 0.68 and its Green Score climbing to 75, making it the first to cross both benchmarks.

SRH showed the least improvement of the retrofitted facilities, increasing its HSI score by only 8 percent, which was a consequence of the facility's poor initial state and complexity of the prefabricated composite structure. It, however, managed to increase its Green Score from 30 to 61, underscoring positive gains in sustainability. Meanwhile, NRH and WRH, though recipients of smaller-scale interventions, still registered notable Green Score improvements that brought them closer to the 70 target, confirming that even incremental upgrades contributed to long-term resilience.

Overall, the results underscored that steady investments, whether comprehensive or targeted, are moving Belize's hospitals closer to the dual goal of HSI A70 performance, with clear momentum that can be built upon in the next phase of interventions.

	Previous Assessment			Current Assessment				
HealthCare Facility	HSI Score	Green Score	HSI Class	HSI Score	Green Score	HSI Class	% increase in HSI Score	% increase in GC Score
Northern Regional Hospital	0.46	31	В	0.47	66	В	2%	113%
Corozal Community Hospital	0.32	26	С	0.55	58	В	<b>72</b> %	123%
Western Regional Hospital	0.38	39	В	0.38	61	В	0%	56%
Southern Regional Hospital	0.48	30	В	0.52	61	В	8%	103%
Punta Gorda Community Hospital	0.41	28	В	0.64	72	В	56%	157%
Central Medical Laboratory	0.38	35	В	0.68	75	A	66%	114%

### 8.4 Capacity Building in Fresh Air System

To support air quality and infection control, staff at the CML were trained in managing the new Fresh Air Intake System, enhancing their ability to manage ventilation and humidity within health facilities effectively and maintaining safe environments for both clients and workers alike.





Strengthening the health system in Belize has become even more significant now due to the COVID-19 pandemic that has changed and affected not only Belizeans but also the global health system. The EU will continue assisting the Ministry of Health and Wellness through its Health Sector Support Programme. Today's visit to the Corozal Community Hospital is a landmark to unveil what will be the future renovations. I thank you (PAHO/ WHO and MoHW) for the excellent joint effort to implement together those vital projects for the well-being of all Belizeans."

- Aniceto Rodriguez, Head of Cooperation for the EU

### IX. Key Achievements and Impacts

### 9.1 Infrastructure Transformation

SO1 successfully transformed Belize's healthcare infrastructure:

- Fully Retrofitted Health Facilities:
  - Punta Gorda Community Hospital (PGCH)
  - Corozal Community Hospital (CCH)
  - Southern Regional Hospital (SRH)
  - Central Medical Laboratory (CML)
- Small Smart Interventions Completed:
  - Western Regional Hospital (WRH)
  - · Northern Regional Hospital (NRH)

These improvements significantly enhanced the disaster resilience, environmental sustainability, and operational efficiency of Belize's healthcare system.

### 9.2 Capacity Development

SO1 substantially strengthened human resource capabilities:

- Assessment Capacity: 20 professionals trained in HSI and Green Checklist methodologies.
- Emergency Response: 76 first responders trained in disaster management and emergency care.
- Maintenance Capability: NEMC and regional staff trained in preventive maintenance for both equipment and the built environment.

Joy Omini, Acting Unit Manager of the Accident and Emergency Unit at the KHMH, shared that even though she dealt with trauma cases on a regular basis, this training was a real eye opener. It emphasized the need for a systematic approach in dealing with mass casualty patients while also showing how to maximize the effectiveness of the various organizations working together during such events.











### 9.3 Policy and Systems Development

Critical systems have been established for ongoing sustainability:

- Emergency Preparedness: Updated Multi-hazard Emergency Action Plan, including enhanced infectious disease protocols.
- Maintenance Framework: Revised and approved Maintenance Policy and Procedures.
- Knowledge Management: Established an electronic repository system for all design knowledge and technical documents to be preserved.
- Renewable Energy: Integrated solar photovoltaic systems into operation, futureproofing facilities against rising costs and environmental risks.

These developments provided a solid foundation for the continued resilience and sustainability of Belize's healthcare facilities.





### X. Conclusion

Strategic Objective 1 successfully achieved its goal of developing efficient, effective, disaster-resilient, and environmentally friendly health facilities across Belize. Through a comprehensive and collaborative approach encompassing assessment, design, implementation, capacity building, and policy development, the project substantially enhanced the quality, safety, and sustainability of Belize's healthcare infrastructure.

The completed retrofitting of four major health facilities, with small smart interventions for two facilities, represented a significant advancement in healthcare infrastructure resilience. Enhanced human resource capabilities in assessment, emergency response, and maintenance ensured that these improvements would be sustained. Updated policies, procedures, and knowledge management systems provided a framework for ongoing resilience and sustainability.

This component served as a model for healthcare infrastructure strengthening in the Caribbean region and demonstrated the value of comprehensive, multi-sectoral approaches to health system resilience. In fact, Belize was invited to present on this at a side event of the Fourth United Nations Conference on Small Island Developing States held in Antigua and Barbuda in May 2024. The lessons learned and systems established from SO1 will continue to benefit Belize's healthcare system long after the project's conclusion, contributing to enhanced health security and service delivery for the Belizean population.

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# B. SO2: To Improve the Structure, Organization, and Management of Health Services

### I. Strategic Objective 2: 2018-2025

### 1.1 SO2 Context and Background

Over seven years (2018–2025), Belize's HSSP committed to implementing a comprehensive transformation of the health system through Strategic Objective 2 (SO2): "To improve the structure, organization, and management of health services." This objective addressed systemic gaps, fragmented governance, and inequitable service delivery. This narrative synthesized milestones, challenges, and outcomes across key initiatives, including the Health Sector Reform Project (HSRP), Universal Health Coverage (UHC) alignment, infrastructure modernization, and pandemicresponsive adaptations. By fostering collaboration among the MoHW, PAHO/WHO, and regional stakeholders, SO2 advanced Belize's vision for a resilient, equitable, and integrated health system with a focus on primary health care.

# II. Year 1 (2019): Laying Foundations for Reform

SO2 began with systematic preparations for a comprehensive Health Sector Reform Assessment, recognizing the importance of evidence-based planning for effective reform. The following was done:

# 2.1 Health Sector Reform Assessment Launch

 In May 2019, the MoHW, PAHO/WHO, National Health Insurance (NHI), and Karl Heusner Memorial Hospital Authority (KHMHA) initiated the Health Sector Reform Assessment process through a two-day stakeholder engagement meeting. This

- engagement set a precedent for multi-stakeholder coordination, which was key for the reform strategy.
- A second two-day working session was convened in September 2019, with the objective of developing a proposal for Belize's health sector reform assessment aligned with regional UHC goals. Technical working sessions facilitated by PAHO further contextualized the methodology to Belize's health system.
- By October 2019, the assessment methodology had been refined through a two-day planning session structured around four key areas for the reform assessment:
- 1. Equity in health status, access, and coverage
- 2. Health Sector Restructuring
- 3. Services Rationalization and Improvements
- 4. Technical support to the National Health Insurance

This methodological refinement ensured the assessment would generate relevant and actionable data to inform future reform strategies.

### 2.2 Desk Review of the Health Sector

To inform the assessment process, a comprehensive desk review of Belize's health sector evolution from 1994 to 2018 was conducted. Nearly 300 reports and strategic plans were analyzed to construct a detailed timeline of important milestones in Belize's health sector. This historical analysis provided valuable context for understanding the trajectory of health system development in Belize and identified patterns, successes, and challenges from previous reform efforts, in addition to revealing critical insights as follows:

 Fragmented Reforms: The 2000–2010 HSRP lacked continuity and integration, particularly between

- primary care services and the NHI.
- Urban-Rural Disparities: Persistent infrastructure and workforce deficits in rural regions contributed to inequitable access.
- Financial Sustainability: Over-reliance on donor funding undermined long-term financial sustainability and policy ownership.

These findings reinforced the need for a reform agenda focused on governance, coherence, equitable service delivery, and sustainable financing mechanisms.

# 2.3 Indicator Development and Monitoring Framework Management

Recognizing the importance of tracking progress, the Health Sector Reform Technical Working Group began selecting indicators aligned with PAHO's UHC monitoring framework. These included output, outcome, and impact indicators.

This framework would serve as a baseline for measuring reform performance and facilitating comparability of progress toward UHC.

### 2.4 Fiscal Space and NHI Costing Studies

Two key studies were initiated to assess the feasibility of expanding and sustaining financing for the health system:

- A Fiscal Space Study examined the financial resources potentially available for expanding health services within Belize's macroeconomic constraints. This analysis was crucial for understanding the feasibility and sustainability of health financing options.
- A complementary Costing Study provided detailed

estimates of the resources required for the expansion and roll-out of the National Health Insurance (NHI) Project.

Together, these studies provided evidence-based recommendations for advancing the NHI project in a financially sustainable manner.

The findings and recommendations from both studies were presented to the NHI Committee, demonstrating the project's commitment to transparency and supporting evidence-based decision-making.

### 2.5 Early Implementation Milestones

Several foundational milestones were achieved in the first year:

- Baby-Friendly Hospital Initiative: In August 2019, the Cleopatra White Polyclinic became the second urban clinic to receive the Baby-Friendly Health Facility certification, demonstrating progress in implementing international standards for supporting breastfeeding and mother-baby bonding.
- Regulatory Framework for Breast Milk Substitutes:
   A Technical Group was formed to monitor the implementation of the International Code of Marketing of Breast Milk Substitutes, reflecting a commitment to protecting and promoting breastfeeding through appropriate regulation of breast milk substitute marketing.
- Cancer Strategic Plan Development: Work began on the National Cancer Strategic Plan, with a preliminary draft submitted to the MoHW. This initiative represented an important step towards a more comprehensive and systematic approach to cancer prevention and control in Belize.
- Fleet Modernization: Two pickup trucks and one vehicle were procured, enhancing the logistical capacity for project implementation and health service delivery. This procurement reflected

recognition of the practical requirements for effective project execution, particularly in a country with diverse geographical contexts.

These early actions reflected tangible progress across policy, service quality, and operational capacity dimensions.







# III. Year 2 (2020): Navigating COVID-19 and Advancing ReformsAssessment

The second year of the HSSP coincided with the onset of the COVID-19 pandemic, requiring the health system to rapidly shift priorities. Despite widespread challenges and disruptions, progress continued on key SO2 initiatives, with several activities adapted to the pandemic context.

# 3.1 Health Sector Reform Assessment Progress

Despite pandemic-related constraints, a draft report of the Belize Health Sector Reform Assessment was completed. It consolidated findings from 2019 activities and outlined preliminary recommendations for restructuring governance, improving equity, and strengthening health system integration.

# 3.2 Health Service Delivery Network Development

In line with the move toward integrated care models, work on the Integrated Health Service Delivery Networks (IHSDN) Tool was initiated. Orientation sessions were held for key stakeholders to introduce IHSDN principles, emphasizing coordination, continuity, and improving access, efficiency, and quality.

The Assessment of Essential Conditions (AEC) Tools, originally designed to measure the capacity of hospitals to provide effective services, were modified to include COVID-19 response elements. While the initial plan to apply the tool at KHMHA was interrupted by pandemic-related lockdown measures, the modified tool was prepared for future health system readiness assessments for COVID-19.

### 3.3 Financial Mechanisms Development

Work continued on developing appropriate financial mechanisms for health service delivery:

The review of the Provider Payment Mechanism Study progressed as part of the broader effort to establish financial mechanisms for IHSDN implementation, particularly in non-NHI areas. While the review process was delayed due to the COVID-19 pandemic, it remained key to enabling equitable provider incentives and sustainable service financing.

### 3.4 Strategic Frameworks Development

Several strategic frameworks were advanced during this challenging year:

- Communication and Marketing Strategic
   Framework was drafted, with a focus on
   behavioral change related to chronic diseases. This
   framework recognized the importance of effective
   communication strategies in promoting healthy
   behaviors and preventing non-communicable
   diseases.
- The draft Comprehensive Cancer Strategic Plan (2020-2024) was developed and submitted to the MoHW for review. This plan represented a significant step forward in developing a systematic approach to cancer prevention, early detection, treatment, and palliative care in Belize.
- A roadmap framework for a National Nutrition Policy was drafted, with input from a multisectoral technical team. This initiative acknowledged the crucial role of nutrition in overall health and the necessity of addressing nutritional challenges through coordinated, multisectoral approaches.

Despite the substantial disruptions caused by the COVID-19 pandemic, the project demonstrated resilience and adaptability in Year 2, continuing to advance key strategic initiatives while also responding to the immediate challenges presented by the global health crisis.

# IV. Year 3 (2021): Finalizing Frameworks

In its third year, the implementation of SO2 focused on consolidating previous efforts, with emphasis on finalizing critical frameworks, strengthening institutional tools, and enhancing technical capacity. Although the health system continued to face operational pressures due to the COVID-19 pandemic, 2021 marked a significant period of technical advancement and groundwork stabilization for future reform implementation.

### 4.1 Finalizing Assessment and Study Reports

Efforts to prioritize the completion of foundational assessment and study reports continued:

- The Health Sector Reform Assessment Report underwent review for finalization, reflecting the project's commitment to producing a comprehensive and high-quality analysis to guide subsequent reform efforts.
- Similarly, the draft Provider Payment Mechanism study was edited for finalization, an important step toward establishing effective financial mechanisms for health service delivery.

### 4.2 National Health Insurance Strengthening

Significant progress was made in strengthening the National Health Insurance (NHI) project:

- The NHI Costing Tool was refined to improve accuracy, usability, and functionality. A user manual was developed to facilitate its application across operational settings. This Excel-based tool allows detailed projections of service delivery costs across various care levels and population groups.
- Capacity-building was embedded in the process, with training of NHI staff on the use of the Costing Tool. This initiative enhanced the sustainability of the costing tool by ensuring that relevant staff had the knowledge and skills to apply the tool effectively.

# 4.3 Advancing Non-Communicable Disease (NCD) Initiatives

Non-communicable disease (NCD) remained a strategic priority within the broader reform context, and Year 3 saw continued refinement of the NCD-related frameworks.

- A review of the National Cancer Plan was conducted by the MoHW with stakeholder participation.
   This consultative approach ensured that diverse perspectives and expertise were incorporated into the final plan.
- The HEARTS Initiative, a technical package aimed at improving cardiovascular disease management at the primary care level, was finalized with a specific focus on addressing nutrition-related NCD risks. This adaptation of the global HEARTS initiative to the Belizean context represented an important step toward standardizing and improving cardiovascular disease prevention and management in primary care settings.



HEARTS will be the institutionalized model of care for cardiovascular risk management, with special emphasis on the control of hypertension and secondary prevention in primary health care in the Americas by 2025.

### **4.4 Nutrition Policy Development**

Nutrition Policy development progressed through an intersectoral approach, with collaboration between health and non-health sectors:

The draft National Nutrition Policy was further advanced in partnership with an intersectoral technical group, which included representatives from health, agriculture, education, and social protection. This inclusive approach recognized that nutrition challenges required a coordinated, whole-ofgovernment response.

Year 3 of SO2 implementation was marked by the technical finalization of key policy instruments and analytical tools, along with strategic investments in institutional capacity. Despite persistent challenges posed by the pandemic, the focus remained on advancing evidence-based planning, improving financial sustainability mechanisms, and reinforcing chronic disease and nutrition strategies. These efforts positioned the health system to move from design and preparation into implementation.

# V.Year 4 (2022): Post-COVID Recovery and System Integration

The fourth year of SO2 saw a significant expansion in implementation activities and technical cooperation, with notable progress across multiple domains, with a focus on operationalizing reforms, enhancing inter-sectoral

coordination, and addressing system vulnerabilities that were further exposed during the COVID-19 pandemic.

# 5.1 Health Sector Reform Assessment Completion

A major milestone was achieved with the completion of the Health Sector Reform Assessment:

The draft Report on the Belize Health Sector Reform Assessment was submitted to the MoHW, marking the culmination of a comprehensive assessment process initiated in 2019. This report consolidated findings from a multi-year assessment process and provided an in-depth evaluation of the health system's structure, performance, and areas for improvement. The final output offered strategic recommendations to guide evidence-based policy development and supported alignment with the broader objectives of the UHC.

# 5.2 Knowledge Exchange and Capacity Building

Institutional strengthening remained a core theme targeting knowledge exchange and capacity building activities:

- A Virtual Study Tour with Uruguay was organized, providing Belizean health officials with an opportunity to learn from Uruguay's experiences and achievements in health system strengthening. This South-South cooperation facilitated the exchange of knowledge, best practices, and lessons learned between countries with similar contexts and challenges.
- Building capacity on IHSDN was conducted among the MoHW and Regional Health Teams. Members of the health management team from the four Regional Health authorities participated in a virtual training session that introduced them to the concepts and methodologies of IHSDNs. This capacity-building initiative strengthened the understanding and skills required for implementing the IHSDN approach in Belize.

### 5.3 Health System Restructuring Support

Technical support for health system restructuring was provided to support the reorganization of the health system:

A Health Systems Strengthening Mission led by PAHO/WHO facilitated high-level discussions on the restructuring and reorganization of Belize's Health System, focused on the separation of functions. This technical cooperation aimed to "strengthen the governance structure; define an equitable and sustainable financing mechanism; and provide an efficient and effective service delivery model of care." This support reflected a systemthinking approach to health reform, recognizing the interconnections among different health system functions and the importance of clear role delineation.

### **5.4 Financial Analysis Updates**

In light of the evolving post-pandemic fiscal conditions, the Fiscal Space Study, originally conducted in 2019, was updated to incorporate the impact of COVID-19 and the resulting economic downturn. This update was crucial for understanding how the pandemic had affected the fiscal resources potentially available for health and for identifying sustainable financing options in the post-pandemic context.

# 5.5 Non-Communicable Diseases (NCDs) Integration

Significant advances were made in integrating NCD management into health service delivery networks:

- The draft National Comprehensive Cancer Strategic Plan was reviewed by the PAHO Headquarters, reflecting the project's commitment to ensuring technical quality and alignment with international standards.
- Belize formally adopted the HEARTS Initiative as a national strategy for cardiovascular disease and other NCDs prevention and control, becoming the 24th country in the region to do so.

- Orientation and sensitization sessions on the Framework Convention on Tobacco Control (FCTC) were conducted, in parallel with the review of the 2016 draft Belize Tobacco Control Legislation, reflecting the importance of regulatory measures in reducing tobacco-related morbidity and mortality.
- The National Diabetes Management Guidelines were reviewed and updated in collaboration with the NHI. Training on these guidelines was provided to 48 primary care physicians employed under the NHI, enhancing capacity for standardized and evidence-based diabetes management in primary care settings.
- The Belize National Suicide Prevention Plan was drafted, reviewed, and submitted to the MoHW, addressing an important mental health priority.

### 5.6 Maternal and Child Health Promotion

In line with broader efforts to improve health outcomes across the life course, maternal and child health initiatives were expanded:

The Baby-Friendly Hospital Initiative was promoted during World Breastfeeding Week 2022, with nationwide training for primary healthcare workers. The training reinforced compliance with the Baby-Friendly Hospital Initiative protocols and the International Code of Marketing of Breastmilk Substitutes, supporting optimal infant feeding practices within health facilities.





### 5.7 Mental Health Service Strengthening

Efforts to strengthen mental health services focused on building capacity and integrating mental health into primary care:

A series of six three-day training workshops on the WHO's Mental Health Gap Action Programme (mhGAP) was conducted for primary health care workers from the four health regions and the KHMHA. These trainings strengthened the capacity of mental health services at the first level of care and developed a proper referral pathway for patients in need of tertiary care. This initiative reflected a commitment to integrating mental health into primary care and ensuring appropriate referral mechanisms for patients requiring services for mental, neurological, and substance use disorders at the community level.

Year 4 represented a period of expanded implementation and technical cooperation, with notable progress in health system restructuring, NCDs risk assessment and management, maternal and child health, and integration of mental health into primary health care services.





Psychiatry has always been an area of interest for me. We were always raised as to not discriminate any person who has a mental illness and for such, I find myself just leaning towards that path. There is no health care without mental health care. I'm hoping we could be more efficient and have better quality and service of health care."

 Dr. Rahleel Jammal Elijio, Medical Officer at the Belize Defence Force Hospital

# VI. Year 5 (2023): Policy Launches and Legal Foundations

The fifth year of SO2 focused on strategic planning and policy implementation, with several important initiatives launched or completed.

### 6.1 Essential Public Health Functions

To ensure the resilience and performance of the health system, Belize prioritized the capacity assessment and development of an Action Plan for the Essential Public Health Functions (EPHFs). Grounded in PAHO's renewed EPHF framework, the action plan provided a roadmap for enhancing core functions such as surveillance, health promotion, emergency preparedness, and regulatory oversight. This Action Plan provided a systematic approach to strengthening Belize's capacity to perform essential public health functions effectively.





# **6.2 Legal and Regulatory Framework Mapping**

In parallel with policy implementation, Belize initiated a Legal Mapping initiative to support future governance reforms. This process systematically assessed existing legislation and regulatory instruments, identifying key areas of fragmentation, outdated provisions, and legal gaps. The findings will inform the development of a modernized legal framework aligned with health system goals, including UHC, accountability, and equitable service delivery.

### **6.3 Nutrition Policy Completion**

A key milestone was the completion and official launch of the National Nutrition Policy for Belize, representing the culmination of a multi-year intersectoral process. Anchored in public health and development priorities, the policy outlined a coordinated, multisectoral approach to addressing malnutrition. This policy provided a comprehensive framework for addressing nutrition challenges in Belize through coordinated action across multiple sectors, including agriculture, education, and social sectors.

### **6.4 Mental Health Policy Completion**

A significant achievement in advancing mental health care in Belize was the development and launch of the Belize Mental Health Policy 2023-2028, which provided a comprehensive framework for delivering high-quality, accessible services nationwide. The policy outlined strategic actions essential for the ongoing reform of mental health services, especially the integration of mental health into all levels of the health system and community.







### **6.5 Health Promotion Framework**

Recognizing the role of health promotion as a vital component of disease prevention, the National Health Promotion Framework/Plan was developed to guide health promotion activities across Belize. The framework integrates behavioral, environmental, and social determinants of health, supporting a shift toward a proactive, community-oriented model of care. It also complements existing clinical services by encouraging preventive behaviors and community participation.

### 6.6 HEARTS Initiative Advancement

Belize's engagement in cardiovascular disease prevention continued through the sustained implementation of the HEARTS. In 2023, the MoHW participated in the HEARTS Surveillance & Implementation Workshop held in St. Lucia. This regional engagement provided opportunities for knowledge exchange and capacity building for effective implementation of the HEARTS technical package in Belize.

Year 5 of SO2 saw important progress in strategic planning and policy implementation, particularly in the areas of essential public health functions, nutrition policy, and health promotion. The finalization of the National Nutrition Policy, the National Mental Health Policy, the development of the EPHF action plan, legal mapping, and advancement of health promotion strategies represented critical steps toward institutional resilience, governance reform, and preventive health care.

# VII. Year 6 (2024): Sustaining Momentum

In the sixth year, implementation of SO2 focused on scaling up and sustaining reform efforts, with a particular emphasis on capacity building, community engagement, and health service strengthening.

# 7.1 Essential Public Health Functions Assessment

A major achievement was the completion of the Essential Public Health Functions (EPHFs) capacity assessment, the first such performance review in over two decades. Finalized in August, the assessment provided a comprehensive appraisal of Belize's capacity to deliver renewed EPHFs, including population health assessment, policy development, service delivery, and emergency preparedness. Priority gaps identified through this process were used to inform the development of the national EPHF Action Plan in October 2024.

### 7.2 Management Capacity Building

A Results-Based Management (RBM) Workshop was conducted to strengthen managerial competencies within the health sector. This capacity-building initiative focused on integrating planning, monitoring, and evaluation into resource management and strengthening the skills and knowledge required for efficient allocation and utilization of limited health resources.

### 7.3 Strategic Planning

With the current Health Sector Strategic Plan set to conclude at the end of 2024, the MoHW initiated a comprehensive strategic planning cycle to define its long-term vision. Grounded in the findings from the EPHF assessment and recent implementation experiences, work began on the new National Health Policy, the Health Sector Strategic Plan 2025–2034, and the MoHW Operational Plan 2025–2026. These planning documents will shape Belize's health sector trajectory over the next decade, reinforcing continuity while integrating lessons learned and evolving health priorities.





### 7.4 Human Resources for Health

Addressing persistent workforce challenges, the MoHW advanced the development of a Human Resources for Universal Health Policy and a five-year Strategy with some emphasis on nursing. These initiatives reflected a strategic shift toward sustainable health workforce planning, emphasizing recruitment, equitable distribution, retention, succession planning and capacity building.

### 7.5 International Knowledge Exchange

To inform reform efforts with practical insights from peer countries, a Study Tour to Chile was organized, providing senior Belizean health officials, including the Minister of Health, with an opportunity to learn from Chile's experiences and achievements in health system strengthening. This international knowledge exchange facilitated learning from a country with a strong track record in health system development and universal health coverage.

### 7.6 Community Health Promotion

Community engagement was significantly expanded through the scale-up of health promotion activities. In five rural communities - Dolores, Trio, San Martin, San Pablo, and Corozal Town, localized health education and promotional sessions were delivered, bringing access to health education and promotion directly to rural populations and building awareness about the risk factors for non-communicable diseases and how to address these.

Additionally, in February 2024, a large-scale Health and Nutrition Exposition reached over 600 students and 300 parents and community members in the Belize District. The event promoted healthy eating and physical activity, reinforcing a whole-of-society approach to chronic disease prevention.

In the education sector, the Healthy Habits, Healthy Schools, Healthy Belize Initiative was implemented in 18 pilot schools, positively impacting over 9,000 students. This initiative reflected recognition of schools as important settings for health promotion, creating an enabling environment for behavioral change among children and adolescents.







### Healthy Lifestyle Caravan - Bibian's Story

In a small, rural village located deep in Belize, Bibian, a 35-year-old mother of three, lived her life much like everyone else in her community. The challenges of distance and cost made it difficult for Bibian and many others in her Mayan village to access healthcare.

But that changed when a team of health workers arrived. Supported by the Ministry of Health and Wellness and PAHO/WHO, they brought health care and education to her village.

Bibian, like many of her neighbors, joined the health event. It was there that she discovered she and her family could be at risk of developing health problems like hypertension and diabetes.

PAHO/WHO, along with the health team, didn't just share information, they offered solutions. They talked about healthier food choices, showed Bibian how to do simple exercises right at home, and helped her set up follow-up care at a nearby clinic.

For Bibian, this was more than a health checkup; it was a lifeline.

Thanks to access to health screenings and expert advice, Bibian is now more conscious of her family's health to ensure they avoid any serious complications. Now, she and her husband stand as advocates for healthy living in her community, encouraging others to take small steps that can lead to a big impact.

This initiative is more than just numbers or statistics. It's about ensuring that even the most remote villages like Bibian's have access to the care they need. It's about empowering people to take charge of their health and building a healthier Belize, one life at a time.





### 7.7 HEARTS Initiative Implementation

Belize completed the national launch and implementation of the HEARTS Initiative in October 2023, standardizing and strengthening cardiovascular disease management in the primary care setting across all health regions in Belize. During 2024, a series of national training workshops was conducted in all six health districts with participants from public and private health care facilities, including the MoHW, NHI, Belize Family Life Association (BFLA), and private practices. These workshops built the capacity of some 200 clinical providers (doctors and nurses) at the primary care level to implement the standardized approach to cardiovascular disease risk assessment and management promoted by the HEARTS initiative.

To support community-level engagement, 350 CHWs were trained to educate community members on risk factors for hypertension and diabetes, healthy nutrition, and the importance of mental health. These efforts advanced the integration of primary care and public health, with CHWs serving as critical links between health services and the communities they serve.











### 7.8 Cancer Prevention and Control

Progress continued in cancer control, with technical guidance and support provided for the final development of the National Cancer Plan and the Cervical Cancer Plan, strengthening Belize's strategic approach to addressing these significant health challenges. Recognizing the importance of early intervention and accurate diagnosis, essential equipment and supplies were procured and delivered: 18 clinically validated blood pressure measuring devices, 5000 self-sampling Copan swabs for HPV screening, and 1000 HPV test kits. This procurement is more than just equipment. It represented a commitment to empowering frontline healthcare workers with the resources they need to detect issues early and improve the outcomes for individuals across the country.





### 7.9 Mental Health Service Strengthening

To further embed mental health into primary care, the Mental Health Gap Action Programme (mhGAP) training continued. In February 2024, a cohort of 16 participants from all six districts completed a training-of-trainers course. This approach established a decentralized and sustainable model for continuous capacity building in mental health service provision.

### 7.10 Infant and Young Child Nutrition

To promote early childhood nutrition, Belize adapted the UNICEF/WHO Infant and Young Child Feeding (IYCF) counseling cards for use by healthcare workers. A total of 300 toolkits were distributed to support counseling during maternal and child health consultations.

In addition, 26 healthcare workers were trained through a training-of-trainers model, with follow-up district-level training planned for late 2024. This cascade model expanded IYCF counseling capacity across all districts and ensured consistent, evidence-based nutrition messaging.









### 7.11 Nutrition Policy Implementation

Following its launch in 2023, the implementation phase of the National Nutrition Policy commenced. This marked a critical shift from policy formulation to operational execution, with a focus on multisectoral collaboration, evidence-based programming, and outcome monitoring to address undernutrition, overweight, and micronutrient deficiencies.

Year 6 has represented a period of scaling up and sustaining reform efforts, with significant progress in community health promotion, cardiovascular disease prevention and control, mental health service strengthening, and nutrition policy implementation. The health system's continued investments in human resources, public health infrastructure, and evidence-based planning laid the groundwork for the final year of the HSSP and the next cycle of national health policy implementation.

# VIII. Year 7 (2025): Drive Towards Impact

The final year of the HSSP under SO2 focused on driving impact, with a continued emphasis on capacity building and health service strengthening. Building on six years of foundational work, 2025 focused on scaling interventions to produce measurable impact and sustainability.

# 8.1 Scale-up of Implementation of the HEARTs Initiative

In May 2025, an awareness forum was conducted for Food Inspectors and Vendors on the dangers of the use of excess salt, sugar-sweetened beverages (SSB) and trans-fat as part of the activities to scale-up the implementation of the healthy lifestyle component of the HEARTS Initiative and promote the implementation of strategies to reduce the consumption of excess salt, unhealthy fats, and sugar sweetened beverages among the population thus reducing the incidence of illness and death from cardiovascular diseases and other NCDs.

Sixty (60) food inspectors and vendors from various districts were educated on the cost-effective interventions for implementation among food vendors and consumers at the community level to promote healthy diets. As a result, food Inspectors began integrating nutritional education and awareness on the dangers of excess salt, vending, and consumption of sugar-sweetened beverages, and the use of healthy fats in food preparation in their routine interactions with food vendors and consumers. This activity has contributed to increased knowledge about healthy nutrition with a focus on reduced salt, trans fat, and SSB consumption among food inspectors and vendors, and the integration of education and awareness activities in the routine activities conducted by food inspectors with vendors and consumers.



### 8.2 Cancer Prevention and Control

Cancer control efforts advanced significantly through both awareness-raising and capacity-building initiatives:

Men and Boys Cancer Awareness Forum: An education and awareness forum about healthy

lifestyle practices and the importance of regular health checks, screening, and early treatment and management of cancers affecting men was conducted exclusively for men and boys in July 2025. Approximately 400 men and boys from various districts in the country participated in this activity, which was geared toward changing the narrative around men's health and creating spaces where men feel safe to talk openly, seek support, and embrace the emotional aspects of recovery as much as the physical. By the end of the forum, men indicated that they felt more empowered to acknowledge and address health challenges and readily access health services.

Palliative Care Training for Regional Health Care Teams: Training on palliative and end-of-life care, including psychosocial support, was conducted for approximately 130 health care providers from regional teams from the six districts in the country in August 2025. The training activities were designed to build the capacity of healthcare workers to provide more structured palliative and end-of-life care services, including psychosocial care mainly for clients affected by cancer and their families, and improve the quality of pain management for clients.









### 8.3 Strengthening of Community-based Mental Health Services

The integration of mental health into primary care continued to be a national priority. In July 2025, training on the Mental Health Gap Action Programme (mhGAP) continued, with a total of 25 medical personnel from all six districts trained as trainers. The training-of-trainers modality was again used as a mechanism for ongoing capacity building in mental health service delivery at the primary care level.

An important component addressed during the training session focused on the establishment of a mechanism for supervision and support, and of primary health care providers involved in the delivery of mental health services at the community level. This new mechanism will ensure the comfort of primary health care providers in the application of the new skills acquired during the training, as well as a mechanism for effective team communication, case reviews, and discussion, and general improvement in the quality of services provided at the community level. Given that primary health care providers identified challenges regarding the availability of psychotropic medications, an informative presentation was made on the PAHO Strategic Fund that fosters greater country participation in pooled procurement of essential medicines and strategic health supplies geared to strengthen supply management systems and prevent stock-outs.

### 8.4 Enhance Digital Health Infrastructure

As part of efforts to enhance digital health infrastructure and expand access to care in remote and underserved areas, SO2 supported the procurement of 15 Multiparametric Vital Signs Monitors (Telehealth Kits). These kits were equipped to measure and transmit critical physiological data, including blood pressure, heart rate, oxygen saturation, and temperature, enabling real-time remote clinical assessments. Training activities were conducted to ensure that healthcare providers are equipped to effectively operate the devices, integrate them into routine care, and support the delivery

of telemedicine services.





### IX. Key Achievements and Impacts

Beyond the chronological progression described above, the HSSP can be analyzed through several key thematic components that have evolved throughout its implementation. This thematic analysis provides insights into the project's approach to addressing specific health system challenges and priorities.

# 9.1 Health Sector Assessment and Strategic Planning

A foundational component of the HSSP has been comprehensive assessment and strategic planning, which has evolved significantly over the project's lifespan.

# 9.1.1 Comprehensive Health Sector Reform Assessment

The Health Sector Reform Assessment, initiated in 2019 and completed in 2022, represented a cornerstone of the project's evidence-based approach to reform. This assessment was:

- Designed through a collaborative process involving key stakeholders from the MoHW, PAHO/WHO, NHI, and KHMHA.
- Focused on four key areas: equity in health status, access, and coverage, health sector restructuring, services rationalization and improvements, and support to the National Health Insurance Fund.
- Based upon a comprehensive review of nearly 300 reports and strategic plans spanning the period 1994-2018.
- Used to establish a set of quantitative indicators aligned with the monitoring framework for universal health access and universal health coverage.
- Culminated in a comprehensive report submitted to the MoHW in 2022.

The thoroughness and rigor of this assessment process provided a strong evidence base for subsequent reform initiatives, ensuring that interventions were targeted at documented needs and gaps in the health system.

### 9.1.2 Essential Public Health Functions Assessment

Building upon the broader Health Sector Reform Assessment, a more focused assessment of Essential Public Health Functions (EPHF) was conducted in 2023:

- This represented the first assessment of EPHFs in Belize in twenty years, providing an updated analysis of the country's capacity to perform core public health functions.
- The assessment identified priority gaps in EPHF performance, which informed the development of an Action Plan to strengthen capacities.
- This assessment and planning process, in turn, provided a foundation for the development of a new National Health Policy and Health Sector Strategic Plan for 2025-2034.
- This sequence demonstrated how targeted assessments can inform both immediate action plans and longer-term strategic planning, creating a logical progression from evidence generation to strategic direction-setting.

# 9.1.3 Strategic & Operational Planning Assessment

Throughout SO2, various strategic and operational plans were developed to guide specific aspects of health system strengthening:

- The National Cancer Strategic Plan and Cervical Cancer Plan were initiated in 2019 and refined over subsequent years.
- The HEARTS technical package for cardiovascular disease risk assessment and management.
- The Belize National Suicide Prevention Plan addressed mental health gaps.

- The National Nutrition Policy was developed through intersectoral collaboration and launched in 2023.
- The Health Promotion Framework/Plan provided guidance for behavior change interventions.
- The Human Resources for Universal Health Policy and draft five-year Strategy were designed to address workforce limitations.
- The National Health Policy, Health Sector Strategic Plan 2025-2034, and Operational Plan with a strong monitoring and evaluation framework aligned to both national health and international standards.



Health is not solely the responsibility of the Ministry of Health and Wellness. Achieving the objectives of the Belize Health Sector Strategic Plan requires collaboration across all sectors, including healthcare, education, finance, social protection, human development, industry and commerce, environmental agencies, civil society organizations, and the private sector."

### Dr. Karen Lewis-Bell, PAHO/WHO Representative of Belize

Collectively, these planning efforts have created a comprehensive strategic framework for addressing key health priorities and strengthening the health system in Belize, with a particular focus on non-communicable diseases, nutrition, mental health, and human resources for health.

### 9.2 Health Financing & Financial Protection

Financial aspects of health system strengthening have been a consistent focus of the HSSP reflecting recognition of the centrality of sustainable financing to achieving universal health coverage.

### 9.2.1 Fiscal Space Analysis

SO2 conducted and updated fiscal space studies to understand the financial resources potentially available for health. An initial Fiscal Space Study conducted in 2019 and updated in 2022 provided a baseline analysis of fiscal resources for health. The 2022 update incorporated the fiscal impacts of the COVID-19 pandemic.

These analyses were crucial for understanding the macroeconomic and fiscal context within which health financing decisions must be made, ensuring that financing strategies were grounded in realistic assessments of resource availability.

### 9.2.2 National Health Insurance Strengthening

A particular focus of the SO2 financial component was strengthening the National Health Insurance (NHI) project:

- A Costing Study provided recommendations for the expansion and roll-out of NHI.
- The NHI Costing Tool was refined, and a user manual was developed.
- NHI staff were trained in the use of the Costing Tool.
- The Provider Payment Mechanism Study explored options for financial incentives in areas not yet covered by NHI.

These efforts aimed to strengthen the financial management and sustainability of the NHI project, while also exploring options for extending financial protection to populations not yet covered by NHI.

### 9.2.3 User Fee Policies

While not extensively documented in the available information, there is a reference to the removal of user fees in October 2023, suggesting that SO2 and the awareness of UHC has also addressed financial barriers to accessing health services through user fee policies.

### 9.3 Health Service Delivery Networks

The strengthening of health service delivery networks has been a key component of the HSSP, with a particular focus on the Integrated Health Service Delivery Networks (IHSDN) approach:

# 9.3.1 IHSDN Conceptualization and Capacity Building

SO2 introduced and built capacity for the IHSDN methodology:

- Orientation on the IHSDN Tool was provided in 2020.
- Capacity building on IHSDNs was conducted among the MoHW and Regional Health Teams in 2022.
- Sensitization/training in the concept of IHSDN and the Tool for measuring the level of integration was done in 2024.
- Members of the health management team from the four Regional Health authorities participated in virtual training sessions.

# **Conclusion: Achievements and Future Directions**

Over seven years, the HSSP, through SO2, transformed Belize's health system through governance restructuring, NHI optimization, and pandemic resilience. Key successes included the National Nutrition Policy, HEARTS integration, HPV screening scale-up and the 2025-2034 National Health Sector Strategic Plan. Challenges persist in financing and rural access, necessitating continued focus on domestic resource mobilization and equity-driven reforms. As Belize transitions to its 2025–2034 Strategic Plan, SO2's legacy lies in its foundational role in building a sustainable, peoplecentered health system.

# C. SO3: To Support Tender, Installation and Operationalization of a Supply Data Exchange Warehouse and Analytics Platform Software (Referred to as CDEP) for the Ministry of Health and Wellness

### I. Strategic Objective 3: 2021-2025

### 1.1 SO3 Context and Background

Over the past four years, the HSSP has made transformative strides in achieving Specific Objective 3 (SO3): "To support tender, installation, and operationalization of a Supply Data Exchange Warehouse and Analytics Platform software (referred to as CDEP) for the Ministry of Health and Wellness", aimed at modernizing Belize's health information ecosystem. The CDEP has served as a cornerstone for Belize's digital health transformation, enabling interoperability, real-time data sharing, and evidence-based decision-making across health systems.

# II. Year 3 (2021): Laying the Foundation

# 2.1 Understanding the Contextual Landscape

The healthcare landscape in Belize, like many developing nations, has historically faced challenges related to siloed information systems, fragmented data collection processes, and limited analytics capabilities. Prior to the Clinical Data Exchange Platform (CDEP) initiative, health information management relied on a combination of paper-based systems and isolated digital platforms with minimal interoperability. This fragmentation presented significant obstacles to comprehensive health planning, evidence-based decision-making, and effective public health surveillance.

Belize's health system serves a population of approximately 400,000 across six administrative districts, with a network of hospitals, polyclinics, health centers, and community health posts. The MoHW oversees this network, working to ensure equitable healthcare delivery while managing limited

resources. In this context, efficient information management represents a critical enabler for maximizing the impact of health investments and improving population health outcomes.

The concept of a CDEP emerged as a strategic response to these challenges, building upon earlier digital health initiatives in the country, including the Belize Health Information System (BHIS). The CDEP initiative represented a significant evolution in Belize's digital health journey, moving beyond basic electronic health records to create an integrated ecosystem for health data exchange and analytics.

International frameworks and standards played an important role in shaping the CDEP vision. PAHO's Information Systems for Health (IS4H) framework provided conceptual guidance, emphasizing the importance of interoperable systems, data governance, and capacity building.

Against this multifaceted backdrop, SO3 was introduced in 2021 as a formal commitment to developing and implementing the CDEP. This marked the beginning of a four-year journey toward transforming Belize's health information landscape, with far-reaching implications for healthcare delivery, public health surveillance, and health system governance.

### 2.2 Strategic Objectives and Vision

The CDEP initiative was conceived with a comprehensive vision that extended beyond technology implementation to encompass fundamental transformation in how health information is collected, managed, shared, and utilized across Belize's health system. The strategic objectives underpinning this vision were multidimensional, addressing

technical, organizational, and systemic aspects of health information management.

At its core, SO3 aimed to develop and operationalize a Clinical Data Exchange Warehouse and Analytics Platform. This concise statement encapsulated several interconnected ambitions:

- Data Integration and Interoperability: A primary objective was to overcome data silos by creating seamless information flow between previously disconnected health information systems including that of the NHI. This interoperability framework would enable relevant clinical and administrative data to be shared between points of care, administrative offices, public health units, and other stakeholders while maintaining appropriate security and privacy protections.
- 2. Enhanced Decision Support: The CDEP was envisioned as more than a data repository; it would serve as an intelligence platform providing actionable insights to support evidence-based decision-making at all levels of the health system. From frontline clinical decisions to national health policy formulation, the platform would transform raw data into meaningful information for diverse stakeholders.
- 3. Improved Public Health Surveillance: A critical objective was strengthening Belize's capacity for timely detection and response to public health threats. The CDEP would enhance surveillance capabilities through real-time data collection, automated alert systems, and improved analytical tools for monitoring disease patterns, outbreak detection, and response coordination.

- 4. Standardization and Data Quality: The initiative aimed to establish and enforce consistent data standards across the health system, improving the reliability, comparability, and usability of health information. Standardization efforts would encompass clinical terminologies, data definitions, exchange protocols, and quality assurance mechanisms.
- 5. Efficiency and Resource Optimization: By reducing duplication in data collection and streamlining information processes, the CDEP sought to improve operational efficiency, reduce administrative burden on healthcare providers, and enable more effective allocation of limited health resources.
- 6. Health System Strengthening: Beyond immediate information management benefits, the CDEP was conceived as a foundational element for broader health system strengthening. Improved information flows would support enhanced accountability, performance monitoring, and continuous quality improvement across the health system.
- 7. Digital Health Capacity Development: The initiative recognized the importance of building sustainable digital health capabilities within Belize. This included developing technical expertise, information management skills, and analytical competencies among health professionals, administrators, and IT specialists.

These strategic objectives aligned with Belize's National Health Sector Strategic Plan and reflected the country's commitment to advancing universal health coverage through strengthened health information systems. The vision for the CDEP positioned it as a transformative intervention that would modernize Belize's approach to health information while addressing practical needs within the health system.

# 2.3 Technical Specifications and Stakeholder Consultations

The conceptualization phase involved extensive consultations with key stakeholders within the MoHW, including clinical leaders, public health specialists, health information managers, and IT professionals. These consultations helped refine the vision for the CDEP, ensuring alignment with actual needs and practical realities in Belize's health system. The resulting concept emphasized interoperability, data quality, security, and usability as core design principles. Requirements included:

- Interoperability with the BHIS, RAWA, and civil registration systems.
- Data security compliant with Belize's Data Protection Act.
- Scalability to accommodate future modules (e.g., cancer registry).

With technical specifications in place, the latter part of 2021 saw the initiation of the procurement process for the CDEP. PAHO's procurement team played a crucial role in this phase, leveraging their expertise in health technology procurement and their understanding of the regional vendor landscape.

### 2.4 Governance Frameworks

Recognizing the importance of structured governance for the CDEP initiative, 2021 also saw the development of Terms of Reference (ToR) for a proposed Technical Working Group (TWG) for Information Systems for Health. This governance structure was designed to provide technical oversight, ensure relevant stakeholder representation, and maintain strategic alignment throughout the CDEP development lifecycle.

# III. Year 4 (2022): Advancing Governance and Procurement

Building upon the conceptual foundation established in 2021, the year 2022 saw significant advancement in stakeholder engagement, technical planning, and governance structures for the CDEP initiative. This year marked a transition from initial concept to detailed implementation planning, with expanded resources and formalized structures to guide the project forward.

### 3.1 Leadership and Stakeholder Coordination

A dedicated SO3 Project Coordinator was hired to streamline efforts. The coordinator conducted a retrospective analysis of past initiatives, identifying lessons from Belize's earlier attempts at health data integration. Key recommendations included:

- Adopting a phased implementation approach to minimize disruption.
- Prioritizing user-centered design to ensure frontline health worker buy-in.

### 3.2 Procurement and Vendor Engagement

Tendering advanced with PAHO's support, focusing on vendors capable of delivering cost-effective solutions to ensure sustainability.

# 3.3 Establishment of the IS4H Technical Working Group

Technical Working Group and Infrastructure Hosting: A Technical Working Group for Information Systems for Health was established to oversee the CDEP development. Infrastructure hosting arrangements between MoHW and the Central Information Technology Office (CITO) were confirmed to ensure data security and system sustainability.



Photo Credit: Ministry of Health and Wellness

# IV. Year 5 (2023): Development and Capacity Building

### 4.1 CDEP Development and Testing

Development of the CDEP began with initial components tested for interoperability among health systems, including the BHIS, to improve data sharing and decision-making in public health surveillance. Efforts were made to ensure an upgrade of the BHIS from ICD-10, 2016 version to the ICD-10, 2019 version, and the use of appropriate application programming interfaces to ensure adequate data comparison.

# 4.2 National Cancer Registry Software Selection

Several technical consultations were conducted to support the identification of a software solution to be used for the National Cancer Registry. The final registry integrated into the CDEP utilized the data format of the CanReg5 database.

# V. Year 6 (2024): Finalization and Integration

### 5.1 Ongoing Development and Testing

- Ongoing Development and Testing: Continued development and testing of the CDEP was done with use cases and a pilot between a MoHW and a NHI facility, with completion and commissioning by September 2024. The platform included the integration of ICD-11 coding, a national cancer registry, and interoperability with Social Security Board and Civil Registration systems for future connectivity.
- Technical Integration and Training: Facilitated technical integration with other national health systems, including the Belize Health Information

System and the Registration of Clinical Activities Web-based Application. Training programmes were conducted for health management teams on digital health, surveillance, and epidemiology

## 5.2 National Cancer Registry Software Selection

CanReg5 was chosen for its alignment with the WHO's International Agency for Research on Cancer (IARC) standards. Key factors included:

- Offline functionality for low-connectivity areas.
- Customizable dashboards for oncology reporting.

### **5.3 Phased Pilot Implementation**

- Phase 1: Initiated mid-July 2024, focusing on technical units.
- Phase 2: Began at the end of July 2024, at Matron Roberts Polyclinic, involving real patient data exchange between the BHIS instance at the hospital and the RAWA pilot instance.

### VI. Year 7 (2025): Enhancing CDEP

In the final year of the HSSP, SO3 focused on driving impact, with a continued emphasis on capacity building and health service strengthening.





# 6.1 ICD-11 Training on Morbidity and Mortality Coding

The ICD-11 training in Belize was a technical capacity-building workshop organized by the Ministry of Health and Wellness with support from PAHO/WHO and CARPHA. It trained health information staff and coders on the use of WHO's 11th Revision of the International Classification of Diseases for mortality and morbidity coding. Participants learned coding rules, digital tools, and quality-assurance methods to ensure accurate, standardized health data. This activity was the first step towards improving the quality, comparability, and timeliness of Belize's health statistics, enabling better surveillance, policy planning, and alignment with international reporting standards.



### VII. Key Achievements and Impacts

### 7.1 Significance for Belize's Health Information Ecosystem

The CDEP represented a paradigm shift in Belize's approach to health information management, with far-reaching implications for the country's health information ecosystem. Its significance extended across multiple dimensions, fundamentally reshaping how health data is conceptualized, processed, and utilized throughout the health system.

Historically, Belize's health information landscape has been characterized by fragmentation and limited integration. While the BHIS made initial strides toward digitalization, many health information processes remained paper-based or confined to isolated electronic systems. This fragmentation resulted in information gaps, duplication of effort, delayed reporting, and challenges in generating comprehensive health intelligence.

The CDEP initiative addressed these limitations by creating a unified framework for health information exchange. By establishing standardized protocols and interfaces for data sharing, the platform enabled seamless integration of information from diverse sources. This integration created a more comprehensive and accurate picture of health status, healthcare utilization, and health system performance.

For healthcare providers, the CDEP's significance laid in enabling more informed clinical decision-making and reducing administrative burden. Access to patients' comprehensive health information, regardless of where previous care was received, supports better continuity of care, reduces unnecessary test duplication, and improves patient safety through enhanced awareness of allergies, medications, and medical history. Standardized data collection and automated information exchange also minimize time spent on documentation and reporting, allowing more focus on direct patient care.

From a public health perspective, the CDEP transformed surveillance capabilities by enabling near real-time monitoring of health conditions, early detection of disease outbreaks, and rapid response to emerging health threats. This enhanced surveillance infrastructure was particularly significant given Belize's vulnerability to infectious disease outbreaks, natural disasters, and the growing burden of non-communicable diseases.

For health system managers and policymakers, the CDEP provided unprecedented visibility into health system operations, resource utilization, and population health outcomes. This transparency supported more informed resource allocation, performance monitoring, and policy development.

The implementation of the National Cancer Registry within the CDEP framework held special significance for addressing the growing cancer burden in Belize. By establishing reliable cancer surveillance, the registry enabled accurate measurement of cancer incidence, prevalence, and outcomes, essential information for developing targeted cancer control programmes, evaluating interventions, and planning cancer care services.

Beyond these operational benefits, the CDEP represented a significant advancement in Belize's digital health maturity. The initiative catalyzed the development of critical digital health infrastructure, including enhanced data center capabilities, improved connectivity, and strengthened information security protocols. It also stimulated the development of a more robust digital health workforce through targeted capacity building and skills development programmes.

From a regional perspective, Belize's CDEP implementation positioned the country as a contributor to and leader in the broader

Caribbean digital health ecosystem. The lessons learned and capabilities developed through this initiative offered valuable insights for other countries in the region embarking on similar digital health transformation journeys. The platform's alignment with international standards also facilitated potential cross-border health information exchange and collaboration on regional health challenges.

Perhaps most significantly, the CDEP represented an investment in health equity. By improving access to comprehensive health information across the health system, the platform helped address disparities in information availability between urban and rural areas, primary and tertiary care settings, and different health programmes. This democratization of health information access supported more equitable healthcare delivery and resource allocation based on objectively identified needs rather than historical patterns or perceptions.

The CDEP's significance extended beyond immediate operational improvements to potentially transformative long-term impacts on health system governance, accountability, and quality improvement. By creating an evidence ecosystem that supports learning and adaptation, the platform laid the groundwork for a more responsive, efficient, and effective health system capable of addressing Belize's evolving health challenges.

### **VIII. Conclusion**

The CDEP's development underscored the importance of adaptive governance, stakeholder inclusivity, and phased scaling. Challenges such as legacy system incompatibility and resource constraints were mitigated through iterative problem-solving and strategic partnerships.

As Belize moves toward full operationalization, the CDEP stands as a model for digital health transformation in small states, poised to enhance public health surveillance, equity, and policy coherence.

# D. Reoriented Funds for COVID-19 Emergency Response

# I. COVID-19 Emergency Response: 2020-2022

# 1.1 Emergency Response Context and Background

With the approval of the EU and the MoHW, the HSSP reoriented funds to address the COVID-19 pandemic in Belize from 2020 to 2022. This emergency response was designed as a strategic reorientation of existing funding to address the urgent challenges presented by the global pandemic. Through a coordinated approach with the MoHW, the response successfully implemented initiatives across three critical domains: diagnostic capacity enhancement, infection prevention and control with a focus on medical waste management, and integrated healthcare service delivery at the community level.

### II. Year 1 (2020): Laying the Foundation

The three-year COVID-19 Emergency Response implemented from 2020 to 2022 strategically redirected resources to strengthen pandemic response capabilities while preserving critical healthcare functions. The initiative was developed in close collaboration with the MoHW and aligned with national emergency response strategies.

The response was implemented in a context characterized by:

- Limited existing diagnostic capacity for novel infectious diseases.
- Challenges in medical waste management amidst increased biomedical waste generation.
- Risk of disruption to essential health services, particularly for non-communicable diseases.
- Need for effective communication strategies to reach diverse communities.

Resource constraints require strategic allocation decisions.

The COVID-19 Emergency Response addressed these contextual challenges through a comprehensive approach focused on system strengthening, infrastructure development, and community engagement.

### 2.1 Strategic Objectives

The emergency response was structured around three primary strategic objectives:

- 1. Enhance national laboratory network diagnostic capacity for early detection of COVID-19
  - Support decentralization of testing capabilities to regional and community levels.
  - Strengthen laboratory infrastructure and safety protocols.
  - Expand storage capacity for COVID-19 response materials.
- 2. Enhance infection prevention and control, with a focus on medical waste management for COVID-19:
  - Develop sustainable medical waste management solutions.
- Procure and install appropriate waste treatment technologies.
- Improve compliance with infection control standards.
- 3. Improve integrated healthcare at the community level for co-morbidity in the context of COVID-19:
  - Strengthen community health worker capabilities.
  - Maintain essential health services for noncommunicable diseases.

- Implement effective risk communication and community engagement.
- Support outreach services, health communications, and community engagement.

These strategic objectives addressed immediate pandemic response needs while building lasting health system resilience and capacity.

### 2.2 Emergency Response Initiation

In its first year, the emergency response focused on the rapid deployment of critical resources and capabilities to address the emerging pandemic. This initial phase established foundational elements that would support continued response efforts in subsequent years.



### 2.3 Key Milestones in 2020

### 1. Programme Reorientation and Planning

- Strategic reallocation of funds for COVID-19 emergency response
- Development of implementation plans for three core objectives
- Establishment of coordination mechanisms with MoHW

### 2. Diagnostic Capacity Enhancement

- Procurement of seven SD Biosensor Rapid Diagnostic Test Analyzers
- Distribution of testing equipment to regional facilities
- Enhancement of Central Medical Laboratory biosafety features
- Expansion of storage capacity for COVID-19 response diagnostic materials

### 3. Community Health Worker Support

- Procurement of 230 CHW bags with essential equipment
- Distribution of 100 hand-held portable pulse oximeters
- Development of NCDs-focused training curriculum
- Initiation of CHW capacity building activities

### 4. Risk Communication Launch

- Development of comprehensive Risk
   Communication and Community Engagement (RCCE) Strategy
- Creation of multilingual public service announcements
- Initiation of multi-channel communication campaigns
- Deployment of community announcers to 86 villages

The rapid implementation of these initiatives in 2020 established critical pandemic response capabilities during the early, uncertain phases of COVID-19. The emphasis on both immediate response (testing, communication) and system strengthening (CHW capacity, laboratory safety) set the foundation for more sustainable interventions in subsequent years.

### Community Health Worker cares for over 1,000 people in her community -

Located just off the Western Highway between Belize City and Belmopan is a small village known as Mahogany Heights. As a community health worker in Mahogany Heights, Raquel Vega cares for approximately 1,063 people. She has lived in Mahogany Heights for 18 years and has been serving as the community health worker for 11 years.

Due to the COVID-19 pandemic, community-based delivery of essential health services became a viable solution to the disruption of health services created by an upsurge in cases and lockdowns, and to the shifting of the health workforce.

"Whenever they (people) come, I just have to make sure they sanitize, we do social distance, and we keep safe," said Vega.

Through the reoriented funds, improvement was made in integrated healthcare at the community level during COVID-19. The EU, PAHO/WHO, and MoHW recognized the need to respond to the demands created by COVID-19 while, at the same time, maintaining access to healthcare, especially for persons suffering from non-communicable diseases like hypertension and diabetes mellitus. This collaborative effort supported an initiative that empowered Belize's team of community health workers to provide basic health services such as blood pressure and glucose monitoring.

The CHW network constituted an alternative strategy for the continued delivery of health services during the pandemic. The programme, which involved training, equipped CHWs to conduct outreach in their villages.

230 Community Health Workers, including Raquel Vega, received work kits containing non-contact thermometers, stethoscopes, glucometers with strips and lancets, and first aid kits.





"

Our CHWs are now an integral part of the global effort to enhance access to health services. Though the role of our CHWs is ever-evolving, the goal remains the same – to make basic healthcare more responsive and more accessible in every sense to those who need it the most."

- Hon. Kevin Bernard, Minister of the MoHW

### III. Year 2 (2021): Consolidating Gains

The second year of the emergency response focused on consolidating initial gains while adapting to evolving pandemic circumstances. This phase emphasized technical refinement, sustained capacity building, and continued community engagement.

### 3.1 Key Milestones in 2021

### 1. Medical Waste Management Planning

- Finalization of technical specifications for autoclave systems
- Initiation of procurement processes for medical waste equipment
- Development of waste management protocols and guidelines

### 2. Continued CHW Capacity Building

- Ongoing training of 230 Community Health Workers
- Refinement of NCD monitoring and management approaches

- Enhancement of referral systems for communitydetected cases
- Support for maintaining essential health services

### 3. Sustained RCCE Activities

- Ongoing technical support to MoHW for risk communication
- Adaptation of messaging to evolving pandemic knowledge
- Refinement of community engagement approaches based on feedback
- Maintenance of multilingual and multi-channel communication efforts

The second year demonstrated a shift from emergency response to more sustainable implementation, with increased emphasis on systems development and adaptation based on implementation experience. The continued focus on community-level interventions helped maintain essential services while supporting pandemic response efforts.

### IV. Year 3 (2022): Sustaining Impact

The third year of emergency response focused on implementing advanced infrastructure components and consolidating gains from previous years. This phase emphasized sustainable solutions and institutional capacity development for long-term health system resilience.

### 4.1 Key Milestones in 2022

### 1. Medical Waste Infrastructure Implementation

- Completion of the procurement process for autoclave systems
- Delivery of two 300-liter autoclave units
- Installation of the autoclave units at Corozal and Punta Gorda Community Hospitals

 Integration with Smart Health facility retrofitting projects



### 2. Advanced CHW Capacity Building

- Continued skills development for diabetes and hypertension monitoring
- Integration of COVID-19 and NCDs management approaches
- Strengthening of community-facility linkages for patient care
- Documentation of CHW programme achievements and lessons learned

### 3. System Integration and Sustainability Planning

- Assessment of programme achievements and ongoing needs
- Development of transition strategies for sustainable operations
- Documentation of best practices and implementation guidelines
- Strengthening of institutional capacities for continued efforts

The final year of the emergency response represented the maturation of programme initiatives, with emphasis on completing infrastructure projects, deepening CHW capabilities, and ensuring sustainable operation of developed systems. The integration with broader health system strengthening efforts, such as the Smart Health facility retrofitting, demonstrated a strategic approach to maximizing long-term impact.

### V. Key Achievements and Impacts

### 5.1 Health System Strengthening

The COVID-19 Emergency Response generated significant positive impacts on health system capabilities and resilience. These impacts extended beyond immediate pandemic response to create lasting improvements in system functionality.

### 1. Diagnostic System Enhancements

- Expanded laboratory testing capacity for COVID-19 at regional and community levels
- Improved laboratory biosafety infrastructure and protocols
- Enhanced storage and logistics systems for diagnostic materials
- Strengthened quality assurance mechanisms for testing procedures

### 2. Infection Control Improvements

- Upgraded medical waste management infrastructure at two community hospitals
- Improved compliance with infection prevention standards
- Enhanced staff awareness and skills in infection control measures
- Strengthened protocols for handling potentially infectious materials

### 3. Service Delivery Adaptations

Development of community-based service delivery

- models for chronic conditions
- Integration of COVID-19 precautions into routine healthcare processes
- Enhanced referral pathways between community and facility-based care
- Improved continuity of care mechanisms during service disruptions

### 4. Health Workforce Development

- Expanded capabilities of 230 Community Health Workers
- New skills in NCDs monitoring and management at the community level
- Enhanced ability to function under emergency conditions
- Improved integration of CHWs with formal healthcare systems

These health system impacts created more resilient, adaptive healthcare capabilities that will continue to benefit service delivery beyond the immediate pandemic response period.

### 5.2 Community Health Outcomes

The community-focused approach generated important positive impacts on community health outcomes, particularly in the areas of NCDs management, health awareness, and healthcare access.

### 1. Improved NCDs Management

- Enhanced monitoring of diabetes and hypertension at the community level
- Improved patient education and selfmanagement support

### 2. Enhanced Health Knowledge

- Increased community awareness of COVID-19 prevention measures
- Improved understanding of NCDs risk factors and management
- Greater recognition of warning signs requiring

medical attention

Enhanced health literacy through multilingual communication campaigns

### 3. Expanded Healthcare Access

- Reduced geographic barriers to basic health monitoring
- More equitable access to health information across language groups

### 4. Community Engagement in Health

- Strengthened role of CHWs as trusted health resources
- Enhanced community participation in health messaging dissemination
- Improved community healthcare system communication channels
- Increased local capacity for health promotion activities

These community health impacts helped mitigate the pandemic's potential negative effects on health outcomes, particularly for vulnerable populations with limited healthcare access or pre-existing health conditions.

### VI. Conclusion

The COVID-19 Emergency Response of the HSSP successfully implemented a comprehensive approach to pandemic response while strengthening health system resilience and maintaining essential health services. Over its three-year implementation period, the emergency response achieved significant results across its three strategic objectives.

The COVID-19 Emergency Response exemplified adaptive health governance. Beyond the immediate pandemic response, it generated long-term benefits that will continue to strengthen health system performance and community health outcomes. These sustainable impacts represented valuable returns on programme investments, ensuring that Belize can better withstand future emergencies.

# HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT September 2018–September 2025

# COMMUNICATIONS AND VISIBILITY



### I. Project Communication

Communications and Visibility have been the project's cornerstone in helping to raise awareness, promote visibility, and engage key stakeholders. The overall communications and visibility objective was to raise awareness of and promote the overall project objective, "Better Health for Belize," while ensuring that the role and funding support of the European Union are recognized.

There were three specific objectives identified in the Communications and Visibility Plan for the project:

- Ensure beneficiaries, governmental agencies, partners, and the general public are aware of the activities, progress, and results of the project
- Recognize the contribution of the EU and communicate broadly the impact of the EU and PAHO/WHO support for the health and well-being of the citizens and residents of Belize
- Promote awareness and effective communication internally between directors, consultants, and staff of PAHO/WHO, EU, and the MoHW to facilitate participatory implementation and keep the stakeholders updated on the progress and impact of the project

Various major communication milestones and achievements have contributed to the project's objectives and its overall impact in Belize.

### 1.1 Development of a Communications and Visibility Plan

The Communications and Visibility Plan was a comprehensive document that served as a roadmap, outlining strategies and approaches to effectively disseminate information, ensure visibility, and keep all stakeholders informed throughout the project's lifecycle. The plan was designed to ensure that key messages reached the target audience through multiple channels and that the project's achievements were well-documented and shared.

### 1.2 Project Identifier

A project identifier was created to serve as a visual representation of the project. This identifier was used across all communication materials, from promotional products to communication documents, to ensure the project maintained a unified and recognizable presence to the public.

### 1.3 Guiding Documents and Strategic Banners

Guiding documents and standing banners for each strategic objective were developed as part of the communications and visibility plan. These materials provided a clear and visually engaging representation of the project's goals and outcomes. The banners were displayed at all project events, while the guiding documents were used to properly show the Communications and Visibility Specialist and partners how to use logos, color format, font format, among others.





# 1.4 Project Sub-Page on the PAHO Belize Website

A dedicated sub-page for the project was developed on the PAHO Belize website. This sub-page served as a central hub for information related to the project, including easy access to news and updates. The <u>website</u> became an essential tool for keeping the global and regional audience informed.

### 1.5 Press Releases for Major Events

Press releases were written and published for significant events throughout the project. These included the handover of vehicles, site visits, policy launches, launch of retrofitting, handover of health facilities, handover of equipment, and workshops. Each press release was done jointly with key stakeholders and strategically published to maximize media coverage and ensure the project's progress and achievements were shared with the broader community. Over 20 press releases were published, which contributed to increased visibility and public awareness of the project's activities.

# 1.6 Web Articles and Local Newspaper Publications

Articles were published on the PAHO Belize website and in local newspapers. These articles were designed to highlight key developments and showcase success stories. The content was tailored to appeal to both the local and national audience.

### 1.7 Billboards in Prime Locations

Three strategically placed billboards were designed and installed at high-visibility locations across Belize. These billboards specifically raised awareness for strategic objective one, especially in areas where the selected health facility was being retrofitted. Related to cancer prevention, billboard raising cancer awareness was also designed and installed.







### 1.8 Posters and Brochures

To further promote the project, posters and brochures were created to highlight strategic objective one and strategic objective two. The content was specifically tailored to the goals of each objective, and in terms of the facilities, it highlighted the retrofitting changes that were going to be made. These materials were distributed at events, health facilities, and community outreach activities.



### 1.9 High-Visibility Events

Three high-profile events were organized to raise awareness of the project's work and engage with communities. These included:

- Community Health Workers Fair (March 2022): This event provided an opportunity to support and recognize the role of CHWs. Medical supplies were donated to the CHWs, and attendees had the chance to learn about the project. Free health check-ups were also offered to promote health, wellness, and community engagement.
- Press Conference with the UN (September 2022): This press event aimed to highlight the contributions of the HSSP in Belize as well as the European Union's support for Belize's COVID-19 response. The event also highlighted the Spotlight Initiative, a partnership between the European Union and the United Nations. The conference served as a platform to raise awareness about the project's health initiatives and its ongoing efforts to strengthen Belize's health system.
- Donation of Medical Waste Autoclaves (October 2022): A handover event was coordinated to showcase the project's contribution of two autoclaves for infectious waste, especially during the COVID-19 pandemic.

Each event gained significant media coverage and further increased the project's presence to the public.







### 1.10 Groundbreaking Ceremonies

Groundbreaking ceremonies for construction at three health facilities (PGCH, CCH, and CML) marked major milestones for strategic objective one of the project. These ceremonies were key to showing the progress of retrofitting. These ceremonies were attended by key stakeholders, including senior government officials and community leaders, and served as a tangible representation of the project's commitment to improving health infrastructure in Belize.







### 1.11 Development of Promotional Videos

In an effort to further engage with the target audience and share the project's goals and impact, eight videos were developed. These <u>videos</u> showcased various aspects of the project, including health facility upgrades, strategic objectives, and pandemic response. The <u>videos</u> were shared on social media platforms and during public events.

### 1.12 Official Handover Ceremonies

Official handover ceremonies for PGCH, CCH, and CML were key achievements for the project. These handover ceremonies were held to mark the completion of upgrades and renovations to health facilities. These events gained wide media coverage and represented the tangible outcomes of the project for strategic objective one.







### 1.13 Participation in the EU in the Park

For two years, 2023 and 2025, the implementing stakeholder participated in the EU in the Park event, where it showcased the project's efforts and engaged with the public. The event was an opportunity to not only share the project's goals but to promote health initiatives to a broad audience, especially the people of Belize.





### 1.14 Launch of the HEARTS Initiative (2023)

The launch of the HEARTS initiative in 2023 marked a significant achievement in the project's efforts to improve cardiovascular health in Belize. Through this launch, the donation of essential medical devices (clinically validated blood pressure measuring devices) was made to further support and enhance quality healthcare.





# 1.15 Launch of the Nutrition and Mental Health Policy (2023)

The launch of the Belize National Nutrition Policy in June 2023 and the Belize National Mental Health Policy in October 2023 marked important achievements in strengthening the country's public health agenda. These policies represented key milestones in enhancing Belize's approach to nutrition, promoting healthier lifestyles, and safeguarding the human rights of individuals living with mental health conditions.



# 1.16 Healthy Lifestyle Caravan (2023 and 2024)

The Healthy Lifestyle Caravan was organized to reach rural and vulnerable communities across Belize, where it educated the local people about healthy living and brought healthcare access and resources directly to the community. The caravan was implemented in over six rural communities, promoting public health and wellness in a hands-on and interactive way, including booths, games, and free health check-ups. The focus was on the risk factors for NCDs with

strong components on physical activity and healthy diets. Promotional branded products were also developed and procured, including caps, water bottles, aprons, stress balls, shirts, rags, and interactive educational materials such as coloring books on healthy diets for children. These promotional branded products included key health messages in both English and Spanish.





### 1.17 Media Coverage

The communication efforts resulted in widespread media coverage, with over 75 media placements across different local and national media outlets. Over 45 social media posts, including those from both internal and external organizations, further amplified the project's reach. Additionally, more than 20 articles were posted on the PAHO Belize website, all contributing to the increased visibility of the project.

### 1.18 COVID-19 Communication Efforts

In response to the COVID-19 pandemic, the project played a vital role in public health communication. Key achievements included:

### Public Service Announcements (PSAs)

 PSAs in six languages (English, Spanish, Garifuna, Mopan Maya, Kriol, and Q'eqchi Maya) were developed and aired on 10 radio stations throughout the country to ensure that health messages reached every and diverse communities.

### Video Advertisements

 Nine video advertisements were produced and aired on six television stations, providing critical information on COVID-19 prevention and health guidelines.

### Printed Materials

 A total of 1,650 printed materials, including posters, were distributed in English and Spanish to health facilities and public spaces to further promote public awareness.

### Human Interest Story

 A human-interest story highlighted the positive impact of donated health kits and training for community health workers, providing a personal example of the project's impact.

### Town Crier Outreach

 Key health messages were delivered via PA systems to over 85 villages across Belize, ensuring that rural communities had access to vital information.









### **Conclusion**

The communication efforts for this project played a vital role in ensuring its key visibility and awareness of the impact and success of the project. From strategic media placements and high-level events to community outreach initiatives, the project has successfully engaged stakeholders, raised awareness, and promoted positive health outcomes across Belize. These communication achievements have helped foster greater understanding of the project's goals and ensured that its impact was visible locally, nationally, regionally, and globally.

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# MATRIX OF EXPECTED RESULTS, PROJECT ACTIVITIES AND KEY MILESTONES



# **Table 1 – SO1 Results**

	Activity Targeted Results		Outputs		Deliverables/ Products		Status			
	SO1: To develop efficient, effective, disaster-resilient, and environmentally friendly health facilities.									
1.1	SMART Facility Base Assessment Tool completed for 50 health facilities and final design for works and tender dossiers elaborated	Completion of assessments and design plans for SMART hospital upgrades	•	SMART assessment for targeted facilities completed Tender dossiers prepared for planned works		SMART Hospital Baseline Assessment Report Finalized tender documents for facility upgrades	Completed			
1.2	Tendering of design and supervision of works	Design and Supervision contract awarded for hospital retrofitting projects		Selection of firms to oversee retrofitting works		Contract agreements with engineering firms  Work plan for project supervision	Completed			
1.3	Upgrade of Northern Regional, Southern Regional, and Western Regional Hospitals	Retrofitted and modernized regional hospitals with improved resilience and energy efficiency		Construction works and greening completed at targeted facilities.  Improved structural and operational resilience		Completion certificates for upgraded hospitals Reports on energy and structural improvements	Completed			
1.4	Upgrade of Punta Gorda and Corozal Community Hospitals	Strengthened infrastructure in community hospitals to improve service delivery		Infrastructure and equipment upgrade at selected community hospitals		Operational reports detailing facility upgrades. Staff feedback on facility improvements	Completed			
1.5	Upgrade and retrofitting of Central Medical Laboratory	Enhanced laboratory capacity to improve diagnostics and outbreak response		Modernization of laboratory infrastructure and equipment		Laboratory assessment report  Completion certificate for retrofitting works	Completed			
1.6	Develop a health facility preventive maintenance plan	Institutionalized maintenance strategy for healthcare facilities		Preventative maintenance plan developed and rolled out Training provided to facility management teams		National Health Facility Maintenance Manual Training records for facility managers	Completed			

Activity	Targeted Results	Outputs	Deliverables/ Products	Status							
SO1: To develop efficient, effective, disaster-resilient, and environmentally friendly health facilities.											
1.7 Create an electronic repository system for the digitalization of facility assessments, infrastructure designs, etc. for information storage and sharing	Completion of assessments and design plans for SMART hospital upgrades	<ul> <li>Centralized digital platform operationalized</li> <li>Historical and new assessments stored electronically</li> </ul>	<ul> <li>Online repository database for facility records</li> <li>User manual and access guidelines</li> </ul>	Completed							
1.8 Develop a Multi-Hazard Plan and training for health teams in disaster preparedness	Design and Supervision contract awarded for hospital retrofitting projects	<ul> <li>Multi-Hazard Plan developed and implemented</li> <li>Disaster preparedness drills conducted</li> </ul>	<ul> <li>National Multi-Hazard Plan for Health Facilities</li> <li>Reports on emergency response drills and simulations</li> </ul>	Completed							
1.9 Gender-responsive capacity building of MoHW staff and disaster response teams	Retrofitted and modernized regional hospitals with improved resilience and energy efficiency	MoHW and response teams trained in gender considerations during emergencies	<ul> <li>Training manuals and attendance records</li> <li>Reports on gender-sensitive emergency planning</li> </ul>	Completed							
1.10 Training of NEMC and regional maintenance staff in preventive maintenance	Strengthened infrastructure in community hospitals to improve service delivery	<ul> <li>Regional maintenance staff trained</li> <li>Institutionalized training programme for new staff</li> </ul>	<ul><li>Maintenance training curriculum</li><li>Certified list of trained personnel</li></ul>	Completed							

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# **Table 2 – SO2 Results**

Activity	Targeted Results	Outputs	Deliverables/ Products	Status					
SO2: Health information system strengthened in collaboration with an organized surveillance system.									
1.1 Assess the Health Sector Reform and reorganize the organizational structure	Improved health system governance and efficiency	<ul> <li>Comprehensive assessment of health sector reform completed</li> <li>Recommendations for restructuring finalized</li> </ul>	<ul> <li>Health Sector Reform Assessment Report</li> <li>Organizational restructuring plan</li> </ul>	Completed					
1.2 Develop an Integrated Care Model for service delivery focusing on primary care services	Enhanced primary healthcare access and service integration	<ul> <li>Integrated Care Model framework developed</li> <li>Pilot implementation in select health regions</li> </ul>	<ul> <li>Integrated Care Model Strategy         Document     </li> <li>Reports on pilot implementation and         evaluation</li> </ul>	Completed					
1.3 Develop a National Nutrition Policy	Improved national guidelines for nutrition and dietary health	<ul> <li>National Nutrition Policy developed and approved</li> <li>Stakeholder consultations completed</li> </ul>	<ul> <li>National Nutrition Policy Document</li> <li>Reports on policy dissemination and awareness campaigns</li> </ul>	Completed					
1.4 Promote health and education for preventing NCDs	Increased awareness and prevention measures for Non-Communicable Diseases (NCDs)	<ul> <li>Health education campaigns conducted</li> <li>School-based nutrition and physical activity programmes launched</li> </ul>	<ul> <li>Reports on NCD prevention initiatives</li> <li>Educational materials for schools and communities</li> </ul>	Completed					
1.5 Provide training in results-based management, strategic planning, and programme budgeting	Strengthened capacity in health sector planning and budgeting	<ul> <li>MoHW staff trained in strategic planning and results-based management</li> <li>Training materials and capacity- building sessions conducted</li> </ul>	<ul> <li>Training manuals and reports</li> <li>List of trained personnel with certification</li> </ul>	Completed					
1.6 Design and implement a Monitoring and Evaluation System for the health sector	Improved tracking and assessment of health sector performance	<ul> <li>M&amp;E framework developed and integrated into MoHW systems.</li> <li>Staff trained in data collection and performance evaluation</li> </ul>	<ul> <li>Health Sector M&amp;E System Framework.</li> <li>Reports on M&amp;E implementation progress</li> <li>National Health Strategic Plan 2025- 2034</li> </ul>	Completed					

# Table 3 – SO3 Results

Activity	Targeted Results	Outputs	Deliverables/ Products	Status						
SO3: To support tender, installation, and operationalization of a Supply Data Exchange Warehouse and Analytics Platform software (referred to as CDEP) for the Ministry of Health and Wellness.										
2.1 Tendering and installation of software for a Clinical Data Exchange Warehouse and Analytics Platform (CDEP) for the MoHW	Established CDEP in accordance with international and national standards and regulations	<ul> <li>Procurement process completed for CDEP software</li> <li>Installation of CDEP software initiated</li> </ul>	<ul> <li>Tender documents and awarded contract</li> <li>Software installation report</li> </ul>	Completed						
2.2 Establish interoperability between BHIS, RAWA, and additional MoHW software including the Cancer Registry	Integrated digital health information system enabling seamless data sharing	<ul> <li>Interoperability framework designed</li> <li>Technical integration with BHIS, RAWA, and Cancer Registry</li> </ul>	<ul><li>Interoperability strategy document</li><li>Integration test reports</li></ul>	Completed						
2.3 Cancer Registry enhancement facilitated	Improved data collection and management of cancer-related health records	<ul><li>Cancer Registry software upgraded</li><li>Data input and reporting functionalities enhanced</li></ul>	<ul> <li>Cancer Registry upgrade report</li> <li>Training materials for Cancer Registry users</li> </ul>	Completed						
2.4 Health management teams/staff trained in BHIS, CDEP, surveillance and epidemiology modules, and ICD-11	Strengthened technical capacity of MoHW personnel in digital health solutions	<ul> <li>Training curriculum developed for health information systems.</li> <li>Training sessions conducted for MoHW staff</li> </ul>	<ul> <li>Training reports and certification records</li> <li>List of trained personnel</li> </ul>	Completed						
2.5 M&E indicators developed within the CDEP	Enhanced monitoring and evaluation of health system performance	<ul> <li>Set of key performance indicators integrated into CDEP</li> <li>M&amp;E framework established for digital health monitoring</li> </ul>	<ul> <li>CDEP M&amp;E indicators report.</li> <li>- Performance tracking dashboard</li> </ul>	Completed						

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# V PROJECT MANAGEMENT AND ADMINISTRATIVE OVERVIEW



### **I. Project Coordination**

The Health Sector Support Programme (HSSP) was formally initiated with the signing of the Pillar Assessed Grant or Delegation Agreement (PAGoDA) contract No. 2018/399-318 on 11 September 2018.

Administrative formalities were completed through the exchange of letters between the EU and PAHO on 1 November 2018, incorporating the EU Standard Clause ensuring compliance with restrictive measures.

In anticipation of donor fund disbursement, PAHO Headquarters approved a request for an advance on 14 November 2018, facilitating the initiation of preliminary activities, including recruitment of key personnel to coordinate project operations. The first tranche of EU funds was received on 17 December 2018, enabling full operationalization of project activities.

### **Governance and Oversight**

Throughout the project life cycle, strategic oversight has been provided by the Project Steering Committee (PSC), chaired by the Chief Executive Officer of the Ministry of Health and Wellness (MoHW). The PSC ensured that project implementation aligned with the Description of the Action and the agreements established between the MoHW, EU, and PAHO/WHO. Its responsibilities included reviewing material changes to the project, monitoring risk mitigation strategies and ensuring alignment with expected outcomes.

During Years 1 and 2, the PSC convened multiple meetings, integrating the Health Information Systems (HIS) component, initially managed directly by the EU, into its discussions. Despite the operational disruptions caused by the COVID-19 pandemic, virtual meetings ensured continuity of strategic oversight.

In Year 3 (2021), the 9th PSC meeting, held on 10 June 2021, marked the first convening under the new national health authority following the November 2020 elections. The PSC continued to provide strategic guidance, ensuring continuity in oversight and alignment with project objectives.

By Year 4 (2022), the 11th PSC meeting was held on 24 February 2022 as a blended format with both in-person and virtual participation, attended by the EU Ambassador. This meeting signaled the resumption of presential engagements while maintaining virtual participation capabilities, reflecting adaptive governance practices post-pandemic.

In Years 5 through 7 (2022–2025), PSC meetings continued in a hybrid format, held on 18 November 2022, 11 May 2023, 23 November 2023, 20 March 2024, 26 November 2024 and 24 July 2025. Key strategic decisions were made during these meetings, including:

- Presentation of the closing report by GOPA/ PROMAN, EU consultants involved in developing the Technical Specifications of the CDEP, including recommendations for linkage of the BHIS and NHI's RAWA to the CDEP.
- Approval of budgetary re-allocations for SMART Health facilities and prioritization of technical components for health systems strengthening.
- Review of implementation progress and preliminary findings of the ROM Evaluation.
- Endorsement of a request for a six-month no-cost project extension with accompanying budget amendments, submitted to the EU in May 2024.
- Endorsement of a request for a six-month no-cost project extension submitted to the EU in December 2024.

- Approval of small smart interventions for WRH and NRH and use of the remaining funds for solar PV systems
- Closing project presentation made by PAHO to PSC members highlighting all project challenges, lessons learned and notable achievements.

### **Operational Oversight**

Operational guidance has been provided by the National Implementation Committee (NIC), chaired by the Director of Health Policy, Planning, and Project Management. The NIC advised the PSC on day-to-day project execution, identified operational risks, and recommended corrective actions. Since inception, the NIC has convened periodically to review areas of concern and to plan visibility and stakeholder engagement events, including subsequent operational sessions aligned with PSC meetings.

### Conclusion

Over the project life cycle, the HSSP governance and administrative framework has demonstrated resilience, adaptability, and strategic foresight.

The PSC and NIC have maintained rigorous oversight and operational guidance, effectively integrating technical components, adapting to virtual and hybrid modalities during the pandemic, and ensuring strategic continuity through leadership transitions. This governance structure has provided a robust foundation for effective implementation, risk mitigation, and stakeholder accountability, ensuring the project remains aligned with the objectives set forth by the EU, PAHO/WHO, and the MoHW.

### **II. Legal Commitments and Procurement**

The procurement process undertaken during the reporting period July 2024 – August 2025 includes the following:

Contracting Firm	Contract Amount USD	Start Date	End Date	Brief Outline of scope of works
Young's Engineering Services	75,455.86	10/26/2021	2/28/2025	Completion of contract for design & inspection of Central Medical Laboratory
Guerra's Construction Ltd.	752,041.35	03/03/2024	3/07/2025	Completion of contract for works of Central Medical Laboratory
No bid submitted	0 RREQ24-00008437	07/19/2024	10/17/2024	Re-tendering process for Northern and Western Regional Hospitals
Unsuccessful bids	0 REQ24-00011935	10/19/2024	15/01/2025	Tendering of Greening Works for Northern and Western Health Region, Drainage Works for Western Health Region, EU Smart Hospital Project, Belize
Floyd Williams & Associates	4,650.00	7/17/2024	10/14/2024	Assessment and remedial works to the Central Air Conditioning Unit of the Operating Theatre at Southern Regional Hospital
Impacto Consulting/PM4DEV	6,300.00	8/15/2024	9/04/2024	Conducting of two-day Results Based Management (RBM) Workshop
Ignite	5,265.00	7/17/2024	10/11/2024	Video production of "Empowering Belize: Addressing NCDs through strengthening health systems and promoting health education"
Pro Solar Engineering Ltd	650,705.25	12/12/2024	02/28/2025	Design and installation of solar photovoltaic systems at Northern and Western Regional Hospitals and Corozal and Punta Gorda Community Hospitals
Floyd Williams & Associates	85,600.00	02/04/2025	02/28/2025	Greening (provision and installation of two 5-ton central air conditioning systems at Western Regional Hospital; three 5-ton central air conditioning systems at Northern Regional Hospital; remedial works for installation and provision of two ductless 24K BTU air conditioning units at Punta Gorda Community Hospital; and provision and installation of a commercial grade dehumidifier at Southern Regional Hospital.
Nvision	14,075.00	02/22/2025	8/29/2025	Video production of human-interest story of the Central Medical Laboratory Retrofitting, renewable energy and solar panels at the health facilities, clinical data exchange platform (CDEP), and overall project achievements.
Swhenzhen Creative Industry Co Ltd	11,523.00	05/15/2025	06/25/2025	Procurement of 15 telehealth kits

Contracting Firm	Contract Amount USD	Start Date	End Date	Brief Outline of scope of works
Omar Martinez	12,834.00	10/26/2021	08/01/2025	Installation of a water tank, maintenance of fence and tile repairs at the Central Medical Laboratory
Ramirez AC & Electrical	5,448.44	03/03/2024	06/09/2025	Installation of four 12000 BTU inverter air conditioning units at Central Medical Laboratory
Carpet Care Plus	6,876.50	07/19/2024	04/25/2025	Deep/comprehensive cleaning of the Central Medical Laboratory facility after completion of works for return of staff to its full functioning capacity
Carpet Care Plus	6,340.45	10/19/2024	05/30/2025	Mold remediation and final maintenance of tiled floor preparation for official handover of the Central Medical Laboratory
Pro Solar Engineering Ltd	748,085.44	7/17/2024	08/22/2025	Provision and installation of solar photovoltaic systems at Central Medical Laboratory and Southern Regional Hospital; and installation of batteries at Northern Regional Hospital and Punta Gorda Community Hospital.
Floyd Williams & Associates	210,199.98	8/15/2024	08/29/2025	Greening (provision and installation of solar water heaters, central air conditioning systems, motion and light detectors, and commercial grade low flow toilets, low flow faucets at Northern and Western Regional Hospitals
New Buildings Limited	16,726.11	7/17/2024	08/22/2025	Installation of a vertical wall mounted hydraulic 4x4 lift at the Central Medical Laboratory
Guerra's Construction Ltd	6,960.00	12/12/2024	08/31/2025	Contract to provide a one-day training in Addison Fresh Air Intake Unit at Central Medical Laboratory
Ignite Ltd	1,062.50	02/04/2025	08/29/2025	Contract to design a professional branded template, format and layout the complete EU-HSSP final report
LSosa & Associates – Environmental Consulting	7,287.00	02/22/2025	08/29/2025	Contract for application of the Hospital Safety Index and Green Checklist at six facilities.
Waight & Associates	1,250.00	05/15/2025	08/29/2025	Contract to conduct electrical revision and update for the Central Medical Laboratory's electrical design including PUC approval.

### **III. Project Evaluation**

The Final Evaluation of the HSSP assessed the relevance, effectiveness, efficiency, impact, sustainability, and visibility, identifying successes, challenges, and areas for improvement of the programme.

The Final Evaluation sought to determine whether objectives were met, and interventions were sustainable, evaluate the optimal use of resources in achieving intended outcomes, document key lessons learned and best practices, and offer recommendations for future health sector planning and reform.

A mixed-methods approach was employed, aligning with the United Nations Evaluation Group (UNEG) principles and PAHO/WHO evaluation guidelines. The evaluation was conducted between 15 January 15 and 28 February 2025, using a triangulated data collection approach, including:

- Document review of HSSP reports, epidemiological data, and government policies.
- Stakeholder consultations through in-person and virtual interviews with representatives from MoHW, PAHO/WHO, EU, healthcare providers, and civil society organizations.
- Site visits to key healthcare facilities, including Southern Regional Hospital, Punta Gorda Community Hospital, Corozal Community Hospital, and the Central Medical Laboratory.
- Quantitative and qualitative analysis of project implementation, performance indicators, and stakeholder feedback.

In terms of relevance, the HSSP aligned highly with Belize's national health priorities and global best practices. It addressed critical gaps in Non-Communicable Diseases (NCD) prevention, climate resilience, and digital health integration, particularly benefiting vulnerable and underserved populations.

The Final Evaluation reported that the HSSP achieved significant milestones, including:

- Facility Retrofitting: Safe, Mitigative, Adaptive, Resilient, and Transformative (SMART) upgrades were completed in 60% of the proposed facilities (Punta Gorda, Corozal, and Southern Regional Hospitals) and almost completed in the Central Medical Laboratory, improving disaster resilience and service delivery.
- Health System Strengthening: Development of an Integrated Care Model (ICM) improved primary healthcare services.
- Structure, organization and management of the health system: A National Nutrition Policy and NCD prevention programs were implemented.
- Digital Health Advancements: The Clinical Data Exchange Platform (CDEP) was developed, improving data interoperability.

However, challenges throughout the programme included delays in procurement, administrative bottlenecks, and varying levels of stakeholder engagement, affecting the pace of implementation. Nonetheless, the project demonstrated financial and operational efficiency, though procurement delays and budget reallocations were experienced. Rising construction materials and labour costs, and contractor selection difficulties impacted timelines, requiring adaptive management strategies, which were successfully implemented.

The Final Evaluation notes that although it is difficult to assess the impact of the HSSP on health outcomes strictly due to the small window of time since the interventions, it is possible to identify impacts in health service delivery. The evaluation found that improvements in healthcare infrastructure enhanced climate resilience and emergency preparedness, increased hospital capabilities (especially for surgery), and reduced patient referrals. HSSP also strengthened policy frameworks, including the National Nutrition Policy and Integrated Care Model.

Finally, the evaluation highlighted that sustainability prospects vary and are subject to contextual changes. On the one hand, institutionalized training programs and policy reforms have strong potential for long-term impact. However, there are important challenges. For example, facility maintenance funding gaps could limit the longevity of SMART hospital upgrades, and digital health governance needs further investment and refinement of technical and legal details to ensure CDEP's full adoption.

### IV. Logframe MATRIX Health Support Programme Belize (FED/2015/039-232)

Overall objective / Impact Horizon 2030: "Belize is a country of peace and tranquility, where citizens live in harmony with the natural environment and enjoy a high quality of life. Belizeans are energetic, resourceful and independent people looking after their own development in a sustainable way."

**Growth and Sustainable Development Strategy (GSDS 2016-2019):** "Achieving a better quality of life, for all Belizeans, living now and in the future."

	Results chain	Indicators	Baseline (1 March 2017)	Current value 31st August 2025	Targets (9 Sept 2025)	Sources and means of verification	Assumptions
	To contribute to high performing and improved health services for the better health and well-being of the population.	% of the population with equitable access to health	60%	100%	100%	MoHW Planning Unit	GoB increases budgetary support to the health sector.
Specific objective /		% of inequities (sex/ age disaggregation)	40%	10%	20%	MoHW Planning Unit	No major natural disasters during project cycle.
Purpose		Common NCDs rate	30%	25%	10%	MoHW reports	Funding exchange rate remains constant.
		% of population covered by disaster resilient and energy efficient health facilites	20%	100%	100%	MoHW Planning Unit	No major epidemic during project cycle.

	Results chain	Indicators	Baseline (1 March 2017)	Current value 31st August 2025	Targets (9 Sept 2025)	Sources and means of verification	Assumptions
	Specific Objective 1: Efficient, effective and disaster resilient health facilities.	1.1 No. of regional hospitals that comply with Hospital Safety Index	0 Assessment of DFID / PAHO on SMART and green facilities	0 Regional Hospital	2 hospitals with A70 rating	NEMC Annual Report HSI and BAT Repeat HSI and Green assessment	Readily available contractors and consultants
Expected Results/		1.2 No. of community hospitals that comply with Hospital Safety Index	O Assessment of DFID / PAHO on SMART and green facilities	0 Community Hospitals	2 community hospitals with A70 rating	NEMC Annual Report  HSI and BAT Repeat  HSI and Green assessment	
Outcomes		No. of health facilities with BAT and SMART toolkit	26 (provisional)  Assessment of DFID / PAHO on SMART and green facilities	53	50 (final)	MoHW and PAHO	
		1.3 Status of Multi Hazard Plan and disaster response teams trained (disaggregated by sex)	0% Health Region training	100%	MHP designed and 100% of disaster response teams trained	Health Region training file	Availability of BTL services for the extreme rural communities

	Results chain	Indicators	Baseline (1 March 2017)	Current value 31st August 2025	Targets (9 Sept 2025)	Sources and means of verification	Assumptions
		2.1 No. of health facilities included in the BHIS	28 facilities connected BHIS register	53 facilities (all) connected to BHIS	90% of health facilities connected BHIS register	BHIS register  MoHW reports	
		2.2 Status of Information system	BHIS delivers basic services in selected hospitals	Achieved. BHIS updated. Transitioning to ICD11	BHIS with new modules, improved IT infrastructure, and functional	BHIS register  MoHW reports	
Expected Results/	Specific Objective 2:  Health information system strengthened in collaboration with an organized surveillance system.	2.3 Status of Cancer Registry	0	Cancer registry incorporated into CDEP	1 registry established	Registry  MoHW reports	
Outcomes		2.4 No. of health management teams / staff trained in: a) BHIS	0	4	4	MoHW reports	
		b) Surveillance and epidemiology	5 basic Cohorts  1 Intermediate Cohorts	5 Basic Cohorts 3 Intermediate Cohorts	5 Basic Cohort 5 Intermediate Cohorts	Training certifications, operational registry	
		c) Integrated Delivery Network (IDC 10)	0	BHIS uses ICD10, transitioning to ICD11. 90% of facilities use BHIS	50%	Post-test training result	

	Results chain	Indicators	Baseline w(1 March 2017)	Current value 31st August 2025	Targets (9 Sept 2025)	Sources and means of verification	Assumptions
		3.1 Status of Integrated Health Service Delivery Network, disaggregated by regions, including primary care services	0 Not available	100%	HSDN in 70% of all primary care facilities	MoHW reports PAHO reports	Availability of human resource for health
Expected Results/	Specific Objective 3: Structure, organization and management of health services strengthened	3.2 Health system re-organised with improved efficiencies and organizational management	0 Not available	5-Achieved. New National Health Strategic Plan 2025-2034 and Operational Plan 2025-2026 implemented	5-Fully.New structure approved and implemented; efficiency index designed with regular reports	MoHW reports  PAHO reports (HRH Plan, Operational Plan, Strategy)	
Outcomes		3.3 Status of National Nutrition Policy	0 Not available	Achieved	NP approved and promoted	MoHW reports PAHO reports	
		3.4 Training in results- base management, strategic planning, and program budgeting and Monitoring and Evaluation system	0 MoH and PAHO reports 2016	100%	90% of regional management teams, technical advisors and senior management	MoHW reports PAHO reports	

### **Activities under SO1**

- 1) SMART Facility Base Assessment Tool completed for 50 health facilities and final design for works and tender dossiers elaborated.
- 2) Tendering of supervision of works.
- 3) Upgrade of Northern Regional, Southern Regional and Western Regional Hospitals.
- 4) Upgrade of Punta Gorda and Corozal Community Hospitals.
- 5) Upgrade and retrofitting of Central Medical Laboratory.
- 6) Develop a health facility preventive maintenance plan.
- 7) Create an electronic repository system for the digitalization of facility assessments, infrastructure designs, etc. for information storage and sharing.
- 8) Develop a Multi-Hazard Plan and training for health teams in disaster preparedness.
- 9) Gender responsive capacity building of MOH staff and disaster response teams.
- 10) Training of NEMC and regional maintenance staff in preventive maintenance.

**Main activities** 

### **Activities under SO2**

- 1) Upgrade of the Belize Health Information System with laboratory, public health and electronic clinical records modules.
- 2) Expand Belize Health Information System to rural facilities.
- 3) Develop a Cancer Registry.
- 4) Develop M& E indicators within the BHIS.
- 5) Training for surveillance and data system.

### **Main activities**

### **Activities under SO3**

- 1) Develop an Integrated Care Model for service delivery focusing on gender responsive primary care services.
- 2) Develop a National Nutrition Policy
- 3) Health promotion and education for risk factor reduction and preventing NCDs.
- 4) Assess the Health Sector Reform and reorganize the organizational structure.
- 5) Training in results-based management, strategic planning, and program budgeting.
- 6) Design and implement a Monitoring and Evaluation System for the health sector.

# HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT September 2018–September 2025

# FINANCIAL OVERVIEW



## I. Project Budget

	SEPTEMBER 2018 (Contract signed)	JUNE 2020 (Addendum 1 signed)	MARCH 2021 (Addendum 2 signed)	SEPTEMBER 2024 (Addendum 3 signed)	MARCH 2025 (Addendum 4 signed)
Strategic Objectives (SO) covered by PAHO	2/3: (SO1) SMART Health Facilities and (SO2) Health Systems Strengthening	2/3: (SO1) SMART Health Facilities and (SO2) Health Systems Strengthening – Funds reallocated from SO1 to support COVID-19 response	3/3: Transferred (SO3) CDEP/Info Systems for Health (IS4H) Strengthening to PAHO	3/3: (SO1) SMART Health Facilities, (SO2) Health Systems Strengthening, (SO3) CDEP	2/3: (SO1) SMART Health Facilities, (SO2) Health Systems Strengthening
Duration	60 months (48 mos. Implementation + 12 mos contingency, 2018 – 2023)	60 months (48 mos. Implementation + 12 mos contingency, 2018 – 2023)	72 months (60 mos. Implementation + 12 mos contingency, 2018-2024)	75 months 9 days (63 months implementation; 2018 – 9 March 2025)	81 months 9 days
Total Budget	EU: <b>€6,800,000</b>	EU: <b>€6,800,000</b>	EU: <b>€8,800,000</b>	EU: <b>€8,800,000</b>	EU: <b>€8,800,000</b>
	PAHO: <b>€772,800</b> (in-kind)	PAHO: <b>€772,800</b> (in-kind)	PAHO: <b>€966,000</b> (in-kind)	PAHO: <b>€995,100</b> (in-kind)	PAHO: <b>€995,100</b> (in-kind)

Figure 1 - CONTRACT FED/2018-399-318 PAHO NATIONAL VOLUNTARY CONTRIBUTION GRANT 049121

#### **Financial Implementation**

From the initially approved budget of EUR 6,800,000.00 at the inception of the HSSP, the programme received its first disbursement of EUR 2,700,000 in December 2018 to commence implementation. In June 2020, Amendment 1 was approved, authorizing the reorientation of a portion of funds to support the COVID-19 Emergency Response, ensuring the programme's responsiveness to emerging national health priorities. Subsequently, in March 2021, Amendment 2 was endorsed, which secured an additional allocation of EUR 2,000,000.00, introduced Strategic Objective 3 (SO3) to facilitate the procurement, installation, and operationalization of the Central Data Exchange Platform (CDEP) for the Ministry of Health and Wellness, and extended the implementation period from 60 to 72 months to accommodate these expanded activities.

Following these amendments, a second tranche of EUR 4,603,823.69 was disbursed in October 2021, further accelerating programme execution. This was followed by a third disbursement of EUR 816,176.31 in March 2024, bringing the cumulative disbursed funds to 92.27 percent of total financing. In October 2024, PAHO advanced an additional USD 765,401.74 to sustain implementation, representing the projected balance of the final contribution. In response to evolving programme needs, Amendment 3 was approved in September 2024, extending the implementation period to 75 months and 9 days and introducing necessary budgetary realignments, while Amendment 4 subsequently extended the duration further to 81 months and 9 days to ensure the completion of key deliverables.

As of 8 August 2025, the programme achieved an impressive 98.6 percent financial implementation rate against the approved budget, demonstrating efficient resource utilization and sound fiduciary oversight. Based on current projections, it is anticipated that approximately 1 percent of the approved budget will remain unutilized, primarily attributable to cost savings generated through strategic procurement and realignments during implementation. This

level of absorption reflects disciplined fiscal management and robust alignment of expenditures with programme priorities.

The high execution rate is indicative of strong fiduciary oversight mechanisms, prudent reallocation where appropriate, and sustained collaboration with national counterparts to ensure that budgetary resources were channeled towards interventions of highest strategic value, based on continuous revisions of the programme's workplan.

Notably, the project's financial momentum was reinforced in the final year through the completion of greening components, including the installation of strategic solar photovoltaic (PV) systems across multiple SMART health facilities and the Central Medical Laboratory. These investments underscore the programme's commitment to sustainability, energy resilience, and cost efficiency in the health sector.

An official final financial statement will be issued after the closure of the project.



# HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT September 2018–September 2025

# CHALLENGES AND LESSONS LEARNED



The Health Sector Support Programme (HSSP) in Belize achieved significant milestones across infrastructure resilience, health system reforms, digital transformation, and emergency pandemic response. However, the project encountered challenges and risks inherent to complex, multisectoral initiatives. This report synthesizes these obstacles, their implications, and the lessons learned to inform future health sector interventions.

#### I. Challenges

## 1. Specific Objective 1 (SO1): Infrastructure and Resilience

- Pandemic-Induced Delays: The COVID-19 outbreak in 2020 disrupted global and local supply chains, in turn resulting in delayed retrofitting works at Punta Gorda, Corozal, and Southern Regional Hospitals, as contractor selection was hampered due to difficulties in identifying suitable contractors and obtaining qualified bids.
- Legacy Infrastructure Limitations: Older facilities, such as the Central Medical Laboratory (CML), Western Regional Hospital (WRH) and the Northern Regional Hospital (NRH) required extensive modifications to meet SMART Hospitals' standards, including outdated electrical, drainage and ventilation systems, thereby deterring potential contractors from submitting qualified bids due to the uncertainty of scope of legacy infrastructure concerns.

- Capacity Gaps: Limited local expertise in disaster-resilient construction techniques slowed implementation, deterred bidding and necessitating repeated training for maintenance staff.
- Budget Overruns: Unanticipated structural repairs (e.g. structural reinforcements) e.g. at Southern Regional Hospital (SRH) and increased costs of materials, services and goods post-pandemic, saw increased costs in many instances.
- Sustainability Concerns: Without continuous funding and continued capacity development, maintenance risks become prominent post-project.

## 2. Specific Objective 2 (SO2): Health System Reform

- Fragmented Governance: Historical fragmentation in health sector reforms complicated stakeholder alignment, delaying the National Nutrition Policy's approval until 2023.
- Resource Allocation Inequities: Rural areas faced persistent workforce shortages, undermining the HEARTS Initiative's rollout in remote districts like Toledo.
- Policy Resistance: Some clinicians resisted adopting standardized diabetes management guidelines, citing workflow disruptions.
- Non-Adoption of Reforms: Development of national strategic plans and policies faced skepticism from policymakers due to unclear funding mechanisms.

 Donor Dependency: Over-reliance on external funding for NHI expansion threatens long-term financial sustainability.

## 3. Specific Objective 3 (SO3): Digital Health Transformation

- Interoperability Issues: Legacy systems required updated support to integrate with the new Clinical Data Exchange Platform (CDEP).
- Data Security Concerns: Stakeholders raised alarms about patient privacy during CDEP's integration with civil registration databases.
- User Resistance: Healthcare workers in rural clinics resisted transitioning from paper-based records to digital systems due to limited IT literacy.
- Sustainability of Training: Without refresher courses, staff proficiency in CDEP analytics tools could decline post-project.

#### 4. COVID-19 Emergency Response (2020-2022)

- Rapid Resource Reallocation: Redirecting funds to pandemic response significantly delayed SO1 and SO2 activities.
- Supply Chain Bottlenecks: Global PPE and infection control equipment shortages delayed the procurement of autoclaves for medical waste management.

- Workforce Burnout: Community Health Workers faced dual pressures of COVID-19 outreach and routine health focused initiatives.
- Service Disruptions: Overburdened facilities risked neglecting routine health focused initiatives during lockdowns.
- Communication Gaps: Campaigns required translation in multiple indigenous languages, adding additional complexity to communication activities.

#### II. Lessons Learned

#### 1. Adaptability in Crisis Management

- Pandemic Pivot: The project's flexibility in reallocating funds to COVID-19 diagnostics and telehealth preserved service continuity. Hybrid training (virtual and in-person) maintained CHW capacity-building during lockdowns.
- Lesson: Embed contingency planning in project design to address unforeseen disruptions.

#### 2. Multi-Sectoral Collaboration

- Stakeholder Engagement: SO1's success relied on partnerships with multiple stakeholders for retrofitting and technical standards. Similarly, SO2's Nutrition Policy required input from the agriculture and education sectors.
- Lesson: Formalize cross-sectoral governance structures early to align priorities and mitigate resistance.

## 3. Sustainability Through Local Capacity Building

- Training Investments: Training 350 CHWs in NCD management created a self-sustaining network for post-pandemic health promotion.
- Lesson: Pair infrastructure investments with longterm training programmes to ensure institutional knowledge retention.

#### 4. Equity-Driven Approaches

- Rural Focus: Solar energy systems at Punta Gorda Hospital addressed disparities in resource access.
- **Lesson**: Prioritize technologies and policies that bridge urban-rural divides in service delivery.

#### 5. Data-Driven Decision-Making

- CDEP's Role: Real-time analytics enabled rapid pandemic resource allocation and informed hypertension screening campaigns. The use of the CDEP will enhance evidence-based decision making.
- Lesson: Invest in interoperable data systems to enhance responsiveness to emerging health threats.

## 6. Mitigating Technical and Financial Risks

 Phased Implementation: CDEP's pilot testing identified implementation issues early, allowing for iterative improvements to support a robust national rollout.

- Lesson: Adopt phased approaches for high-risk projects or activities to minimize large-scale failures.
- Domestic Resource Mobilization: The Fiscal Space Study informed Belize's shift toward domestic funding for NHI, reducing donor dependency.
- Lesson: Integrate financial sustainability analyses into policy development stages.

### HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT

September 2018-September 2025





This report presents a comprehensive narrative of the implementation of the HSSP over the past seven years (2018-2025), detailing its key activities, achievements, challenges, and impacts, in addition to highlighting a three-year COVID-19 Emergency Response implemented from 2020 to 2022, which strategically redirected resources to strengthen pandemic response capabilities while preserving critical healthcare functions. By documenting this experience, the report aims to provide valuable insights for stakeholders involved in health system strengthening in Belize and potentially offer lessons learned for similar initiatives in comparable contexts.

The HSSP has successfully enhanced Belize's healthcare infrastructure, governance, and digital health capabilities. The project's comprehensive approach—integrating facility upgrades, policy reforms, digital transformation, and emergency response—has positioned Belize ahead in healthcare resilience and sustainability.

To ensure the long-term impact of these initiatives, the following sustainability measures were noted:

- Institutionalize Maintenance Programmes: Ensure ongoing training for facility maintenance staff and integrate long-term upkeep into government budgets.
- Expand Digital Health Systems: Continue developing the CDEP to integrate additional health programmes and facilitate real-time patient data access across all health facilities.
- Strengthen Financial Mechanisms for Universal Health Coverage (UHC): Build on NHI costing studies to develop sustainable financing strategies for healthcare expansion.
- Scale Up Community-Based Healthcare Initiatives: Continue investing in CHW training and expanding their role in disease prevention and early detection.
- Enhance Disaster Preparedness and Climate Adaptation Strategies: Incorporate lessons learned from health facility retrofitting into broader national health security policies.

The project's achievements serve as a foundation for the next phase of Belize's healthcare evolution. By institutionalizing strategic reforms and fostering continued stakeholder collaboration, Belize is well-positioned to sustain and expand its progress in delivering resilient, efficient, and equitable healthcare services for all.

# HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT September 2018–September 2025



The preparation of this final report was informed by a thorough review of:

- Project Annual Reports (Years 1 to 6)
- Project Evaluation Report
- Results-Oriented Monitoring (ROM) Report

These documents, alongside other relevant project records and data, provided critical insights and a foundation for the analysis and conclusions presented in this report.

## HEALTH SECTOR SUPPORT PROGRAMME BELIZE FINAL REPORT

September 2018–September 2025



- Essential Public Health Function Capacity Assessment Report
- Human Resources for Health Policy
- Belize Health Sector Strategic Plan 2025-2034
- Belize National Nutrition Policy
- Belize Mental Health Policy
- Project Evaluation Report







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