PRIMARY HEALTH CARE SYSTEM IN SOLOMON ISLANDS

A PRIMARY HEALTH CARE PERFORMANCE INITIATIVE ASSESSMENT

LUCY HARTSHORN · CAITLIN NOONAN · AWA DIALLO · CAMERON FEIL · WAYNE IRAVA · ERNEST MAE
PRISCILLA TOTOREA · PAUL KUNUA · BRIAN IDUFANOA · MICHAEL MIKE · MANUELA VILLAR URIBE

WORLD BANK GROUP
Health, Nutrition & Population

phcpi

PRIMARY HEALTH CARE SYSTEM IN SOLOMON ISLANDS

A PRIMARY HEALTH CARE PERFORMANCE INITIATIVE ASSESSMENT

LUCY HARTSHORN · CAITLIN NOONAN · AWA DIALLO · CAMERON FEIL · WAYNE IRAVA · ERNEST MAE
PRISCILLA TOTOREA · PAUL KUNUA · BRIAN IDUFANOA · MICHAEL MIKE · MANUELA VILLAR URIBE

Report prepared by the World Bank in consultation with
the Ministry of Health and Medical Services, Solomon Islands.

CONTENT

Acknowledgements 6

Abbreviations 7

Executive Summary 9

Introduction 17

Key findings from the VSP assessment 29

Performance 30

- Access 30
- Service Coverage 31
- Quality 35

Equity 40

Capacity 41

- Governance 42
- Inputs 55
- Population health and facility management 64

Financing 71

Recommendations 75

Appendices 101

Appendix A. Performance Domain 102

Appendix B: Capacity Domain 103

Appendix C. PHCPI Framework 104

Appendix D. Recommendations Based on Solomon Islands VSP 105

Appendix E. Implications of the Recommendations for Stakeholders 108

Appendix F. Progression Model Participants **110**

Appendix G. Progression Model Documents Reviewed **114**

References **118**

LIST OF FIGURES

Figure 1. Under-five and neonatal mortality rates, Solomon Islands (2000-2020) 18

Figure 2. Life Expectancy and Healthy Life Expectancy in Solomon Islands from 2000 to 2019 20

Figure 3. Top 10 Causes of Deaths per 100k in 2019 and Rate Change 2009–2019, All Ages Combined 21

Figure 4. Solomon Islands Vital Signs Profile 27

Figure 5. ANC (4 or More) Visits by Province, 2021 33

Figure 6. Tuberculosis Treatment Success by Province, 2021 34

Figure 7. Percentage of Facilities Reporting the Provision of Key Components of ANC 37

Figure 8. Health Facilities with Basic Functioning Water Supply, Sanitation Service, Hygiene, and Waste Management, 2021 39

Figure 9. Under-five Mortality by Province, 2021 41

Figure 10. Proposed MHMS Organizational Structure, National Level 45

Figure 11. Facilities without Reported Stockouts of Drugs and Consumables 55

Figure 12. Completeness and Timeliness of Facility HMIS Reporting 59

Figure 13. Number of Outreach Activities by Zone 67

Figure 14. Changes in Health Expenditure by Revenue Source in the Solomon Islands, 2000–2020 73

LIST OF TABLES

Table 1. Service Coverage of RMNCH, Infectious Disease, NCDs, and Nutrition. 31

Table 2. Solomon Islands Legal Framework and Laws Related to Primary Health Care 43

Table 3. Recommendations by Priority Level and Time Horizon. 76

LIST OF BOXES

Box 1. Overview of NCD Strategic Plans and Policies in Solomon Islands 44

Box 2. Overview of Roles and Responsibilities of Coordinating Authority in NCD-Related Implementation in Solomon Islands 46

Box 3. Overview of Clinical Management of NCDs in Solomon Islands 47

Box 4. Overview of Multisectoral Actions for NCDs in Solomon Islands. 49

Box 5. Overview of NCD Service Monitoring and Disease Surveillance in Solomon Islands 51

Box 6. Deep Dive into Governance and Gender 53

Box 7. Deep Dive into Inputs and Gender 63

Box 8. Deep Dive into Population Health and Facility Management and Gender 70

ACKNOWLEDGEMENTS

This report presents the key findings of the Primary Health Care Performance Initiative (PHCPI) assessment in Solomon Islands, which was completed by World Bank teams led by Manuela Villar-Uribe and Wayne Irava in collaboration with the Ministry of Health and Medical Services of Solomon Islands. Qualitative data collection and analysis was led by Lucy Hartshorn with support from Ronney Kenitahana. Caitlin Noonan oversaw quantitative data analysis and curation. Lucy Hartshorn led report writing and coordination, and Caitlin Noonan, Awa Diallo, and Cameron Feil provided writing support. Laura Dodge provided editorial support. Diego Hernan Vapore provided design support. Baldeep Dhaliwal, Michael Mike, Marwa Ramadan, and Valeria Cruz Villaba also provided critical input at different phases of the assessment.

The team is grateful for the outstanding leadership, support, and guidance provided by the following PHCPI focal points (listed alphabetically) from the Ministry of Health and Medical Services, Solomon Islands: Brian Idufanoa (Chief Planning Officer), Paul Kunua (Partnership Coordination Unit Manager), Ernest Mae (Chief Policy Officer), Priscilla Totorea (Principal Planning Officer).

The team is grateful to the members of the High-Level Committee of the Ministry of Health and Medical Services, Solomon Islands: Pauline Mcneil (Permanent Secretary), Dr. Nemia Bainivalu (Deputy Secretary Health Improvement), Dr Gregory Jilini (Deputy Secretary Healthcare), Ivan Ghemu (Director Planning and Policy), Michael Larui (National Director of Nursing), and Dr. George Wilson Malefoasi (Chief Executive Officer, National Referral Hospital). These members served as the Steering Committee for the PHCPI assessment and provided valuable input and support for the assessment's success. The team also thanks the key informants interviewed for their time and contributions, without which this assessment would be incomplete.

The team wishes to acknowledge the passing of Ronney Kenitahana, whose invaluable contributions and dedication contributed to the body of evidence that forms the foundation of this final report.

ABBREVIATIONS

AHCs	Area Health Centers
ANC	Antenatal Care
AOP	Annual Operational Plans
ART	Anti-Retroviral Treatment
AYF	Adolescent and Youth-Friendly
CHW	Community Health Worker
CRVS	Civil Registration and Vital Statistics
DALY	Disability-Adjusted Life Year
DHIS2	District Health Information Software 2
DHS	Demographic and Health Survey
DPT3	Diphtheria-pertussis-tetanus, third dose
DRF	Drug Revolving Fund
DTP	Diphtheria, Tetanus, Pertussis
DWEs	Direct Wage Employees
EML	essential medicines list
FMIS	Financial Management System
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GGHE	General Government Health Expenditure
HFRSA	Health Facility Readiness and Service Assessment
HIS	Health Information System
HIV	Human Immunodeficiency Viruses
HMIS	Health Management Information System
HVPs	Healthy Village Promoters
IDSR	Integrated Disease Surveillance and Response
IHME	Institute for Health Metrics and Evaluation
MCH	Maternal and Child Health
MHMS	Ministry of Health and Medical Services
MOH	Ministry of Health

MSAP	National Multisectoral Action Plan
MWYCFA	Ministry of Women, Youth, Children, and Family Affairs
M&E	Monitoring And Evaluation
NCD	Noncommunicable Disease
NGO	Nongovernmental Organization
NHSP	National Health Strategic Plan
OOPS	Out-of-Pocket Spending
ORS	Oral Rehydration Salts
PHC	Primary Health Care
PHCPI	Primary Health Care Performance Initiative
PLHIV	People living with HIV
PMTCT	prevention of mother-to-child transmission of HIV
PPP	Purchasing Power Parity
PSC	Public Service Commission
RDP	Role Delineation Policy
RHCs	Rural Health Centers
RMNCH	Reproductive, Maternal, Newborn, and Child Health
SARA	Service Availability and Readiness Assessment
STI	Sexually Transmitted Infections
TB	Tuberculosis
UHC	Universal Health Coverage
UHCs	Urban Health Centers
VSP	Vital Signs Profile
WHO	World Health Organization

EXECUTIVE SUMMARY

This report presents the findings of the Vital Signs Profile (VSP) assessment conducted by the World Bank and the Primary Health Care Performance Initiative (PHCPI) in collaboration with Solomon Islands' Ministry of Health and Medical Services (MHMS). The VSP provides an opportunity to assess the state of the primary care system in Solomon Islands, highlighting areas of strength and challenges through the lens of the PHCPI framework. The framework organizes various domains and subdomains of primary health care (PHC) through a logic model approach that encompasses the traditional inputs and output of primary care systems and emphasizes the capacity and processes of PHC service delivery and performance (Bitton, et al. 2017). Notably, while PHCPI recognizes the role of social determinants of health and intersectoral health promotion and prevention efforts as important factors influencing population health, the VSP is primarily focused on aspects of health service delivery.

PHC performance is evaluated in terms of access, coverage, and quality. Access to care is vital for a high-performing PHC system and reducing financial and geographic barriers is a priority. However, there is a lack of information on barriers to care in the Solomon Islands, highlighting the need for further efforts to better understand the factors influencing access, particularly for vulnerable populations. Service coverage is assessed for reproductive, maternal, neonatal, and child health (RMNCH), infectious diseases, and non-communicable diseases (NCDs). There have been slight declines in RMNCH service coverage since 2015, particularly in demand for family planning satisfied with modern methods and DPT3 vaccination, while care-seeking for suspected child pneumonia has increased. Tuberculosis (TB) detection requires improvement while TB treatment among detected cases is high. Human Immunodeficiency Viruses (HIV) treatment coverage is high for the few detected HIV cases in the country, but late diagnosis remains a problem. NCD service coverage is low, especially for adults with hypertension, as only 14 percent of adults with hypertension are receiving treatment.

PHC quality measures examine health care comprehensiveness, continuity, person-centeredness, provider competence, and safety practices. Gaps in comprehensiveness are noted in infectious disease and maternal and child health services. There is a lack of information on facilities offering NCD services. HIV services are available in a limited number of facilities and not all people living with HIV (PLHIV) receive comprehensive care. Maternal and child health services are relatively available but lack certain components. TB treatment continuity is strong among diagnosed patients. Patient safety practices require improvement, particularly in infection prevention and control and waste disposal.

Equitable PHC aims to reduce disparities in health outcomes across populations. While standard VSP equity indicators on perceived financial barriers and maternal and child health services are unavailable for Solomon Islands, under-5-year-old mortality data indicates significant regional variation, highlighting potential inequities in access and coverage. Comprehensive data collection on equity is recommended to support targeted interventions.

The capacity of PHC in Solomon Islands is evaluated in terms of governance, inputs, and population health and facility management. Measures of capacity demonstrate important strengths as well as areas of opportunity related to the foundational properties that enable a system to deliver high-quality PHC. Governance measures address the governance, leadership, and adjustment to population health needs. In Solomon Islands, substantial political planning and execution from the Ministry of Health and Medical Services has contributed to a strong policy environment, directed by the 10-year National Health Strategic Plan 2022-2031. However, the lack of a clear definition of primary health care and designated leadership to coordinate fragmented PHC efforts has limited the governance of PHC. Social accountability mechanisms leverage strong working relationships across the health sector and government but are similarly limited by the ambiguity in the definition of and designated leadership for PHC. A well-

established process for priority setting through Annual Operational Plans (AOPs) helps govern the allocation of resources and could be further supported through access and use of timely data and adaptation to the needs of communities and stakeholders. The Role Delineation Policy is a seminal effort that articulates the type of services and workforce at each facility level, although limited operationalization has prevented its use in driving the quality and accessibility of PHC services.

Input measures examine the availability, quality, and equitable distribution of key system inputs including drugs and supplies, facility infrastructure, information systems, workforce, and funds. Availability of essential inputs such as drugs and supplies and diagnostics is limited in PHC facilities and there is significant room for improvement for the availability of amenities and safety equipment in PHC facilities. There have been efforts to assess and address PHC facility density and distribution, with the Role Delineation Policy (RDP) outlining optimal facility types, roles, and catchment populations. However, it has been challenging to implement. The overarching health information system in Solomon Islands, the DHIS2, is populated with data collected on a monthly from the majority of PHC facilities, although timeliness and inaccessibility of resulting analyses limit the information systems use at the facility level. The availability of health workers, particularly outside of Honiara, remains an important challenge to universal, high-quality health services. While supportive mechanisms for defining workforce competencies and ensuring the quality of the health workforce, hiring freezes within the Solomon Islands Government compound challenges in workforce shortages and uneven distribution. Systems tracking funds include budgets and a financial management information system, but their utility in PHC is limited due to a lack of disaggregation and penetration at the PHC facility level.

Population health and facility management measures assess population health management, including community outreach and the setting of local priorities, as well as facility organization and

management, including capability and leadership, information system use, performance measurement, and team-based care. Key systems and processes for population health management and facility organization and management represent an area of opportunity to drive performance improvements. Provinces play an important role in facilitating population health management within their subnational region, collating priorities for facilities and zones and overseeing much of PHC service delivery. There is, however, limited use of data and engagement with communities in population heath management activities, which can impact the effectiveness and person-centeredness of PHC services. Community health literacy compounds these problems. At the facility level, there is opportunity to enhance PHC service coverage and quality through strengthening team-based care, facility management and leadership, information systems use, and performance measurement.

The following recommendations have been developed to address the identified challenges and to support PHC revitalization efforts to achieve universal and effective PHC coverage in Solomon Islands. Considering the VSP's focus on the delivery of health services (which forms the basis of the recommendations), it is important to note that efforts to strengthen the health system must also be accompanied by efforts to strengthen equitable health promotion and prevention. There is a need to address the substantial and growing burden of NCDs and ensure sensitivity to gender needs and concerns in the delivery of services.

1. **Strengthen governance and coordination to promote comprehensive primary health care.**

   Solomon Islands could invest in strengthening PHC policy, leadership, and accountability to promote comprehensive primary health care. By developing a primary health care policy, the MHMS could define the scope and composition of PHC and facilitate political prioritization of a PHC approach. A policy for improved PHC service delivery can be supported by establishing a clear authority for PHC within

senior management of the MHMS, responsible for coordinating and overseeing PHC policies. Strong leadership enhances the effectiveness of policy planning and implementation and ensures comprehensive PHC by coordinating across units and divisions. PHC leadership should also facilitate accountability by establishing mechanisms for cross-sector and government collaboration, such as a technical working group on PHC. Solomon Islands could further institutionalize and standardize the inclusion of PHC priorities by integrating key dimensions of overarching PHC policies and strategies into the Annual Operational Plan (AOP) process and materials.

2. **Invest in integrating and emphasizing a focus on quality of care across all levels of the health system to facilitate high-performing primary health care.**

   Solomon Islands could prioritize the quality of PHC services by investing in strategies to govern, coordinate, and implement quality management infrastructure at national, subnational, and facility levels. It should develop national frameworks and management structures, including a national quality strategy, to codify national commitment to quality and the accompanying processes for continuous improvement. Additionally, the MHMS could build on and operationalize the Role Delineation Policy to establish facility and provider classifications and benchmarks. There is limited information on the quality or impact of services with which to monitor and assess PHC performance. Solomon Islands could enhance existing monitoring and evaluation frameworks by including additional indicators covering quality of care in routine Health Management Information System (HMIS) data collection and visualization through DHIS2. Furthermore, Solomon Islands would significantly capacitate its PHC system to deliver high-quality, comprehensive, PHC at the community-level by ensuring the availability of essential medicines, supplies, infrastructure, and safety standards across all PHC facilities.

By strengthening and implementing decision-making tools such as clinical guidelines and care pathways, it could improve technical quality at the facility level.

3. **Build on investments in information systems to drive quality improvements through care coordination, performance measurement, and evidence-based decision making.**

   Building on investments in information systems, Solomon Islands could leverage existing digital and paper-based information systems to improve key health system functions. Information systems are important in the development and implementation of patient-centered care management approaches, as well as for monitoring the quality and accessibility of clinical service provision. Solomon Islands could integrate PHC-oriented indicators into routine surveys and extend recent measurement and dialogue around comprehensive primary health care, such as the Vital Signs Profile assessment, from the national to the provincial level. At the facility level, Solomon Islands could integrate various data collection tools and information systems into a single tool for facility-level recording and reporting to support the use of timely and relevant information for clinical and performance improvement.

4. **Implement new people- and community-centered models of care.**

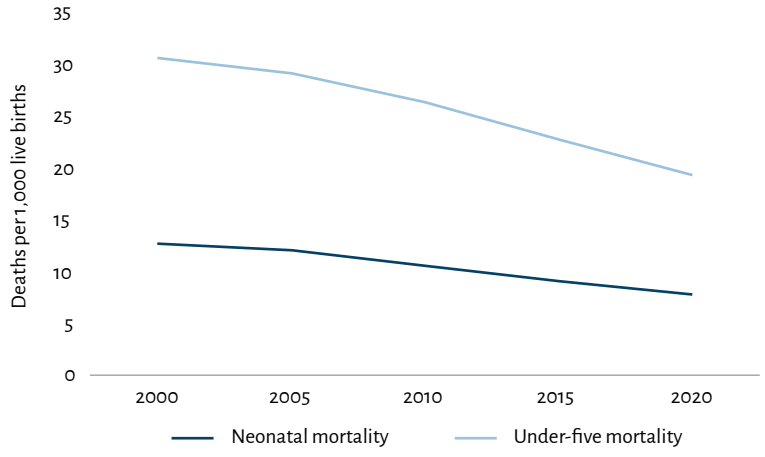
   Solomon Islands could pursue a set of strategies to implement new people- and community-centered models of care by instituting a practice of using patient panels, reinstating and institutionalizing the Healthy Village Settings work, and enhancing population outreach efforts to enable a proactive approach to PHC. The country is well-positioned to leverage its knowledge and practice of geographic catchment populations to establish patient panels at PHC facilities and an empanelment system. When health facilities empanel their assigned populations, they can better understand and plan for their

communities' health needs. Supplementing patient panels with robust systems for engagement and service delivery in the communities by reinstating and scaling of the healthy village settings approach would enhance the PHC system's ability to adapt to community health needs. Furthermore, Solomon Islands could enhance population outreach effectiveness by integrating parallel outreach activities, supplementing service delivery during outreach with community engagement and health literacy efforts and leveraging information systems for a more proactive and effective approach.

INTRODUCTION

Solomon Islands has made impressive gains in health outcomes over the past three decades. Between 1992 and 2021, Solomon Islands witnessed a decrease in under-five mortality from 37.2 deaths per 1,000 live births to 18.8 deaths per 1,000 live births. At the same time, infant mortality rates decreased from 29.7 to 16.09 deaths per live births (UNICEF 2023) (Figure 1). People in Solomon Islands are living longer, with life expectancy rising from 62.5 years in 2000 to 65.2 years in 2019 (WHO 2023). The country has continued to achieve high coverage rates in key services such as immunization. For example, in 2000, 86 percent of all children had received their third dose of the diphtheria, tetanus, pertussis (DTP) vaccine, and by 2020 this had increased to 94 percent of all children (WHO 2023). Solomon Islands is also characterized by declining rates of infectious disease. Although malaria has been one of the leading mortality causes in children and infants, rates of admission and mortality have been declining steadily since 2009 (WHO 2014; UNDP 2010). The Solomon Islands has also made impressive progress in reducing years of life lost due to premature mortality for both lower respiratory infections as well as diarrheal diseases (IMHE 2023).

Figure 1. Under-five and neonatal mortality rates, Solomon Islands (2000-2020)

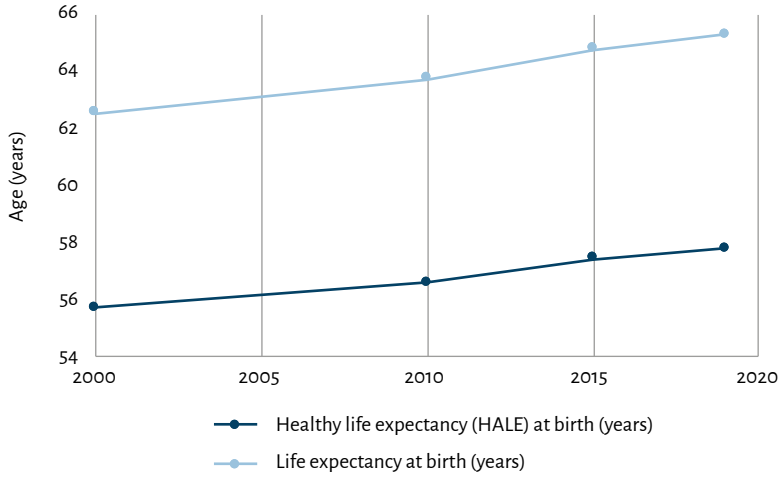


Source: UNICEF 2023.

Solomon Islands has always prioritized a primary health care (PHC) approach in delivering services to its population, although this has evolved in practice. The majority of Solomon Islanders live outside of urban areas, with 80 percent of the population distributed across approximately 150 islands (Solomon Islands National Statistics Office 2009). To address the health needs of the population while navigating the challenge of serving widely dispersed and often remote island communities, health services in Solomon Islands have long been delivered through nursing aid posts and rural health centers, which are also responsible for community outreach. In recent years, the government of the Solomon Islands has been actively pursuing the development of an integrated care program (Whiting, et al. 2016). This integrated care program has a high-level goal to improve the quality of health service delivery across all sectors, but primarily to rural populations. As part of this, integrated service delivery packages are being developed to define the clinical and public health services that should be provided at different levels of the health system. In recent years, Solomon Islands has increasingly prioritized health with an increased volume of expenditure on health, reflecting a dedication to health service delivery (WHO 2022).

These activities have partially contributed to increases in life expectancy, but the gap between life expectancy and healthy life expectancy has increased. Life expectancy at birth increased from 62.5 years in 2000 to 65.2 years in 2019 (WHO 2023). While healthy life expectancy also increased, the gap between life expectancy and healthy life expectancy, or the years when people are living longer but in poor health, increased from 6.8 years in 2000 to 7.5 years in 2019 (Figure 2). The widening gap between life expectancy and healthy life expectancy has important implications for both individual well-being and Solomon Islands' health system utilization and development with individuals living more years in ill health. PHC can play a crucial role in decreasing this gap by providing accessible and affordable preventative and curative health services.

Figure 2. Life Expectancy and Healthy Life Expectancy in Solomon Islands from 2000 to 2019



Source: World Health Organization (WHO) 2023.

Changing demographics and lifestyles, consumption patterns, and increasing population size, are contributing to large increases in non-communicable diseases (NCDs). Like other Pacific Island countries, Solomon Islands is undergoing a demographic transition, with populations living longer and increasing in urban areas. The median age of the population is 20 years, suggesting the population is fairly young (Worldometer 2023). Approximately 54 percent of the population was between 15–59-years-old, and just 5 percent of the population was 60 years old or older. While the majority of Solomon Islands' population lives in rural areas (80 percent), the urban population is growing at over twice the overall rate of population growth (UN Habitat 2023). Lifestyle changes have contributed to the growing burden of non-communicable diseases, with the top risk factors driving death and disability due to metabolic and behavioral risks (Figure 3). Four of the top five risk factors have significantly increased; the number of disability adjusted life years (DALYS) per 100,000 for high fasting plasma glucose and body-mass index increased by 1,544.5 and 845.7, respectively, and dietary risks and tobacco increased by 528.5 and 493.9, respectively, from 2009 to 2019 (IHME 2023) . NCDs are now the primary cause of disease in Solomon Islands, accounting for 67 percent of the disease burden (IHME

2023). Almost half of surgical and medical ward admissions now relate to complications arising from common NCDs, such as diabetes, cancer, hypertension, and mental health issues (Maike 2010; WHO 2015). Globally, Pacific Islands countries have the highest rates of mortality due to NCDs among persons between ages 30 and 70 years (World Bank 2023).

Figure 3. Top 10 Causes of Deaths per 100k in 2019 and Rate Change 2009–2019, All Ages Combined

- Communicable, maternal, neonatal, and nutritional diseases
- Non communicable diseases
- Injuries

Cause	2009 rank	2019 rank	Change in deaths per 100k, 2009-2019
Ischemic heart disease	1	1	↑ +17.0
Stroke	2	2	↑ +7.2
Lower respiratory infect	3	3	↓ -19.2
Diabetes	6	4	↑ +12.3
Diarrheal diseases	5	5	↓ -17.4
COPD	7	6	↓ -0.2
Road injuries	9	7	↓ -1.1
Breast cancer	23	8	↑ +11.6
Self-harm	10	9	↓ -0.4
Cirrhosis liver	12	10	↑ +0.3

Source: Institute for Health Metrics and Evaluation (IHME) 2019.

Persistent challenges remain, including those related to communicable disease, maternal and child health, and nutrition, as well as the provision of services across remote and disparate geographies. Tuberculosis continues to be a serious problem, along with other infectious diseases such as dengue fever, which can emerge suddenly. There are also other emerging (or re-emerging) health issues including threats from vector-borne diseases, pandemic flu, sexually transmitted infections, and HIV (WHO 2015). The country faces a dual challenge of providing health care to dispersed and often remote communities while also addressing the pressure of a fast-growing urban population. The rural population

(80 percent) is dispersed across nearly 150 islands, presenting resourcing, logistical, and managerial challenges in the delivery of care to remote areas.

A changing global context has important implications for health outcomes in Solomon Islands. Climate change and other environmental challenges are especially salient in the Pacific, along with the emergence of new health security threats that challenge progress. Solomon Islands was able to prevent COVID-19 from spreading until early 2022 when the outbreak began and spread to 90 percent of the country's provinces. As in many countries, it led to increasing hospitalizations and deaths and strained the healthcare system as demand for services increased while investments were diverted to stop the pandemic. In response, the Ministry of Health and Medical Services identified gaps in early warning systems, the need for better integration of emergency responses into routine health systems, and limited human resources for responses (WHO 2023b). Solomon Islands faces a range of acute to long-term risks due to climate change, including extreme weather events such as floods, droughts, and cyclones, as well as increased average temperatures, extended periods of droughts, and rising sea levels (WHO 2020). The direct and indirect effects of climate change include health impacts of extreme weather events, heat-related illnesses, coastal erosion, water shortages, salination of water supplies, depleted fishery stocks, and an increase in vector-borne diseases. These effects have health implications ranging from changes in infectious disease transmission to service delivery as health centers positioned in hazardous areas are likely to be impacted by rising sea levels.

In the face of current challenges and stagnating life expectancy, the Solomon Islands government has recognized the important role that PHC can play.

THE HEALTH SYSTEM

The predominantly publicly financed and managed health system, governed by the Ministry of Health and Medical Services (MHMS) has evolved and grown over the last several decades and is governed by the Ministry of Health and Medical Services (MHMS). The private sector also plays an important role in the health sector through nongovernmental organizations (NGOs), a smaller number of for-profit providers concentrated in urban areas, and the largely informal practitioners of traditional medicines. As defined for this assessment, the PHC system in Solomon Islands, besides being the first point of contact and where health services are provided, extends to all aspects of primary, secondary, and tertiary care, and public health, throughout the entire health system. It encompasses continuity of care, and person-centered, comprehensive, and integrated health services provided by multidisciplinary teams that are responsible for a defined population. These teams also collaborate with social services and other sectors and coordinate the contributions of hospitals, specialists, and community organizations. PHC services are delivered through the following facility types: community centres, rural health centres (RHCs), area health centres (AHCs), urban health centres (UHCs), and general hospital outpatient departments. While private facilities were acknowledged, they were not included in the analysis due to a lack of data and small overall proportion of utilization.

The health care infrastructure in Solomon Islands consists of three tiers: national, provincial, and zone. At the national level, the MHMS is organized into various departments and national health programmes, each responsible for specific aspects of healthcare, public health, and medical services and including departments for Non-communicable Disease, Health Promotion, Public Health Emergency and Surveillance, Health Information, and RMNCH, among others. Health care is delivered through the ten administrative provincial health departments, one in each of the

nine provinces and one in Honiara City Council which functions separately from MHMS headquarters. At the province and zone level, health officers are responsible for implementing and coordinating health services and play a crucial role in delivering healthcare and public health initiatives to communities. Each province oversees several zones and facilities including nursing aide posts, which provide basic care only; health centers, which provide comprehensive care; and hospitals, which provide ambulatory and inpatient care across all levels. It is important to note that hospitals deliver secondary and primary health care services through outpatient departments. The VSP assessment, however, was unable to distinguish the service delivery levels within these facilities and the assessment therefore categorized hospitals as secondary care, except for the National Referral Hospital (NRH), which is categorized as tertiary care.

WHY PHCPI?

Understanding the current state of primary health care is essential for directing improvement efforts. To enable high-quality Primary Health Care in Solomon Islands, it is important to have the data and insight into what's working, what's not, and how to drive needed improvement. More and better data about primary health care can drive health care improvement and investment. Better data lets policymakers identify gaps, steer investments, track progress, and stay accountable. Better data gives health care providers key insights to help them improve the care they deliver.

PHCPI was a global partnership dedicated to transforming the global state of primary health care. PHCPI believed that strong PHC systems are the cornerstone of sustainable development and essential for achieving UHC and that improving PHC begins with better measurement. PHCPI partners included the World Bank, Bill & Melinda Gates Foundation, World Health Organization, UNICEF, the Global Fund, Results for Development, and Ariadne Labs. The partnership was dedicated to transforming the

global state of primary health care by working closely with governments and development partners looking to strengthen PHC, helping them analyze data, and providing them with information and support they need to drive evidence-based improvements.

PHCPI developed technical tools to support countries in improving the performance of their primary health care systems. PHCPI's Conceptual Framework (presented in Appendix C) was developed to describe the critical components of a strong primary health care system (Veillard et al. 2017). The Conceptual Framework defines five core domains of a primary health care system and serves as the foundation of the initiative's activities. The framework is operationalized in the Vital Signs Profile (VSP), which provides a snapshot of PHC systems in individual countries, shining a light on where systems are strong and where they have challenges. It is designed to help countries and development partners identify priority areas for improvement and to track improvements over time.

In Solomon Islands, the Ministry of Health and Medical Services and the World Bank Group have been working together to understand and improve the primary health care (PHC) system, using PHCPI's tools. Solomon Islands is one of four Pacific countries, alongside Fiji, Kiribati, and the Republic of the Marshall Islands, who have, with the support of the World Bank, used PHCPI tools to take stock of current performance, safeguard what works well, and lay out a vision for areas requiring improvement. A VSP has been created using the latest survey data and information gathered from an extensive document review and interviews with multiple health sector actors. As such, the VSP for Solomon Islands currently includes information on the PHC system's capacity, performance, and equity, providing important insights on issues across multiple levels in the system.

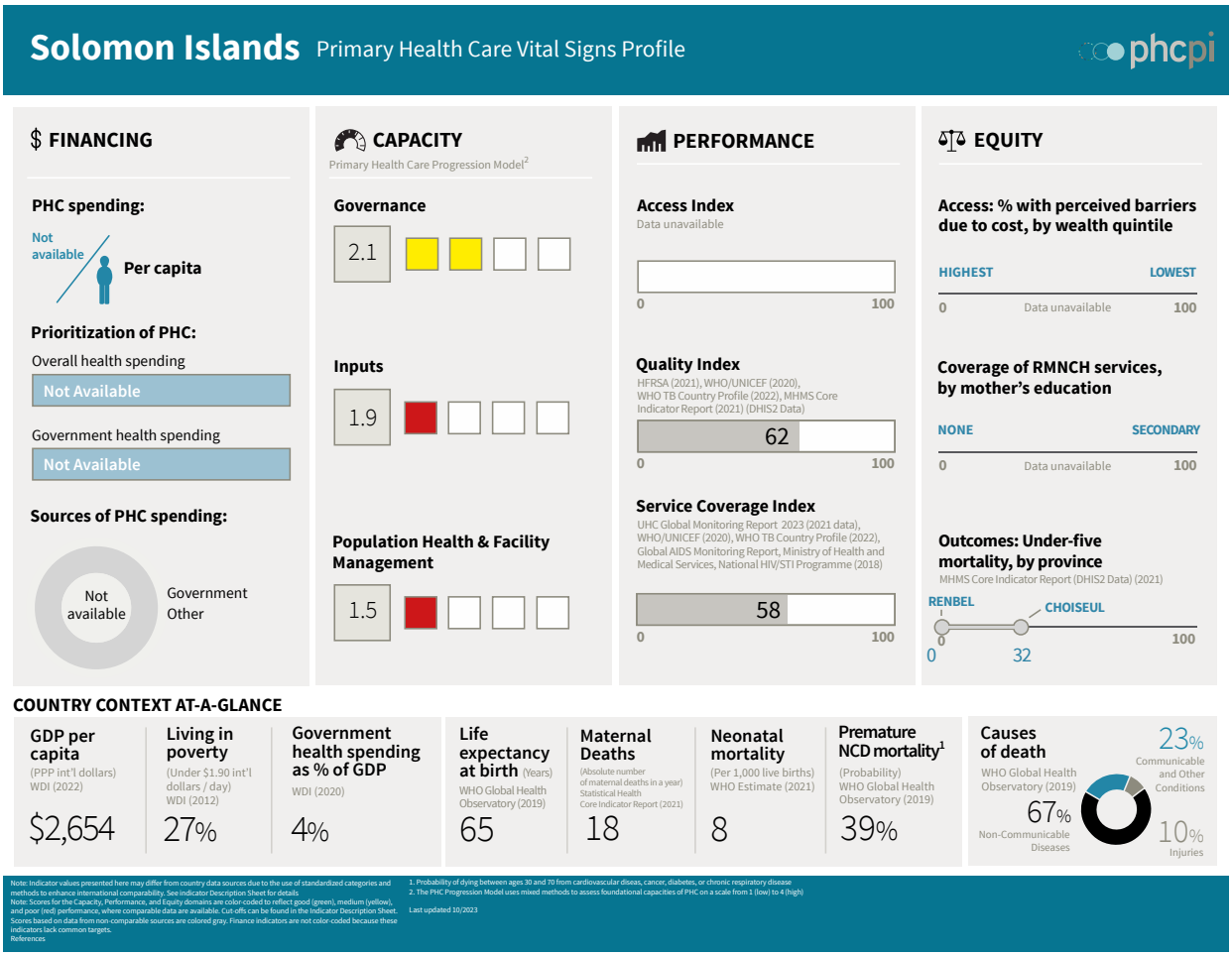
Additionally, and in support of goals to target non-communicable diseases and strengthen a gender-informed primary health care approach, Solomon Islands supplemented the standard PHCPI Vital

Signs Profile with targeted deep-dives into NCD and gender across conceptual domains. The gender deep-dive conducted a detailed investigation into the capacity and performance of the primary health care system to incorporate considerations around gender into planning and to deliver gender-sensitive services. This includes assessing (i) how national-level policies cater to the specific needs of the different genders of the population and (ii) the accessibility of gender-sensitive high-quality services at primary care facilities. The NCD deep dive aims to assess the capacity of the primary health care systems to detect, diagnose, treat, and manage NCDs and to understand the policy and planning capacities required for effective NCD management. Questions for both gender and NCD targeted deep dives were answered through a desk-review and as part of key informant interviews. The gender deep dive included the following questions: (i) do national health policies and plans incorporate gender-responsive considerations of PHC; (ii) who is accountable for managing gender issues (iii) how extensively are disaggregated or gender-responsive data used in decision-makings; (iv) do quality assurance mechanisms promote gender sensitivity in service delivery; (v) how do vulnerable population, especially women and girls, provide feedback to PHC facilities ; and (vi) how do PHC facilities ensure a non-discriminatory environment. The NCD deep dive included the following questions: (i) does the national strategic health plan include components on NCDs and or risk factors for NCD; (ii) are there clear roles and responsibilities for PHC related to NCDs; (iii) are data and evidence used to develop best practices for management of key risk factors; (iv) do policies include specific funding mechanism for NCDs in PHC; and (v) do policies and/or strategies include and monitoring and evaluation framework for NCDs.

The VSP (Figure 4) illustrates the strengths and weaknesses of Solomon Islands' PHC system and provides the foundation for actionable policy recommendations for improvement. The results are presented using the core dimensions of PHC as identified by the PHCPI VSP. Additional details on the VSP domains and corresponding results for Solomon Islands

are presented in appendices A and B. The following results have been mapped to five domains of PHC: coverage, access, equity, capacity, and financing. Each domain's performance is measured through a collection of best-practice indicators derived from selected qualitative and quantitative data sources. Presenting the findings in such a manner provides a comprehensive and nuanced analysis of Solomon Islands' PHC system. Further expansion on these results in terms of NCDs and from a gender lens is provided in callout boxes across the relevant sections. The results can be used by policymakers, donors, advocates, and citizens to better understand and ultimately improve PHC in Solomon Islands.

Figure 4. Solomon Islands Vital Signs Profile



KEY FINDINGS FROM THE VSP ASSESSMENT

PERFORMANCE

PHC performance refers to the ability of a PHC system to provide high quality services to populations in need without financial or geographic barriers. In the PHCPI framework, the performance domain consists of three sub-domains: access, coverage, and quality. The access sub-domain includes measurements of financial barriers to care and geographic hardship due to distance. The coverage sub-domain reflects the proportion of the population in need of services who receive them based on a broad range of clinical services related to reproductive, maternal, neonatal, and child health (RMNCH), infectious diseases, and NCDs. The quality sub-domain is organized around core principles proven to impact the quality of PHC service delivery including the comprehensiveness of care, continuity of care, person-centeredness, provider availability and competence, and safety practices.

ACCESS

The access domain in the PHCPI framework encompasses individuals' perspectives in receiving care; specifically, it captures whether individuals can receive appropriate primary health care when they need it without undue financial and geographic barriers. Access to care is an important PHC dimension, as primary health care must be accessible to be considered high performing. Reducing supply-side and perceived barriers to care is typically an important priority for policymakers seeking to improve PHC performance. The two standard VSP indicators for access are perceived barriers due to treatment costs and perceived barriers due to distance, typically measured through household surveys like the Demographic and Health Survey (DHS). However, there is no available, up-to-date information on barriers to care in Solomon Islands. While the 2012/13 Household Income and Expenditure Survey (HIES) reports that 35 percent of households travel more than one hour to reach their health care facility,

the data is not up-to-date and has therefore not been included in VSP scoring calculations. The lack of updated information on access highlights the need for further efforts to better understand the affordability of and distance to care, particularly for vulnerable populations[1].

SERVICE COVERAGE

The PHCPI assessment captures the coverage of RMNCH, infectious disease, and NCDs in Solomon Islands. The indicators selected to capture the effective coverage across these areas are presented in Table 1. The VSP indicators were chosen through extensive literature reviews and consultations with international experts (Veillard et al.2017). Service coverage data was collected from the 2017 and 2023 Universal Health Coverage Global Monitoring Reports, MICS 2021, the WHO TB Country Profile 2023, and the WHO Global TB Report 2017.

Table 1. Service Coverage of RMNCH, Infectious Disease, NCDs, and Nutrition

Indicator	Percentage (2015)	Percentage (2021)	Percentage point change	Source
RMNCH				
Demand for family planning satisfied with modern methods	56%	53%	↓3	UHC Global Monitoring Report (WHO and World Bank 2017, 2023)(2015, 2021 data)
Antenatal care coverage (4+ visits)	65%	65%	—	UHC Global Monitoring Report (WHO and World Bank 2017, 2023)(2015, 2021 data)
Coverage of DTP3 vaccination	98%	94%	↓4	UHC Global Monitoring Report (WHO and World Bank 2017, 2023) (2015, 2021 data)
Care-seeking for suspected child pneumonia	73%	79%	↑6	UHC Global Monitoring Report (WHO and World Bank 2017, 2023) (2015, 2021 data)

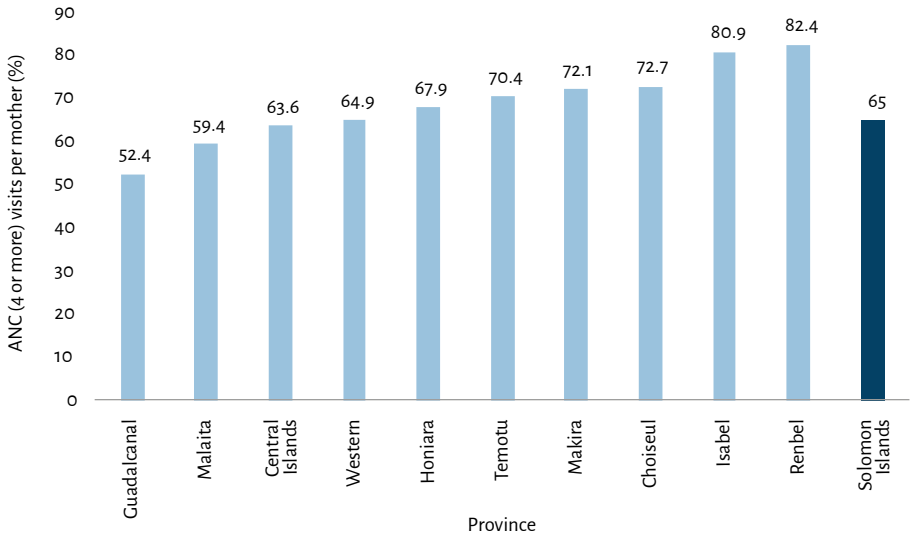
1 Solomon Islands 2012/13 Household Income and Expenditure Survey National Analytical Report (Volume I). 2015 [cited Nov 25, 2023]. Available from: https://www.ilo.org/surveyLib/index.php/catalog/7500/related-materials

Indicator	Percentage (2015)	Percentage (2021)	Percentage point change	Source
Infectious disease				
People living with HIV (PLHIV) receiving anti-retroviral treatment (ART)	—	100%[b]	—	Global AIDS Monitoring Report 2018, Ministry of Health and Medical Services, National HIV/STI Programme 2018
TB cases detected and treated with success	76%	74%	↓2	WHO TB Country Profile 2023 (2021 cases 2020 cohort), WHO Global Tuberculosis Report 2017 (2016 cases 2015 cohort)
NCDs				
Prevalence of treatment among adults with hypertension[c]	—	14%	—	UHC Global Monitoring Report (WHO and World Bank 2023) (2021 data)

Note: DPT3 = diphtheria-pertussis-tetanus, third dose; NCDs = noncommunicable diseases; RMNCH = reproductive, maternal, newborn, and child health; STI = sexually transmitted infection; TB = tuberculosis; UHC = Universal Health Coverage; — = not available.
a. Percentage of children under 5 years of age with symptoms of acute respiratory infection, for whom advice or treatment was sought.
b. Indicator value for PLHIV on ART taken from Global AIDS Monitoring Report 2018. Ministry of Health and Medical Services, National HIV/STI Programme 2018 indicating that 12 out of 12 people currently living with HIV in the country in 2018 were enrolled in ART.
c. The indicator reflects modelled estimate for prevalence of treatment (taking medicine) for hypertension among adults aged 30 to 79 with hypertension, based on age-standardized estimates. For more details see Tracking UHC: 2023 Global Monitoring Report.

The VSP assessment in Solomon Islands shows a slight decline in RMNCH service coverage since 2015. The demand for family planning satisfied by modern methods dropped from 56 percent to 53 percent, while coverage of DPT3 vaccination (diphtheria-pertussis-tetanus, third dose) also declined slightly from 98 percent in 2015 to 94 percent in 2021. Antenatal care (ANC) coverage (four-plus visits) stayed at 65 percent between 2015 and 2021. ANC coverage varied significantly across provinces from 82 percent in Renbel to 52 percent in Guadalcanal (Figure 5). Care-seeking for suspected child pneumonia, defined as the percentage of children under 5 years of age with symptoms of acute respiratory infection, for whom advice or treatment was sought, increased from 73 percent in 2015 to 79 percent in 2021.

Figure 5. ANC (4 or More) Visits by Province, 2021

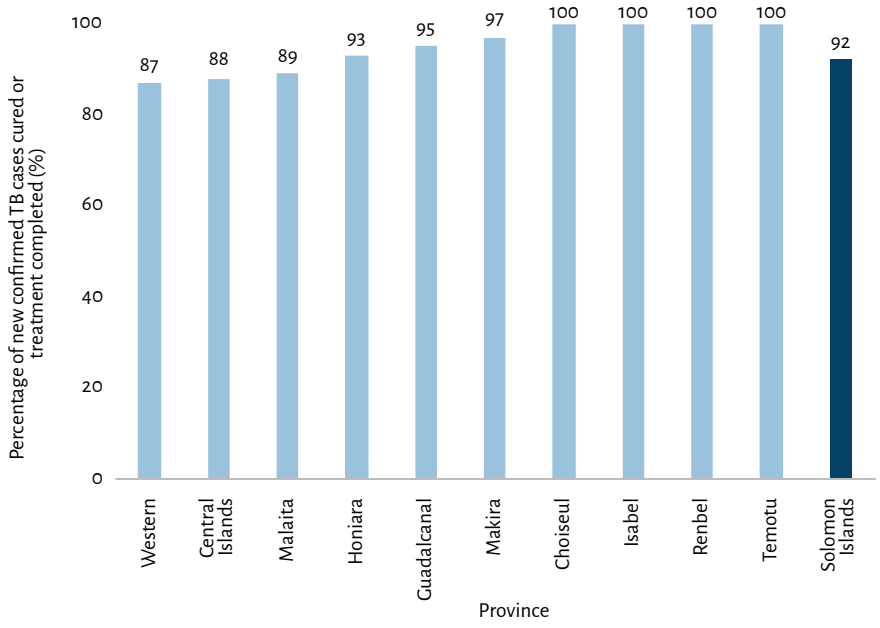


Source: Source: DHIS2 data reported in 2021 MHMS Core Indicator Report

Overall coverage for TB detection and treatment shows room for improvement, while most PLHIV have been enrolled in ART. The Solomon Islands faces challenges in the detection and treatment of TB, as the percentage of cases detected and treated has declined slightly from 76 percent in 2015 to 74 percent in 2021. Looking at this indicator by its component parts, TB case notification, defined as the total cases notified over the estimated TB incidence, was 80 percent in 2016 and 2021. Treatment success, defined as the percentage of notified TB patients who were successfully treated, decreased slightly from 94 percent in 2016 to 92 percent in 2021, emphasizing the need for improved TB detection efforts while highlighting high treatment success (Figure 6). While treatment success for TB shows promise, the total costs of TB treatment result in high rates of catastrophic spending for individuals and households. According to the WHO's Global TB Report 2022, the estimated percentage of TB patients and their households facing catastrophic costs is 92 percent, the highest among all 27 countries with reported survey data. This value indicates that much progress is needed to reach the WHO's End TB Strategy target that no TB patients and their households will incur catastrophic expenditures due to the disease (WHO 2022). Regarding HIV service coverage, the 2018

Global AIDS Monitoring Report issued by the Ministry of Health and Medical Services' National HIV/STI program indicates that 12 out of 12 people living with HIV in 2018 were enrolled in ART and had suppressed viral loads.[2] In 2016, Solomon Islands implemented a test-and-treat strategy for HIV treatment for all HIV-positive people regardless of their viral load or CD4 count. Despite the low prevalence of HIV in the country, the Ministry of Health and Medical Services notes that the risk of late diagnosis of HIV remains a problem due to low HIV testing coverage and stock-outs of HIV testing kits. For example, the Health Facility Readiness and Service Assessment (HFRSA) indicates that only 14 percent of facilities reported that point-of-care HIV testing was provided during ANC.

Figure 6. Tuberculosis Treatment Success by Province, 2021



Source: DHIS2 data reported in 2021 MHMS Core Indicator Report

2 According to the 2023 UHC Global Monitoring report, the treatment rate for HIV is 55% among people currently living with HIV based on modeled estimates. Discrepancies between country estimates and estimates from the UHC Global Monitoring report could be due to the low prevalence of HIV in the country.

The low coverage of NCD services, including the prevalence of treatment among adults with hypertension, requires significant attention as the prevalence of NCDs increases in the country. According to the 2023 UHC Global Monitoring Report, the prevalence of treatment among adults with hypertension is only 14 percent (World Health Organization, 2023). The indicator reflects the modeled estimate for prevalence of treatment (taking medicine) for hypertension among adults ages 30–79 with hypertension, based on age-standardized estimates. Low treatment coverage is increasingly important as District Health Information Software 2 (DHIS2) data indicates the number of NCD patients presenting to health facilities with hypertension has increased from 37 percent in 2017 to 42 percent in 2021.

QUALITY

In the PHCPI framework, PHC quality encompasses not only clinical quality, but also the core principles of service provision that have been shown to impact primary health care quality. These include comprehensiveness, continuity, and person-centeredness of service delivery, as well as aspects of provider competence and safety. Data on quality measures come from the UNFPA's HFRSA 2021 and the WHO Global TB Report 2022 to 2023.

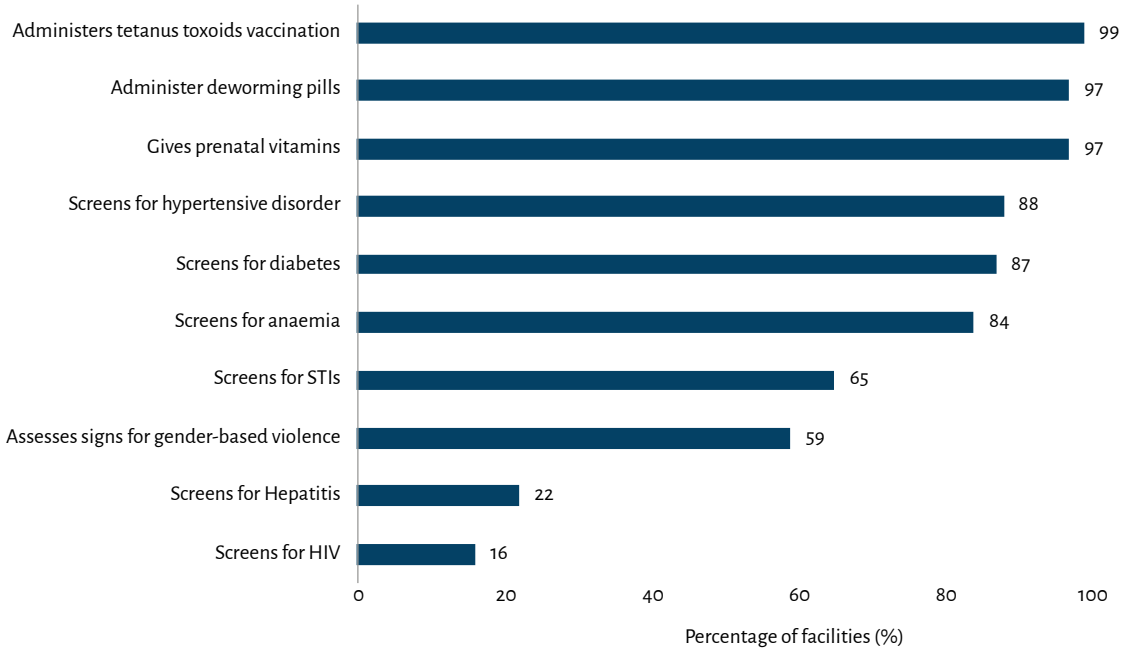
Comprehensiveness in health care entails providing holistic and suitable care across a broad spectrum of health needs, and the HFRSA survey reveals noticeable gaps in the comprehensiveness of infectious disease and maternal and child health services. The VSP methodology uses three indicators to measure the comprehensiveness of PHC service delivery: the proportion of facilities offering diagnosis and treatment for three NCD services, the proportion of facilities providing three primary infectious disease services, and the proportion of facilities offering five primary maternal and child health services. Information on the proportion of facilities offering NCD services was unavailable. For infectious diseases,

the HFRSA provided information on the proportion of facilities offering STI and HIV services but did not have information on the VSP indicator for the proportion of facilities offering TB services. A high proportion of facilities (98 percent) offer STI services, primarily for gonorrhea and syphilis. However, the availability of STI testing materials was limited as only 3 percent of facilities had available syphilis test kits. Regarding HIV, only 16 percent of facilities provide HIV/AIDS services. Breaking service provision down by facility type, HIV/AIDS services are available in 60 percent of hospitals, 34 percent of AHCs, and 9 percent of RHC/UHCs. Despite the availability of HIV/AIDS services, services for HIV-positive clients are more limited. For example, among facilities providing HIV/AIDS services, only 53 percent distribute condoms to prevent transmission of HIV, 28 percent provide treatment for opportunistic infections, and 19 percent provide ART treatment follow-up services. Although the prevalence of HIV in the country is low, with 12 cases identified and on treatment in 2018 (MHMS 2018), the Ministry of Health and Medical Services noted that the risk of late diagnosis and premature death among this population is a problem due to low HIV testing coverage. To address gaps in infectious disease service provision, the National Strategic Plan for HIV, STIs, and Viral Hepatitis 2019-2023 seeks to improve HIV, STI, and hepatitis testing services among vulnerable populations.

For comprehensiveness of maternal and child health (MCH) services, the HFRSA provided information on the proportion of facilities offering family planning, antenatal care, and prevention of mother-to-child transmission of HIV but did not have information on the VSP indicators for the proportion of facilities offering sick child and vaccination services. According to the 2021 HFRSA, 100 percent of facilities offer family planning and 96 percent offer ANC (70 percent of hospitals, 100 percent of AHCs, and 97 percent of RHCs/UHCs). Although the availability of family planning services is high, according to the HFRSA 2021, only 81 percent of facilities have providers trained in family planning, 56 percent have family planning guidelines, and 66 percent of primary level facilities have three or more

contraceptive methods in stock. Similarly, breaking the provided ANC services down shows low provision of screening for STIs, HIV, and hepatitis (Figure 7). Regarding prevention of mother-to-child transmission of HIV (PMTCT), only three facilities (all in Malaita Province) offer PMTCT services. Despite this low percentage of facilities offering PMTCT services, the 2018 Global AIDS Monitoring Report states that the country had a mother-to-child transmission of HIV rate of 0 percent from 2015-2018, with all female PLHIV receiving counselling and given information about PMTCT and family planning.

Figure 7. Percentage of Facilities Reporting the Provision of Key Components of ANC



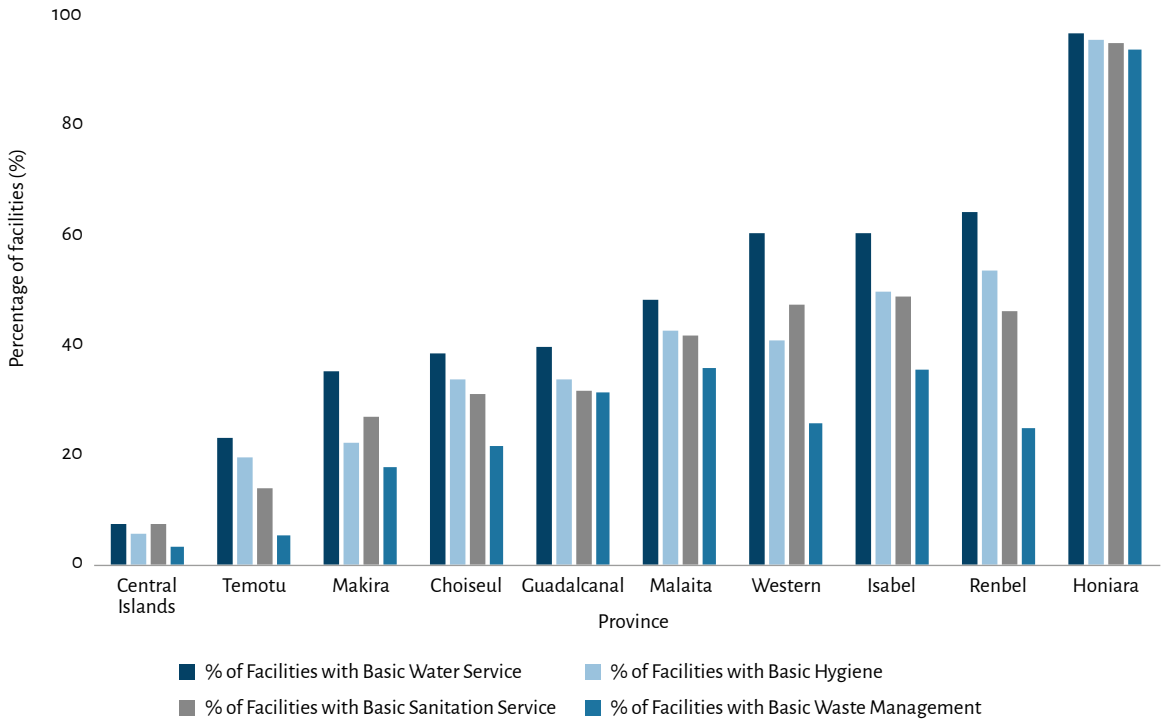
Source: HFRSA 2021

Results from Solomon Islands for show strong continuity of care for TB treatment. Care continuity assesses the extent to which patients experience a series of discrete health care events as coherent and consistent with their medical needs and personal context. The VSP uses two key indicators to gauge care continuity: the percentage of TB cases that were successfully treated, and the DPT3 dropout rate. According to the WHO Global TB Report

(World Health Organization, 2022), among the estimated 430 incident TB cases in 2022, 80 percent were notified of their diagnosis, and 92 percent underwent successful treatment. Information on DTP3 continuity, defined as the percentage of children who received their third dose of DTP after their initial dose, is unavailable.

Data from DHIS2 indicates significant room for improvement in safety practices. PHCPI uses two measures to determine patient safety at health facilities: adequate infection prevention and control and adequate waste disposal. Adequate infection prevention and control refers to the proportion of rooms (family planning, sick child, antenatal care, and NCD) where all infection control tracer items are present. The items include soap and running water or hand disinfectant, storage for sharps waste, gloves, and surface disinfectant availability. To assess infection prevention based on available information from DHIS2, a proxy indicator has been constructed to represent the average percentage of facilities with basic water, hygiene, and sanitation services. The value for 2021 was 41 percent. Figure 8 shows how the availability of basic water, hygiene, and sanitation services varies across provinces with low performance in Central Islands and high performance in Honiara. The VSP defines adequate waste disposal as the adherence to standards for disposing of medical and hazardous waste, sharps, and the availability of guidelines for waste disposal at the facility. To assess infection prevention based on available information from DHIS2, a proxy indicator has been constructed that encompasses the percentage of facilities with basic waste management with a value of 29 percent for 2021. Across provinces, basic waste management was poor, with 90 percent of provinces scoring below 35 percent (Figure 8).

Figure 8. Health Facilities with Basic Functioning Water Supply, Sanitation Service, Hygiene, and Waste Management, 2021



Source: DHIS2 data reported in 2021 MHMS Core Indicator Report

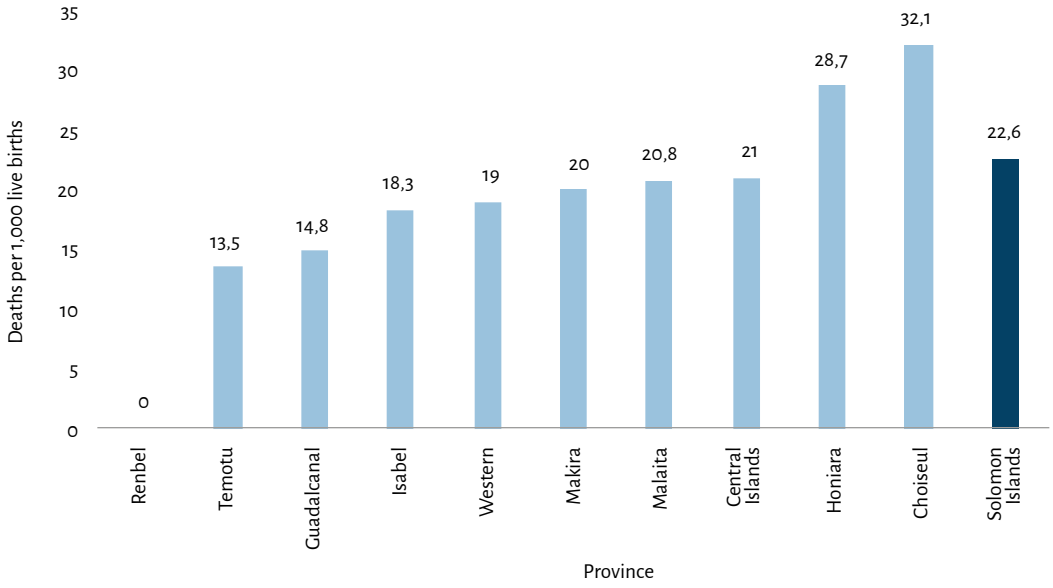
In Solomon Islands, information on three components of quality care (provider competence, person-centeredness, and provider availability) was unavailable, highlighting the need to routinely collect data key components of care delivery. The VSP methodology utilizes two indicators to gauge provider availability: the proportion of consultations exceeding 10 minutes in duration, and the proportion of clinical staff absences compared to the expected staffing levels. The VSP also assesses person-centeredness in the PHC system through estimations of the proportion of caregivers who indicate that health care providers informed them of their sick child's diagnosis or indicated the name of the child's disease or condition. Person-centeredness aims to measure performance from the patient's perspective, assessing whether patients are engaged and viewed as an equal partner in their care experience. Improving person-centeredness in care is important to empower users of the health system and improve patient satisfaction. The

VSP assesses provider competence, which refers to providers' possession of the necessary "knowledge, skills, abilities, and traits" to deliver high-quality services successfully and effectively, through three key indicators: ANC quality score, sick child services quality score, and diagnostic accuracy.

EQUITY

Equitable primary health care coverage and access aims to reduce disparities in health outcomes across populations. The VSP measures equity across access, coverage, and outcomes. These indicators examine equity across socioeconomic status, mother's education, and urban or rural residence. Equity assesses the difference in perceived financial barriers to health care across wealth quintiles, the difference in effective maternal and child health care services based on a mother's level of education, and differences in urban and rural children's mortality rates. Differences in perceived financial barriers and maternal and child health services are calculated using household survey data and are unavailable for Solomon Islands. Mortality data gives us an indication of how inequities in primary care access and coverage are linked to key population outcomes. Looking at available data on under-five mortality, there is significant variation by region from a high of 32 deaths per 1,000 live births in Choiseul to 0 deaths in Renbel (Figure 9). Data from the DHIS2 should be interpreted with the understanding that mortality data is weak in the country, and it is likely that the number of deaths has been under-reported. Encouraging comprehensive data collection on equity can support targeted interventions to improve population health.

Figure 9. Under-five Mortality by Province, 2021



Source: DHIS2 data reported in 2021 MHMS Core Indicator Report

CAPACITY

The capacity of PHC refers to the ability of a system to deliver high-quality PHC services. In the PHCPI framework, capacity is comprised of three domains: governance, inputs, and population health and facility management. Governance includes an assessment of PHC policies, quality management infrastructure, and social accountability, as well as the ability of the system to appropriately adjust to population health needs. Inputs reflect the availability, equitable distribution, and quality of essential service delivery inputs including medicines, supplies, workforce, facility infrastructure, information systems, and funds at the facility level. Population health and facility management is an assessment of how PHC provision integrates active community outreach and engagement, as well as planning and decision-making at the local level. This section also examines facility organization and management, such as the effective organization of facility operations, deployment of human resources in multidisciplinary teams, routine data collection and use of information systems to establish

targets and monitor progress on quality improvement initiatives, and the capability of facility managers to oversee, support, and enforce these processes.

GOVERNANCE

Effective governance and leadership is the starting point of a strong, resilient PHC system. Strong PHC governance has many downstream effects, including more efficient resource allocation, improved local governance, and facility management, enabling greater population trust and improved population health outcomes. The governance sub-domain includes an assessment of PHC policies, quality management infrastructure, and social accountability, as well as the ability of the system to appropriately adjust to population health needs.

Solomon Islands' National Health Strategic Plan 2022-2031 governs the MHMS and sets the strategic priorities for the 10-year period. While it does not explicitly prioritize PHC, the NHSP does mention the need for high-quality, continuous care and identifies public and population health interventions as important, with a focus on equity, integrity, respect, collaboration, responsiveness, and transformation. The plan is designed around PHC, particularly through its third strategic objective, which covers a wide range of health services from public health to maternal and child health, and health security. The NHSP is complemented by several other program-specific policies and strategies and includes the elements of high-quality PHC policies. The policies around PHC are formulated through a participatory process involving various stakeholders, although some key informants expressed that their participation in policy development was limited. While there is a robust legal framework in place (table 2), challenges exist in fully operationalizing and implementing the national strategic plan. There is an established monitoring and evaluation (M&E) framework, but it requires improvement in terms of use in tracking policy implementation and impact. While the policies are strong, challenges lie in their operationalization.

Table 2. Solomon Islands Legal Framework and Laws Related to Primary Health Care

Laws governing health services and programs			Laws managing public health risks	
Health Services Act	**Mental Treatment Act**	**Child and Family Welfare Act 2017**	**Environmental Health Act**	**Quarantine Act**
Governs administration of public health services at all levels	Treatment and management of persons with mental illness	Provides for the welfare and protection of children	Management of general public health risks (environmental and communicable diseases)	Measures at points of entry to prevent the spread of disease and other risks to public health
MHMS is to be responsible for provision of health and medical services. Regulates service fees and charges. Provides for hospital management. Provides for partnerships in public health service delivery – with provincial government, NGOs, education sector.	Procedures for voluntary and involuntary facility-based treatment. Governs management of mental health facilities. Provides for guardianship, custody, and management of estates.	Protects rights of children, outlines responsibilities of parents, and ensures the wellbeing and best interests of the child are paramount in decision-making. Provides for social welfare support and inquiries. Processes for care and protection orders.	Surveillance of communicable disease (notification) and basic response powers (not utilized during COVID). Powers to investigate and respond to low level risks (nuisances) and apply standards and measures for certain risks, for example vectors, water, sanitation, buildings. Allows the minister to delegate functions to provincial assemblies and Honiara City Council. Most substantive provisions are found in the regulations, which contain parts of the repealed Public Health Act.	Prohibits import of goods presenting health risks. Provides for quarantine of incoming vessels and aircraft, and places within Solomon Islands. Used early in COVID-19 pandemic before emergency declared.
Made in 1979, last amended in 1980. NHSP: "update health-related administrative laws to support the reform and ongoing decentralization of health services."	Made in 1970, last amended in 1978. A Mental Health Bill has been in development. for several years.	Commenced in 2022.	Made in 1980, not amended. NHSP cites need to establish separate, overarching Public Health Act. Public Health Emergency Bill remains before Parliament.	Made in 1930, last amended in 1978. Not mentioned in NHSP but would be affected by any process to establish new Public Health Act.

Laws regulating certain behaviors / commodities to protect & promote health			Laws regulating health professions to protect public safety			
Tobacco Control Act 2010	**Pure Food Act 1996**	**Pharmacy and Poisons Act**	**Medical and Dental Practitioners Act**	**Nursing Council Act**	**Pharmacy Practitioners Act 1997**	**Health Workers Act**
Regulates the sale, manufacture, import, export, distribution of tobacco products.	Regulates food production, handling and trade to ensure quality and safety.	Regulates the sale and distribution of drugs and poisons.	Regulates medical and dental practitioners.	Regulates Nursing Practitioners.	Regulates pharmacy practitioners.	Regulates other health professions.
Requires businesses engaged to be licensed. Prohibits advertising, sponsorship and promotion and regulates packaging and labelling. License fees paid into special fund to promote healthy lifestyles.	Prohibits sale of substandard or 'adulterated' food and establishes standards based on Codex. Regulates food packaging, labelling and claims. Prohibits advertising of breastmilk substitutes in health facilities. Food establishments required to be licensed and adhere to hygiene standards.	Establishes Pharmacy and Poisons (Chaired by USHC) board to regulate pharmacies and issue licenses for sale or supply of medicines. Outlines prescribing requirements. A license is required to import medicines for sale.	Establishes Medical and Dental Board (Chaired by USHC) to register and set / oversee professional standards. Practitioners must meet entry requirements to profession and be registered by Board (one-time registration). Disciplinary processes for misconduct and failure to meet standards.	Establishes Nursing Council Board (Chaired by NDON). Practitioners must meet the entry requirement to practice as nurse (Part I & II registrations). Disciplinary processes for misconduct and failure to meet standards.	Establishes Pharmacy Practitioners Board (USHC chairs) to register and set / oversee professional standards. Practitioners must meet entry requirements to profession and be registered by Board (on-time registration). Disciplinary processes for misconduct. and failure to meet standards.	Establishes Health Workers Board (Chaired by USHC) board to register and set / oversee professional standards. Contains processes for registration and disciplinary action. Categories of 'health worker' covered by the Act not yet prescribed.
Made in 2010, not amended.	Made in 1996, not amended. Subordinate instruments have been amended more recently.	Made in 1941, last amended in 1997. Recently reviewed, but not amended.	Made in 1988, not amended. Regulations made in 2022.	Made in 1987.	Made in 1997, not amended. Note: pharmacy business and medicines regulated by Pharmacy and Poisons Act.	Made in 1989, not amended. Act is inoperative as no regulations have been made applying it to any health professions.

Source: MHMS Policy and Planning Unit analysis.

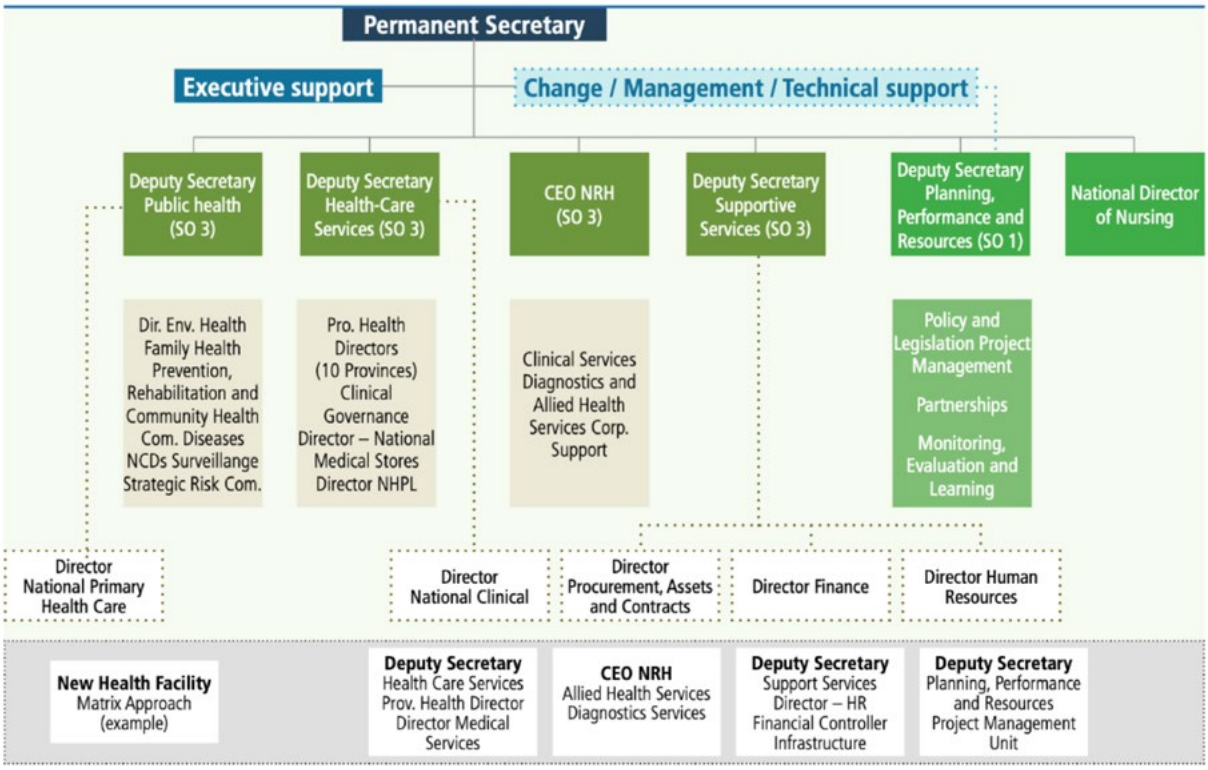
Box 1. Overview of NCD Strategic Plans and Policies in Solomon Islands

Solomon Islands has several key health strategies that provide a strong policy framework for addressing NCDs, including the National Health Strategic Plan (2022-31), National Multisectoral Action Plan (2019-23), and Cervical Cancer Elimination Plan. The National Health Strategic Plan (2022-31) specifies objectives for the health system that include components dedicated to NCDs. The plan specifies a focus on "advancing and enforcing upstream population interventions and health legislation that address NCD priority risk factors" using a "whole government and society approach." This includes a focus on addressing factors such tobacco use, alcohol use, poor nutrition, and a lack of physical activity—noting the potential use of legislation and taxation to modify behaviors. In addition, Solomon Islands developed a National Multisectoral Action Plan 2019-23 (MSAP). The MSAP specifies three priority areas: NCD prevention and wellness promotion; improving the control of NCDs through capacity building and health system strengthening; and monitoring and evaluating NCD interventions to track and achieve targets. Both the National Health Strategic Plan and MSAP contain results frameworks that outline key achievements, actions, and responsible actors for implementation. The MSAP's results framework is detailed, including targets for each priority area, along with activities, indicators, time frames, responsibilities, and budgets. More recently, Solomon Islands introduced the Cervical Cancer Elimination Policy and Strategic, which provides a framework for HPV vaccination and screening and cervical cancer diagnosis and treatment.

Leadership and coordination for PHC is fragmented across programs and provinces. There is no specific and dedicated national coordinating authority responsible for coordinating, monitoring, integrating, and implementing state primary health care (PHC) strategies and policies. This contributes to an incomplete and unclear accountability for PHC, resulting in limited operational capacity and reach. The proposed organizational structure in the National Health Strategic Plan (Figure 10) includes the creation of a position called "Director National Primary Health Care," although this position has not been implemented and its scope,

reporting lines, and overall responsibility is still being defined. At the provincial and zone operational levels, leadership for PHC ultimately falls under the Deputy Secretary Health Care who is responsible for provincial health services. Provincial health directors coordinate activities within their respective provinces. While there is an organizational structure to manage activities at the subnational level, the matrix-like structure can lead to complications in coordinating across various programs and provinces. Effective PHC leadership is further hindered by insufficient authority, budget, and staff; authorities for coordinating PHC only have sufficient resources some of the time, largely at the national and provincial level. This lack of clear coordination authority and the many sub-authorities in vertical or geographic areas create challenges in understanding and ensuring accountability related to PHC across programs, provinces, and activities.

Figure 10. Proposed MHMS Organizational Structure, National Level



Source: NHSP 2022-2031

Box 2. Overview of Roles and Responsibilities of Coordinating Authority in NCD-Related Implementation in Solomon Islands

Solomon Islands has a well-defined coordinating authority for NCDs, but human resource gaps limit the effective implementation of NCD programs in provinces. The NCD program division exists at the national level and is responsible for NCD planning and policy, although there is no specific unit for PHC. Each of the provinces also has an NCD coordinator who is responsible for overseeing program implementation. It was identified in the analysis that the national NCD coordinating unit consists of a facilitator for training, a research coordinator, and an advocator. Provincial coordinators implement this program; however, human resources within provinces are limited. Specifically, there appears to be implementation support for Solomon Islands Package of Essential NCD Services (SoLPen), which was noted to be implemented in 50 to 60 percent of AHCs. Provincial coordinators are specifically responsible for conducting training on NCD protocols within their respective provinces. A noted challenge is that, because the NCD unit is not PHC-specific, provincial coordinators are often stretched as they conduct trainings in both hospital and community settings. Establishing and implementing SolPen was noted to be especially challenging in hard-to-reach provinces.

Solomon Islands has several quality-related activities taking place, but their impact on PHC is limited due to the lack of overarching quality management infrastructure. Quality management infrastructure refers to the planning, control activities, and improvement work that ensures populations receive high-quality health services: the right care, at the right time, responding to users' needs and preferences, while minimizing harm and resource waste. Currently, there is no clear national direction on quality management at the policy level. While the NHSP does identify quality management tools as part of its strategic objectives, there is no comprehensive policy on quality. In terms of packages of interventions to target different dimensions of quality, there is a package of interventions to create an enabling systems environment; the Role Delineation Plan (RDP)

serves as an overarching framework for service delivery, although it has not been fully operationalized. There are also several systems for licensing and regulation of health workers. There are no dedicated quality interventions to reduce harm to patients, to improve the clinical effectiveness of health services, or to engage patients, families, and communities in quality improvement efforts. Information systems routinely collect and publish data, but they do not focus on information related to quality or outcomes. While there are nascent efforts regarding a culture of learning on quality, these largely occur at the tertiary level, in the National Referral Hospital. There is an opportunity to encourage further learning and activity around quality of care at all levels. Despite the absence of a clear quality policy or packages of interventions for some dimensions of quality, the NHSP recognizes the importance of providing quality healthcare services, demonstrating leadership's dedication to establishing a standard of quality care, and senior executives in the Ministry of Health have signaled their commitment to advancing quality of care.

Box 3. Overview of Clinical Management of NCDs in Solomon Islands

There are well defined roles and responsibilities, along with adapted clinical guidelines, for clinical management of NCDs, including NCD diagnosis and management. Service delivery programs and policies cumulate into Role Delineation Policy, which defines the service levels and package of care at each level of the health system. For NCDs, the Role Delineation Policy specifies roles and responsibilities of facilities and providers in delivering cardiovascular disease, diabetes, chronic respiratory diseases, cancers, eye health, mental health, ear health, and dental health. For PHC specifically, community centers offer lifestyle counseling for NCDs and health promotion activities. Rural centers are responsible for risk screening and assessment, refills of anti-hypertensive statins, hypoglycemic drugs for cardiovascular disease, along with screening of high blood pressure and blood glucose. AHC1 facilities provide general outpatient services, dental services, and screening for cancer. SolPen also supports facilities and providers to develop shared-care plans that are developed by NCD coordinators within NCD clinics. Furthermore, Solomon

Islands adapts international best-practices for clinical management through the Solomon Islands Guidelines for the Management of NCDs in Primary Care. The essential medicines list (EML) also contains drugs specified for the clinical management of NCDS, including for cardiovascular conditions, hypertension, and diabetes.

Social accountability for PHC is limited by the ambiguity in PHC and challenges in identifying and bringing together the various elements, projects, stakeholders, and activities covering PHC. Ministry of Health engagement with private sector, civil society, and NGOs related to primary healthcare (PHC) primarily occurs during national planning processes through technical working groups or in bilateral meetings between stakeholders. For example, PHC discussions often take place within various working groups and committees related to health, such as the cervical cancer technical working group and the Family Health/ Interagency Coordination Committee meetings. Outside of the national planning process, engagement around PHC-related issues through these forums occurs on an ad-hoc basis, although the types of stakeholders involved tend to be consistent, including entities like Planned Parenthood, Red Cross, and faith-based hospitals or clinics. The ad hoc nature of these engagements limits the effectiveness of such engagements in fostering social accountability for PHC. A key challenge is the lack of a centralized, cross-government entity or forum dedicated to PHC to serve as a platform for social accountability across different stakeholder groups. Beyond the health sector, there is also an opportunity for a structured platform or mechanism for cross-government engagement around PHC-related issues, although Solomon Islands history of cross-sector integrated planning suggests a strong foundation to build upon. Public disclosure regarding the status of PHC implementation occurs rarely and primarily through annual reports. These reports are available but not easily accessible as there is no dedicated public online platform for them; they are often only made

available on request. Nongovernmental experts noted that the Ministry of Health has valuable data but that the information-sharing process needs improvement. Public disclosure is generally at a basic level, with room for more comprehensive data sharing to inform the public about PHC efforts.

Although there is no explicit cross-government group for intersectoral coordination on primary healthcare, there is a strong history of cross-sector integrated planning, and several groups exist whose work covers PHC is part. Examples include the cross-government group on gender-based violence and collaboration between ministries of health and education in promoting healthy schools and villages. The effectiveness of these standardized groups was recognized, particularly in addressing issues like gender-based violence (GBV), digital health, and non-communicable diseases (NCDs). While there are instances of collaboration, further efforts are needed to ensure a more systematic and coordinated approach to integrated planning and joint reviews across government entities. The practice of multisectoral engagement on PHC provides a strong foundation for further strengthening, such as through a structured platform or mechanism for cross-government engagement around PHC-related issues.

Box 4. Overview of Multisectoral Actions for NCDs in Solomon Islands

Despite the development of the MSAP, the coordination and implementation of actions are considered ad-hoc. This analysis identified that although there is an annual meeting for multisector action related to NCDs, it does not always occur. Engagement with different government agencies, the private, sector, and civil society is not systematic and occurs infrequently. It was identified that multisectoral government engagement used to occur for tobacco but is no longer operational. The analysis also learned of a training guide on key risk factors for NCDs for community members that has been used to train stakeholders in churches (80 percent of the population in Solomon attends church regularly). There is also a strong partnership with the NCD Alliance, which promotes, advocates, and raises awareness for NCDs at the national

level. It was also identified that there is no formal assessment tool for evaluating the progress and impact of multisectoral policies. While feedback from stakeholders is discussed, there is no routine mechanism to formally evaluate these policies and actions.

In addition to the strategic policy frameworks, effective oversight, coalition building, and efforts towards leveraging system-design and accountability, an important function of PHC governance is the ability to adjust to population health needs. This includes routine collection of information about population health status and needs, appropriate analysis and use of this information to set and implement priorities, and continual learning and adaptation based on emerging evidence and data.

In Solomon Islands, the surveillance system performs core functions related to disease detection and reporting but requires improvements in data integration, standardization, and timely information flow between levels. The surveillance system plays a role in tracking health and burden of disease metrics through a syndromic surveillance system coordinated at the national level, with sentinel sites in all nine provinces. This system detects and reports on core syndromes while responding to unexpected variations in their reporting. It primarily operates within government facilities, and there is limited daily or weekly data monitoring, as the reporting cycle is mostly monthly or quarterly. Data is collected and collated by trained surveillance officers who report to the national coordinator, mostly using phone-based communication. The surveillance system faces challenges in timely and complete information flows given the primarily paper-based system, particularly between provincial and community levels. Data integration across different health programs is also a challenge. Efforts are underway to enhance data collection and analysis for a more comprehensive and responsive surveillance system. However, expansion beyond syndromic surveillance is limited by access

to diagnostics. Aspirations for the surveillance system include creating a Public Health Act to mandate reporting of notifiable diseases in alignment with international health regulations.

Box 5. Overview of NCD Service Monitoring and Disease Surveillance in Solomon Islands

There is a strong system for NCD service monitoring and data collection, with opportunities to further embed quality monitoring. PHC facilities routinely collect patient information on diabetes, cancer, chronic lung disease, respiratory disease, and COPD. There are two reporting systems in place—the DHIS2, which collects basic patient information, and provincial coordinators, who routinely collect information on complex patients and send it to the national NCD Unit. In addition, data is aggregated from both systems at the national level and sent to the international partners who develop an annual report and dashboard. Facilities also keep paper-based registries for diabetes, hypertension, and cancer. These measures track basic patient information pertaining to their clinic visits, such as measures of blood glucose and blood pressure. However, they do not track basic measures of quality, including patient drop-offs at certain points of the care continuum. The health system currently lacks an integrated system for capturing patients' clinical care records. Rather, patients maintain a booklet that contains their clinical record, which they are required to bring to each visit. It was noted that these booklets are at a high risk of being lost or damaged. Regarding disease surveillance, STEPs surveys are conducted regularly, and a global tobacco survey has recently been completed.

While the standardized approach to codifying priorities through annual operational plans (AOPs) streamlines priority setting, there is limited ability to ensure priorities are aligned to population health needs. The setting of health service delivery priorities is primarily driven by the National Health Strategic Plan (NHSP), which provides an overarching framework for health policy and priorities. Provinces, programs, and provinces develop their AOP and budgets annually based on the NHSP's strategic objectives and govern the allocation of resources. However, the

AOP process can be challenging to understand, and data only occasionally drives priority setting, limiting the alignment between established priorities and existing or emerging health needs. While data is available through the Health Management Information System (HMIS) and is intended to guide priorities, its use and utility in practice varies as data is not timely and competing priorities can hinder its careful incorporation. Stakeholder engagement is part of the priority-setting process, with some collaboration among different units and with external partners. This happens through various methods depending on the unit of the Ministry and/or external partner. The allocation of resources is influenced by established priorities, but other factors, such as personal or political considerations also come into play, impacting the equitable and strategic distribution of resources.

Solomon Islands is in the early stages of developing mechanisms for recognizing, evaluating, and scaling innovations in primary healthcare. Currently, there are no formalized or systematic processes for these activities outside of the research unit at the MHMS. While there is an acknowledgment of the importance of research, innovation, and learning, mechanisms to promote and support these activities are nascent. Innovation in the country tends to be perceived as limited to technology. Innovation currently occurs mostly at the pilot level, and opportunities to scale or share learnings across stakeholders and at different levels of the health system are limited. An understanding of innovation could be expanded to include process design or adaptation to ensure the delivery of PHC is adjusting to population health needs. Experts noted that innovation is externally driven primarily by development partners and academia in collaboration with government programmatic partners. Private sector involvement in public health innovation could be explored further.

Box 6. Deep Dive into Governance and Gender

Gender-informed primary health care governance ensures that the PHC system is responsive to the needs of all individuals, regardless of gender. It recognizes that gender influences health outcomes and that health systems must be designed to address these differences. Gender-informed governance can help to ensure that health care services are accessible, affordable, and of high quality for all individuals through policy formulation and effective implementation of specific and targeted health interventions.

In the Solomon Islands, gender-focused policies mainly address gender-based violence services and reproductive health, with the National Policy on Eliminating Violence Against Women Policy and the Gender Equality and Women's Development Policy 2016-2020 as key frameworks. These policies focus on attitudinal and institutional barriers to gender equality. They also promote safe spaces for users to access health information and services regardless of sex and gender (MWYCFA 2020). However, the policies lack comprehensive strategies especially around engaging men during service delivery, creating a gap in gender-responsive interventions. Efforts to involve men as supportive partners are evident through programs like "Men-As-Partners" project within the family planning services in the PHC service package (UNFPA 2007; MHMS 2011). Gender-responsiveness is also addressed in reproductive health and GBV services, however service readiness remains a concern. There are limited facilities ready to provide family planning and adolescent and youth-friendly services (AYF), with 33 percent and 1.5 percent of facilities providing these, respectively (UNFPA 2021). Additionally, GBV services are available but vary in terms of comprehensiveness. The provision of gender-responsive consideration with the PHC service package, including for adolescent and family planning services, could be expanded and made more widely accessible by expanding the scope of gender-related issues addressed in service delivery policies and priorities.

The coordinating authority for gender-responsive interventions involves the Gender Focal Point (or Gender-Based Violence Focal Person) and the Ministry of Women, Youth, Children, and Family Affairs (MWYCFA), with the

Public Service Commission (PSC) playing a leadership role in government-wide gender mainstreaming. Within the Ministry of Health and Medical Services, A Gender-Based Violence Focal Person is based in the Ministry of Health and Medical Services to address the needs of women exposed to violence and people with disabilities (MHMS 2022; MHMS 2016). However, experts shared that there is limited integration of gender issues in public health programming, and gender equity champions operate without clear coordination. A specific funding mechanism for gender-responsive primary healthcare interventions is lacking. The focus tends to center on addressing violence rather than holistic gender integration (MoFT 2023).There is a need to invest and expand the role of the focal point to address other key gender-responsive interventions, such as gender mapping exercises, data collection and analysis, and the development or review of gender training and guidelines at the facility.

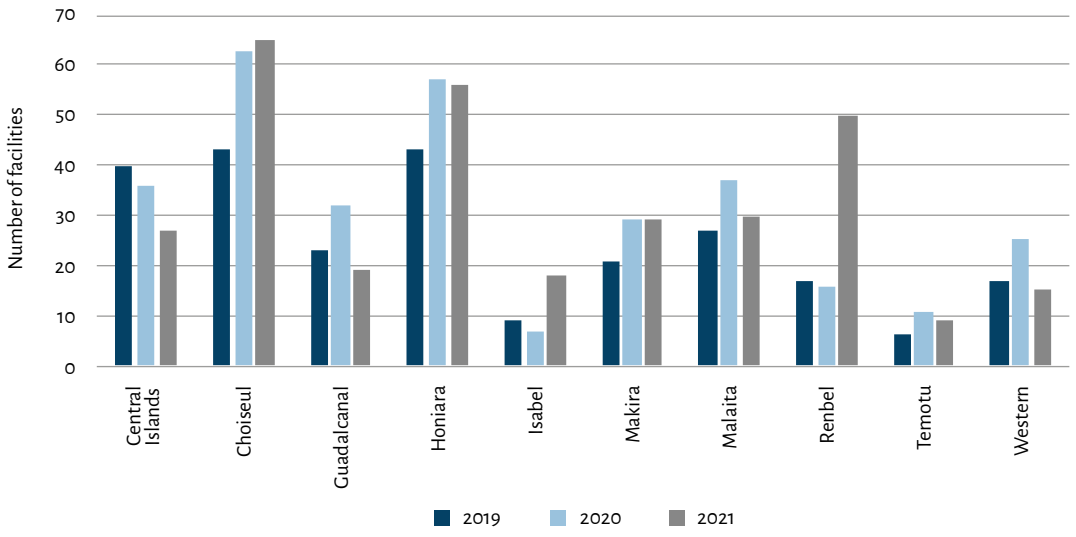
Despite consensus on the existence of gender inequalities in the country, data presented in national plans and reports is not disaggregated by gender. Data on gender equality and gender-responsive considerations is limited and not disaggregated in national plans and reports, which makes it challenging to assess gender disparities and develop targeted policies and gender equality promotion over time (ADB 2015). Disaggregation of data by gender for decision-making at all levels is needed, along with additional metrics to cover a range of measures related to gender-responsiveness in service delivery. For example, an indicator that could be added is the proportion of providers who investigate men's health issues more in depth than women's, unrelated to pain severity.

INPUTS

The measurement of input availability helps to identify gaps and assess the distribution of resources required to deliver timely, appropriate, and high-quality PHC services.

The availability of drugs and consumables in PHC facilities is limited. Only 28 percent of primary care facilities have all primary care-specific essential medicines and consumable commodities available, with DHIS2 data from 2021 showing that 72 percent of facilities reported stockouts. Information systems do not track specific drug or consumable availability Instead, they track facilities with no reported stockout of at least one essential medicine per month as a proxy for the availability of essential medicines and consumables. There is significant variation between provinces. The highest reported availability is in Choiseul province (65 percent of facilities), while the lowest is in Temotu province (9 percent of facilities) (Figure 11). Challenges in the availability of medicines are noted to contribute to instances where clinics refuse to open because they lack basic medicines, rendering the facility unable to provide care to patients.

Figure 11. Facilities without Reported Stockouts of Drugs and Consumables



Data source: MHMS Statistical Health Core Indicator Report 2021

Although most primary care facilities have the necessary basic equipment, few have all the diagnostic equipment needed to deliver comprehensive primary health care. Diagnostic equipment availability is assessed through the presence of supplies needed to conduct all necessary diagnostic tests: rapid hemoglobin; blood glucose; urine dipsticks for protein, glucose, and ketones; urine pregnancy tests; rapid HIV; rapid syphilis; and cholesterol meter. There is a gap in tracking diagnostic equipment availability at the facility level. Although the NHSP includes an indicator to measure the percentage of basic diagnostic equipment available at various health facilities, with a target of 95 percent, no baseline data is available. Coverage indicators are used as proxies for diagnostic availability, and they show variation depending on type of tests. HFRSA survey data indicates that more testing for blood glucose and urine is being conducted (78 percent and 91 percent respectively) than for hepatitis or hemoglobin (7 percent and 21 percent respectively). Malaria microscopy services are assessed using a coverage proxy indicator, showing only 20 percent of facilities (70 out of 349 facilities) as having this capacity. There is the assumption at the programmatic level that specific diagnostics are available in facilities or that diagnostics should be there in theory. For example, experts interviewed noted that, in principle, all facilities should have malaria RDTs and, while there is data on overall procurement numbers, there is not a real-time understanding of where tests are or if facilities have them available. Similarly, HIV and syphilis testing should be routinely done for pregnant mothers at all facility levels conducting antenatal clinics (first ANC visit), but in practice, testing depends on the availability of test kits and mandated trained counsellors in facilities. No rural health centers are doing testing and only some area health centers conduct HIV and syphilis testing as part of ANC services.

Solomon Islands has made significant gains in establishing standards for PHC facility density and distribution through the RDP, which outlines the optimal facility types, roles, density, and distribution and aims to classify facilities according to their roles and catchment areas.

However, it has been challenging to implement changes due to political considerations, including the downgrading or closing of health facilities. The MHMS may wish to downgrade or close a facility that is redundant or not effectively placed to serve population health needs, but communities are likely to reject such efforts. An assessment of primary health care density and distribution has been conducted, and there are documented targets for catchment areas and facility roles. Catchment populations and health activities have been prioritized based on the assessment, which could serve as a strong foundation for further integration into individual AOPs. Efforts have been made to increase the overall number of health facilities, including the construction of clinics across provinces. In addition, there is growing recognition that a shift in priorities is needed to rationalize existing facilities and provide a package of quality health services to improve health care access and quality within the existing infrastructure, rather than to simply construct new facilities.

The current state of PHC facility amenities and standard safety precautions and equipment limits the ability of PHC to meet the established standards in the RDP and provide high-quality PHC. The Role Delineation Policy outlines specific infrastructure requirements that primary health care facilities are expected to meet, including provisions for water supply, power supply, sanitation, incineration for medical waste disposal, accessibility for people with disabilities, security fencing, insect screening, ventilation, and staff housing. However, challenges exist in ensuring that facilities meet these standards, particularly given the significant portion of facilities in isolated areas. While the NHSP prioritizes integrated service planning and an infrastructure audit, data on the proportion of primary care facilities with all identified amenities is limited and fragmented across sources. There was no data available on the proportion of facilities with access to electricity, sanitation facilities, communication equipment, or a computer. Where information is available for waste, sanitation, and hygiene amenities, reports indicate low levels of access to basic water, hygiene, sanitation, and waste management services.

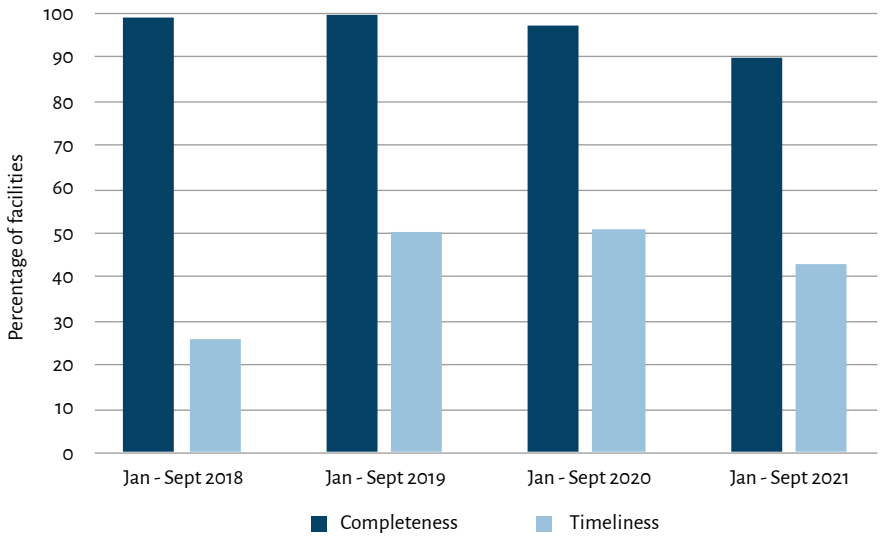
There is notable variation in the availability of these amenities across provinces, with Honiara generally having the highest availability and the Central Islands experiencing lower availability of these inputs. Addressing these infrastructure challenges is crucial for delivering quality PHC services and implementing supportive systems.

Solomon Islands has a partially strong system for civil registration and vital statistics (CRVS), capturing over 86 percent of births, but only 12 percent of deaths in the country. A CRVS system generates the administrative data that serves as the basis for databases and population registers and is essential for effective health planning and service delivery. There is a formal interagency committee established with an extensive oversight role to oversee CRVS planning. It includes relevant stakeholders and meets regularly. Data is paper based at the local level, with electronic processing at provincial and higher levels. To monitor data quality and support analysis, there are checks on aggregate data at the national level. Regular monitoring of key indicators takes place at subnational and central levels to track system performance. Death registration statistics may be lower because only deaths occurring in facilities are likely to be registered.

Investments in information systems have contributed to a strong overarching health management information system, with further opportunity to integrate and enhance utility at the facility level. The overarching health information system in Solomon Islands is the DHIS2, which builds from standardized paper-based forms completed at the facility level. Not all data collection systems are integrated within the HMIS, however, which means that, at the facility level, there are many different registers and forms that must be filled out. Additionally, some health programs collect data separately, which can create additional workload and challenges for the Health Information System (HIS) unit. Despite the overall high completeness of reports, data is not timely due to the need to transport paper forms from facilities to the provincial offices before data entry into the digital system (Figure 12). While most facilities

have HMIS paper forms in place, these systems are not fully interoperable and interconnected due to the fragmentation of program data collection and the fact that datasets and are only digitized at the provincial level. In addition to the HMIS, there are standardized personal care records used at the facility level for most patients. Personal care records include problem lists, care history and notes, medication lists and allergies, and referrals. These are kept by the patients in paper-based formats. Patient-level forms may also be filled out in duplicate for facility visits, with one copy kept at the facility and another sent to the central level, although this is not a regular practice and is highly dependent on individual health workers. Because the care records rely on patients and their caregivers to maintain and bring them, they vary in quality and use between facilities and health workers.

Figure 12. Completeness and Timeliness of Facility HMIS Reporting



Source: HIS unit administrative records (completeness) and DHIS2 (timeliness)

Solomon Islands' workforce density is below the WHO threshold of workforce needed to meet basic health needs and well below the threshold needed to deliver universal health coverage. Solomon Islands has a workforce density of 20.2 skilled health professionals per 10,000 population, and includes 2.4 doctors and 17.8 nurses and midwives per 10,000 population. The WHO threshold for sufficient workforce for achieving

basic health needs in 22.8 health workers per 10,000 population, and the threshold for sufficient workforce to achieve high coverage across the broad range of primary care services targeted by universal health coverage is 44.5 health workers per 10,000 population (WHO 2023c). Nurses and nurse aids play a crucial role in PHC service delivery and make up the majority of the PHC workforce. Their roles are particularly important in the provinces and rural areas, where they are considered the backbone of health services. However, there is an inequitable distribution of the health workforce in the country. About 53 percent of the healthcare workforce is concentrated in the capital city of Honiara. This disparity in workforce distribution is a longstanding issue, impacting equitable access to healthcare services across the country. A hiring freeze within the Solomon Islands government compounds these challenges as the Ministry of Health and Sanitation is unable to recruit for additional positions. Efforts are needed to address the overall number of workforce and the geographical imbalances in workforce distribution to ensure that all regions have adequate access to skilled health professionals.

For the existing PHC workforce, there are strong quality assurance mechanisms for ensuring that all health workforce have the required qualifications. There are further opportunities to strengthen the capacity of systems to ensure quality standards are met in practice. Registration and regulation mechanisms exist for certain health professions, such as nurses, doctors, dentists, and pharmacists. The Nursing Council, for instance, plays a pivotal role in approving courses and programs offered by educational institutions and ensures that nurses are qualified to practice in the country. Nurses must undergo the Nurses Supervisory Practice Program to be registered. However, the capacity of the system to ensure that quality standards are consistently met in practice appears to be weak and fragmented, with governance for quality assurance devolved to professional associations. The process for renewing licenses and ongoing quality assessments is lacking, and mechanisms for disciplinary actions are not clearly defined within the health system. Ensuring that healthcare

professionals maintain their qualifications and meet quality standards is an area that may require further attention and strengthening in the PHC system.

Competencies for the primary health care workforce are established and embedded in the training curriculums and quality assurance mechanisms for the various cadres of health workers. These are somewhat translated to the job descriptions for different positions, although it is noted that descriptions have not been updated for many positions since 2004. Job descriptions themselves are considered by many in the health system as equivalent to competencies, despite their covering of duties and functions, and only indirectly covering competencies. Global standards and benchmarks are drawn upon to ensure that competencies are evidence-based. While the competencies relevant to PHC are adapted to the country context, training does not correspond exactly with what is practiced at the facility level. The Role Delineation Plan identifies several activities that different cadres should perform. The RDP could be leveraged to further refine and articulate the competencies and job descriptions, with more explicit links to the specific requirements of PHC in Solomon Islands.

There is no specific occupation of health workforce similar to that of Community Health Workers (CHWs) in Solomon Islands. In global PHC best practice, CHWs are a community-based health worker cadre whose primary responsibility is to conduct proactive outreach and who deliver a range of preventive, promotive, and curative health services. Although these do not exist in the Solomon Islands, there are other related roles, such as ad-hoc Village Health Committees, Health Promotion Officers stationed at provincial hospitals, and the Healthy Village Promoters (HVPs) from the Healthy Village Settings project. These have different scopes and levels of implementation. While the role of CHWs, as defined in the context of proactive population outreach, is to be established in the communities themselves and not in PHC facilities, nurses and nurse-aids may conduct community outreach visits for health promotion and programs. The

concept of "healthy villages" is being considered, which may include healthy village promoters, but this initiative was not continued beyond its pilot. or integrated into the healthcare system. There are opportunities to further define and establish roles for CHWs, provide formal training and accreditation, and integrate them into local health facility service delivery systems and data reporting systems to enhance community-based healthcare services.

Budgets for primary care facilities and primary health care networks are maintained at the health zone level and include activities like outreach programs to primary health care. All health zones have budgets that are tracked at the provincial health level. However, budgets are not disaggregated to the primary care facility level, and funds may in practice be managed on a "first come first serve" approach by provincial and zone level supervisors. The budgets include various components such as regular expenditure, payments, and spending, with a portion of government grants to the provinces used for health program activities like outreach and supervisory tours. Systematic forecasting is not a widespread practice. Challenges in obtaining timely data and varying operational costs affect the accuracy of forecasting and decisions are often based on past budgets and spending patterns.

The MHMS has a financial management system (FMIS) that has been in place since 2013 and captures and tracks various financial aspects including expenditure, staff-related expenses, and line-item budgets. Expenditure is closely monitored, with reports on expenditure rates and remaining budgets submitted monthly. However, the FMIS does not include detailed information at the primary care facility or network level. Instead, funds are aggregated under "Health Service Grants - Primary" and tracked at the provincial level. While the FMIS appears to be functional at the executive level, its effectiveness at the provincial and zone levels remains uncertain. The system may need further operationalization to better support health workers at the primary care facility level, particularly

in terms of infrastructure and service delivery. Additionally, user fees as internally generated funds are not directly managed through the FMIS, contributing to limited understanding of the volume and role that user fees play at the PHC level.

The remuneration of primary health care staff is highly stable, timely, and predictable, with little difference in reliability across provinces and workforce cadre. Remuneration is very stable, and wages and allowances are consistently paid on time by the government. Health workers typically receive their salaries on a fortnightly basis, ensuring timeliness and predictability in remuneration. The stability, timeliness, and predictability of remuneration are generally consistent for public servants but may vary for direct wage employees (DWEs) based on differences in the amount they are paid; the same role and terms of reference may receive a different wage depending on the province.

Box 7. Deep Dive into Inputs and Gender

Gender responsiveness of the PHC workforce can help to ensure that health care providers are trained to provide gender-sensitive care and that quality assurance mechanisms are designed to identify and address gender-based disparities in health care access and outcomes. Gender is an important consideration in inputs such as quality assurance mechanisms and data quality. As noted in box 1, data and information systems are not readily disaggregated by gender and there is further opportunity to expand their utility in ensuring accepted and effective PHC services.

Despite most healthcare workers in the Solomon Islands being female, there is a notable gender disparity among highly skilled health workers. Women constitute 51.9 percent of the healthcare workforce across facilities but only 21 percent of doctors are women, with a limited number of female specialists reported (WHO 2014). Similar disparities are observed among dental personnel and pharmacy workers, suggesting the existence of barriers preventing women from attaining higher skilled positions. These gender disparities may be influenced by societal factors such as masculine political

cultures, violence against women, and restrictions on women's social mobility and economic independence, which contribute to limited participation by women in management and leadership roles, both in healthcare and other sectors (MHMS 2017).

Solomon Islands lacks comprehensive mechanisms to ensure that quality standards related to promoting gender sensitivity in primary health care service delivery are applied in practice. Gender-related pre-service and in-service training predominantly focuses on addressing gender-based violence, with 45 percent of facilities that provide GBV services employing staff specifically trained in this area (HFRSA 2021). However, there are no established quality standards and guidelines that translate gender-related policy objectives into service delivery practices.

POPULATION HEALTH AND FACILITY MANAGEMENT

Population health management measures assess how well population health is managed, including activities such as community engagement, outreach and local priority setting. Facility organization and management measures capture facility management capability and leadership, information system use, performance measurement, and team-based care. Understanding these two domains of PHC ensures that the care being delivered in local clinics and communities is proactive and based on the needs of the populations being served, and that facility staff are empowered to deliver high-quality PHC services.

Provinces play an important role in facilitating population health management within their region and lead local priority-setting initiatives. However, there are gaps in the use of data and community input in setting priorities. Each year, provinces develop an AOP in which they collate the submissions from primary health care facilities within the province. Facilities submit their priorities and needs, including human

resources, budgeting, supplies, equipment, and medicines. The Provincial Health Director is responsible for collating these priorities and submitting them as a provincial request. The AOPs capture local priorities but make limited use of data. An estimated 25 to 50 percent of zones collect and use data to translate national and provincial policies into local priorities and strategic action plans. There are notable gaps in processes and information systems to capture data that could influence provincial AOPs, as well as a lack of understanding of whether provinces assess zone performance levels as part of priority setting processes. While there is data available through the HMIS, the use of data for priority setting varies across provinces and zones. Some provinces actively use data to set priorities, including utilizing HMIS data and recent surveys. However, not all zones identify local primary health care priorities and make strategic action plans, and the capacity to use data for this purpose may be limited. Communities and local leaders who are important stakeholders are not actively involved in the prioritization, budgeting, and planning exercises. There is a new initiative to increase community involvement through the establishment of ward development committees that could enable community and local leader involvement in data interpretation and priority setting. Where community involvement exists, it is often attributed to specific individual characteristics of the health facility and leadership or community.

Community engagement mechanisms exist but are not consistently used, and there are no formal policies or requirements for engaging communities in local PHC planning and prioritization. Community engagement mechanisms include Village Health Committees, cleaning committees, and traditional community-based structures, which vary across provinces. Nurse-led outreach is also a channel by which informal community input is received, although nurses are not formally supported or enabled for the systematic capture and use of information they may receive during outreach visits. Therefore, community engagement effectiveness depends on the level of activity and advocacy by local health workers and the demand for services within communities. For example,

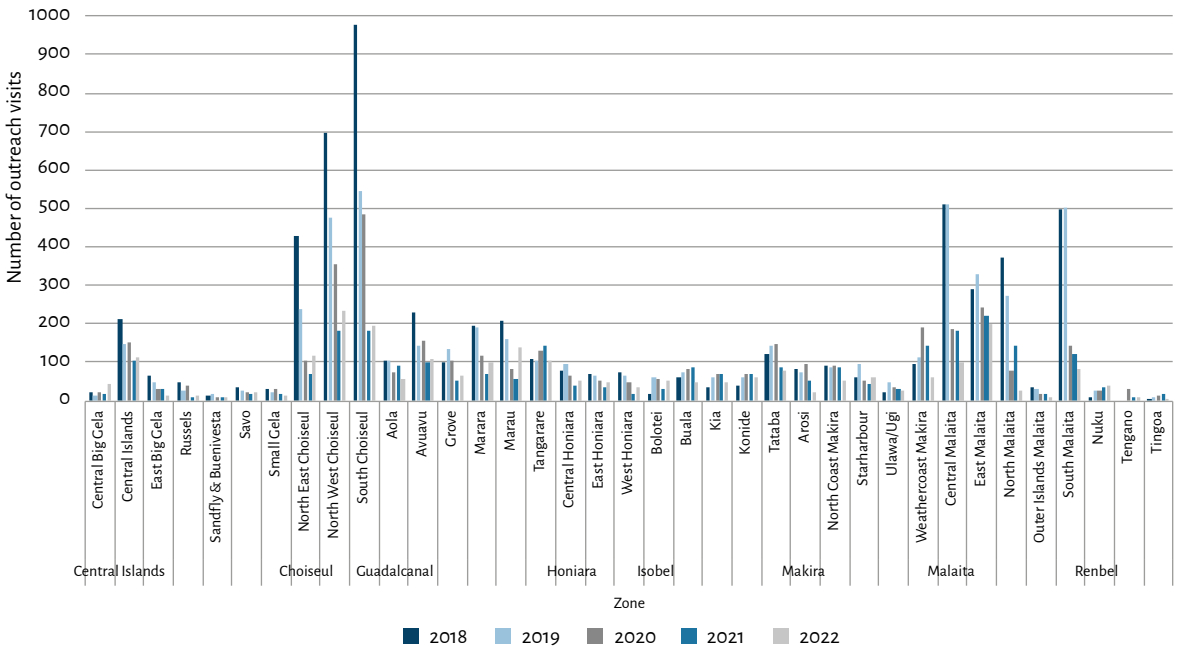
engagement leads to impact in zones where Village Health Committees are heavily involved in planning and advocating for services. Examples of community engagement impacting PHC services include communities managing their own quarantine systems during COVID and advocating for the presence of healthcare staff in their villages. However, in many areas, community engagement does not significantly affect the way services are funded, governed, or enforced, as decision-making often remains outside the community. There is potential to improve community engagement by moving beyond information sharing to involving communities in planning, quality assurance, and reporting when services are not delivered. Training and support for nurses to solicit and capture community feedback and improved health literacy within communities may enhance community engagement in PHC.

There is limited empanelment in the primary health care system. While catchment areas and knowledge of community numbers exist, empanelment is not common practice and individuals are not typically registered to specific providers or health facilities. There is, however, a system of registering specific patient populations for conditions like NCD, HIV, physical therapy, and rehabilitation. These lists are kept at the national level and are not used consistently to direct service delivery and priorities during outreach or at the facility level. The PHC allows patients to choose where they seek care. The NHSP acknowledges the potential for empanelment, focusing on a population health approach and the importance of identifying population coverage at the AHC level, which could be the basis for staffing and funding decisions.

Outreach activities—often led by nurses and nurse aides—make up an important part of the primary health care system in all zones. The NSP prioritizes outreach, with a focus on health promotion and information sharing to ensure effective dissemination of health information, training, and community engagement. Outreach activities occur in all provinces and zones, but the number of activities varies significantly between zones

and has decreased over recent years (Figure 13). Findings on the proactive nature of outreach were mixed, suggesting that 51 to 75 percent of zones conduct outreach proactively. In the other zones, outreach activities are more reactive due to factors such as the availability of nurses, funding, and transportation. Challenges related to subnational politics and resource allocation also influence outreach efforts. Registries and lists that identify relevant patients can be used to target proactive outreach activities. As mentioned above, there are registries for specific patient groups, such as NCD and HIV patients, which are maintained in registry books. Nurses in the facilities identify these patients and report to program officers responsible for outreach. However, the use of registries is variable, and some health needs, like NCDs and disabilities, may require more up-to-date and effective incorporation of registries in outreach efforts.

Figure 13. Number of Outreach Activities by Zone



Source: DHIS2

The PHC system in Solomon Islands faces challenges regarding facility management, especially in standardizing team-based care, management training, data utilization, performance monitoring, and

quality improvement in PHC facilities. The effectiveness of supportive supervision also varies by province, with funding and incentives playing a role in its consistency. Addressing these challenges would contribute to improving the quality and effectiveness of primary healthcare.

In Solomon Islands, the implementation of team-based care in PHC facilities, a strategic approach to the distribution of work among members of a primary care practice team, varies by region. Team-based care is not standardized across all provinces, leading to inconsistent implementation. While some aspects of team-based care exist, especially for AHCs, hospital level, and pharmacies, there is a lack of accountability and consistent implementation. The lowest-level facilities, such as Nurse Aid Posts, often have only one health officer or nurse aid, making it challenging to leverage comprehensive team-based care. In areas where a single provider manages a health post, they are supervised by zone supervisors or managers, typically nurses who in turn are supervised by Provincial Health Directors. The structure for team-based care exists in these areas to some extent, with examples of consulting doctors by phone for advice in emergency cases. However, more concrete mechanisms and strategies to enable service delivery through an effective team-based care approach are needed. Experts indicated that the Ministry is exploring opportunities to shift from a nurse-based model to a multidisciplinary approach and develop multiskilled clinical and public health staff.

Management of PHC facilities in the Solomon Islands is limited by challenges including lack of official management training or standards of training and accreditation for health facility managers. Job descriptions for various nursing roles, such as community health clinical nurses, community health nurse consultants, and registered nurses, include duties related to facility management. These duties encompass supervision, support, and day-to-day management of clinics, among other responsibilities. However, many facilities are managed by a health worker with no formal management training, as qualifications in this regard are

based on experience rather than formal training. For example, clinical nurse managers who oversee facilities in different zones are often selected without formal management qualifications. There is limited post-graduate training available, and it is uncertain how many PHC facility managers have received such training. While some curricula include basic leadership and management modules, more comprehensive training is needed. There is also no formal facility manager position within the system, and only a small percentage (less than 25 percent) of healthcare facilities have leaders with formal management backgrounds. This is compounded by inconsistency in the annual review and feedback process for managers, particularly for lower-level facilities.

Primary healthcare facilities in Solomon Islands have the capacity to capture and report data using the DHIS2 system, with high reporting rates across provinces but limited use of information systems. The capacity of primary care facilities and health care networks to utilize information systems remains unclear. While data is captured and reported, challenges in accessing data, including login credentials and Internet connectivity issues, hinder the effective use of information systems for decision-making. Timeliness in data reporting is also a challenge, with less than 25 percent of facilities submitting monthly reports on time. The use of established performance indicators for PHC is limited, and many indicators are set at the program level rather than specifically for PHC. Routinely monitoring these performance indicators at PHC facilities is also limited, as data is not accessible in paper-based formats and not regularly disaggregated to the facility level and shown in DHIS2. Overall, there is potential for improvement in the use of data for quality improvement (QI) activities, but current quality improvement activities are not systematically documented and integrated into the healthcare system. Additionally, challenges in data analysis and timeliness need to be addressed to fully leverage the data-rich environment for healthcare improvement.

Supportive supervision is in place in approximately half of PHC facilities, but the nature and scope of this supervision varies by province, with some supervisors not fully recognizing its importance due to limited funding and incentives. Zone Health Managers at Area Health Centers are responsible for supervising specific zones. At the provincial hospital level, the Assistant Director of Nursing oversees PHC and supervises the AHCs, RHCs, and NAPs in their respective provinces. Experts reported that supervision in primarily care facilities is intended mainly to be carried out by zone supervisors. The nature of supportive supervision varies by province, and, while the goal is to ensure effective supervision focused on improving the quality of healthcare services, there are challenges. These challenges include limited funding and capacity to support performance improvement, misunderstandings about the concept of supportive supervision, and individual interpretations of its frequency and nature. While some forms of supervision through programs include in-service training and checklists for assessment, the absence of comprehensive, systematic supervision for facilities affects overall consistency and performance. Systematic reforms and standardized approaches are crucial to address these challenges and enhance the quality of primary healthcare services in the Solomon Islands.

Box 8. Deep Dive into Population Health and Facility Management and Gender

Gender-responsiveness of PHC is an important consideration in population health and facility management, especially in community engagement and team-based care approach. Gender-based differences in health outcomes and access to health services must be identified and addressed to ensure equitable health outcomes for all. Women are often the primary caregivers in families and communities, and their participation in health care decision-making is crucial. Engaging women in health care decision-making can lead to better health outcomes for women and their families. In addition, it is important to ensure that health care teams are diverse and inclusive, and that they are trained to provide patient-centered care that is sensitive to the needs of all

patients, regardless of their gender. For example, both men and women may feel more comfortable discussing certain health issues with providers with the same gender identity. Gender diversity can help ensure that the team is better equipped to meet the needs of all patients and understand and address the unique health needs of male and female patients.

Feedback on the quality of services, service satisfaction, and patient-provider respect and trust is not regularly solicited from women and girls, partly due to the gender imbalance in community leadership and social norms. Most community leaders and structures are male-dominated, leading to insufficient consideration of women's needs in healthcare planning and decision-making (MHMS 2017). When it comes to service delivery, women's needs rarely come up during meetings or plannings. These issues point to the need for more comprehensive mechanisms and training to ensure gender-sensitive primary health care practices and improve women's access to healthcare services in the Solomon Islands. The limited mechanisms for issuing and investigating complaints related to gender discrimination hinders the provision of gender-sensitive services with a team-based care approach (MHMS 2022). More concrete mechanisms and strategies to enable services delivery through an effective team-based care approach in these facilities are needed. This can be done by institutionalizing the inclusion of the perspective of women and girls in facility health management decision-making mechanisms such as targeted health education programs, and by ensuring that community centers or other health facilities can be considered a "safe space," as well as by requiring a minimum gender ratio for health committees or community committees.

FINANCING

The Financing domain assesses Solomon Islands' commitment to PHC by evaluating the allocation of funds to PHC and sources of expenditure. The VSP uses five indicators to evaluate the total spending on and prioritization of PHC. The first indicator, current PHC expenditure per capita, examines financial commitment to PHC by capturing the absolute amount of spending

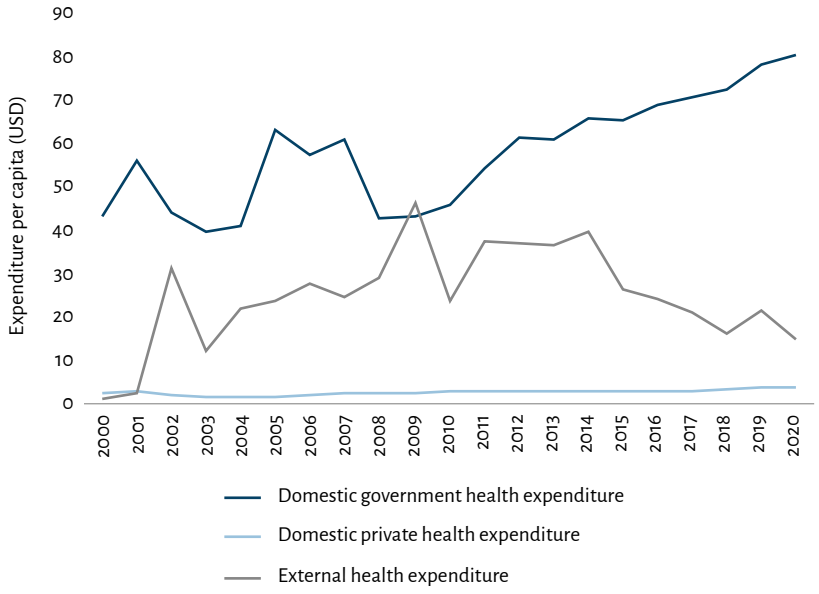
on PHC per person. The subsequent two indicators focus on spending prioritization on PHC. The first indicator is the current PHC expenditure as a percentage of the current health expenditure (CHE), which captures PHC spending in relation to total current health spending. The second is the domestic general government PHC expenditure as a percentage of the current health expenditure, which compares PHC spending in relation to total government health spending. The last set of PHC financing indicators examines the sources of PHC spending. These indicators include government spending as a percentage of total PHC spending, and other spending (domestic private and external) as a percentage of total PHC expenditure.

The indicators specified above are calculated using a standardized methodology across countries. However, they are currently unavailable for the Solomon Islands. The indicators are typically calculated by the WHO Health Finance team using the Systems of Health Accounts 2011 (SHA 2011) and published in the Global Health Expenditure Database. This process involves defining PHC expenditure at the global level, which would require adaptation to the Solomon Island's context. It is critical that the country aspires towards defining and measuring the selected PHC financing indicators, which will provide a robust understanding of total level, prioritization, and sources of health spending allocated to PHC.

Nevertheless, existing indicators pertaining to health system financing beyond PHC can offer valuable insights that are applicable to the PHC level. According to the WHO's Global Health Expenditure Database, the Solomon Islands' health expenditure in 2020 was 4.4 percent of GDP, higher than the average of 3.9 percent for lower middle-income countries. Similarly, the domestic general government health expenditure was 3.6 percent of GDP compared to an average of 1.5 percent for lower middle-income countries. The country spent US$99 per person/year on health in 2020, with US$81 coming from the government, US$15 from international sources, and US$4 coming from external expenditure

including US$3 from out-of-pocket expenditure. Over the last two decades (2000–2020), government expenditure increased from US$43 to US$81, while private expenditure remained similar from US$3 in 2000 to US$4 in 2020. External expenditure fluctuated over the period from US$1 in 2000 to a high of US$46 in 2009 to US$15 in 2020 (Figure 14).

Figure 14. Changes in Health Expenditure by Revenue Source in the Solomon Islands, 2000–2020



Source: WHO Global Health Expenditure Database 2023 (2020 data)

RECOMMENDATIONS

Solomon Islands has made substantial progress towards achieving accessible, comprehensive, and high-quality PHC and is uniquely positioned to leverage its PHC-oriented approach to tackle new and remaining challenges through targeted intervention. Solomon Islands has made impressive gains in health outcomes over the past three decades, with decreases in under-5 and infant mortality rates and increasing life expectancy, among other accomplishments. Major challenges remain, however, including variable coverage in services, high rates of NCDs, and an increasing gap between life expectancy and healthy life expectancy. The following four recommendations highlight specific areas that have the potential to lead to sustainable improvements to the PHC system in Solomon Islands. Table 3 summarizes the four recommendations by priority level, time horizon, and core VSP domain addressed. A more detailed summary of the recommendations, the resources requirements, difficulty of implementation, potential impact, time horizon, VSP domains addressed, and delegation of responsibilities is provided in appendices D and E.

Table 3. Recommendations by Priority Level and Time Horizon.

Recommendation	Prioritization from low (+) to high (+++)	Time horizon to impact	Core VSP domain addressed
Strengthen governance and coordination to promote comprehensive primary health care	+++	Medium to Long term	Access, quality, coverage, equity, capacity Governance and leadership Facility organization and management Population health management
Invest in integrating and emphasizing a focus on quality of care across all levels of the health system to facilitate high-performing primary health care	+++	Medium term	Quality, access, coverage, capacity Facility organization and management Population health management Workforce

Recommendation	Prioritization from low (+) to high (+++)	Time horizon to impact	Core VSP domain addressed
Build on investments in information systems to drive quality improvements through care coordination, performance measurement, and evidence-based decision making	++	Short term	Quality, coverage, access Adjustment to population heath needs Information systems Facility organization and management
Implement new people- and community-centered models of care	++	Short term	Access, coverage, equity Adjustment to population health needs Population health management

The VSP provides an overview of the state of PHC in the Solomon Islands. The above recommendations are grounded in the PHCPI framework and informed by the findings from the quantitative and qualitative VSP. The Ministry of Health can use these recommendations as an opportunity to engage with partners with the aim of strengthening PHC services.

1. Strengthen governance and coordination to promote comprehensive primary health care.

1.1. Develop a primary health care policy to define the scope and composition of primary health care and facilitate the political prioritization of a PHC-oriented approach.

Effective governance strategies enable the key functions of PHC: accessibility, continuity, comprehensiveness, coordination, and patient-centeredness (Veillard et al. 2018). At present, Solomon Islands does not have a singular, comprehensive PHC-specific policy for strengthening and directing PHC activities, or a formal definition of primary health care. There is opportunity to formulate a comprehensive PHC policy, which would benefit the PHC system by establishing a common definition and clear priorities for stakeholder alignment. The policy could add specificity to the PHC-related identified in the NHSP 2022-2031, particularly detailing how PHC

could help to achieve the third strategic objective. The PHC policy could explicitly focus on four dimensions: defining PHC in line with other policies such as the Role Delineation Policy; coordination for planning and execution of PHC policies; quality management; and continuous measurement. Furthermore, a national policy on PHC could serve as a foundation enabling the collation and coordination of policy objectives from vertical programs that cover parts of primary health care. To achieve this, the policy could state what PHC facilities are, what PHC services are, who the PHC actors and stakeholders are, what the PHC priorities are, and which elements of M&E frameworks from the NHSP and other policies come together to measure PHC.

1.2. Establish clear authority for PHC to improve coordination across MHMS entities and facilitate effective delivery and oversight of health services.

To advance PHC policy and planning, Solomon Islands would benefit from establishing a clear authority for coordinating and overseeing PHC activities. Solomon Islands does not currently have a coordinating authority for PHC activities; leadership and coordination for PHC is fragmented across programs and provinces. For example, PHC is covered in policies and service delivery across units such as policy and planning, RMNCAH, health promotion, and health information systems. The establishment of a national entity or position to coordinate, monitor, and implement PHC policy at national, regional, and community levels could remedy the fragmentation of PHC across units. The NHSP 2022-2031 proposes the establishment of such a position, a "Director National Primary Health Care." To operationalize this position, careful planning, consensus building, and inclusive participation from public and private stakeholders should be undertaken to define its scope and overall responsibilities. The position holder will likely need to have sufficient institutional knowledge of the Solomon Islands health system and political

authority to steward PHC across the many entities that currently cover aspects of PHC.

Furthermore, it will be important to identify which and what parts of national programs and provincial responsibilities are within PHC, so these can be coordinated either in a matrix-like organizational approach, or with responsibility explicitly assigned to promote transparency and accountability. Acknowledging the decentralized nature of PHC governance and the important role that provinces play in PHC planning and service delivery, leadership at the provincial level should also be targeted. This could be accomplished through enabling Provincial Health Directors to have a stronger focus on PHC by explicitly including it in their scope of work and including evaluation of PHC leadership in performance reviews. Another strategy could be to leverage the national coordinating authority in this regard, with this authority overseeing PHC across provinces, in collaboration with the Deputy Secretary – Health Care Services.

An effective coordinating authority with sufficient provincial operational capacity and reach and resources is important to prevent gaps between written policy objectives and implementation capacity. For example, Thailand's experience of a politically-motivated policy that attempted to rapidly scale up a health screening program without ensuring that it could be effectively implemented lead to an unsuccessful program outcome (Yothasamut et al. 2010). By carefully aligning the PHC policy recommendations, above, with the design and capacitation of a national coordinating authority, Solomon Islands MHMS could position itself well for accelerating improvements in PHC.

1.3. Enable accountability mechanisms and strengthen collaboration to help ensure policies, strategies, and plans are translated into action and achieve desired outcomes.

While the MHMS is the primary driver of PHC policy and implementation, non-state actors such as development partners, non-profit and for-profit nongovernmental organizations, and civil society groups are important stakeholder groups and critical in achieving health systems goals of increased coverage of services and improved health status (WHO 2023d). Additionally, multisectoral action—integration across government entities whose work intersects and interacts with PHC—is an important means of ensuring social accountability and a 'Health in All Policies' approach (WHO 2023e). In alignment with a shared vision for PHC and a coordinating authority, Solomon Islands could establish mechanisms for social accountability such as cross-government groups on primary health care and/or technical forums that are regularly held and consistent in structure, with the explicit purpose of covering primary health care. Establishing such groups for implementing and advancing NCD-related policies is also important, as addressing key risk factors such as alcohol, tobacco, diet, and exercise requires collaboration and coordination across government agencies and multiple sectors.

Key components to facilitate social accountability through such mechanisms are information transparency, responsiveness to people, representative participation, and citizen-led oversight (PHCPIa). Information transparency assists in monitoring the health system and includes disclosure of relevant health indicators, budget allocation and expenditure reports, and health system performance indicators. Responsiveness to people ensures government institutions and actors are open and responsive to citizen feedback. Representative participation of important stakeholders in PHC ensures that the voices emerging from the community are heard and included in social accountability activities and that there is awareness and alignment across government ministries and non-state actors implementing and overseeing parts of PHC.

Solomon Islands may take inspiration from Nigeria's establishment and. Use of technical working groups to facilitate social accountability in policymaking. When Nigeria developed its 2016 National Health Policy, the Federal Ministry of Health built consensus with nongovernmental actors through collaboration in a technical working group. The group met over a period of two years to analyze progress made on previous health policies and chart a new way forward (Nigeria Federal Ministry of Health 2016). The MHMS could use Nigeria's approach as a reference to plan for and oversee the establishment of a technical working group for PHC. Given Solomon Islands' successful use of technical working groups for other areas, such as cervical cancer, this could be an effective mechanism to institutionalize the participation of stakeholders at the national level and make it more likely for them to be positively engaged and aligned with the government. This type of engagement promotes social accountability by closely involving stakeholders in planning, policy formation, and monitoring and evaluation. In Solomon Islands, it could enable stakeholders to hold the MHMS accountable to existing and emerging concerns and priorities relevant to PHC due to increased and shared knowledge and systematic forums for consultation and information dissemination.

1.4. Integrate PHC priorities into national, provincial, and zone priority setting processes for effective translation of strategic goals.

Solomon Islands could institutionalize and standardize the inclusion of PHC priorities by integrating key dimensions of overarching PHC policies and strategies into the AOP process and materials. Effective priority setting is central to building resilient health systems that can effectively adapt and respond to changing population health needs and demands and maintain emphasis on PHC. Integrating overarching PHC priorities into AOP drafting templates may help translate those

priorities into strategic and operational plans and prevent their getting lost in the prioritization process. Criteria to include in the AOPs should encompass costing and budgeting, implementation, and monitoring and evaluation. There is also an opportunity to flag areas where evidence could be incorporated to guide the priority-setting process; for example, findings on the comprehensiveness of services could be flagged to encourage priority setting that ensures gaps in service coverage are addressed. Standardizing the approach to translate and capture PHC priorities at national, provincial, and zone levels would also enable transparency, effective collaboration, and resource sharing between programs or across regional areas.

Solomon Islands could use a similar approach to that of Afghanistan, whose ministry of health reformed priority setting processes to rebuild the fragmented health system and revise its package of services. There, the ministry collaborated with national working groups from different levels of the system in 2017-2018 to revise both the basic and essential packages of health services in response to the global UHC agenda and changing population health needs. The strengths of their approach were in adapting international evidence to the local context, utilizing clear and transparent multilevel and multisectoral decision-making processes, and prioritizing effectiveness, local feasibility, affordability, and equity (PHCPIb). The ministry and working groups used the third edition of the national disease control priorities (DCP3) series to translate international evidence to the country context and adopted a multicriteria approach to facilitate a fair and transparent priority setting process. The process was guided by two key questions: 1) Which interventions are no longer justified as a top priority and which additional health interventions are needed? And 2) How will the new package of health services be accessible to the most vulnerable and geographic isolated groups of the population? Solomon Islands can use Afghanistan as a reference to implement a similar approach to integrate PHC priorities into priority setting processes. A country-

specific definition of PHC could be used to establish principles for priority setting which, alongside guiding questions, could be explicitly included in AOP forms. Additionally, provincial and national health system leaders could use the same principles in reviewing and approving AOP submissions.

1.5. Expand the role of the Gender Focal Point to enable gender-responsive PHC interventions.

To enhance the effectiveness of gender-responsive interventions, Solomon Islands could broaden the role of the Gender Focal Point or Gender-Based Violence focal person within the MHMS. The focal point should be empowered to go beyond addressing violence-related issues and take a comprehensive approach towards gender integration in public health programming. This expansion should encompass key gender-responsive interventions, including but not limited to gender mapping exercises, data collection, evidence gathering, and the development or review of gender training and guidelines at the facility level.

The Gender Focal Point, in collaboration with MWYCFA and under the leadership of the PSC, should actively engage in gender mainstreaming initiatives. This involves not only addressing the needs of women exposed to violence and people with disabilities but also ensuring a holistic integration of gender considerations across primary healthcare services. By investing in and expanding the role of the focal point, the coordinating authority can create a more inclusive and coordinated approach to gender-responsive interventions, fostering a supportive environment for both service providers and recipients.

Additionally, efforts should be directed towards establishing a specific funding mechanism dedicated to gender-responsive primary healthcare interventions. This mechanism should enable

targeted initiatives such as gender mapping exercises and evidence gathering to ensure the sustainable implementation of gender-integrated practices in public health facilities. The coordination and collaboration of gender equity champions should be facilitated with clear communication channels and strategies, reinforcing their roles in promoting gender equity within the healthcare system.

2. Invest in integrating and emphasizing a focus on quality of care across all levels of the health system to facilitate high-performing primary health care

2.1. Develop national frameworks and management structures to establish a national PHC quality management strategy, governance, and intervention characterization and coordination

Solomon Islands would benefit from establishing a national quality management strategy to strengthen PHC systems. An overarching management structure for PHC quality could create clarity, accountability, and liability for the delivery of quality health services at national, subnational, and facility levels and provide a shared understanding of quality across the health system (PHCPIc). A national strategic direction on quality would help to codify a commitment to quality and quality planning efforts; it establishes the aims, processes, and goals to help institutionalize continuous improvement. Most approaches to national quality strategy development involve one or more of the following processes: a national quality policy and implementation strategy as part of the formal health sector national plan; a quality policy document developed as a stand-along national document, usually through multistakeholder process, led or supported by the MHMS; a national quality implementation strategy, including a detailed action agenda and a section on essential policy areas; and enabling legislation and regulatory statues to support the policy and strategy (PHCPId). Reforms in other countries demonstrate the value of these efforts. For example, starting in the 1980s, Malaysia defined

its Strategic Action Plan for Quality in Health, which institutionalized a regulatory structure to ensure a given level of progress or health improvements for facilities to help ensure equitable access to quality care.

In Solomon Islands, the MHMS could capitalize on efforts to improve the quality of care across government and nongovernmental stakeholders by systematically characterizing and collating existing quality-related interventions within a centralized quality management initiative. This could entail mapping various quality initiatives and characterizing their geographic scope, extent of implementation, and degree of impact. For example, existing quality interventions include registration and regulation of health professionals, the national medicines adverse reaction reporting system, and decision-making tools in health facilities. There are not, however, any efforts to integrate and oversee these interventions to ensure that an overarching, strong quality management infrastructure is in place. Global best practice encourages a package of interventions to cover four important aspects of quality planning, management, and control: interventions to create an enabling systems environment; interventions to reduce harm to patients; to improve clinical effectiveness of health services; and to engage patients, families, and communities.

Solomon Islands could adapt a project used in Kenya to develop its own national frameworks and management structures for national quality of care management. Kenya's SQALE project provides a compelling example of embedding quality improvement activities into national health programs and community health practices (PHCPId). At the national level, this included anchoring quality improvement methodology in licensure and rewards processes; locally, this involved implementing citizen-engagement programs to increase accountability through community participation and offering a training course to guide health staff and managers in strengthening

quality management in every setting. Solomon Islands is well placed to adapt this approach. The National Health Strategic Plan's goal to ensure that all Solomon Islanders have access to equitable quality preventive, curative, rehabilitative, and promotional health services is a strong foundation and justification for these enabling activities. The MHMS can use the tools developed as part of the SQALE project as a reference to plan and implement similar quality management interventions, such as the training course for health staff and/or the participatory methodology for community quality improvement.

2.2. Build on and operationalize the Role Delineation Policy to establish facility and provider classifications and benchmarks.

Solomon Islands Role Delineation Policy articulates the ideal roles and capacities of each level of facility and could be leveraged to support an enabling environment for quality by operationalizing into facility and provider classifications and benchmarks. Opportunities to work in tandem with or build from existing policies could take advantage of the momentum and lessons learned. The RDP would readily serve as the foundation of a system for public reporting and comparative benchmarking given its robust methodology and detailed breakdown of facility and provider requirements. By combining the requirements of the RDP for each facility with existing systems on facility density and distribution, the MHMS could establish benchmarks and compare facility-specific performance across each. For example, the RDP states that rural health centers require a minimum number of staff (two registered nurses or nurse aides), a service delivery package of essential clinical services including, among others, first-line emergency and trauma care, ANC and postpartum care, and point-of-care testing for communicable diseases, and facility infrastructure elements of a multipurpose waiting room, bathroom facilities, waste facilities, among others (MHMS 2020). These could be codified into a checklist implemented by the facility to capture the extent to which facilities

are resourced to provide services in alignment with the RDP. The checklist could also be used at provincial and national levels to monitor facilities' resources. An example of a successful facility reporting and benchmarking practice is the implementation of basic scorecards in Afghanistan, which improved facilities and noted opportunities for broader performance benchmarking and strategic management (PHCPIe). With Solomon Islands RDP as a foundation for the required elements and standards of benchmarking, its operationalization into facility reporting and comparative benchmarking would strengthen the MHMS' ability to emphasize quality of care at the facility level.

2.3. Enhance existing monitoring and evaluation frameworks to enable routine monitoring of quality at facility, subnational, and national levels.

The quality of services has been identified as a significant challenge in Solomon Islands, however the MHMS has limited information with which to monitor and assess quality. Robust information is key to identifying quality issues in a timely fashion and enabling improvements or corrections where needed. The MHMS has invested in its information system and the DHIS2 system facilitates tracking of utilization and health statistics. Data can be used for planning purposes, maintaining essential supplies, and managing human resources as it includes details on antenatal care, family planning services delivered, immunizations, and medicine stockouts, among others. There are opportunities to update the data captured at the facility level to enable monitoring of PHC quality and service delivery. For example, additional indicators to show performance and quality of care include adherence to clinical guidelines, provider absence rate, and diagnostic accuracy, among others.

Afghanistan's efforts in implementing balanced scorecards of performance, mentioned above, provide an example of the types of indicators that could be used and their impact on quality of care

(Edward, et al. 2015). They include aspects such as facility cleanliness, waiting time, accurate clinical examination (based on patient volume and adequate consultation time) and proper prescribing (Edward et al. 2015)but the quality of care remains suboptimal, as evidenced in the balanced scorecard (BSC. As a result of the scorecard performance system, stakeholders were able to identify emergent needs for allocation of resources and improve meaningful outcomes such as patient satisfaction and quality PHC (PHCPIf).

Efforts to populate information systems with quality-focused indicators provides an opportunity to implement recommended strategies to integrate information systems in parallel. Furthermore, data and indicators should align with and enable the operationalization of facility and provider benchmarks, as discussed above. Establishing well-designed health information and monitoring and evaluation systems that routinely collect and publish data on quality health systems at the national, subnational, and local levels enables a quality-focused approach to overseeing PHC and would enhance Solomon Islands' ability to facilitate high-performing PHC.

2.4. Improve the supply and availability of facility amenities and facility-level availability of drugs and supplies to ensure equitable access. Encourage PHC as the first point of contact.

Solomon Islands would significantly capacitate the PHC system by ensuring the availability of essential medicines, supplies, infrastructure, and safety standards and equipment across all PHC facilities. This initiative would ensure that patients consistently receive safe and effective services, without the need for time and resource-intensive travel to higher-level or more urban facilities. Infrastructure, medicines, and supplies are essential elements of a functioning health system. PHC systems that can provide a comprehensive suite of promotive, preventive, and curative services depend on the availability of drugs, supplies, and safe facilities.

Improving the supply and availability of amenities and supplies requires sufficient financing, effective management of funds at the facility level, appropriate physical infrastructure, and information systems to track procurement, distribution, and status. The MHMS is currently implementing a logistics management information system, mSupply, and it should ensure that it can continuously monitor availability, predict shortages and proactively address them, and evaluate appropriate prescribing, dispensing, and rational use. Additionally, the development of a health facility infrastructure plan, building on standards established in the RDP, provides an opportunity to assess the country's needs and establish a long-term plan for improving, demolishing, and building infrastructure that supports the population's evolving health needs. This should be drafted in close alignment with standards set in the RDP and be closely linked with any developed systems for facility classification, as discussed above. Given the Solomon Islands' vulnerability to climate change, infrastructure investments could consider facility risk and resilience. Additionally, resource allocation must be strategically approached to ensure that facilities are properly equipped, including with electricity, reliable telecommunications, and access to Internet or data connectivity.

Continued and regular monitoring is essential to improving the supply and availability of inputs. Solomon Islands could take inspiration from Senegal and use their efforts to improve physical infrastructure as a reference to guide MHMS planning and implementation. Using a proactive approach to gather data through nationally representative assessments, Senegal was able to determine priorities for modifying facility infrastructure and amenities. Between 2012 and 2017, Senegal's Ministry of Health took actions to equip health huts, the lowest level of the health system, with family planning consumables and infectious disease diagnostics and treatment. They also facilitated a dramatic increase in facilities with regular access to electricity, Internet, and

latrines, among other inputs (PHCPIg). Through strategic design, significant investment in resourcing facilities, and regular monitoring and prioritization, Solomon Islands MHMS improved PHC facilities' ability to deliver safe, comprehensive, high-quality PHC.

2.5. Improve technical quality at the facility level by strengthening and implementing decision-making tools such as clinical guidelines and care pathways.

Decision-making and patient management tools are critical for health workers to provide safe and effective care. The MHMS must ensure that health workers at all levels of the health system have access to up-to-date clinical guidelines and care pathways for the diseases and conditions afflicting the population. Care pathways are especially crucial in the management of chronic diseases and NCDs, particularly for patients with complex comorbidities. At present, facilities have limited access to job aids and guidelines and no standardized resources on care pathways exist at scale. There is an opportunity for the MHMS to review existing decision-support tools to ensure they are up to date with current best practices and reflect the service delivery design captured in the RDP. There may also be a need to develop new decision-support tools to cover gaps in existing materials, including gender-sensitive service delivery and care pathways for complex diseases. An update to or development of decision-support tools should be distributed to all PHC facilities and health workforce training institutions. Furthermore, the MHMS could take steps to monitor adherence to the guidelines and pathways. At present, the Ministry's work on quality is centered on the National Referral Hospital, but it could also support the development and monitoring of care pathways at the primary care level. Supportive supervision activities are nascent, but the content covered could explicitly discuss the availability and use of decision-support tools. An additional approach is to use tools for mobile health in the implementation and

monitoring of adherence. In Tanzania, for example, a digital decision-support tool was designed to assist health workers with family planning counseling and screening. The tool enabled electronic data collection and referrals and included functionality for SMS status reports and reminders for CHWs to conduct a follow-up (Agarwal et al. 2016). Similar approaches can be used for NCDs and other priority diseases.

3. Build on investments in information systems to drive quality improvements through care coordination, performance measurement, and evidence-based decision making.

3.1. Integrate PHC oriented indicators into routine surveys.

With a foundation of routine health surveys and recognition of the value of survey data in informing health system improvement, Solomon Islands could expand the scope of indicators included and surveys conducted to enable more comprehensive monitoring of PHC implementation and impact. Health facility and community surveys are an important mechanism for generating information on aspects not routinely captured through the HMIS and for soliciting community and user perspectives. Solomon Islands has implemented the Health Facility Readiness and Service Availability Assessment, in partnership with UNFPA, which aims to provide insights into the availability and quality of essential maternal health services as well as the availability of contraceptives and essential medicines. This survey provides valuable information on PHC capacity and performance, and could be further expanded to help fill information gaps in: the availability of basic equipment and diagnostic supplies in PHC facilities; facilities with amenities such as electricity, communications equipment and Internet connectivity, access to emergency transport; availability of safety precautions and equipment including sterilization equipment and safe disposal of sharps; practices of facility quality improvement; and occurrence of supportive supervision for facility management.

Because the survey is already collecting data from the facility level, including additional PHC-focused indicators presents an important opportunity to generate data for decision-making while reducing redundant data collection costs. The planned MICS survey for 2024 presents another opportunity to ensure additional data is generated on PHC. Other valuable survey initiatives that could provide information on PHC performance to fill gaps, particularly in understanding the continuity, person-centeredness, safety, and accessibility of PHC services as well as provider availability and competencies, include the Service Availability and Readiness Survey, the Service Delivery Indicators, or MICS.

3.2. Extend measurement and dialogue around comprehensive primary health care to the provincial level

Solomon Islands' provinces direct a significant amount of PHC implementation and could be further supported to prioritize PHC in decision-making by extending the VSP approach to measuring and understanding PHC performance to the subnational level. A comprehensive understanding of PHC concepts and performance contributes to more effective, PHC-focused priority setting, implementation, and evaluation. The availability of summarized health information through DHIS2 in recent years has significantly expanded the potential for data to inform decision-making at the provincial level. However, current DHIS2 visualizations are organized to summarize by indicator and are not collated into a comprehensive, cross-PHC snapshot. In addition, varying definitions of PHC complicate its understanding across provinces. The Vital Signs Profile is acknowledged for its contributions towards cross-sector alignment and establishment of a common language for PHC at the national level, which could be cascaded to the provincial level. This would also provide an opportunity for more nuanced data collection at the provincial level, with disaggregation of analysis down to the zone

and even facility level. Extending this approach could include three elements: introducing an additional data visualization module into DHIS2 based on the VSP; summarizing DHIS2 and globally available data at the provincial level using the VSP; and conducting an adapted VSP assessment with data collection to populate provincial capacity scores. Several of the VSP capacity and performance scores leveraged DHIS2 data, including topics such as essential medicines availability, proactive outreach, and service coverage, among others, and the existing data on these topics could be visualized through PHC-specific modules within DHIS2 at the provincial level.

Additionally, existing information from surveys could be disaggregated, analyzed, and summarized by provincial level into adapted VSPs, where data is disaggregated to the provincial level. Where appropriate, the national VSP assessment data collection process could be adapted and used to direct qualitative data collection and mining of province-specific information systems, enabling generation of a full, provincial-level Vital Signs Profile for more granular and disaggregated information for decision-making. Such analytical efforts have been conducted in Ghana, which created dashboards in its digital information system modeled after the Vital Signs Profile for real-time visualization of performance by district; and Costa Rica, which adapted the measurement tool to its subnational decision-making structures and generated informative findings on service delivery networks at the subnational level to direct policy efforts.

3.3. Integrate data collection tools and information systems at the facility level to support the use of timely and relevant information for clinical and performance improvement.

At present, Solomon Islands information system is comprised of many distinct forms and ledgers that capture patient and service-delivery data at the facility level. This contributes to the robust information

in DHIS2, but also places considerable workload on providers at PHC facilities who are responsible for filling in multiple ledgers, some with duplicative copies. This approach may also lead to duplicative data collection across programs with separate tools. The MHMS would benefit from integrating existing templates and data collection tools into a singular tool for facility-level recording and reporting. This effort could streamline workflows for health care workers, produce more timely data, and facilitate an integrated information system. Information systems are critical to enabling patient-centered approaches to care management and informed decision-making at policy and management levels and are most impactful when functional and interconnected. Functional information systems are accessible and user-friendly, fitting into existing workflows with systems in place to ensure appropriate quality and cooperative use of information across the health system and are important for efficient digitalization.

It will be important for the MHMS to review the existing data collection tools at the facility level, including both the monthly reporting form and specific programmatic forms, and develop an integrated form or ledger that captures necessary data in a singular manner. This process will also provide an opportunity to review indicators and ensure sufficient PHC implementation, utilization, and outcome metrics are included. Furthermore, an integrated data collection tool provides a foundation for any future efforts to digitize the HMIS at the facility level. It is important that longitudinal patient data can be collected in the information systems and seamlessly shared across health care providers and facilities. At present, NCD patients are responsible for bringing a booklet with the clinical information. Having the capacity to share patient information longitudinally will help to ensure primary health care is continuous and appropriate. In Bangladesh, for example, the development of an interoperable, integrated information system supported reliable data aggregation, analysis, and reporting by

leveraging existing in-country information infrastructure (PHCPIh). Their customization of DHIS2 for this purpose was critical for ensuring the inclusion of a myriad of health data from multiple sources. By leveraging its existing DHIS2 and strong practices in facility-based data collection, Solomon Islands is well-positioned to further enhance the utility of its existing information system.

4. Implement new people- and community-centered models of care.

4.1. Institute a robust practice of empanelment to enhance the quality of care through improved continuity, comprehensiveness, and patient-centeredness of services.

Solomon Islands is well-positioned to leverage its knowledge and practice of geographic catchment populations to establish patient panels and an empanelment system. Empanelment, also called "rostering," involves assigning individual patients of a population to specific primary care providers or teams through patient panels and plays a vital role in enabling continuous, first-contact PHC (Joint Learning Network for Universal Health Coverage 2019). A robust system for population empanelment forms the backbone of integrated health service delivery. (PHCPIi). It establishes a point of care for individuals and simultaneously holds providers and care teams accountable for actively managing care for a specific group of individuals. Empanelment also emphasizes patient-centeredness by tailoring care to individual needs and preferences.

Solomon Islands currently does not have a system for empanelment. However, there is knowledge and practice of geographic catchment populations, where the overall number of individuals living within a facility's set geographic domain is known to health system administrators—the first step in establishing patient panels. This could be expanded upon to broaden PHC facilities' health outreach efforts and enhance the effectiveness of services for high-risk patient

groups, such as mothers, children, those with disabilities, and those with NCDs. This expansion would entail regular monitoring of population data within the defined geographic catchment areas and availability of that data, disaggregated to the individual patient level, within the facility. It would also enable communication with individuals in catchment populations to facilitate awareness of the providers and facilities that individuals are empaneled to. This could be supplemented with information in Solomon Islands' national registers for NCDs, HIV, and rehabilitation that could be operationalized at the facility level if made available there. When this information is available at the facility level, it enables the systematic identification of patients in need of follow-up or more intensive clinical care. The systematic analysis of this population data empowers PHC facilities to customize their services to the specific health needs of the local population, thereby improving service efficiency and delivery.

This approach is particularly crucial for addressing the growing burden of NCDs, which require ongoing and proactive care management. By continually monitoring and tracking high-risk patients within a geographic catchment population, the health care system can proactively meet their needs and reduce the risk of acute clinical complications. Costa Rica, Ghana, and Brazil have demonstrated the benefits of implementing empanelment systems by expanding their geographic catchment population strategies. In Brazil and Costa Rica, the PHC system depended in part on PHC teams' knowledge and understanding of their catchment areas built up through the strong empanelment systems. In Ghana, empanelment led by trained nurses contributed to dramatic increases in health service utilization (PHCPIi).

4.2. Reinstitute and institutionalize Healthy Village Settings work to support community engagement.

To further enable regular engagement of communities in priority setting and service delivery, Solomon Islands would benefit from reinstating and institutionalizing the piloted Healthy Village Settings efforts across the country. Community engagement is a critical function and enabler of strong primary health care systems. When done effectively, community engagement helps to ensure that the design, planning, governance, and delivery of health care services appropriately meet the needs of the communities they are designed to serve (PHCPIk).

The Healthy Village Settings work was piloted by the MHMS with support of Japan International Cooperation Agency (JICA). Its objective was to develop a public health intervention model combining preventative and promotive activities in 15 villages in Guadalcanal and Makira. The initiative established Village Health Committees (VHCs) and Healthy Village Promoters (HVPs) to develop village action plans, provide basic services and health education, and implement community activities. It demonstrated successful impact on community engagement and health outcomes before the project ended. It involved the development of programs, activities, and resources designed to collaborate with communities through activities like village cleanings. To further strengthen community engagement and population health management, Solomon Islands could revive the program and broaden its scope of implementation to the entire country. Additionally, the Healthy Village Settings work created the position of Healthy Village Promoters who provided basic services in their communities with a similar effect of community health workers in other settings. CHWs play an important role given the population's increasing incidence of NCDs and chronic conditions that necessitate more proactive and regular care. The suite of tools developed by the program are readily available and could be used to train and equip HVPs in villages across the country. In addition, media outputs to promote the Healthy Village program—a recommendation from

the pilot—could be developed. To ensure that HVPs are supported and integrated within the health system, thereby enabling them to serve as the linkage between community and service delivery, it is recommended that health centers serve as coordinating focal points, with nurses as managers and provincial officers as supervisors.

Solomon Islands could draw inspiration from a successful example in Nepal, where a public-private partnership with NGOs expanded access to high-quality health care in remote areas through community health care workers. Full-time salaried community health care workers were rigorously trained to provide longitudinal home-based care for patients with NCDs and for RMNCH. Their responsibilities encompassed passive community surveillance, home-based diagnosis and treatment, counseling, triage, referral to local health facilities, and the continuous collection of data, alongside feedback loops for follow-up care (PHCPIk). Their roles were thus effectively integrated into the local health care system. CHWs in Nepal played roles like the HVPs in the pilot Healthy Village Settings project, who targeted salient issues including malaria, WSH, NCDs, and nutrition. As was important in Nepal, the successful scale and integration of the Healthy Village Settings work will require national and provincial level buy-in and oversight, as well as ongoing supervision to ensure effective implementation and impact.

4.3. Enhance population outreach effectiveness and impact by enabling a proactive approach with a focus on prevention, screening, and treatment of NCDs in high-risk populations.

Integrating parallel outreach efforts and supplementing service delivery with community engagement and health literacy efforts will enhance the effectiveness of population outreach activities. Proactive population outreach is an important function of a PHC system, leading to improved awareness of and access to services and increased efficiency by moving certain health activities outside of the

physical clinic. It can optimize person-centered health by bringing services to patients and integrating service delivery into the context of the community. Proactive outreach also serves as an opportunity to promote health literacy and engage communities with the health system in the Solomon Islands' remote and hard-to-reach islands.

The MHMS could leverage existing practices of conducting population outreach, as detailed in the results above. In practice, this may involve combining programmatic activities such as immunizations and NCD screenings into singular outreach trips by aligning staff, supplies, and logistics. Furthermore, outreach activities could leverage existing data and information, such as registries for NCD patients and trends in disease metrics, to proactively design and conduct outreach visits or target specific populations. There are a few strategies by which this can be achieved: targeting specific or acute health needs, such as through the identification of acute cases and pregnant women needing referrals; targeting by preventive needs, including by conducting health promotion and education activities for populations according to age, gender, and vulnerability, such as poverty and malnourishment; targeting by chronic diseases, such as by ensuring patients with NCDs have appropriate treatment and follow-up; and targeting by risk strata, or risk-stratified care management, to direct care to those in greatest need (PHCPII). Empanelment systems, discussed above, could serve inform these different strategies.

An additional benefit of proactive population outreach is the ability to promote health literacy and solicit community engagement in the design and delivery of health services. Low levels of health literacy limit communities' ability and interest in engaging in the health system. Outreach visits could address this issue by distributing health literacy tools and communicating the location and type of services that should be available at their nearest facilities. In order to ensure relevance and impact at the community level, MHMS should, through

provincial and zone officers, ensure tools use the local dialect of each specific region. Given that outreach activities offer opportunities for communities to provide feedback about the health systems, such as in discussions with health care providers, there is an opportunity to systematically promote community engagement and capture feedback during outreach visits. Options to operationalize this may include standardized forms with probing questions for community input and space for outreach staff to summarize feedback they receive.

APPENDICES

APPENDIX A. PERFORMANCE DOMAIN

phcpi

PERFORMANCE DOMAIN: DETAILED VITAL SIGNS PROFILE INDICATORS

Solomon Islands	SCORE	PERCENTAGE	SOURCE	YEAR
ACCESS				
Financial				
Perceived access barriers due to treatment costs*		*No data available*		
Geographic				
Perceived access barriers due to distance*		*No data available*		
QUALITY	62			
Comprehensiveness				
Avg. availability of 3 RMNCH services✧		66%	*HFRSA*	*2021*
Avg. availability of services for 2 tracer communicable diseases❊		57%	*HFSRA*	*2021*
Avg. availability of diagnosis & management for 3 tracer NCDs		*No data available*		
Continuity				
DTP3 dropout rate*		11%	*WHO/UNICEF*	*2020*
Treatment success rate for new TB cases		92%	*WHO Global TB Report*	*2022*
Person-Centeredness				
% of caregivers who were told sick child's diagnosis		*No data available*		
Provider competence				
Antenatal care quality score based on WHO guidelines		*No data available*		
Family planning quality score based on WHO guidelines		*No data available*		
Sick child quality score based on IMCI guidelines		*No data available*		
Adherence to clinical guidelines		*No data available*		
Diagnostic accuracy		*No data available*		
Provider availability				
% of family planning, ANC, and sick child visits over 10 minutes		*No data available*		
Provider absence rate*		*No data available*		
Safety				
Proportion of facilities with basic water, hygiene, and sanitation services**		41%	*MHMS Core Indicator Report (DHIS2 Data)*	*2021*
Proportion of facilities with basic waste management**		29%	*MHMS Core Indicator Report (DHIS2 Data)*	*2021*
SERVICE COVERAGE	58			
Reproductive, Maternal, Newborn and Child Health				
Demand for family planning satisfied with modern methods		53%	*UHC Global Monitoring Report*	*2023 (2021 data)*
Antenatal care coverage (4+ visits)		65%	*UHC Global Monitoring Report*	*2023 (2021 data)*
Coverage of DTP3 immunization		94%	*WHO/UNICEF*	*2020*
Care-seeking for suspected child pneumonia		79%	*UHC Global Monitoring Report*	*2023 (2021 data)*
Infectious diseases				
Tuberculosis cases detected and treated with success		74%	*WHO TB Country Profile*	*2022*
People living with HIV receiving anti-retroviral treatment		100%	*Global AIDS Monitoring Report, Ministry of Health and Medical Services, National HIV/STI Programme*	*2018*
Children under 5 with diarrhea receiving ORS		*No data available*		
Non-Communicable Diseases (NCDs)				
Prevalence of treatment among adults with hypertension✣		14%	*UHC Global Monitoring Report*	*2023 (2021 data)*

*Indicators where lower values are preferable were transformed before inclusion in the index. The modified indicator was defined as 100-X, where X is the original percentage shown in this table. **Country-specific (proxy) indicator, used in absence of globally comparable survey data. ✣The indicator reflects modeled estimate for prevalence of treatment (taking medicine) for hypertension among adults aged 30-79 with hypertension, based on age-standardized estimates. For more details see Tracking UHC: 2023 Global Monitoring Report. ✧The avg. availability of RMNCH services is comprised of the average number of facilities that provide services for family planning (FP), antenatal care (ANC), and prevention of mother-to-child transmission of HIV (PMTCT). The percentage of facilities that provide FP services is 100 percent , the percentage of facilities providing ANC is 96 percent, and the percentage of facilities providing PMTCT is 2 percent, bringing the overall average to 66 percent. The inclusion of PMTCT services in the average should be noted given the low prevalence of HIV in the country. Note: Summary scores for the domains of Access, Quality, and Coverage are calculated by taking the average of indicator values within each subdomain, and then taking the average across subdomain scores. ❊The avg. availability of ID services is comprised of the average number of facilities that provide STI and HIV services. The percentage of facilities that provide STI services is 98 percent, the percentage of facilities providing STI services is 98 percent, and the percentage of facilities providing HIV services is 16 percent, bringing the overall average to 57 percent. The inclusion of HIV services in the average should be noted given the low prevalence of HIV in the country.

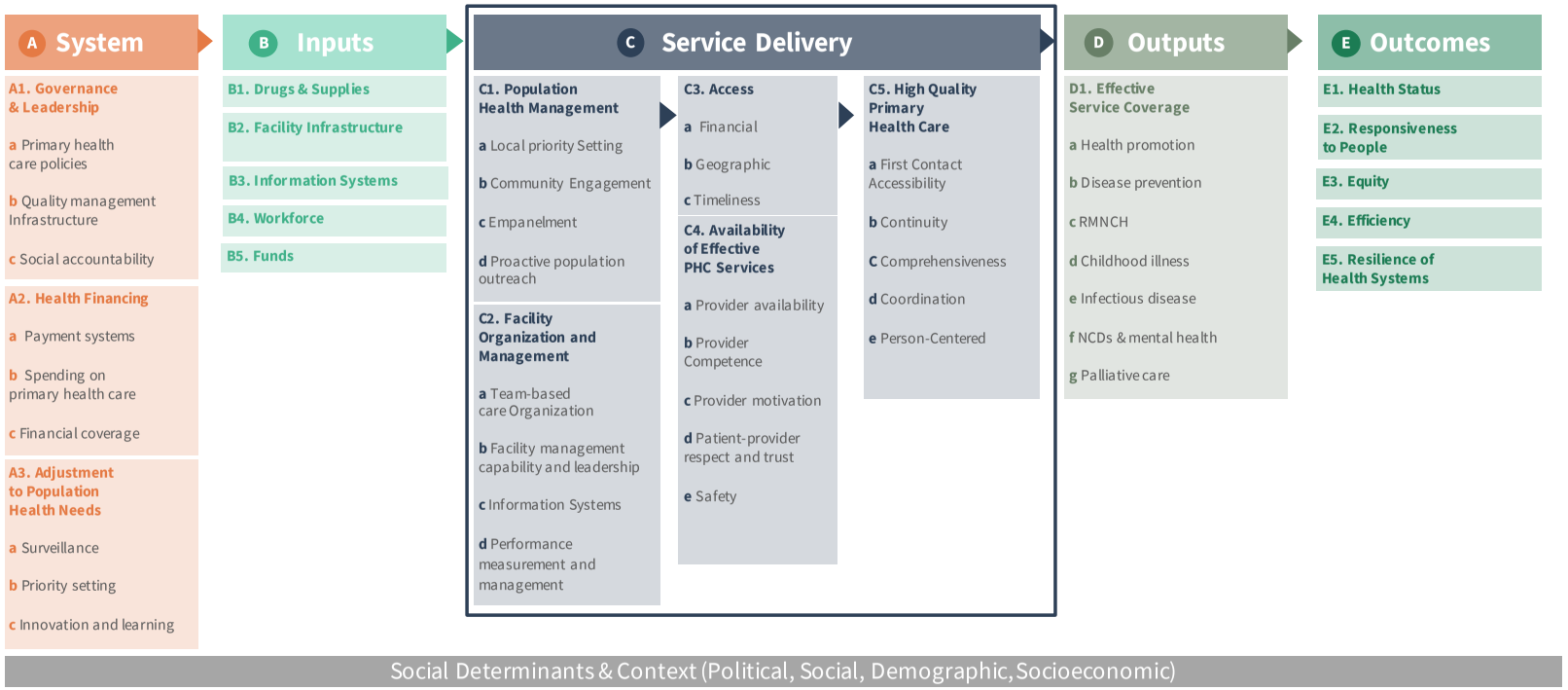
APPENDIX B: CAPACITY DOMAIN

phcpi

CAPACITY DOMAIN: DETAILED VITAL SIGNS PROFILE INDICATORS

Solomon Islands	SCORE
GOVERNANCE	2.1
Governance and Leadership	2.2
Measure 1: Primary health care policies (1/2)	
Measure 2: Primary health care policies (2/2)	
Measure 3: Quality management infrastructure	
Measure 4: Social accountability (1/2)	
Measure 5: Social accountability (2/2)	
Adjustment to Population Health Needs	2.0
Measure 6: Surveillance	
Measure 7: Priority setting	
Measure 8: Innovation and learning	
INPUTS	1.9
Drugs and Supplies	1.7
Measure 9: Stock-out of essential medicines	
Measure 10: Basic equipment availability	
Measure 11: Diagnostic supplies	
Facility Infrastructure	1.7
Measure 12: Facility distribution	
Measure 13: Facility amenities	
Measure 14: Standard safety precautions and equipment	
Information Systems	2.3
Measure 15: Civil Registration and Vital Statistics	
Measure 16: Health Management Information Systems	
Measure 17: Personal care records	
Workforce	1.8
Measure 18: Workforce density and distribution	
Measure 19: Quality assurance of primary health care workforce	
Measure 20: Primary health care workforce competencies	
Measure 21: Community health workers	
Funds	2.0
Measure 22: Facility budgets	
Measure 23: Financial Management Information System	
Measure 24: Salary payment	
POPULATION HEALTH AND FACILITY MANAGEMENT	1.5
Population Health Management	1.8
Measure 25: Local priority setting	
Measure 26: Community engagement	
Measure 27: Empanelment	
Measure 28: Proactive population outreach	
Facility Organization and Management	1.2
Measure 29: Team-based care organization	
Measure 30: Facility management capability and leadership	
Measure 31: Information system use	
Measure 32: Performance measurement and management (1/2)	
Measure 33: Performance measurement and management (2/2)	

APPENDIX C. PHCPI FRAMEWORK



Source: Veillard et al. 2017

APPENDIX D. RECOMMENDATIONS BASED ON SOLOMON ISLANDS VSP

Recommendation	Resources required, from low (+) to high (+++)	Difficulty of execution, from low (+) to high (+++)	Potential impact, from low (+) to high (+++)	Time horizon from impact (short, medium, or long term)	Main PHC dimension affected
Recommendation 1: Strengthen governance and coordination to promote comprehensive primary health care					
1.1 Develop a primary health care policy to define the scope and composition of primary health care and facilitate the political prioritization of a PHC-oriented approach	+++	++	+++	Long	Access, quality, coverage, capacity Governance and leadership
1.2 Establish clear authority for PHC to improve coordination across MHMS entities and facilitate effective delivery and oversight of health services	++	+++	+++	Medium	Quality, coverage, capacity Governance and leadership Facility organization and management Population health management
1.3 Enable accountability mechanisms and strengthen collaboration to help ensure policies, strategies, and plans are translated into action and achieve desired outcomes	+	++	++	Long	Quality, Equity Governance and leadership
1.4 Integrate PHC priorities into national, provincial, and zone priority setting processes for effective translation of strategic goals	+	+++	++	Medium	Access, quality, coverage, capacity Governance and leadership Adjustment to population health needs Population health management
1.5 Expand the role of the Gender Focal Point to enable accountability mechanisms for gender-responsive PHC interventions	+	++	++	Medium	Access, equity Governance and leadership Adjustment to population health needs

Recommendation	Resources required, from low (+) to high (+++)	Difficulty of execution, from low (+) to high (+++)	Potential impact, from low (+) to high (+++)	Time horizon from impact (short, medium, or long term)	Main PHC dimension affected
Recommendation 2: Invest in integrating and emphasizing a focus on quality of care across all levels of the health system to facilitate high-performing primary health care					
2.1 Develop national frameworks and management structures for establishing a national quality management strategy, governance, and intervention characterization and coordination	+	+++	++	Long	Quality, access, coverage, capacity Governance and leadership Facility organization and management Population health management
2.2 Build on and operationalize the Role Delineation Policy to establish facility and provider classifications and benchmarks	++	++	++	Medium	Capacity, access, coverage Workforce, facility organization and management, population health management
2.3 Enhance existing monitoring and evaluation frameworks to enable routine monitoring of quality at facility, subnational, and national levels	++	++	++	Medium	Quality Facility organization and management Population health management
2.4 Improve the supply and availability of facility amenities and facility-level availability of drugs and supplies to ensure equitable access and encourage PHC as the first point of contact	+++	+++	+++	Medium	Access, quality Drugs, supplies, and facility infrastructure Facility organization and management
2.5 Improve technical quality at the facility level by strengthening and implementing decision-making tools such as clinical guidelines and care pathways	+	+	+++	Short	Quality Workforce Facility organization and management

Recommendation	Resources required, from low (+) to high (+++)	Difficulty of execution, from low (+) to high (+++)	Potential impact, from low (+) to high (+++)	Time horizon from impact (short, medium, or long term)	Main PHC dimension affected
Recommendation 3: Build on investments in information systems to drive quality improvements through care coordination, performance measurement, and evidence-based decision-making					
3.1 Integrate PHC oriented indicators into routine surveys	+	+	++	Short	Quality, coverage, access Information systems
3.2 Extend measurement and dialogue around comprehensive primary health care at the provincial level	++	+	++	Medium	Coverage, access, quality Governance and leadership Information systems
3.3 Integrate data collection tools and information systems at the facility level to support the use of timely and relevant information for clinical and performance improvement	+	++	+++	Short	Quality, coverage, access Information systems Facility organization and management
Recommendation 4: Implement new people- and community-centered models of care					
4.1 Institute a robust practice of using patient panels through empanelment to enhance the quality of care through improved continuity, comprehensiveness, and patient-centeredness of services	++	++	++	Medium	Access, coverage Information systems Population health management
4.2 Reinstitute and institutionalize Healthy Village Settings work to support community engagement	+++	+++	+++	Long	Coverage Adjustment to population health needs Population health management
4.3 Enhance population outreach effectiveness and impact by enabling a proactive approach with a focus on prevention, screening, and treatment of NCDs in high-risk populations	++	++	+++	Medium	Access, equity, coverage Population health management

APPENDIX E. IMPLICATIONS OF THE RECOMMENDATIONS FOR STAKEHOLDERS

Recommendation	National government and health authorities	Provincial health authorities	Service delivery providers	Academia	Patients and citizens
Recommendation 1: Strengthen governance and coordination to promote comprehensive primary health care					
1.1 Develop a primary health care policy to define the scope and composition of primary health care and facilitate the political prioritization of a PHC-oriented approach	E, P, D, F	E, P, D, M	P, I	P, I	P, I
1.2 Establish clear authority for PHC to improve coordination across MHMS entities and facilitate effective delivery and oversight of health services	E, M, P, D, F	E, P, D, M	P, I	I	I
1.3 Enable accountability mechanisms and strengthen collaboration to help ensure policies, strategies, and plans are translated into action and achieve desired outcomes	E, M, P, D, F	E, P, D	P, I	P, I	P, I
1.4 Integrate PHC priorities into national, provincial, and zone priority setting processes for effective translation of strategic goals	E, M, P, D, F	E, P, D, M	P, I	I	I
1.5 Expand the role of the Gender Focal Point to enable accountability mechanisms for gender-responsive PHC interventions	E, M, P, D, F	P, I	P, I	I	I
Recommendation 2: Invest in integrating and emphasizing a focus on quality of care across all levels of the health system to facilitate high-performing primary health care					
2.1 Develop national frameworks and management structures for establishing a national quality management strategy, governance, and intervention characterization and coordination	E, M, P, D, F	M, P	P, I	P, I	P, I
2.2 Build on and operationalize the Role Delineation Policy to establish facility and provider classifications and benchmarks	E, M, P, D, F	E, P, I	P, I	P, I	P, I
2.3 Enhance existing monitoring and evaluation frameworks to enable routine monitoring of quality at facility, subnational, and national levels	E, M, P, D, F	E, P, I, D	P, I	P, I	P

Recommendation	National government and health authorities	Provincial health authorities	Service delivery providers	Academia	Patients and citizens
2.4 Improve the supply and availability of facility amenities and facility-level availability of drugs and supplies to ensure equitable access and encourage PHC as the first point of contact	E, M, P, D, F	E, M, P, D	P, I	P	P
2.5 Improve technical quality at the facility level by strengthening and implementing decision-making tools such as clinical guidelines and care pathways	E, F, P, D, F	E, M, P, D	M, P, I	P, E	I
Recommendation 3: Build on investments in information systems to drive quality improvements through care coordination, performance measurement, and evidence-based decision making					
3.1 Integrate PHC--oriented indicators into routine surveys	E, M, P, D, F	P, I	P, I	I	I
3.2 Extend measurement and dialogue around comprehensive primary health care at the provincial level	F	E, M, P, D	P, I	I	I
3.3 Integrate data collection tools and information systems at the facility level to support the use of timely and relevant information for clinical and performance improvement	E, M, F	E, M, P, D	P	I	I
Recommendation 4: Implement new people- and community-centered models of care					
4.1 Institute a robust practice of using patient panels through empanelment to enhance the quality of care through improved continuity, comprehensiveness, and patient-centeredness of services	E, M, P, D, F	M, P, I	P, I	I	I
4.2 Reinstitute and institutionalize Healthy Village Settings work to support community engagement	F, E	M, P, I	P, I	I	P, I
4.3 Enhance population outreach effectiveness and impact by enabling a proactive approach with a focus on prevention, screening, and treatment of NCDs in high-risk populations	F, E	M, P, I	P, I	I	P, I

Note: F=provide financing or financial incentives, E=establish strategic direction, norms, and policies, M=manage the program, P=participate in the implementation of the program or support it, I=stay informed on the program activities, D=make informed or strategic decisions

APPENDIX F. PROGRESSION MODEL PARTICIPANTS

KEY INFORMANTS

Name	Title	Affiliation
Adrian Leamana	Director	Health Promotion
Nancy Pego	Acting Director	Reproductive, Maternal, Newborn, Child, Adolescent Health (RMNCAH)
Michael Larui	National Director; Secretariat	Nursing; Nursing Council
Elsie Taloafiri	Director	Physio and Rehabilitation
Gari Joseph	Manager	Human Resource Unit
Dr Joel Denty	Provincial Health Director	Guadalcanal Province
Dr Dickson Boara	Provincial Health Director	Western Province
William Timba	Provincial Health Director	Choiseul Province
Dr David Danitofea	Provincial Health Director	Malaita Province
Dr Lynnson Yai	Provincial Health Director	Temotu Province
Albino Bobogare	Director	Vector Borne Diseases Control Programme
Moses Karuni	Director of Nursing	Guadalcanal Province
Philip Kona	Mental Health Coordinator	Guadalcanal Province
Alfred Maedaudau	Health Information Systems Coordinator	Guadalcanal Province
Terry Evans Tugumana	Principle Administraion Officer	Guadalcanal Province
Richard Maegerea	Director of Nursing	Malaita Province
Casper Fa'asala	CEO Disability Persons Association Solomon Islands (DPASI)	DPASI
William Same	Provincial Coordinator DPASI (Western Province)	DPASI
Takuya KUGA	Project Formulation Advisor	JICA
Akiko Kawamoto	Volunteer Coordinator	JICA
Dr Kshitij Joshi	Chief of Field Office UNICEF Solomon Islands	UNICEF
Dr Alex Stephens	First Secretary Health	DFAT

Name	Title	Affiliation
Zina Ferera	Program Officer - Health	DFAT
Monica Fong	Coordinator Health Systems	WHO
Dr Sonya Tanevska	Technical Officer - RMNCAH & GBV	WHO
Dr Gregory Jillini	Deputy Secretary	MHMS
George Pego	National Deputy Director of Nursing	MHMS
Ernest Mae	Policy and Planning Unit	MHMS
	Director of Health Services and Health Team, Guadalcanal Province	MHMS
	Temotu provincial team	
	Malaita provincial team	

PHCPI STEERING COMMITTEE MEMBERS

Name	Organization	Title
Pauline Mcneil	Ministry of Health	Permanent Secretary
Dr Gregory Jilini	Ministry of Health	Deputy Secretary Healthcare
TBC	Ministry of Health	Deputy Secretary Corporate Service
Ivan Ghemu	Ministry of Health	Director Planning & Policy
Dr George Wilson Malefoasi	Ministry of Health	Chief Executive Officer NRH
Dr Nemia Bainivalu	Ministry of Health	Deputy Secretary Public Heath
Michael Larui	Ministry of Health	National Director of Nursing

Source: PHCPI Assessment Project Charter

VALIDATION WORKSHOP PARTICIPANTS (OCTOBER 12-13, 2023)

No.	Name	Title	Organization
1	Pauline McNeil	Permanent Secretary	Ministry of Health and Medical Services
2	Dr Nemia Bainivalu	Deputy Secretary Health Improvement	Ministry of Health and Medical Services
4	Mr Michael Larui	National Director of Nursing	Ministry of Health and Medical Services
5	Dr George Malefoasi	Chief Executive Officer, National Referral Hospital	Ministry of Health and Medical Services
6	Adrian Leamana	Director Health Promotion	Ministry of Health and Medical Services
7	Nancy Pego	Program Manager	Ministry of Health and Medical Services
8	Nevalyn Laesango	Director NCD (spvg)	Ministry of Health and Medical Services
10	Albino Bobogare	Director VDCP	Ministry of Health and Medical Services
11	Dr Henry Kako	Director TB/Leprosy	Ministry of Health and Medical Services
13	Wesley Kukutu	Manager NMS	Ministry of Health and Medical Services
14	Layten Jacob	Manager Procurement	Ministry of Health and Medical Services
16	Joseph Gari	Human Resources Manager	Ministry of Health and Medical Services
17	Lawrence Diau	Provincial Health Director	Ministry of Health and Medical Services
18	Adrian Simbe	ADON	Ministry of Health and Medical Services
20	Moses Karuni	Provincial Health Director (Spvg)/ Director of Nursing	Ministry of Health and Medical Services
22	Elsie Taloifiri	Coordinator Community-Based Rehabilitation	Ministry of Health and Medical Services
23	Cavanagh Tanabose	RDP/Health Systems	Ministry of Health and Medical Services
24	George Pego	Nursing Deputy Director	Ministry of Health and Medical Services
25	Freda Pitakaka	Research & Training Coordinator	Ministry of Health and Medical Services
26	Coswal Nelson	Director Budget Unit	Ministry of Finance
29	Sonja Tanevska	Country Representative (Spvg)	WHO
30	Monica Fong	Technical Officer	WHO
33	Takeshi Watanabe	Resident Representative of JICA	JICA
34	Stephen Mucunguzi	Maternal and Child Health Specialist	UNICEF

No.	Name	Title	Organization
37	Nixon Panda	Dean, School of Nursing, Medicine and Health Sciences	SINU
38	Wayne J. Irava	Health Specialist	World Bank
39	Annette Leigh	Country Resident Representative	World Bank
40	Dr Jillini	Dep Sec. PHC	Ministry of Health and Medical Services
41	Oliver Sokone	Eye/NID	Ministry of Health and Medical Services
42	Ester Luria	Media Officer	Ministry of Health and Medical Services
43	Ronesh Prasad	Specialist	UNICEF
44	Alfred	PPO	MNPDC
46	Jeanna Tatalu	APM	DFAT
47	Michael Mike	Health Consultant	World Bank
48	Lucy Ann Hartshorn	Health Consultant	World Bank
49	Awa Diallo	Health Consultant	World Bank
50	Priscilla Totorea	Budget Planning Officer	Ministry of Health and Medical Services

Source: October 12-13, 2023, Validation Workshop Participants list

APPENDIX G. PROGRESSION MODEL DOCUMENTS REVIEWED

1. National Health Strategic Plan 2022-2031
2. National Health Strategic Plan 2016-2020
3. National Healthy Settings Policy 2021
4. Multisectoral National Non-Communicable Disease Strategic Plan 2019-2023
5. Role Delineation Policy
6. Solomon Islands Health System Review
7. Statistical Health Core Indicator Report
8. SCORE for Health Data Solomon Islands Assessment
9. 2021 Final Budget Outcome Report
10. Health Facility Readiness and Service Availability Assessment
11. Solomon Islands Ministry of Health and Medical Services - Environmental and Social Management Framework
12. Family Planning Services in accordance with Ministry of Health & Medical Services (MHMS) Guidelines
13. Health Promoting Village Project Final Report 2016-2021
14. Moving towards Universal Health Coverage through the Development of Integrated Service Delivery Packages for Primary Health Care in the Solomon Islands
15. National Health Strategic Plan 2011-2015

16. A review of health leadership and management capacity in Solomon Islands
17. Environmental and Social Management Framework
18. 2023 Financial Policy Objectives and Strategies
19. Solomon Islands Global AIDS Response Progress Report
20. Health Information Systems In The Pacific At A Glance
21. Solomon Islands Essential Medicines List
22. HIS Quarterly Updates - 3rd Quarter
23. Minutes for Family Health/Interagency Coordination Committee Meeting
24. National Food Security, Food Safety, And Nutrition Policy 2019-2023
25. Template for monthly report of health activities
26. Provincial Health Profiles - Guadalcanal and Renbel
27. Honiara City Council Health Report
28. Essential medicines wastage assessment in the Solomon Islands
29. DHIS2 "Provincial Data Core indicator_2011-2021_WB
30. Number of functioning and not functioning registered health facilities by type
31. Master list of health facilities
32. Health facility list 2019 - working file Cavanagh - classification-reclassification 2020
33. National Health Strategic Plan 2020-2016
34. HIS Checklist
35. Review of Solomon Islands NHSP 2016 Draft 4

36. Job Description for Medical Officer 2 – Kilu'ufi Hospital Malaita
37. Pharmacy Pharmacist II Job Description
38. Annual Report
39. Solomon Islands - 2023 Financial Policy Objectives and Strategies
40. primary health syllabus
41. Job description for Assistant Medical Laboratory Technician – Temotu (L4/5)
42. Job description for Assistant Health Promotion Officer (province)
43. Job description for Community-Based Rehabilitation Provincial Coordinator
44. Job description for CBR Field Officer
45. Job description for Principle Vector Management Officer, Vector Control Unit
46. Job description for Field Officer, Vector Management Unit
47. PHC/Community Health Registered Nurse, position statement Aug 2004
48. Job description for Community Health Clinical Nurse, PHC/community health and urban services
49. Job description for Community Health Nurse Aid: AHC, RHC, NAP
50. AOPB template - provincial divisions
51. Article "Educating Solomon Islanders on National Health Standard Policy _ Solomon Islands"
52. Master list – Nursing Division – Position Descriptions
53. Solomon Islands Ministry of Health and Medical Services - Labour Management Plan

54. Human resources for health country profiles
55. Job description for Principal Pharmacy Officer
56. Job description for PHC/Community Health Registered Nurse
57. Job description for Community Health Nurse Consultant
58. Solomon Islands Public Service Performance Management Process. Policy and Procedure Manual
59. Job description for Principal Pharmacy Officer – Western Province
60. Job description for Community-Based Rehabilitation Provincial Coordinator
61. Job description for PHC/Community Health Registered Nurse
62. Job description for Community Health Clinical Nurse, PHC/ Community Health And Urban Services

REFERENCES

6.2 National surveys of costs faced by TB patients and their households [Internet]. 2022 [cited Nov 13, 2023 Nov 13]. Available from: https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2022/uhc-tb-determinants/6-2-national-surveys-of-costs-faced-by-tb-patients-and-their-households

A vision for primary health care in the 21st century [Internet]. [cited Nov 13, 2023]. Available from: https://www.who.int/publications-detail-redirect/WHO-HIS-SDS-2018.15

Agarwal, S., Lasway, C., L'Engle, K., Homan, R., Layer, E., Ollis, S., Braun, R., Silas, L., Mwakibete, A., & Kudrati, M. 2016. Family Planning Counseling in Your Pocket: A Mobile Job Aid for Community Health Workers in Tanzania. Global health, science and practice, 4(2), 300–310.

Asian Development Bank (ADB). Solomon Islands country gender assessment [Internet]. 2015. Available from: https://www.adb.org/sites/default/files/institutional-document/176812/sol-country-gender-assessment.pdf

Bitton, A., Ratcliffe, H. L., Veillard, J. H., Kress, D. H., Barkley, S., Kimball, M., Secci, F., Wong, E., Basu, L., Taylor, C., Bayona, J., Wang, H., Lagomarsino, G., & Hirschhorn, L. R. 2017. Primary Health Care as a Foundation for Strengthening Health Systems in Low- and Middle-Income Countries. Journal of general internal medicine, 32(5), 566–571.

Bitton A, Veillard JH, Basu L, Ratcliffe HL, Schwarz D, Hirschhorn LR. 2018. The 5S-5M-5C schematic: transforming primary care inputs to outcomes in low-income and middle-income countries. BMJ Glob Health, 3(Suppl 3):e001020.

Diphtheria tetanus toxoid and pertussis (DTP) vaccination coverage [Internet]. [cited Nov 13, 2023]. Available from: https://immunizationdata.who.int/pages/coverage/DTP.html?CODE=SLB&ANTIGEN=DTPCV3&YEAR=

Edward A, Osei-Bonsu K, Branchini C, Yarghal T shah, Arwal SH, Naeem AJ. Enhancing governance and health system accountability for people centered healthcare: an exploratory study of community scorecards in Afghanistan. 2015. BMC Health Serv Res. 2015 Dec;15(1) (December):1–15.

Federal Ministry of Health Nigeria. National Hhealth Policy 2016: Promoting The Health Of Nigerians To Accelerate Socio-Economic Development [Internet]. Federal Ministry of Health.; 2016 [cited Nov 13, 2023]. Available from: http://ngfrepository.org.ng:8080/jspui/handle/123456789/3155

Global strategy on human resources for health: Workforce 2030 [Internet]. [cited Nov 13, 2023]. Available from: https://www.who.int/publications/i/item/9789241511131

Health and climate change: country profile 2019: Solomon Islands [Internet]. 2019 [cited Nov 13, 2023]. Available from: https://www.who.int/publications/m/item/health-and-climate-change-country-profile-2020-solomon-islands

Joint Learning Network for Universal Health Coverage. 2019. Empanelment: a Foundational Component of Primary Health Care [Internet]. Ariadne Labs, Comagine Health. Available from: https://www.jointlearningnetwork.org/wp-content/uploads/2019/10/empanelment-foundational-component-phc.pdf

Maike P. Framework for priorities in health: Solomon Islands Case Study [Internet]. 2010. Public Helalth Division, Secretariat of the Pacific

Community; 2010. Available from: https://hrsd.spc.int/sites/default/files/2021-07/50935_Framework_for_priorities_in_health.pdf

Millennium Development Goals Report for Solomon Islands 2010. 2010. | United Nations Development Programme [Internet]. [cited Nov 13, 2023]. Available from: https://www.undp.org/pacific/publications/millennium-development-goals-report-solomon-islands-2010

Ministry of Health & Medical Services (MHMS). Labour Management Plan Draft: 04 February 2022 [Internet]. 2022. Available from: https://solomons.gov.sb/wp-content/uploads/2022/02/3.-Labour-Management-Plan.pdf

Ministry of Health & Medical Services (MHMS). National Health Strategic Plan [Internet]. 2011. Available from: https://cdn.who.int/media/docs/default-source/digital-health-documents/global-observatory-on-digital-health/solomon_islands_nationalhealthplan.pdf?sfvrsn=aebfd623_3

Ministry of Health & Medical Services STI/HIV Division (MHMS STI/HIV Division). Global Aids Response Progress Report 2016 [Internet]. 2016. Available from: https://www.aidsdatahub.org/sites/default/files/resource/solomon-islands-global-aids-response-progress-report-2016.pdf

Ministry of Health and Medical Services National HIV/STI Programme. 2018. Solomon Islands Global AIDS Monitoring 2018. 2018.

Ministry of Health and Medical Services. Role Delineation Policy for Solomon Islands [Internet]. Available from: https://solomons.gov.sb/wp-content/uploads/2020/02/MHMS-Role-Delineation-Policy.pdf

Ministry of Women Youth Children and Family Affairs (MWYCFA). National Gender Equality and Women's Development Policy 2016–2020 [Internet]. 2020. Available from: https://solomons.gov.sb/wp-

content/uploads/2020/02/National-Gender-Equality-and-Womens-Development-Policy-2016-2020.pdf

Operational Framework for Primary Health Care [Internet]. 2023. [cited Nov 13, 2023]. Available from: https://www.who.int/publications-detail-redirect/9789240017832

PHCPIa. Deep Dive - Social Accountability [Internet]. 2020. Available from: https://www.improvingphc.org/sites/default/files/Social%20Accountabilty-%20v1.0%20-%20last%20updated%207.9.2020.pdf

PHCPIb. Deep Dive - Priority Setting [Internet]. Available from: https://www.improvingphc.org/sites/default/files/Priority%20Setting-%20v1.0%20-%20last%20updated%207.1.2020.pdf

PHCPIc. Service Quality - Improvement Strategy [Internet]. Available from: https://www.improvingphc.org/improvement-strategies/quality/service-quality

PHCPId. Deep Dive - Quality Management Infrastructure [Internet]. Available from: https://www.improvingphc.org/sites/default/files/Quality%20Management%20Infrastructure%20-%20v1.0%20-%20last%20updated%204.13.2020.pdf

PHCPIe. Improving PHC Case Study: Afghanistan Management of Services [Internet]. Available from: https://www.improvingphc.org/afghanistan-management-services

PHCPIf. Deep Dive - Performance Measurement and Management [Internet]. Available from: https://www.improvingphc.org/sites/default/files/Performance%20Measurement%20and%20Management%20-%20v1.0%20-%20last%20updated%2007.24.2020.pdf

PHCPIg. Improving PHC Case Study: Senegal Physical Infrastructure [Internet]. Available from: https://www.improvingphc.org/senegal-physical-infrastructure

PHCPIh. Deep Dive - Information Systems [Internet]. Available from: https://www.improvingphc.org/sites/default/files/Information%20Systems%20-%20v1.0%20-%20last%20updated%203.13.2020.pdf

PHCPIi. Deep Dive - Empanelment [Internet]. Available from: https://www.improvingphc.org/sites/default/files/Empanelment%20deep%20dive%20-%20v1.1%20-%20last%20updated%203.9.2020.pdf

PHCPIj. Deep Dive - Community Engagement [Internet]. Available from: https://www.improvingphc.org/sites/default/files/Community%20Engagement%20deep%20dive%20-%20v1.1%20-%20last%20updated%203.9.2020_1.pdf

PHCPIk. Improving PHC Case Study: Nepal Health Workforce [Internet]. Available from: https://www.improvingphc.org/nepal-health-workforce

PHCPIl. Deep Dive - Proactive Population Outreach [Internet]. Available from: https://www.improvingphc.org/sites/default/files/Proactive%20Population%20Outreach%20deep%20dive%20-%20v1.0%20-%20last%20updated%204.13.2020.pdf

Solomon Islands 2012/13 Household Income and Expenditure Survey National Analytical Report (Volume I). 2015 [cited Nov 25, 2023]. Available from: https://www.ilo.org/surveyLib/index.php/catalog/7500/related-materials

Solomon Islands (SLB) - Demographics, Health & Infant Mortality - UNICEF DATA [Internet]. [cited Nov 13, 2023]. Available from: https://data.unicef.org/country/slb/

Solomon Islands | The Institute for Health Metrics and Evaluation [Internet]. [cited Nov 13, 2023]. Available from: https://www.healthdata.org/research-analysis/health-by-location/profiles/solomon-islands

Solomon Islands data | World Health Organization [Internet]. [cited Nov 13,m 2023]. Available from: https://data.who.int/countries/090

Solomon Islands National Statistical Office. Solomon Islands Report on 2009 Population & Housing Census: Basic Tables and Census Description [Internet]. 2009. Report No.: Volume 1. Available from: https://www.statistics.gov.sb/statistics/demographic-statistics/census

Solomon Islands Population (2023) - Worldometer [Internet].2023 [cited Nov 13, 2023]. Available from: https://www.worldometers.info/world-population/solomon-islands-population/

Solomon Islands: National Urban profile | UN-Habitat [Internet]. 2023 [cited Nov 13, 2023]. Available from: https://unhabitat.org/solomon-islands-national-urban-profile

The Ministry of Finance and Treasury (MoFT). 2023. Financial Policy Objectives and Strategies Budget-Paper: Volume 1 [Internet]. Available from: https://solomons.gov.sb/wp-content/uploads/2023/01/2023-Financial-Policy-Objectives-and-Strategies-Vol-1-FINAL.pdf

UNFPA, Australian Aid. Health Facility Readiness and Service Availability (HFRSA) Assessment Solomon Islands. 2021 (April).

United Nations Population Fund (UNFPA). Evaluation of Men as Partners in Reproductive Health through Organized Workforce [Internet]. 2007. Available from: https://gate.unwomen.org/resources/docs/gendereqaulity/UNFPA_Men%20as%20Partners%20in%20Reproductive%20Health_2007.pdf

Veillard, J., Cowling, K., Bitton, A., Ratcliffe, H., Kimball, M., Barkley, S., Mercereau, L., Wong, E., Taylor, C., Hirschhorn, L. R., & Wang, H. 2017. Better Measurement for Performance Improvement in Low- and Middle-Income Countries: The Primary Health Care Performance Initiative (PHCPI) Experience of Conceptual Framework Development and Indicator Selection. The Milbank quarterly, 95(4), 836–883.

Whiting, S., Dalipanda, T., Postma, S., Jamshaid de Lorenzo, A., & Aumua, A. 2016. Moving towards Universal Health Coverage through the

Development of Integrated Service Delivery Packages for Primary Health Care in the Solomon Islands. International journal of integrated care, 16(1), 3.

WHO Regional Office for the Western Pacific. Solomon Islands Health System Review. 2015. Vols. 5, Issue 1. World Health Organization. 2015. p.124.

World Development Indicators | DataBank [Internet]. [cited Nov 13, 2023]. Available from: https://databank.worldbank.org/source/world-development-indicators

World Health Organization. Global Health Expenditure Database [Internet]. World Health Organization. [cited Sep 25, 2022]. Available from: https://apps.who.int/nha/database

World Health Organization. Global Tuberculosis Report. 2022. Available from: https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2022

World Health Organization, International Bank for Reconstruction and Development/The World Bank, 2023. Tracking universal health coverage 2023 global monitoring report. Available from: https://www.who.int/publications/i/item/9789240080379

World Health Organization. Solomon Islands - Outbreak and Crisis Response Appeal 2023 [Internet]. 2023 [cited Nov 13, 2023], Available from: https://www.who.int/emergencies/funding/outbreak-and-crisis-response-appeal/2023/2023-appeals/appeal-solomon-islands

World malaria report 2014 [Internet]. [cited Nov 13, 2023]. Available from: https://www.who.int/publications-detail-redirect/9789241564830

Yothasamut J, Putchong C, Sirisamutr T, Teerawattananon Y, Tantivess S. 2010. Scaling up cervical cancer screening in the midst of human papillomavirus vaccination advocacy in Thailand. BMC Health Serv Res. Jul 2;10(Suppl 1):S5.


WORLD BANK GROUP
Health, Nutrition & Population


phcpi


WORLD BANK GROUP
Health, Nutrition & Population


phcpi