# ANALYSIS OF PRIMARY HEALTH CARE SYSTEM CAPACITY IN THE HUETAR ATLÁNTICA REGION OF COSTA RICA

Eesha Desai, Joseph Ross, Natalia Rovelo Velázquez, Oscar Bernal, Jess Wiken, Zeina Siam, Dan Schwarz, Manuela Villar Uribe

ARIADNE LABS
PRIMARY HEALTH CARE

WORLD BANK GROUP

phcpi
PRIMARY HEALTH CARE PERFORMANCE INITIATIVE

# ANALYSIS OF PRIMARY HEALTH CARE SYSTEM CAPACITY IN THE HUETAR ATLÁNTICA REGION OF COSTA RICA

**Authors:**

Eesha Desai, MS, Joseph Ross, MPA, Natalia Rovelo, Oscar Bernal, MD, PhD, Jess Wiken, Zeina Siam, PhD, MS, Dan Schwarz, MD, MPH, Manuela Villar Uribe, PhD, MPH, with technical contributions and review by the Program for Strengthening the Provision of Health Services (PFPSS) of Costa Rica

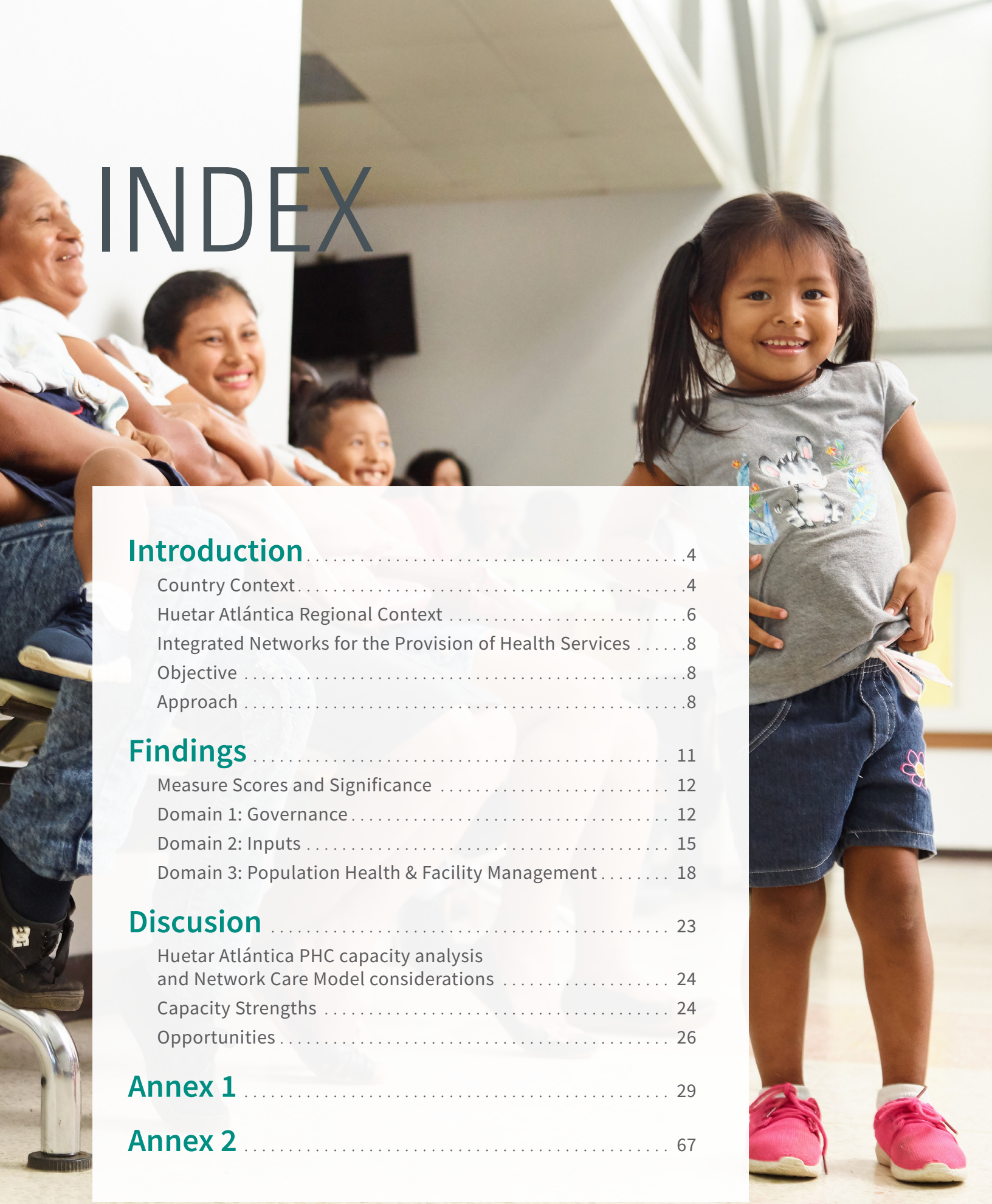
**Please direct inquiries to:**

Communications Director
Ariadne Labs
401 Park Drive
Boston MA 02215
USA
www.ariadnelabs.org
info@ariadnelabs.org

**Suggested citation:**

Desai, E., Ross, J., Velàzquez, N. R., Bernal, O., Wiken, J., Siam, Z., Schwarz, D., Uribe, M. V. (2022). *Analysis of Primary Health Care System Capacity in the Huetar Atlántica Region of Costa Rica.* Ariadne Labs.

# INDEX



# Introduction

## COUNTRY CONTEXT

Costa Rica's primary health care system serves as the country's foundation for universal health coverage by establishing primary care as the first point of access to health services for all individuals. For over 40 years, Costa Rica has prioritized investment into primary health care (PHC) to manage the entirety of its population through a network of health services that bring together health establishments of varying complexities. These networks are formed on team-based care models that are responsible for populations located in clearly defined service areas whereby every citizen has access to healthcare through geographic enrollment.

Costa Rica's PHC system continually serves as a model for the development and delivery of high quality care across the globe. In the face of recent demographic changes and shifts to burdens of disease, the country's PHC system now faces challenges different from those that existed during its initial design. As a result, Costa Rica is now exploring innovative service delivery models to continue adapting to the needs of its changing population and epidemiology.

### *Socioeconomics*

Costa Rica is an upper middle-income country in Central America with a population of 5 million and one of the lowest poverty rates in Latin America. A stable democracy since 1948, Costa Rica has prospered economically and socially. Steady economic growth over the past 25 years has been driven by an outward oriented, free market economy with strong performance in agriculture, finance, corporate services, pharmaceuticals, and ecotourism. Costa Ricans have experienced longer lives, better access to education, and an increased standard of living as measured by the Human Development Index (HDI). Between 1990 and 2019, Costa Rica's HDI value (a summary measure of life expectancy, years of schooling, and gross national income per capita) increased from 0.665 to 0.810, ranking the country 62 globally.[2] In 2019, Costa Rica's current health expenditure represented 7.27% of its GDP and constituted $921.59 USD per capita.[1] As of 2020 the average Costa Rican lives to 80.3 years, exceeding the average for Latin American and the Caribbean by almost five years.[1]

1 World Bank, DataBank. https://data.worldbank.org/country/costa-rica. Accessed April 22, 2022.

2 United Nations Development Programme. Human Development Report 2020. The Next Frontier: Human Development and the Anthropocene; *Briefing note for countries on the 2020 Human Development Report.* 2020.

### *Health System Structure*

Progress in the length and quality of life for Costa Ricans is in part a testament to the country's prioritization of universal health coverage, high-quality health care, and investment in PHC. In the 1940s, Costa Rica made notable advances in social security and education reflected in the enactment of Social Guarantees (Garantias Sociales) and Labor Codes (Codigo de Trabajo), as well as the creation of University of Costa Rica and the Caja Costarricense de Seguro Social (CCSS). These advancements positively influenced and guided the organization of the national social security system. Created in 1941, the CCSS which was initially designed to provide access to health care for salaried workers. In 1961, Costa Rica universalized CCSS services, expanding benefits to its entire population and establishing Costa Rica as a global leader in creating a policy framework and service delivery institution for achieving universal health coverage through primary health care.[3] Throughout its history, Costa Rica has remained a steward for the promotion of comprehensive primary health care. Currently, the country's financing, management, and delivery of PHC is housed with the CCSS which serves as an autonomous service delivery authority. In Costa Rica, the Ministry of Health oversees and fulfills political management, establishes health regulation, guides direction of research and leads planning and coordination of the broader health sector.

Costa Rica's health system is divided into seven Health Regions, including Huetar Atlántica. Within a Health Region, the major administrative unit is the Directorate of the Integrated Network for the Provision of Health Services (DRIPSS), which constitutes the governance structure of a region's health network. A Health Region consists of Health Areas that are responsible for disease prevention, community health education, home care, treatment, medication, and care management of between 30,000 and 110,000 citizens. A Health Area's size is dependent on geographical needs and regional capacity. Health Areas are subdivided into operational units called Health Sectors, each of which is serviced by an EBAIS—Equipos Básicos de Atención Integral de Salud—integrated primary health care teams that care holistically for a specific, geographically ordered (empaneled) group of no more than 5,000 citizens. The number of EBAIS per region depends on the size of the Health Area. Each EBAIS team includes physicians, nurses, community health workers (Asistente Técnico de Atención Primaria en Salud [ATAPs]), medical data clerks (REDES), and pharmacists.

3 Pesec M, Ratcliffe H, Bitton A. "Crear un Sistema de atención primaria de salud próspero: la historia de Costa Rica." Estudio de caso, Ariadne Labs, 2017.

### *Demographic Changes and System Response*

Costa Rica is experiencing a demographic shift coupled with economic prosperity; with an aging population comes higher incidence of non-communicable diseases as lifestyles and health behaviors change.[4] The country's top causes of death and disability combined are now ischemic heart disease and diabetes; both of which have increased in incidence by over 40% and 60% respectively in the past 20 years.[5] In the past 20 years, Costa Rica has also seen a 41% increase in the incidence of high blood pressure, 52.5% increase in the incidence of high body-mass index, and a 61.9% increase in the incidence of high fasting plasma glucose. This, together with evolving technological advancements, has resulted in greater care resource consumption and increased population demand for care.

This epidemiological shift has presented Costa Rica with a strain on its health system that necessitates new strategies to strengthen health service delivery and ensure quality and timely comprehensive disease care. At the national level, Costa Rica has developed "Marco Conceptual y Estratégico para el Fortalecimiento de la Prestación de Servicios de Salud" which defines how the country aims to respond to social demand and epidemiological changes. In line with this strategy, the Program for Strengthening the Provision of Health Services (PFPSS) has launched a health system strengthening program in Huetar Atlántica called the Integrated Networks for the Provision of Health Services (RIPSS). RIPSS is intended to help strengthen the provision of service by implementing an enhanced model for assessing and adapting service delivery to evolving health needs through relational and informational integration between levels of care with a focus on individual, family, and community-centered care.

## HUETAR ATLÁNTICA REGIONAL CONTEXT

In Huetar Atlántica, primary care is managed within eight Health Areas which include 118 EBAIS teams based out of 79 headquarters (CCSS December 2021). While some EBAIS have their own headquarters, others share a base location. Huetar Atlántica also includes two hospitals, the Guápiles Hospital and the Dr. Tony Facio Hospital in Limón, which represents the second level of care.[6] Epidemiologically, like the rest of Costa Rica, Huetar Atlántica has seen a large increase in the burden of noncommunicable diseases, standing out nationally in the incidence of type II diabetes mellitus and obesity. Some Health Areas within the region experience significant distances and poor road conditions in accessing higher levels of care suggesting a need for a well integrated system and alternative mechanisms for care.

As of 2019, the population of Huetar Atlántica was 451,742. Of this population, an estimated 56.5% live in urban areas, 42.2% are women, and 61% are under the age of 35.5 Uniquely located in the Eastern part of Costa Rica, Huetar Atlántica is the only

4 Caja Costarricense de Seguro Social Gobierno de la Red- RIPSSHA. Plan de Gestión de la Red Integrada de Prestación de Servicios de Salud Huetar Atlántica; Plan de Gestión 2019-2020. 2020.

5 IHME. Health Data: Costa Rica. https://www.healthdata.org/costa-rica. Accessed April 29, 2022.

6 Caja Costarricense de Seguro Social Gobierno de la Red- RIPSSHA. Plan de Gestión de la Red Integrada de Prestación de Servicios de Salud Huetar Atlántica; Plan de Gestión 2019-2020. 2020.

*Child waits on a stretcher for a check-up at his local EBAIS clinic.*

region bordered by two countries, Nicaragua and Panama, and has experienced strong migration over recent years. The region represents a highly multicultural population in Costa Rica, with self-identifications including white/mestizo (74.4%), mulatto (8.6%), indigenous (7.1%), Afro-descendant (4.7%), and Asian (0.2%).[5]

Although Costa Rica's Human Development Index is 0.810, Huetar Atlántica's value is lower at 0.69 implying a less favorable standard of living. While Costa Rica at large has experienced an increase in access to education, Huetar Atlántica has the highest dropout rate in the country and an average schooling of 7.3 years. Huetar Atlántica also has Costa Rica's lowest performance in the Social Development Index and Multidimensional Poverty Index. Sixty-five percent of the region's district is classified as being in the lowest level of social development.5

## INTEGRATED NETWORKS FOR THE PROVISION OF HEALTH SERVICES

Since 2019, Costa Rica has developed and begun implementation of RIPSS, an innovative integrated networks of care model which is both a strategic health and a social security priority. The network model aims to provide timely and high-quality comprehensive care, across all levels of the health system, in response to the changing epidemiology of the population and consequent health needs. Implementation of the integrated network model is embedded within the National Development Plan, Institutional Strategic Plan, and Program for Results to Strengthen Universal Health Insurance in Costa Rica.[7,8] Prior to national expansion of the integrated network model of care, the CCSS has led the pilot implementation in the Huetar Atlántica Region during the 2019-2021 period. The pilot has allowed for the gradual adaptation of health services to the needs of the population in Huetar Atlántica, while developing a governance, implementation, and optimization strategy to inform future scaling efforts.

## OBJECTIVE

The objective of the PHC system capacity analysis is to understand how underlying components of the PHC systems are currently functioning, and how these components interact as enablers or barriers with the integrated networks of care model. The PHC system provides the foundation for all health care services in Costa Rica—it serves as the first point of contact to health services for the population, and is responsible for continuously assessing and proactively addressing individual and community needs to provide people centered care. The existing capacities of the PHC system are therefore integral to the design and implementation of the integrated networks model in Huetar Atlántica. This analysis will inform and enhance the integrated networks model in Huetar Atlántica, as well as CCSS efforts to scale the model nationally.

## APPROACH

The Primary Health Care Performance Initiative (PHCPI) has developed, and validated a mixed-methods PHC system capacity assessment tool. The assessment tool is the result of an iterative development process with 75 expert consultants representing researchers and policy makers from low- and middle- income countries.[9] Thus far, the partnership has implemented and validated the tool in close to two dozen countries. When referring to primary health care (PHC), the analysis refers to continuous, coordinated, comprehensive, and patient-centered care that meets the majority of a population's diverse health needs across the lifespan. In the context of Costa Rica, PHC in the form of non-specialized care, is provided across all levels of the system, from primary through tertiary care.

7 Caja Costarricense de Seguro Social Gobierno de la Red- RIPSSHA. Plan de Gestión de la Red Integrada de Prestación de Servicios de Salud Huetar Atlántica; Plan de Gestión 2019-202. 2020.

8 The World Bank Group. Strengthening Universal Health Insurance in Costa Rica: program-for-results. Appraisal document, World Bank Group. 2016.

9 Ratcliffe et al. PHC Progression Model: a novel mixed-methods tool for measuring primary health care system capacity. (2019). BMJ Global Health.

### *Three Domains of Measurement*

Primary health care capacities in this analysis cover three domains including governance, inputs, and population health and facility management measures. These three domains have been identified by the PHCPI partnership as representing foundational capacities needed for strong primary health care performance. The governance domain seeks to understand if a foundational strategic policy framework with appropriate oversight exists to promote high performance and flexibility to population needs.[10] Appropriate governing policies and political commitment provide a scaffolding for the acquisition and development of key inputs. Inputs represent the core infrastructure, both physical and informational, that are needed to optimize health system performance and deliver efficient high-quality care with equity across Health Areas and populations. Finally, population health and facility management (PHFM) represent components of service delivery that are essential for high-quality PHC that is comprehensive, continuous, coordinated, person-centered and promotes first contact accessibility. PHFM promotes this by analyzing a system's ability to provide proactive management of population health and the ability of health facilities to evaluate and improve their own performance. Together, these domains cover the needed capacities for effective service delivery and positive health outcomes.[11]

### *Ordinal Scoring at Component and Measure Levels*

Within the governance, inputs, and population health and facility management domains are additional subdomains which further group measures into more specific concepts. Each measure is divided into relevant components which highlight the important aspects of a key primary health care capacity. Each component within a measure receives an independent score which can range from Level 1 to Level 4. Level 1 indicates low performance, while Level 4 indicates high performance. Measure rubrics provide detail on the specifications required to achieve a particular score. While each component is individually scored, the overall measure score is determined by its lowest performing component. The analysis employs a threshold approach by which varying performance levels can only be achieved if all criteria described in the rubric level are met.5 The measures are analyzed with a mixed methods approach and utilize data from a range of sources including regional statistics, policy documents, and key informant consultations.

### *Context-Specific Tool + Methodology Adaptations*

The analysis tool was adapted by the technical team at Ariadne Labs and World Bank Group to the regional context and adjusted to focus on key components of PHC system capacity which interface with the integrated networks model. Adaptations include content and definitonal adaptations guided by foundational reference

10 WHO. Monitoring the Building Blocks of Health Systems. (2010). World Health Organization. https://apps.who.int/iris/handle/10665/258734

11 PHCPI. The PHCPI Conceptual Framework. (2017). Primary Health Care Performance Initiative. https://improvingphc.org/phcpi-conceptual-framework

sources and consultation with both the CCSS and World Bank Group. Adjustments were made to better reflect relevance to Huetar Atlántica and Costa Rica's primary care structure at large. Content adjustments were primarily made to component definitions and scoring rubrics related to the governance domain and the population health and facility management domain. Consequently, the capacity rubrics used for this evaluation and evaluation results are unique to the region's context. The adapted component definitions and scoring rubrics are provided in Appendix 1.

The technical analysis team made methodology adjustments to adapt to an expedited evaluation timeline. Methodology adjustments aimed to promote rapid analyses and to minimize time required of the CCSS for data collection and scoring. The adapted approach included preliminary scoring through independent desk research by the technical team, who identified publicly available data sources and mapped them to the scoring rubrics where possible. Once missing information was identified, a short questionnaire was completed by technical experts representing the CCSS's work in Huetar Atlántica to provide quantitative data covering the input domain. Remaining qualitative data gaps were discussed during a two hour workshop with key informants from the CCSS who represented PHC system perspectives at the national and Huetar Atlántica regional level. The technical analysis team synthesized the data collected through these methods and developed preliminary scores which were shared with CCSS. During a second two-hour workshop, scores with unclear results were discussed and finalized. The final data synthesis and scoring is provided in Appendix 2. This methodology deviated from standard PHCPI approaches in two ways. First, evidentiary standards were reduced to allow expert consultation to serve as quantitative and qualitative data sources. Secondly, an external validation by PHCPI was not conducted. Thus, results should not be considered globally comparable.

# FINDINGS

# Findings

## MEASURE SCORES AND SIGNIFICANCE

The primary health care capacity rubrics used for this exercise were modeled on the PHCPI Progression Model and adapted for the subnational context of Huetar Atlántica, Costa Rica (Appendix 1). Provided below are summarized findings related to the primary health care capacity analysis completed in Huetar Atlántica, Costa Rica. The summary of results include articulation of significance at the subdomain and domain levels. The analyses were completed through data collected in both the desk reviews and workshops described prior. While the Findings section describes the significance of the capacity analysis, a breakdown of scores and evidence sources can be found for every measure in Appendix 2.

## DOMAIN 1: GOVERNANCE

### *Summary*

The RIPSS of Huetar Atlántica has demonstrated both strengths and areas needing improvement in its Governance capacity. The health region demonstrates a robust foundation of primary health care policies and leadership commitment. Clear development of PHC plans and initiatives enable effective regulation, oversight, design, accountability, and buy-in into the health system. Regional policies are data driven, participatory, and translate national objectives for primary care to Huetar Atlántica's needs. The region has a strong surveillance system which is operational both in non-emergency and emergency times and enables an integrated response across levels of the health system. Priority setting for Huetar Atlántica is data-driven and is the foundation for resource allocation which ensures resources are efficiently and equitably distributed.

There is room for improving innovation and learning. While Huetar Atlántica actively implements and evaluates ongoing innovations, like the integrated networks of care model itself, evidence shows limited mechanisms to scale successful innovations beyond the pilot level. Findings suggest that scaling of innovations occurs only some of the time, and that there is minimal stakeholder engagement on innovation and learning activities.

### *Governance & Leadership*

Governance and leadership refers to a system's capacity for developing foundational PHC policy and effective quality oversight. Analysis of Huetar Atlántica's capacity on governance and leadership indicates a strong foundation for policies and quality management infrastructure, with opportunities to improve the staffing of coordinating authorities and promote multi-sectoral planning and action related to PHC.

Huetar Atlántica's RIPSS has strong primary health care policies and leadership commitment to PHC. Most notably, this comes in the form of its integrated networks of care model plan which is used as a mechanism for implementing Costa Rica's larger PHC strategy at the level of Huetar Atlántica and to reduce fragmentation of the region's PHC system. The implementation of the integrated networks of care model is rooted in a legal framework supported and enforced by the CCSS. Huetar Atlántica has developed a robust monitoring and evaluation framework for the network model and has equipped the region with a coordinating authority, in the form of the Directorate of the Integrated Network for the Provision of Health Services (DRIPSS), which has reach in each Health Area. DRIPSS is a governing body that was initially created by the CCSS over 40 years ago to serve as a directorate for the entire country; however, as of 2019, the CCSS transformed DRIPSS to serve as a body which governs, coordinates and manages the new integrated network model in Costa Rica, starting with Huetar Atlántica. While authorities and evaluation systems are established in formal policy, key informants do note that there is a need to improve adequate budgeting and staff of the coordinating authorities to ensure their responsibilities are able to be consistently and effectively performed.

Huetar Atlántica has also implemented a robust quality management infrastructure in terms of its integrated networks of care model, but also for general safety, clinical performance, and user feedback. The region has several mechanisms in place to ensure quality, improvement, and patient satisfaction. Examples include routine monitoring and publication of quality performance, as well as technical guidance for standard care practices. There remains opportunity to improve the region's culture of learning on quality which can help promote a system where successes and challenges related to primary care can be openly shared and collectively worked on. Evidence indicates that some learning initiatives have been previously piloted, but have largely been discontinued since the COVID-19 pandemic.

The region has also established a foundational system for social accountability by consistently engaging stakeholders for feedback on primary health care implementation and by publishing the results and progress of PHC implementation on the CCSS website. Enhancing a user's ability to access and navigate displays can help to further promote transparency. Finally, there is potential to improve the involvement of non-health sectors in the planning, implementation, and evaluation of PHC. Huetar Atlántica has an opportunity to better engage non health sectors including financing, infrastructure, education, and transportation sectors, to better enable planning that can ultimately increase its population's access to high quality health information and health services.

## *Adjustment to Population Health Needs*

Analyzing the capacity of a PHC system to adjust to population health needs is important for understanding that a system is able to adapt development priorities and service delivery to respond to changing needs. Analysis results indicate that the health region has a strong foundation for surveillance and priority setting, and there is a need to develop better mechanisms for scaling innovation and learning.


*A gentleman takes an exercise class provided by the Limon Health Area.*

Huetar Atlántica has a surveillance system that is able to track the health and burden of disease within its population, and also rapidly respond to notifiable diseases and potential disease outbreaks. However, there is room for improving the format of the surveillance system to ensure that the entire Huetar Atlántica region is able to connect to an electronic and interoperable system to enhance detection and response timeliness. Surveillance data collection and use translates well to strong priority setting in Huetar Atlántica as the region has established a collaborative process for translating national priorities to the regional level using disease information and local needs analyses to drive the equitable and efficient allocation of resources.

Notably, Huetar Atlántica has the opportunity to improve its mechanisms for scaling innovations and learnings to improve population health management. The integrated networks of care model pilot a helpful example for how Huetar Atlántica approaches implementing and evaluating innovation. Innovation pilots are monitored according to program specific evaluation frameworks and have results published on at least a

yearly basis. Though evaluations occur, key informants suggest that a clear mechanism for scaling successful innovations is needed and that there is opportunity to include non-CCSS or Ministry of Health stakeholders in the process of innovation and learning. Including more diverse stakeholders and establishing a clear mechanism for scale can help to create solutions tailored to the population that are swiftly scalable when proven effective. Improving the foundation for adjustment to population health needs can help Huetar Atlántica to more appropriately collect necessary information to promote continual learning and adaptation of the system based on emerging needs and evidence.

## DOMAIN 2: INPUTS

### *Summary*

Inputs address the supplies, physical and informational systems, workforce and funds available for primary health care delivery. The availability and distribution of inputs is critical for understanding a system's ability to efficiently allocate and track resources for equitable service delivery. Huetar Atlántica has a notably high availability of these critical inputs to deliver effective, equitable, and high quality primary care across every Health Area in the region. There is little to no reported variation in access to inputs across Huetar Atlántica's eight Health Areas pointing to a high performing supply chain that ensures regular and functional inputs to deliver PHC. Huetar Atlántica has a strong information system that is fully electronic, interoperable, and interconnected across all facility types and Health Areas enabling high-quality service delivery, facility management, priority setting, and population monitoring. The region also has a robust health workforce that is critical for delivering high quality care by a competent workforce. Lastly, Huetar Atlántica has a robust system for managing funds so that care delivery at the health facility level is not constrained by financial limitations.

### *Drugs & Supplies*

Drugs and supplies refer to the essential medicines, equipment, and diagnostics needed to deliver safe, effective, and comprehensive primary care. Huetar Atlántica's capacity analysis points to a robust and equitable distribution of drugs and supplies across all Health Areas in the region. Data on the availability, distribution, and variation of drugs and supplies were not publicly available, thus evidence for this portion of analysis were obtained through direct consultation with the CCSS and relevant stakeholders.

Stakeholders confirmed that all Health Areas in Huetar Atlántica consistently have essential medicines, consumable commodities, basic equipment, and diagnostic supplies available as articulated by international standards and guidelines. Most importantly, there is no variation in the availability of these drugs and supplies across Health Areas or between different primary care facility types. This indicates that Huetar Atlántica has high performing, and reliable supply chain infrastructure. These data were obtained through stakeholder consultation, it is important for this information to be publicly available to better promote transparency and accountability with the population the region serves.

### *Facility Infrastructure*

Facility infrastructure refers to the distribution of primary care facilities, as well as the existence of functioning amenities and safety equipment needed for delivering care. The capacity analysis indicates that Huetar Atlántica has a strong foundation for facility infrastructure that is dynamic to population needs, with some room for improvement. Most notable is Huetar Atlántica's approach to facility distribution. The region's primary care facilities are rooted in the distribution of multidisciplinary teams known as EBAIS. The distribution of EBAIS depends on the distribution of Huetar Atlántica's population and is regularly analyzed and reassessed to meet population needs.

Direct consultations with CCSS provided information on the availability, distribution, and variation of amenities and safety precautions as this data were not publicly available. Key informants reported that while there is consistency in the availability of both facility amenities and standard safety equipment, there is some variation in the availability of facility amenities between Health Areas and facility types. This signifies that although Huetar Atlántica has a strong foundation for facility infrastructure, there is room for improvement in minimizing variation and maximizing equity between service delivery locations.

### *Information Systems*

Information systems include the capture of data related to vital statistics, health management, and personal care records. Huetar Atlántica has a high functioning and highly capacitated information system. All civil registration and vital statistics data are captured in Huetar Atlántica and can be disaggregated by Health Area. Notably, Huetar Atlántica has fully implemented the Expediente Digital Único en Salud (EDUS) as of 2018. EDUS is a fully digitized, integrated, and interoperable health management information system (HMIS) which includes patient care records. It allows access to an individual's unique patient information from every service delivery point. EDUS is consistently kept up-to-date and used to monitor both patient health and also health system performance. Huetar Atlántica's ability to maintain a highly functioning and robust HMIS is critical for understanding the health needs of the population, for promoting relational and informational continuity in care, and for managing and improving the delivery of high quality health services.

### *Workforce*

Workforce analyzes the ability of a system to establish and maintain a health workforce, with adequate physical distribution and a diversity of cadre, as well as to enforce standards of competence and quality. The results of the capacity analysis in Huetar Atlántica show that it has a robust health workforce and does not have a significant variation in the distribution of the PHC workforce in the Huetar Atlántica Health Areas. The Huetar Atlántica region does not have figures on the rate of health personnel per 10,000 inhabitants, which makes it difficult to establish whether it is adequate or


*A patient demonstrates use of the EDUS mobile app to access their health record.*



insufficient. The WHO establishes a standard of 44.5 doctors, nurses and midwives for every 10,000 inhabitants and Costa Rica has 49 doctors and nurses for every 10,000 inhabitants according to PAHO data. If only the health personnel registered with the CCSS are taken into account, this rate is 17 health professionals for every 10,000 inhabitants.

The Huetar Atlántica region also has strong capacity for ensuring the quality of its health workforce through the establishment of required qualifications and appropriate credentials for each cadre of actively practicing members. Competencies exist for every cadre of the health workforce, including non-clinical staff. There is room for improving the system's ability to ensure that quality standards are consistently met, including standardizing re-licensing and performance evaluations.

Huetar Atlántica also has a well-established community health worker system, called ATAPs, who are highly trained and well-integrated into the routine PHC system. The ATAPs play a significant role in health education, population outreach, and care quality. The number of ATAPs in each EBAIS is defined according to the population size within the Health Area they serve, as well as the level of health risk present, helping support appropriate and equitable distribution.

### *Funds*

The funds subdomain analyzes the availability and management of funds at the facility level. Results of the capacity analysis in Huetar Atlántica indicate that the region has strong mechanisms for the establishment of budgets, collection of financial information, and dispersion of workforce payments. Although highly centralized and governed by the CCSS, each health facility in Huetar Atlántica maintains a facility budget that undergoes monthly financial monitoring and this historical data is used for an annual forecasting exercise that dictates allocation and use of funds. This process can be improved at the regional level to better forecast changing financial needs associated with the network model rather than relying on historical data alone.Every health facility in Huetar Atlántica also maintains a financial management information system that has the ability to track expenditures. This allows the region to understand efficiency, minimize waste, and improve service delivery. Generally, the remuneration of staff in Huetar Atlántica is stable, predictable, and reliable across all cadres of the health workforce. There is room for improving the remuneration system for temporary and substitute staff who have distinct employment contracts and at times face delays in receiving payment.

## DOMAIN 3: POPULATION HEALTH & FACILITY MANAGEMENT

### *Summary*

Population health management is particularly important for integrating community outreach and engagement into the provision of primary care services as it allows for proactive community health promotion rather than reactive care management. Facility organization and management enables effective deployment of human resources, the monitoring of facility performance, and the capacity of managers for supporting and enforcing primary care standards.

In Huetar Atlántica, there is a need to increase community leadership and Juntas de Salud involvement in data interpretation and the design and delivery of primary care. While local priority setting activities are rooted in data, community input remains low and more inclusion can increase the system's ability to adapt effectively to user health needs and wants. Simultaneously, the region has a strong foundation for empanelment and proactive outreach supporting the development of patient-provider relationships with vulnerable populations and the establishment of longitudinal patient relationships.

Through well established facility organization and management, the health region has effective multidisciplinary teams who routinely monitor and work towards quality targets. This includes supportive supervision for all workforce cadres and multidisciplinary collaboration on efforts to improve service delivery. While the foundation for team-based care is strong, it can be strengthened by promoting mutual accountability among team members and by consistently following-up on quality improvement initiatives.

## *Population Health Management*

Population health management refers to interacting with a community or population to improve health status and meeting needs. The concept includes local priority setting, community engagement, empanelment, and proactive population outreach. The capacity analysis of Huetar Atlántica's performance on Population Health Management is varied with both strengths and simultaneous room for improvement.

Huetar Atlántica demonstrates strong and consistent use of data to guide local priority setting, however there is limited community participation. Currently, communities are not systematically involved in data interpretation nor the development of strategic priorities. While Health Boards provide a consistent mechanism for community engagement in Health Areas, Health Boards are limited to providing feedback on the quality of health services rather than partaking in the co-design of primary care objectives. This analysis suggests that while Huetar Atlántica's local priority setting is data driven, there is opportunity for improving community input when setting service delivery priorities.

The capacity analysis shows that Huetar Atlántica has nearly its entire population empaneled to primary care settings. This allows for the continued delivery of high quality care across segments of a population and across an individual's life span. Empanelment, coupled with proactive population outreach, allows for the monitoring of population health as well as the delivery of services to hard to reach populations.

The CCSS has discussed the issue of patient choice of health providers and has determined that in the Costa Rican context there is rationale to not promote this practice. The CCSS' "Estrategia de Atención Integral" has been developed based on empanelment and seeks to achieve continuity of care in the provision of health services, as well as in the planning and allocation of resources. By empaneling its population based on a geographic basis, Huetar Atlántica enables efficient resource allocation with an ability to focus on the life course, home care, community based care, and health education.

RIPSS actively tracks high risk populations as part of their proactive population outreach strategy. In Huetar Atlántica, this tracking provides the information to generate robust patient registries to monitor and inform outreach of high-risk populations.

## *Facility Organization & Management*

Analysis indicates that Huetar Atlántica has a strong foundation for facility organization and management with some areas for improvement which can further strengthen organizational functioning.

Huetar Atlántica organizes its primary care delivery in EBAIS teams which consist of an all-encompassing range of health workforce cadres including physicians, nurses, ATAPs, medical data clerks (REDES), and pharmacists. Each Health Area also has a Support Team made of technical and administrative professionals who are responsible for supporting the provision of health services through clinical


*Community members attend a health education and preventative care workshop provided by their local EBAIS.*

and administrative management. Together, EBAIS and Support Teams make up what is known as the "Health Team" in each Health Area of Huetar Atlántica.

The team-based nature of EBAIS, addressed in Measure 29, is strongly grounded in team identities, clear roles, and shared goals for service delivery. However, improving mutual accountability structures, or mechanisms for team members to hold each other responsible for quality, may help to increase efficiency and effectiveness of primary care delivery. The substantial credential and training requirements of facility managers in Huetar Atlántica, most have high master's degrees or have received relevant management training, bolsters the organization of primary care facilities. This is important in ensuring that those who monitor services and regulate facility activities are trained with the appropriate skills and knowledge to do so.

Uniquely, Huetar Atlántica's EBAIS teams each have a dedicated medical data clerk (REDES) who are assigned primary responsibility for accessing and continuously maintaining all patent and management records in the HMIS. This enables most primary care facilities to use their information systems for quality improvement activities, but the analysis finds that there is room for improving the effectiveness of follow-up that comes from information use activities.

Lastly, Huetar Atlántica has a strong foundation of performance measurement and management, which includes the supportive supervision of all staff. This enables a system for continuous monitoring, evaluation, and improvement of provider competence and service delivery quality. Ultimately, the robust foundation for facility organization and management capacitates Huetar Atlántica with an effective, coordinated, and high quality platform for primary care delivery.

# DISCUSSION

# Discussion

## HUETAR ATLÁNTICA PHC CAPACITY ANALYSIS AND NETWORK CARE MODEL CONSIDERATIONS

Completion of the primary health care capacity analysis in Huetar Atlántica has enabled the identification of several strengths and opportunities for further investment and development.

Costa Rica has had more than three decades of PHC implementation, and this has been reflected in the successes underscored by the capacity analyses. Findings from the analysis were consistent with the CCSS' experience implementing the network model— measures of PHC capacity that were identified as established or advanced serve as facilitators for the implementation of the model, while measures of capacity that were identified to be progressing or less mature are consistent with challenges. The integration of the model into the underlying PHC governance and inputs systems provided CCSS with numerous advantages during implementation. Looking ahead, community involvement will be critical for strengthening Huetar Atlántica's PHC system capacity and for designing, implementing, and scaling new service delivery innovations that meet the population's changing needs. While the analysis helped to identify strengths and opportunities for development, it was challenging to identify how network implementation changed the PHC landscape through this analysis alone.

## CAPACITY STRENGTHS

### *Governance*

Huetar Atlántica's primary care system has several notable capacity strengths that promote its ability to deliver high quality services to its population. In particular, it has a robust alignment of **primary health care policies** that target regional priorities and quality standards. These include the creation and implementation of the integrated networks of care model which has helped to mitigate historical issues of system fragmentation. PHC policies are embedded in legal policy and supported in implementation by CCSS, which demonstrates **leadership** commitment to improving primary care in the region. Huetar Atlántica has developed a well-established **quality management infrastructure** that sets standards and regulations down to the service delivery level. Huetar Atlántica's quality management infrastructure includes a network governing body which seeks to improve coordination among facilities; while the governance structure has been developed, it can benefit from further defining its decision making processes and composition. Altogether, the quality management infrastructure allows CCSS to monitor and promote general safety, clinical performance, and user feedback when implementing the integrated networks of care model.


*Patients in a waiting room at a local EBAIS.*

### *Inputs + Population Health and Facility Management*

Huetar Atlántica has robust capacity across all input measures, indicating that the region has the appropriate supply chains, physical and informational infrastructure, workforce and funds in place to consistently deliver services across all primary care facility types and health areas. This achievement provides Huetar Atlántica with the basic necessities that are needed to ensure high quality system performance so long as other aspects of primary care are simultaneously strengthened. The **health management information system** (EDUS) was particularly important for implementing the network model. EDUS provided CCSS access to institutionally standardized **performance measurement and management** data to monitor implementation of the model at the individual EBIAS level where services are delivered. Clearly defined roles and competencies, which are rooted in strong **facility management capability and leadership,** are critical drivers of ensuring performance data is being used for quality assessment, management, and for putting improvement plans into action.

## OPPORTUNITIES

### *Governance*

Simultaneously, there are several opportunities for improvement within the system identified by the analysis including **social accountability and multisectoral action.** Multisectoral action enables non-health stakeholders (including other government departments and private sector) an opportunity to aid in the development and promotion of primary care. Given the impact of social determinants on health, partnering with agencies focused on infrastructure, finance, transportation, and education can help stimulate the implementation of care initiatives that are best tailored to a population and likely to further improve access to care. CCSS key informants shared that insufficient cross-governmental planning, as well as a lack of role clarity and ownership, contributed to challenges in the management of resources and governance of the Network Care Model.

As Huetar Atlántica continues to explore and promote innovative care models, such as the integrated networks of care model, it is important that the Program for Strengthening the Provision of Health Services (PFPSS)develops clearer mechanisms for the expansion of innovation and learning past the pilot phase. CCSS key informants indicated that implementation of the networks model would have benefitted from more established platforms and mechanisms to share experiences and learning to generate, capture, and share innovation and continuous learning in different services. Progress can be made through broadening the scope of stakeholders involved in ***innovation and learning*** in PHC, and deepening their engagement. In order to create shared accountability and facilitate successful scale of innovation and learning past the pilot phase, this engagement should include clearly defined roles and responsibilities amongst stakeholders. Improving innovation and learning benefits from—and provides a recruitment channel for—engaging diverse internal and external stakeholders (including communities, employees, governmental and nongovernmental organizations, etc.) to ensure new services are tailored to population needs.

### *Population Health and Facility Management*

Huetar Atlántica demonstrates a need to strengthen several measures of Population Health Management domain. Population health management is essential to ensure that the health system proactively meets the needs of a population and is dynamic enough to adjust when circumstances change. ***Local priority setting*** and ***community engagement*** can both benefit through increasing opportunities for communities to provide input into the establishment of priorities and design of PHC. Community members provide an opportunity for better understanding context when interpreting

*A clinician provides a family health counseling session.*

data for priority setting. Knowing both the health needs and health wants of a community can enable the design of a favorable PHC system—one that strengthens both population health as well as population perceptions, and trust in the quality of care available to them. CCSS key informants noted that, while the Health Boards provide a mechanism for community-level engagement, participation in decision-making for the planning and provision of services remains weak. The community's voice has varying input and impact by health area. Investments in local priority setting and community engagement are aligned with Fundamental Element #1 in the Management Plan for the Integrated Network for the Provision of Health Service in Huetar Atlántica, "Identification of the needs of people in the field of service provision of health."

# ANNEX 1

## Measure 1: Primary health care policies (1/2)

Primary health care policies are decisions and plans that are undertaken by governments with input from other stakeholders to achieve specific primary health care goals. PHC policies promote, support, and establish system orientation, financing, inputs, and service delivery mechanisms to ensure quality and improve and develop PHC functions and outcomes.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Evidence-based policy—** Incorporates research-identified effective solutions or approaches, knowledge and experience, and values and goals.<br><br>**Joint review—** A shared approach that includes a diverse range of stakeholders to assess the progress, outcomes, strengths, and weaknesses of a policy. | Number of elements below that can be answered positively:<br>☐ Is there an active Regional PHC Health Plan or Regional PHC Strategic Plan in the Huetar Atlantica Region?<br>☐ Is Huetar Atlantica's Regional Health Plan and/or Regional Strategic Plan designed around PHC? This could occur either through the existence of an explicit PHC plan, strategy, or policy and/or through embedding of core PHC principles into the Plan?<br>☐ Are policies around PHC evidence based?<br>☐ Are policies around PHC formulated through a participatory process?<br>☐ Are policies around PHC embedded in a legal framework?<br>☐ Do policies around PHC include the fundamentals?<br>a. Service package defined<br>b. Financing mechanism<br>c. M&E framework<br>☐ Is there a joint review of the progress towards the objectives set out in PHC-related policies? | 2 or fewer | 3-4 | 5-6 | All 7 |

### MEASURE 1 CONTEXTUAL INFORMATION

This measure is designed to assess the Huetar Atlantica region's governmental commitment to PHC both in theory and in practice. It refers to policies broadly as the laws, guiding principles, working frameworks and ways of working that guide practice, service delivery decisions, and actions.

Huetar Atlantica may strongly prioritize PHC on paper, but this will not translate to effective implementation if there are inadequate systems for acting on these strategies, policies, and/or plans. Formulating policy through broad stakeholder participation and embedding policy with laws and regulation are mechanisms to support the translation of policy into action. Not only is it important for PHC to be prioritized in policies, but the fundamentals of a defined service package, ways of financing PHC, and a system for monitoring and evaluation need to be included.

Note that this measure purposely does not assess whether Huetar Atlantica has a "PHC policy." The region might, while it may instead integrate the functions and principles of PHC into their broader health policy. Policies designed around PHC mean that these polices put PHC at the core of a Huetar Atlantica's health strategy; emphasize the five key functions of primary health care: first point of contact, continuity, comprehensiveness, coordination, and patient-centered care;[2] integrate primary care with other service delivery structures and other policy aims and objectives; and emphasize the individual and community at the center of policy and implementation.

Embedding policies in a legal framework means leveraging law and regulation to establish a "roadmap" for the national health policy planning process and the creation of a broad system of rules that serve as "a key implementation mechanism to translate the major policy objectives into action by setting standards and requirements, and using sanctions and incentives to exert leverage over the health system".[3] This may include legally binding instruments (state constitutions, laws, acts, decrees, orders, regulations and ordinances) and legally non-binding instruments (guidelines, standards, operating rules, administrative procedures or rules) and other instruments (protocols, resolutions, and intersectoral or inter-ministerial agreements).[4]

Effective joint review processes should include assessment of the situational analysis and programming, the process, costs and financing, implementation and management arrangements, and results, monitoring and review mechanisms. The inclusion of a diverse range of stakeholders enhances the quality of the assessments and broad confidence in the strategies, as well as improves coordination and alignment moving forward.[5]

## Measure 2: Primary health care policies (2/2)—Leadership

Policies are decisions and plans that are undertaken by governments with input from other stakeholders to achieve specific health care goals. PHC policies promote, support, or establish system orientation, financing, inputs, and service delivery mechanisms to ensure quality and improve and develop PHC function and outcomes.

This measure is about leadership for the coordination, monitoring, integration, and implementation of PHC-related policies. It refers to an identifiable regional authority(ies) for primary health care within the government. This person or governmental entity provides stewardship of primary health care and should coordinate, monitor, integrate, and implement regional policies related to PHC with defined authority,clear accountability, adequate budget, and sufficiently competent staff. The mandate of this authority should include the public sector as well as oversight and regulation of the private sector, where applicable. The regional authority must have accountability for the entire range of comprehensive PHC services defined by Huetar Atlantica's health policies, strategies, and/or plans. The authority must have oversight of all units that are relevant to PHC to ensure active alignment and coordination for the effective and efficient delivery of PHC services.

| COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|
| A coordinating authority(ies) (whether an individual or other governmental organizational entity), exists that is accountable for coordinating, monitoring, integrating, and implementing PHC strategies and policies at the Huetar Atlantica Health Region level. | No | Yes, with minimal accountability | Yes, with a moderate degree of accountability with some room for improvement | Yes,with clear and complete accountability all of the time |
| Sub-regional operational capacity and reach of the Huetar Atlantica Health Region's coordinating authority(ies) | N/A (No Huetar Atlantica coordinating authority) | Minimal, and only at some Health Areas (<50%) | Moderate at the majority of Health Areas (>50%, but less than all) | Sufficient |
| Proportion of time the regional coordinating authority(ies) has adequate authority, budget and staff | N/A (No Huetar Atlantica coordinating authority) | Rarely, and only at the Huetar Atlantica Health Region level | Sometimes, at the Huetar Atlantica Health Region level and Health Arealevel | All of the time at Huetar Atlantica Health Region level and Health Area Level |

### MEASURE 2 CONTEXTUAL INFORMATION

This measure assesses Huetar Atlantica's ability to follow through on policies and strategies, specifically through the leadership of a regional coordinating authority. A regional authority(ies) may be an individual or an organization, but the emphasis of this measure is on their ability to steward Huetar Atlantica's vision and strategies for PHC; implement strategies and policies; bring together all PHC-related activities to ensure awareness, coordination and alignment between and among them; and oversee implementation at the regional and Health Area levels. Through effective stewardship and oversight, a regional coordinating authority(ies) can promote effective and efficient PHC service delivery by reducing duplication and resources waste and by identifying gaps in services or coverage. To be effective, the regional authority(ies) must have an adequate budget, meaning that sufficient funds are available for them to execute their mandate to coordinate, monitor, integrate, and implement regional PHC operationally at the Health Area levels.

To qualify as a regional PHC authority(ies), it is not required that PHC be the sole focus of this person or entity, though they must have sufficient time and capacity to dedicate to PHC in order to be able to execute on their mandate.

## Measure 3: Quality management infrastructure

Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.[6] High-quality health services involve the right care, at the right time, responding to the service users' needs and preferences, while minimizing harm and resource waste. Quality management includes three interlinked concepts, necessary to enhance quality across the health system—quality planning, quality control, and quality improvement. Quality planning includes aims, processes, and goals needed to create an environment for continuous improvement. Quality control entails monitoring established processes to ensure their functionality. Quality improvement is the action of every person working to implement iterative, measurable changes, to make health services more effective, safe, and people-centered.[7] Ensuring quality requires development of robust quality infrastructure.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Quality interventions to:**<br><br>**Create an enabling systems environment**<br>• Registration and licensing<br>• External evaluation/accreditation<br>• Clinical governance<br>• Public reporting and comparative benchmarking<br><br>**Reduce harm**<br>• Inspection of institutions for minimum safety standards<br>• Safety protocols<br>• Safety checklists<br>• Adverse event reporting<br>*continued...* | Number of elements of quality management infrastructure, below, that are in place:<br>☐ Articulation of Huetar Atlantica's regional direction on quality, often outlined as a regional quality policy or strategy, or integrated with broader health systems planning, that is aligned with the overall national policy.<br>☐ Use of a package (2+ interventions) to create an enabling systems environment.<br>☐ Use of a package (2+ interventions) of appropriate quality interventions to reduce harm to patients.<br>☐ Use of a package (2+ interventions) of appropriate quality interventions to improve clinical effectiveness of health services.<br>☐ Use of a package (2+ interventions) of appropriate quality interventions to engage patients, families and communities.<br>*continued...* | 2 or fewer | 3-4 | 5-6 | 7-8 |

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Improve clinical effectiveness**<br>• Clinical decision support tools<br>• Clinical standards, pathways and protocols<br>• Clinical audit and feedback<br>• Morbidity and mortality reviews<br>• Collaborative and team-based improvement cycles<br><br>**Engage patients, families and communities**<br>• Formalized community engagement & empowerment mechanisms<br>• Health literacy<br>• Shared decision making<br>• Peer support and expert patient groups<br>• Patient experience of care<br>• Patient self-management tools | ☐ Active systems that routinely collect and publish data on quality health systems.<br>☐ A culture of learning on quality across the health system, including development of systems to collect and share learning on quality of care at the EBAIS, Health Area, and Health Region levels.<br>☐ Clearly stated leadership commitment to institutionalize quality of care throughout the health system. | 2 or fewer | 3-4 | 5-6 | 7-8 |

### MEASURE 3 CONTEXTUAL INFORMATION

Quality management infrastructure supports a health system to deliver safe, effective, and efficient care that improves health outcomes and supports healthy populations. It refers to the planning, control activities, and improvement work that underpins the delivery of quality health services. Identification and implementation of appropriate quality interventions as part of quality management infrastructure can have a significant impact on specific health services delivered and on the health system at large. Four key quality intervention categories have been identified for their potential impact on quality by reducing harm to patients; improving clinical effectiveness; creating an enabling systems environment; and engaging patients, families, and communities.[6] Qualifying interventions for each category are provided in the definitions.

## Measure 4: Social accountability (1/2)

Social accountability is a measure of whether a region is held accountable to existing and emerging social concerns and priorities based on need relevant to PHC of internal and external stakeholders (for example, community, employees, governmental and nongovernmental

organizations, management, and owners). Social accountability can be promoted through close involvement and collaboration among citizen groups, marginalized populations, private sector, civil society organizations, non-governmental organizations, non-health actors, and other stakeholders in health care planning, policy formation, monitoring and evaluation. Systems for social accountability should provide evidence of how inputs from non-governmental sectors are translated into changes reflective of and responsive to the concerns of external stakeholders.

In its best form, social accountability should be a bi-directional process in which government seeks and prioritizes external input, while non-governmental actors also seeks to amplify or improve government-led PHC efforts. Social accountability at the local level is addressed separately under *Population Health Management*.

Note: Social accountability at the local level is addressed separately under *Population Health Management.*

# ANNEX 1

| CRITERIA | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Ad hoc engagement—**Hosted or requested for a particular purpose as necessary. The structure and process of engagement changes often and is usually not deliberate.<br><br>**Systematic engagement—** The methods and structure for engagement is established and used consistently at regular intervals and as opportunities for stakeholder consultation and information dissemination arise.<br><br>**Minimal involvement—** Private sector, civil society, local governments, and/or non- governmental organizations are informed of relevant health care planning, policy formation, monitoring and evaluation but given few or no opportunities to provide input.<br><br>**Moderate involvement—** Private sector, civil society, local governments, and/or non- governmental organizations are informed of relevant health care planning, policy formation, monitoring and evaluation and given the opportunity to provide feedback on the status of implementation and results, alternatives and/ or decisions throughout the process.<br><br>**Significant involvement—** Private sector, civil society, local governments, and/or non- governmental organizations are collaborators in the health care planning, policy formation, monitoring and evaluation and given equal voice and decision-making power as other stakeholders, such as health system leaders and local government officials. | Engagement around PHC-related issues with the private sector, civil society, local governments, and/or non-governmental organizations (NGOs) occurs: | Rarely, if ever | Only as needed, and varying in methods and structure | Only as needed, and consistent in methods and structure | Regularly, and consistent in methods and structure |
| | Scope of stakeholders involved in PHC planning, policy formation, and monitoring and evaluation.<br>• Civil society<br>• Local governments<br>• Non-governmental organizations<br>• Private sector | No stakeholders are involved | 1 | 2-3 | 4 |
| | Involvement of the stakeholders in health care planning, policy formation, and monitoring and evaluation | No involvement | Minimal (informed but given few opportunities for input) | Moderate (informed and given the opportunity to provide feedback) | Significant (able to express perspectives and influence decisions) |
| | Public disclosure on the status of PHC implementation and results occurs: | Does not occur | Rarely, and is not easily accessible | Occasionally, and is easily accessible | Systematically |

### MEASURE 4 CONTEXTUAL INFORMATION

This measure is related to and often confused with community engagement (Measure 26). In contrast to community engagement which occurs at the local level and involves direct consultation with patients who live in the community served by the local-level facilities, social accountability in this context addresses regional-level collaboration and input. Governments and leaders should be held accountable for the content of policies and delivery of health services by the populations they serve. This is facilitated by the establishment of defined processes and mechanisms for the health system to engage stakeholders, and for stakeholders to engage the health system. Beyond engagement, stakeholders should be involved throughout the leadership and governance process—from health care planning, policy formation, and monitoring and evaluation—with the system responsive to their input. The impact of stakeholder engagement on policy priorities is addressed in Measure 7: Priority setting.

## Measure 5: Social accountability (2/2)—Multi-sectoral action

Social accountability is a measure of a country's state of being responsive to existing and emerging social concerns and priorities relevant to PHC of internal and external stakeholders (for example, community, employees, governmental and nongovernmental organizations, management, and owners). Social accountability can be promoted through close involvement and collaboration among citizen groups, marginalized populations, private sector, civil society organizations, non-governmental organizations, non-health actors, and other stakeholders in health care planning and governance. Systems for social accountability should provide evidence of how inputs from non-governmental sectors are translated into changes reflective of and responsive to the concerns of external stakeholders. In its best form, social accountability should be a bi-directional process in which government seeks and prioritizes external input, while non-governmental actors also seeks to amplify or improve government-led PHC efforts. Social accountability at the local level is addressed separately under *Population health management.*

This measure is specifically about multi-sectoral action. Multi-sectoral action—integration across government entities whose work intersects and interacts with Primary Health Care—is an important means of ensuring social accountability and a Health in All Policies approach.[8] Examples of such groups include cross-parliamentary groups on health or other groups who coordinate PHC-related topics across relevant ministries.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| Health in **all policies approach** "An approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity"[9] | Cross-government groups on primary health care | Do not exist | Exist, but roles are not clearly defined | Exist, with clearly defined roles but minimal transparency | Exist, with clearly defined roles and transparent proceedings. |
| | Evidence of cross-sector integrated planning and joint reviews | Do not exist | Exist, but are infrequent and largely championed by individuals | Exist, with somewhat systematic processes and minimal representativeness | Exist, with systematic processes and representative involvement |

### MEASURE 5 CONTEXTUAL INFORMATION

Cross-government groups refer to different agencies at the national and/or sub-national level whose mandate and work relate to health. Examples of such groups include cross-parliamentary groups on health, or other groups who coordinate PHC-related topics across relevant ministries. For instance, the Ministry of Health may collaborate with the Ministry of Education, Finance, Housing, or Interior on various health-related issues. It is important that the government as a whole is able to be held accountable for health, including involving those domains that are involved in, impact, or are impacted by health and health services. Sectors which may be included in such groups include but are not limited to Education, WASH, Housing, Finance, Transportation, etc.

## Measure 6: Surveillance

Surveillance is the "ongoing, systematic collection, analysis, and interpretation of health-related data essential to the planning, implementation, and evaluation of public health practice."10 Effective surveillance systems consistently perform the four functions listed below.[11-13]

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Interoperable—** Interoperability is the ability of different surveillance systems, processes, devices or applications to connect, in a coordinated manner, within and across organizational or geographic boundaries to access, exchange and cooperatively use data amongst stakeholders to respond to disease instances, with the goal of optimizing the health of individuals and populations.[14] | Number of function(s) of an effective surveillance system (listed below) consistently performed in the majority of Health Area units:<br>☐ Track health and burden of disease metrics (morbidity, mortality, incidence)<br>☐ Detect, report, and investigate notifiable diseases, events, symptoms, and suspected outbreaks or extraordinary occurrences<br>☐ Continuously collect, collate and analyze the resulting data<br>☐ Submit timely and complete reports from local to higher levels of the system and from higher levels of the system back to lower/ community levels | 0-1 | 2 | 3 | 4<br>*Note: to achieve Level 4, all sub-Huetar Atlantica units (Health Areas) must use an effective surveillance system that consistently performs all 4 functions described.* |
| **Interconnected—** The facilitated linkage or connection of all constituent parts of the surveillance system. This refers to connection of surveillance system components—data systems, detection, reporting and investigative activities, and feedback loops—within a sub-national health system network, and to the linkage between different sub-national health system networks. | Format of surveillance systems | Primarily paper-based | Only some parts are electronic | Largely electronic with limited interoperability and inter-connectedness | Entirely electronic, and interoperable and inter-connected |

### MEASURE 6 CONTEXTUAL INFORMATION

This measure assesses the presence and functioning of health surveillance systems. Strong surveillance systems are dynamic and multimodal networks that inform a region's ability to respond to emerging health needs and build resilience. This goes beyond the collection of data on incidence of communicable diseases of public health significance and notification of emergency response systems, to the dynamic collection of information on population health to inform service delivery. For example, an effective surveillance system would cover both the functions of detection, reporting, and investigation of an incident of viral meningitis, as well as flag a seasonal increase in diabetes complications or increase in road traffic injuries. In order to fill these functions, surveillance systems should track health and burden of disease information for a broad range of diseases, events and symptoms and integrate closely with health management information systems (Measure 16).

Collecting and recording data has little use without mechanisms in place to detect incidences or trends of issue, identified communication channels to report to, and trained staff with the necessary expertise and processes to investigate and respond to these incidences or trends. Recently, the Ebola epidemic underscored the importance of sensitive and robust surveillance systems. Feedback loops between facilities, EBAIS, Health Areas, Huetar Atlantica and the centralized levels of the health system are critical to ensure that the data actually informs action. The flow of information from the national/Huetar Atlantica region/Health Area/EBAIS teams back to facility level is particularly important for response to incidents, with the establishment of communication channels and information system use playing an important role (Measure 31), as well as for overall integration of the surveillance system into population health and facility management.

## Measure 7: Priority setting

Priority setting involves making decisions about how best to allocate limited resources to improve population health. Effective priority setting involves assessing existing and emerging health needs (see Measure 6: Surveillance), stakeholder engagement and social accountability, use of an explicit process, consideration of values and context, funding programs, communicating decisions, and managing feedback and demands from stakeholders at Huetar Atlantica region and Health Area levels.

Note: This section refers to priority setting at the Huetar Atlantica region and Health Area levels. Local priority setting is addressed separately in Measure 25 under *Population health management*.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Service delivery evaluation—** Compilation and assessment of information about the progress and implementation of program or intervention activities, characteristics, outcomes/ impact, consideration of whether the desired results have been achieved, and determination of the merit or worth of the program or intervention.[15] *Continued...* | Degree to which data (health, burden of disease, user needs and preferences, evaluation of programs and interventions, and cost effectiveness) are used to set service delivery priorities at the *Huetar Atlantica region and Heath Area* level. | Rarely, if ever | Occasionally | Systematically for some priority setting exercises | Systematically for all priority setting exercises |

## ANNEX 1

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Stakeholder engagement—** The process through which the health system involves people who will be affected by decisions, priorities, and service delivery changes and/or people who can influence the implementation of the defined priorities in order to build and maintain an open and constructive relationship, and to enhance implementation and service delivery.[16] | Proportion of priority setting exercises where stakeholder engagement occurs | Stakeholder engagement does not occur | <50%, with variable methods, structure, and composition | 50-90%, with variable methods, structure, and composition | Systematically for all (>90%) |
| **CRITERIA**<br><br>**Rarely used—**Data is available, presented, discussed and applied in <50% of priority setting exercises<br><br>**Occasionally used—** Data is available, presented, discussed and applied in 50% or more of priority setting exercises<br><br>**Systematically used—** Data is available, presented, discussed and applied through consistent processes for >90% of priority setting exercises<br><br>**Systematic stakeholder engagement—**The processes for identifying, communicating with, and convening stakeholders are transparent and consistent, with engagements occurring at regular, predefined intervals as well as on an ad-hoc basis, as necessary | Frequency at which allocation of resources is based on results of the priority setting exercise. | None | <50% | 50-90%, | All or nearly all of the time (>90%) |

## MEASURE 7 CONTEXTUAL INFORMATION

This measure assesses Huetar Atlantica and Health Area systems for identifying health priorities and allocating resources appropriately. System-wide priority setting is a complex and inherently political process involving a diverse array of stakeholders, decision-makers, and actors, whose motivations and actions are often imperfectly aligned. Effective priority setting navigates these differing interests and motivations through clear processes, identifying the most appropriate, evidence-based programs and interventions to address the most important needs and demands of a population. This depends on the use of diverse sources of data: health and burden of disease information; service delivery evaluations; cost-effectiveness assessments; and stakeholder input for prioritizing the most appropriate programs and interventions and informing resource allocation. Stakeholder engagement plays an important role in priority setting because it ensures that priorities reflect population needs and that the interventions and programs selected are acceptable, appropriate, and desired.

## Measure 8: Innovation and learning

Innovation and learning is defined as having a system, organization, and culture in place that allows for flexibility and adaptation to modify behavior, practice, priorities, and policies to reflect new knowledge and insights (external or from within the region). This requires routine incorporation of new evidence from research or data and routine reviews and discussion of progress and challenges so that lessons from past events are identified and can be used to predict and/or improve response to future threats or changing health needs.

Innovation and learning can occur across a wide range of areas, including changes in the design of services, products, and production processes (technology element); new or altered ways of organizing or administering activities (organization element); new or improved ways of interacting with other organizations and knowledge bases (system interaction element); and new worldviews, rationalities, missions, and strategies (conceptual element). Innovation involves interrelated changes in technological, organizational and institutional elements of healthcare.[17]

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Nascent—**Newly created or in existence and only just beginning to display signs of future potential.<br>**Formalized—**With an agreed upon defined structure, established processes, and endorsement by health system governance and leadership.<br>**Systematic—**The methods and structure for recognizing and evaluating success and deciding to scale are established, widely understood, and used consistently as innovations arise. | State of mechanisms to recognize, evaluate, and scale successful innovations | N/A | Nascent and often dependent on individual champions or relationships | Formalized, but may not be systematically implemented and/or transparent | Formalized, systematic and transparent |
| | Scope of stakeholders (government and private) involved in innovation and learning in PHC | N/A (no stakeholders involved) | Only some stakeholders | Stakeholders at all relevant levels of the health system OR stakeholders from multiple sectors | Stakeholders at all relevant levels of the health system AND stakeholders from multiple sectors |
| | Engagement of stakeholders (government and private) in innovation and learning in PHC | N/A (no stakeholders are engaged) | Only some stakeholders are engaged | Stakeholders are engaged, but roles and responsibilities are not clearly defined | Stakeholders are engaged, with clearly defined roles and responsibilities |

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| | As a result of the performance of the above components, the occurrence of innovation and learning in PHC and scaling of successful innovations | Does not occur | Mostly at the pilot level | Successful innovations are occasionally scaled | Successful innovations are consistently scaled beyond the pilot level. There are systematic structures in place for sharing learnings across stakeholders at different levels of the health system |

### MEDIDA 8: INFORMACIÓN CONTEXTUAL

This measure assesses whether a region has the underlying mechanisms to learn from new evidence, research, and data and to operationalize and incorporate these learnings into changes at scale. This requires mechanisms to recognize and evaluate innovations as well as the operational capacity to scale successful interventions and programs. It is important that innovations are evaluated before decisions to scale are made, rather than scaled as a result of internal or external lobbying. Standards and criteria for consideration as "successful" should be clearly defined and transparent, with standards applied consistently. The decision to adopt and diffuse innovations may be centralized to a small number of key players, or devolved to committees, departments and/or working groups. It is important that these decision-making processes are aligned with regional strategy planning and budgetary cycles, in order to incorporate innovations in a sustainable way. The broad involvement of stakeholders supports an overall culture of innovation, and clearly defined roles helps ensure that mechanisms for recognizing success and scaling are not dependent on specific individuals or relationships between individuals but formalized into a system.

## Measure 9: Availability of essential medicines and consumable commodities

"Essential medicines are those that satisfy the priority health care needs of the population. They are selected with due regard to public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness. Essential medicines are intended to be available within the context of functioning health systems at all times in adequate amounts, in the appropriate dosage forms, with assured quality and adequate information, and at a price the individual and the community can afford."[18] Essential consumable commodities are the items and products identified as necessary to treat, cure and/or prevent health system priorities. These may include vaccines, contraceptives, malaria products, sterile gauze, disposable needles, etc.[19]

The availability of essential medicines and consumable commodities depends on a functioning supply chain to manage the effective planning, coordination, procurement, inventory management, transportation, distribution, storage, and data collection and reporting, and to ensure the flow of essential medicines and consumables commodities reaches the patient at the primary care facility level.

| CRITERIA | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Significant variation—**The maximum absolute difference in availability of essential medicines and consumable commodities as measured by stockouts between Health Areas and facility types is >30%.<br>**Moderate variation—**The maximum absolute difference in availability of essential medicines and consumable commodities between Health Areas and facility types is between 30% to 10%.<br>**Minimal variation—**The maximum absolute difference in availability of essential medicines and consumable commodities between Health Areas and facility types is <10%. | Proportion of primary care facilities that have all primary care-specific essential medicines and consumable commodities available, as measured by the number of stockouts of any single item. | Fewer than one-third | Between one-third and two-thirds | Between two-thirds and 90% | At least 90% have all primary care-specific essential medicines and consumable commodities consistently available |
| | Variation in availability between Health Areas and facility types | Significant >30% | Moderate 10-30% | Minimal <10% | None |

## MEASURE 9 CONTEXTUAL INFORMATION

The list of essential medicines and consumable commodities should be defined at the country level and may be regionally adapted by Huetar Atlantica. This list can often be found in a national essential medicines list. This describes the medicines approved to address (treat, cure and/or prevent) the priority health needs of a population. There may be defined essential medicines lists specifically for different levels of care in the health system, and assessment of this measure should focus on primary health care, as defined in Phase 1 of the assessment process. If there is no essential medicines/essential commodities list defined, this measure should be scored as a Level 1.

For essential medicines and consumable commodities to be considered “available” at the primary care facility level, there must be: the correct medicines and commodities present in the appropriate quantities to meet patient needs and priorities, they must be in a safe and viable (ie, non-expired) condition, and able to be dispensed or used as needed. The level of performance for this measure therefore depends on the management of the essential medicines and consumable commodities supply chain.

## Measure 10: Basic equipment

Basic equipment refers to the essential supplies needed for "the safe and effective prevention, diagnosis, treatment and rehabilitation of illness and disease"[20] at all primary care facilities.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Basic equipment**<br>• scales<br>• measuring tape<br>• thermometer<br>• blood pressure apparatus<br>• stethoscope*<br>*This list of basic equipment was extracted from the SARA survey, the SPA survey, the SDI, and the WHO "List of Medical Devices by Facility"* [21-24] | Proportion of primary care facilities that have all basic equipment present and functioning | Fewer than one-third | Between one-third and two-thirds | Between two-thirds and 90% | At least 90% have all basic equipment |
| **CRITERIA** | | | | | |
| **Significant variation—**The maximum absolute difference in availability of all basic equipment between Health Areas and/or facility types, as measured by stockouts, is >30%.<br>**Moderate variation—**The maximum absolute difference in availability of basic equipment between Health Areas and/or facility types, as measured by stockouts, is between 30% to 10%.<br>**Minimal variation—**The maximum absolute difference in availability of basic equipment between Health Areas and/or facility types, as measured by stockouts, is <10%. | Variation in availability between Health Areas and/or facility types | Significant >30% | Moderate 10-30% | Minimal <10% | None |

### MEASURE 10 CONTEXTUAL INFORMATION

Essential equipment is needed in all primary care facilities in order to prevent disease, make diagnoses, monitor, treat and alleviate conditions, and make service delivery decisions. Performance in this measure is influenced by "the proper manufacturing, regulation, planning, assessment, acquisition, and management" of essential equipment.[20] The list of basic equipment above was selected from the WHO list of medical devices by facility[21] because this information can be extracted from data from a SARA[22], SPA[23], and/or SDI survey[24]. If a country has not completed one of these surveys in the last 5 years and/or has more recent data from another source, it is permissible for the exact list of basic equipment assessed to vary slightly—for example, some countries may assess availability of a hand-held light source but not the availability of measuring tape.

If Huetar Atlantica has a more robust list of basic equipment, you may also assess progress against that list but a country should not be scored lower because of using stricter requirements. For example, if only 50% of facilities have all equipment as defined through a country's internal, more robust list but 80% of facilities have the five items listed above the facility should be scored as a 3, not as a 2 (assuming conditions re: equity are met).

## Measure 11: Diagnostic supplies

Diagnostic supplies refers to the materials needed to conduct essential diagnostic tests, with the aim of providing information on a patient's condition for diagnosis, monitoring, screening, prediction, or prognosis purposes at the primary care facility level.[25]

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Diagnostic supplies**<br>The necessary materials to conduct:<br>• hemoglobin tests<br>• blood glucose tests<br>• urine dipsticks for protein<br>• urine dipsticks for glucose<br>• pregnancy tests<br>• other tests as defined by local health needs or guidelines (i.e. malaria, syphilis, HIV)*.<br>These materials may include "reagents, calibrators, control materials, specimen receptacles, software and related instruments or apparatus or other articles."[25]<br><br>**This list of diagnostic supplies was extracted from the SARA survey, the SPA survey, the SDI, and the WHO "List of Medical Devices by Facility"* [21-24] | Proportion of primary care facilities that have all of the supplies needed to conduct the diagnostic tests listed at right. | Fewer than one-third | Between one-third and two-thirds | Between two-thirds and 90% | At least 90% of facilities have all of the supplies needed to conduct the identified diagnostic tests consistently available |
| **CRITERIA**<br><br>**Significant variation—**The maximum absolute difference in availability of diagnostic supplies, as measured by stockouts,between Health Areas and/or facility types is >30%.<br><br>**Moderate variation—**<br>The maximum absolute difference in availability of basic equipment, as measured by stockouts, between Health Areas and/or facility types is between 30% to 10%.<br><br>**Minimal variation—**The maximum absolute difference in availability of basic equipment, as measured by stockouts, between Health Areas and/or facility types is <10%. | Variation in availability between Health Areas and/or facility types | Significant >30% | Moderate 10-30% | Minimal <10% | None |

### MEASURE 11 CONTEXTUAL INFORMATION

Diagnostics are a crucial input to service delivery because they provide information on patient and disease conditions and can be used to guide clinical decision-making to determine what sort of services, medicines, or treatment, if any, are needed. The list of diagnostic supplies above was selected from the WHO list of medical devices by facility21 because this information can be extracted from data from

a SARA,[22] SPA,[23] and/or SDI survey.[24] If a country has not completed one of these surveys in the last 5 years and/or has more recent data from another source, it is permissible for the exact list of diagnostic supplies assessed to vary slightly. In advance of the assessment, you should consult relevant standards for the country to determine whether any additional tests have been deemed necessary by the country and should be added to this list.

## Measure 12: Facility distribution

Ensuring that all populations have timely, geographic access to care requires sufficient facility infrastructure. The number and type of facilities needed depends on many factors such as population distribution and staffing of facilities, among others, and there are therefore no global normative guidelines for facility density or distribution. Instead, it is important for countries and regions to assess their own facility density and distribution needs and set targets that reflect these needs and local context.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Facility density—**The number of primary care facilities per number population. Some indicators base the facility density per 10,000 people, others by 5,000 or 100,000. The denominator should be kept consistent. | Has there been an assessment of primary health care density and distribution in Huetar Atlantica? | No | Yes, but not within the last 5 years | Yes, but does not explicitly include primary care facilities | Yes, and explicitly includes primary care facilities |
| | Are there documented targets for optimal primary care facility density and distribution to meet population health needs? | No | Somewhat, targets exist but are not well documented | Yes, targets exist but do not specify primary care facilities | Yes, targets exist and specify primary care facilities |
| | What action has been taken towards achieving targets? | N/A | No or limited action | Action has been taken and progress made, though targets have not yet been met | Action has been taken and the targets have been met |

### MEASURE 12 CONTEXTUAL INFORMATION

The density and distribution of primary care facilities refers to the physical locations of primary care facilities. Infrastructural deficiencies pose issues for patient geographic access to care and health system ability to deliver services. The definition of "primary care facility" established at the outset of the assessment should be used for this measure. Because there is no global normative guidance on the optimal facility density and distribution, this measure instead assesses whether regions have conducted their own assessment of facility density and distribution, set targets for optimal density/distribution based on local context and population health needs, and taken steps towards meeting these targets.

In assessing the density and distribution of facilities, it is important to know the number of health facilities, the number of different facility types, the size of the population, and the overlap between where the population lives (population density), and where the facilities are (facility density), disaggregated by sub-regional/Health Areas.

## Measure 13: Facility amenities

Facility amenities are features and utilities that enable primary care facilities to be ready and able to provide quality, person-centered primary health care.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Facility amenities**<br>• electricity<br>• safe water<br>• exam room with auditory and visual privacy<br>• light source<br>• sanitation facilities (toilet/latrine: flush/pour toilets to piped sewer system or septic tank, pit latrine, composting toilet)<br>• communication equipment (cell phone, landline telephone, and/or shortwave radio)<br>• computer with internet or network connectivity<br>• access to emergency transportation*<br>**This list of facility amenities was extracted from the SARA survey, the SPA survey, and the SDI survey*[22-24] | Proportion of primary care facilities that have all of the identified amenities | Fewer than one-third | Between one-third and two-thirds | Between two-thirds and 90% | At least 90% have all of the identified amenities consistently available |
| **CRITERIA**<br>**Significant variation—**The maximum absolute difference in availability of facility amenities between Health Areas and/or facility types is >30%.<br>**Moderate variation—**The maximum absolute difference in availability of facility amenities between Health Areas and/or facility types is between 30% to 10%.<br>**Minimal variation—**The maximum absolute difference in availability of facility amenities between Health Areas and/or facility types is <10%.. | Variation in availability between Health Areas and/or facility types | Significant >30% | Moderate 10-30% | Minimal <10% | None |

### MEASURE 13 CONTEXTUAL INFORMATION

Facility amenities are considered a core component of health facility readiness to provide services.[26] The list of facility amenities above is extracted from the SARA survey,[22] the SPA survey,[23] and the SDI survey.[24] If a country has not completed one of these surveys in the last 5 years and/or has more recent data from another source, it is permissible for the exact list of amenities assessed to vary slightly. If a more robust list of basic amenities required for primary care facilities has been defined by the country, you may also assess progress against that list but a country should not be scored lower because of using stricter requirements. For example, if only 50% of facilities have all amenities as defined through a country's internal, more robust list but 80% of facilities have the amenities listed above the facility should be scored as a 3, not as a 2 (assuming conditions re: equity are met).

## Measure 14: Standard safety precautions and equipment

Standard safety precautions and equipment are the established processes and materials that support safe primary care service delivery and prevent transmission of communicable diseases.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Standard safety precautions and equipment**<br>• safe final disposal of sharps<br>• safe final disposal of medical waste<br>• sharps box/container in exam room<br>• waste bin with lid and liner in exam room<br>• surface disinfectant (also called environmental disinfectant)<br>• single-use standard disposable or auto-disposable syringes<br>• soap (bar or full-concentration liquid) and running water or alcohol-based hand sanitizer<br>• latex gloves<br>• guidelines for standard precautions against infection*<br><br>**This list of standard precautions and equipment was extracted from the SARA survey, the SPA survey, the SDI, the WHO "Infection Prevention and Control Assessment Framework at the Facility Level", and the WHO "Guidelines of core components of infection prevention and control programmes at the national and acute health care facility level.*[22-24,27,28] | Proportion of primary care facilities that have all of the identified standard safety precautions and equipment in place | Between one-third and two-thirds | Between two-thirds and 90% | Between two-thirds and 90% | At least 90% have all of the identified standard safety precautions and equipment consistently available |
| **CRITERIA**<br><br>**Significant variation—**The maximum absolute difference in availability of standard safety precautions and equipment between Health Areas and/or facility types is >30%.<br><br>**Moderate variation—**The maximum absolute difference in availability of standard safety precautions and equipment between Health Areas and/or facility types is between 30% to 10%.<br><br>**Minimal variation—**The maximum absolute difference in availability of standard safety precautions and equipment between Health Areas and/or facility types is <10%. | Variation in availability between Health Areas and/or facility types | Significant >30% | Moderate 10-30% | Minimal <10% | None |

### MEASURE 14 CONTEXTUAL INFORMATION

Standard safety precautions and equipment, sometimes called standard precautions on prevention of infections, are considered a core component of health facility readiness to provide high-quality services and ensure the safety of patients and providers.[26] The list of standard precautions and equipment above is extracted from the SARA survey,[22] the SPA survey,[23] the SDI survey,[24] the World Health Organization's "Infection Prevention and Control Assessment Framework at the Facility Level", [27] and the WHO "Guidelines of core components of infection prevention and control programmes at the national and acute health care facility level".[28] If a country has not completed one of these surveys in the last 5 years and/or has more recent data from another source, it is permissible for the exact list of standard safety precautions and equipment assessed to vary slightly.

If a more robust list of standard safety precautions and equipment has been defined by the country, you may also assess progress against that list but a country should not be scored lower because of using stricter requirements. For example, if only 50% of facilities have all standard safety precautions and equipment as defined through a country's internal, more robust list but 80% of facilities have the standard safety precautions and equipment listed above the facility should be scored as a 3, not as a 2 (assuming conditions re: equity are met).

## Measure 15: Civil Registration and Vital Statistics

Huetar Atlantica should have a well-functioning Civil Registration and Vital Statistics (CRVS) system that registers all births and deaths, issues birth and death certificates, and compiles and disseminates vital statistics, including cause-of-death information. It may also record other events such as marriage, divorce, adoption and legitimation. CRVS systems generate administrative data, which serve as the basis for databases, or population registers, across multiple sectors and can be compiled to produce vital statistics.[29]

| CRITERIA | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Completeness—**The proportion of the total number of actual births and deaths that were recorded in the civil registration and vital statistics system. A complete system would capture 100% of all births and deaths. | Completeness of registration of births regionally | Limited (<50%) | 50-74% | 75-90% | >90% |
| | Completeness of registration of deaths regionally | Limited (<50%) | 50-74% | 75-90% | >90% |

### MEASURE 15 CONTEXTUAL INFORMATION

Information on how many people are born and die each year in a region, as well as the causes of death, is essential for effective health planning and service delivery. "The only way to count everyone and to track all births and deaths is through civil registration. Civil registration provides the basis for individual legal identity but also allows countries to identify their most pressing health issues."[30] Civil Registration and Vital Statistics systems provide routine, up-to-date fertility and mortality data of a population which can be used to establish the foundation for many health policies and provides a meaningful denominator for monitoring and evaluation of burden of disease data. Assessment of the completeness of a CRVS system often compares the number of births and deaths registered with that of the estimated population.

## Measure 16: Health Management Information Systems (HMIS)

HMIS are routine facility reporting systems used to monitor service data. "Service data are generated at the facility level and include key outputs from routine reporting on the services and care offered and the treatments administered."[26]

| COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|
| Proportion of primary health care facilities in which Health Management Information Systems are in place. | Fewer than half | More than half | More than half | Greater than two thirds, and they are interoperable and interconnected. |
| Format of HMIS | All or primarily paper-based | All or primarily paper-based | Only some parts are digitized | Fully digitized |

### MEASURE 16 CONTEXTUAL INFORMATION

This measure is about the presence and digitization of HMIS. Personal care records are assessed separately in the next measure. HMIS are important data collection systems that can be used to plan, manage, and make decisions in health facilities and across a region. This goes beyond simple monitoring and evaluation, to facilitate the active collection and assessment of service data. HMIS systems should be integrated into a national/sub-national monitoring framework built on a standardized list of service delivery indicators and definitions. A standardized list of indicators and definitions, called a data dictionary in some contexts, ensures that all users of an HMIS are defining and measuring indicators the same way and therefore are "speaking the same language."

## Measure 17: Personal care records

Personal care records provide a longitudinal health history of patients. Comprehensive personal care records should include the following components:

- Unique patient identification (ID)
- Problem lists
- Care history and notes
- Medication lists and allergies
- Referrals and results of referrals
- Laboratory, radiology and other test results

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Interoperable—** Interoperability is the ability of different information systems, devices or applications to connect, in a coordinated manner, within and across organizational boundaries to access, exchange and cooperatively use data amongst stakeholders, with the goal of optimizing the health of individuals and populations.[14]<br>**Longitudinal—**Containing information gathered over a long period of time.<br>*continued* | Use of personal care records | The majority of primary care facilities do not use personal care records, rely on patients to carry their own paper-based personal care records, or use another paper-based personal care record system which does not record patient information longitudinally. | The majority of primary care facilities use longitudinal personal care records that include 1-4 of the components described above. | The majority of primary care facilities use longitudinal personal care record that include 5-6 of the components described above. | Almost all (<90%) primary care facilities use a comprehensive longitudinal personal care record that includes all six of the components described above. |

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Nascent—**Newly created or in existence and only just beginning to display signs of future potential. | Format of personal care records | N/A | Nearly exclusively paper-based | Paper based and use a standard format. Some isolated facilities or sub-national units may use nascent electronic records | Fully digitized and interoperable across levels and sub-national areas |

## MEASURE 17 CONTEXTUAL INFORMATION

Comprehensive personal care records record the history and clinical "story" of a patient, summarizing their experiences with the health system over time in one place. While HMIS and CRVS are invaluable for planning, managing, and decision-making at the facility, sub-regional, sub-national and national levels, personal care records play an important role in fostering quality, continuous, and coordinated care. Health care workers in primary care and other levels of the health system and patients can review and act on the complete information in personal care records to better assess, diagnose, monitor, treat, and/or refer a patient. By maintaining relevant information in one place, personal care records make it easier to identify and follow trends, understand chronic conditions, and address any gaps in care.

Personal care records are considered interoperable when the same information is captured in the same or similar format and channels are established such that personal care records can be shared between clinicians and facilities. This means that a patient's care history is then able to follow them as they move geographically or between levels of the health system.

A longitudinal record means that there is a system within the personal care record that allows providers to track a patient's care over time and multiple care encounters.

Electronic personal care records may be considered nascent if they do not have all of the components or functionality of comprehensive personal care records or if clinicians are not fully transitioned to the electronic platform.

## Measure 18: Workforce density and distribution

Achieving effective coverage of health services is dependent on having a sufficient number of skilled health professionals who are equitably distributed and accessible by the population.[31] The World Health Organization has defined a required density of skilled health workers for meeting basic health needs and for achieving coverage of the broad range of primary care services targeted by universal health coverage, where density is measured as the ratio of doctors, nurses, and midwives to the total population.[31,32]

*Note:* Community Health Workers are considered separately in Measure 21.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Skilled health professional**—Doctors, nurses and midwives who are actively providing clinical care | Workforce density<br>(Ratio of active skilled health professionals per 10,000 population.) | Critical workforce shortages to meet basic health needs<br><br>(<22.8) | Insufficient workforce density to achieve high coverage across the broad range of primary care services that are targeted by universal health coverage<br><br>(>22.8 but <44.5) | Insufficient workforce density to achieve high coverage across the broad range of primary care services that are targeted by universal health coverage<br><br>(>22.8 but <44.5) | Sufficient workforce density to achieve high coverage across the broad range of primary care services that are targeted by universal health coverage<br><br>(>44.5) |
| | Percentage of Health Area administrative units that have a health workforce density below 50% of the Huetar Atlantica regional median density | N/A | >50% | <50% | N/A |

### MEASURE 18: CONTEXTUAL INFORMATION

The health workforce density and distribution is a "critical starting point for understanding the health system resources situation in a country".[33] For this measure, only **doctors, nurses, and midwives who are actively practicing medicine (i.e., not retired, working in another field, etc.)** should be counted in order to maintain fidelity to the measures recommended by the World Health Organization. Community Health Worker-type cadres are considered separately in Measure 21. The quality of training and practice for all "primary care health workers" are considered separately in Measure 19 and 20.

## Measure 19: Quality assurance of primary health care workforce

This measure is about the functionality and coverage of a continuous system for ensuring that the practicing primary health care workforce has the appropriate training and qualifications, that lists of those appropriately trained and qualified workforce are maintained, and that appropriate measures are taken with respect to workforce members who do not meet established standards.

*Note that assessments of workforce competence and quality of care provided during patient interactions are included in the Performance Pillar of the Vital Signs Profile.*

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Mechanisms to ensure that the workforce has the required qualifications —**May include established standards for learning outcomes and training institutions, training institution accreditations, and/or a system for licensing or certifying graduates of training institutions.<br><br>**Mechanisms to ensure that all actively practicing workforce are qualified, including workforce with foreign credentials—**May include ensuring all practicing workforce be licensed and/ or accredited, and/or a list of all qualified workforce is routinely updated to ensure that it is current.<br><br>**Mechanisms to ensure that quality standards are met in practice—**May include a means of issuing and investigating complaints, continuing professional development including periodic re-validation of credentials/registration/licensing, and/or the capacity to course correct members of the workforce who fail to meet standards, including the possibility of removal if no improvements are made. | Capacity of the system to ensure that the primary health care workforce has the required qualifications. | None | Weak | Moderate | Sufficient |
| | Capacity of the system to ensure that all actively practicing primary health care workforce are qualified, including workforce with foreign credentials. | None | Weak | Moderate | Sufficient |
| | Capacity of the system to ensure that quality standards are met in practice. | None | Weak | Moderate | Sufficient |

| CRITERIA |
|---|
| **Capacidad deficiente—**Coverage of system does not include all occupations of the primary health care workforce and quality assurance mechanisms are not consistently implemented and functioning due to insufficient staff and/or funds within the responsible regulatory bodies.<br><br>**Moderate capacity—**Coverage of system does not include all occupations of the primary health care workforce but quality assurance mechanisms that are in place are consistently implemented and functioning due to sufficient staff and funds within the responsible regulatory bodies. OR Coverage of system includes all occupations of the primary health care workforce but quality assurance mechanisms are not consistently implemented and functioning due to insufficient staff and/or funds within the responsible regulatory bodies.<br><br>**Sufficient capacity—**Coverage of system includes all occupations of the primary health care workforce and quality assurance mechanisms that are in place are consistently implemented and functioning due to sufficient staff and funds within the responsible regulatory bodies. |

## MEASURE 19 CONTEXTUAL INFORMATION

This measure assesses systems for quality assurance of both workforce education and practice, reflecting the need to have a consistency of quality standards, from education to practice, and a continuum of stakeholders working to assure quality at each phase of training and practice. The capacity of systems is assessed as both their level of functionality as well as their coverage. When assessing coverage, you should reference the list of primary health care workforce occupations defined at the beginning of the assessment.

## Measure 20: Primary health care workforce competencies

"Competencies are the observable abilities of individual health workers relating to specified activities of work that integrate knowledge, skills, and behaviors. Competencies are durable, trainable and measurable."[34] The primary health care workforce should have competencies related to people-centeredness, communication, decision-making, collaboration, evidence-informed practice, and personal conduct to enable them to provide the PHC service package.

This measure assesses whether evidence-based and locally-adapted competencies relevant to PHC service delivery have been defined for the PHC workforce and whether standards for education outcomes based on these competencies have been established.

*Note that assessments of workforce competence and quality of care provided during patient interactions are included in the Performance Pillar of the Vital Signs Profile.*

| COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|
| Are competencies specific to the PHC service package established for all occupations of the PHC workforce? | No | Yes | Yes | Yes |
| Number of elements below that can be answered positively:<br>☐ Competencies relevant to PHC are evidence-based.<br>☐ Competencies relevant to PHC are adapted to the regional context, meaning that competencies reflect the list of interventions at the PHC level and structure of the PHC workforce in Huetar Atlantica.<br>☐ Competencies relevant to PHC incorporate all key functions of primary health care: first-contact access, continuity, comprehensiveness, coordination, and people-centered.<br>☐ Standards for education that are based on competencies relevant to PHC have been set for all occupations of the PHC workforce. | N/A | 0-2 | 3 | 4 |

### MEASURE 20 CONTEXTUAL INFORMATION

Defining competencies in relation to the PHC service package for all occupations of the PHC workforce is an essential input for aligning education programs and workforce practice with population health needs and ensuring that the PHC workforce is capacitated to deliver on the core functions of PHC (first point of contact, continuity, comprehensiveness, coordination, and person-centeredness). Competencies include people-centeredness, communication, decision-making, collaboration, evidence-informed practice, and personal conduct.[34] Defining these competencies in relation to the PHC service package is a mechanism for ensuring that all occupations of the PHC workforce are able to demonstrate these core competencies to execute their PHC job requirements and deliver the core functions of PHC.

Many different competency frameworks exist that are evidence-based. However, in order to ensure that these competencies are relevant to the region-specific package of PHC services, to the way in which health care providers are organized and their scopes of work defined, it is essential that regions adapt evidence-based competencies to their context.

*Note that occupations that make up the PHC workforce in any given country are defined at the outset of the assessment.*

## Measure 21: Community Health Workers

This measure is about an occupation of health worker whose primary responsibility is to conduct proactive outreach in the community to meet local population health needs. This occupation may be referred to as a Community Health Worker, or Asistente Tecnico en Atencion Primaria (ATAP) in the context of Costa Rica, but may have other designations.[35]

*Note:* This type of health worker will also be involved in providing the services described in Measure 27: Proactive Population Outreach.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Accredited**—Officially recognized as having a particular status or being qualified to perform a particular activity.<br>**Formally employed**—Having a working agreement or contract.<br>**Remunerated appropriately**—The World Health Organization recommends that Community Health Workers be remunerated with a financial package that "could take different forms (salary, stipend, honorarium, monetary incentives), in accordance with the employment status and applicable laws and regulations in the jurisdiction."[35] | Is there an occupation of health worker whose primary responsibility is to conduct proactive outreach in the community to meet local population health needs? | No | Yes, with both limited scope of services and only in select geographic areas | Yes, with a broad scope and only in select geographic areas of need | Yes, with a broad scope of services and functioning across all geographic areas of need |
| | Number of below criteria the occupation meets<br>☐ Trained and accredited to provide a suite of preventative, promotive, and curative (where appropriate) health services, tailored to the local population<br>☐ Formally employed and remunerated appropriately, in accordance with the local health worker salary scale<br>☐ Supported at frequent, regular intervals by a designated supervisor<br>☐ Integrated into local health facility service delivery system or teams<br>☐ Integrated into local health data reporting and feedback systems | N/A | 2-3 | 4 | 5 |

### MEASURE 21 CONTEXTUAL INFORMATION

"CHWs and other types of community-based health workers are effective in the delivery of a range of preventive, promotive and curative health services, and they can contribute to reducing inequalities in access".[35] This measure is about an occupation (cadre) of health worker whose primary responsibility is to conduct proactive population outreach, regardless of what this type of worker is called. The five characteristics assessed in this measure are considered best practices for community-based health workers based on the "WHO guideline on health policy and system support to optimize community health worker programmes."[35]

## Measure 22: Facility budgets

| COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|
| Maintenance of an annual budget for primary care facilities/primary health care networks | None | <50% of primary care facilities/ primary health care networks | 50%-90% of primary care facilities/primary health care networks | >90% of primary care facilities/ primary health care networks |
| Proportion of primary care facilities/primary health care networks that use a comprehensive annual budget to engage in a systematic forecasting exercise | N/A | N/A | At least 25% | All |

### MEASURE 22 CONTEXTUAL INFORMATION

This measure is about the presence and use of budgets only and does not concern the specific amount/sufficiency of cash flow into and out of facilities. Facility budgets set out how much money comes into the facility, where it comes from, and how much money is spent and on what. Budgets can simply track the flow of funds as they move in real time/retroactively, but at higher levels of performance facilities can also use budgets to proactively plan for future activities and expenditures. These forecasting exercises provide the information facilities need to make strategic decisions such as what and how many medicines and supplies to buy, which staff to hire, etc.

Note that not all facilities may be required or have the autonomy to maintain their own facility budget; this may be done for or in partnership with them by a higher-level facility that is part of the same "primary health care network." "Primary health care network" is a term defined at the beginning of the assessment and refers to a group of facilities that share operational and managerial structures and processes, for example a group of health posts that report into a health center which is responsible for management and reporting requirements for the full group of facilities. Primary health care networks also often share responsibility for patient care, with higher-level facilities in the network providing more advanced or specialized services to support service delivery throughout the network.

## Measure 23: Financial Management Information System

Financial Management Information Systems manage and track expenditure, staff, line item budgets.[36]

| COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|
| Maintenance of a financial management information system for primary care facilities/ primary health care networks to track revenue and expenditure flows | A financial management information system is not maintained for the majority (>50%)of primary care facilities/ primary health care networks. | A financial management information system that includes 1 of the components listed above is maintained for the majority (>50%) of primary care facilities/primary health care networks. | A financial management information system that includes 2 of the components listed above is maintained for the majority (>50%) of primary care facilities/primary health care networks. | A financial management information system that includes all 3 of the components listed above is maintained for all primary care facilities/primary health care networks. |

### MEASURE 23 CONTEXTUAL INFORMATION

Financial Management Information Systems (FMIS) are a tool to improve the strategic allocation of resources, minimize waste and align spending for operational efficiency, establish credibility of the budgets, and improve service delivery. Underpinning government allocation and use of resources with FMIS helps to increase efficiency and effectiveness, when carried out with principles of comprehensiveness, legitimacy, flexibility, predictability, contestability, honesty, transparency, and accountability.[36] Transitioning from "fragmented and outdated information systems to modern integrated Financial Management Information Systems offers great opportunities for improving public resource mobilization and management, openness and public services."[37]

Note that not all facilities may be required or have the autonomy to maintain their own FMIS; this may be done for or in partnership with them by a higher-level facility that is part of the same "primary health care network." "Primary health care network" is a term defined at the beginning of the assessment and refers to a group of facilities that share operational and managerial structures and processes. For example, a group of health posts that report into a health center which is responsible for management and reporting requirements for the full group of facilities. Primary health care networks also often share responsibility for patient care, with higher-level facilities in the network providing more advanced or specialized services to support service delivery throughout the network.

## Measure 24: Remuneration

Remuneration is the payment(s) made to the primary care workers for their work or services. This measure refers to the payment of wages and salaries (including benefits and allowances) and consultancy fees, where applicable.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Formally employed—**Having a working agreement or contract<br>**Stable—**Consistent in quantity with amount specified in the working agreement or contract.<br>*Continued...* | Stability of primary health care staff remuneration | Highly unstable | Moderately unstable | Moderately stable | Highly stable |
| | Timeliness of primary health care staff remuneration | Almost always delayed | More often delayed than on time | More often on time than delayed | Always on time |
| **Predictable—**The timing and mechanism of delivery can be anticipated | Predictability of primary health care staff remuneration | Highly unpredictable | Moderately unpredictable | Moderately predictable | Highly predictable |
| **Timely—**Occurring promptly and when specified in the working agreement or contract | Differences in in reliability (stability, timeliness, and predictability) of remuneration across Health Areas and/or facility type. | N/A | Significant differences | Few differences | No differences |

### MEASURE 24 CONTEXTUAL INFORMATION

This is a measure of how reliably and dependably primary care staff are remunerated. It is not a measure of how adequate the amount of payment is. It is important that funds in a health system are managed in such a way that remuneration of primary care staff happens reliably. This means that the amount of remuneration expected is paid in its entirety, that it is predictable when and how the remuneration is delivered to staff, and that it is made on time. You should use the definition of "primary care staff" established by the country at the beginning of the assessment.

## Measure 25: Local priority setting

Local priority setting entails the translation of national or sub-national policies into local strategic action plans that respond to the burden of disease and the needs and preferences of the population.

*Note:* Priority setting at the national and sub-national levels is covered under *Adjustment to Population Health Needs, Measure 7: Priority Setting.*

| CRITERIA[40] | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Participación mínima—**Se informa a las comunidades de los datos relevantes y de las prioridades resultantes, pero se les da poca o ninguna oportunidad de hacer aportaciones.<br>**Participación moderada—**Se informa a las comunidades de los datos pertinentes y se les da la oportunidad de opinar sobre el análisis, las alternativas y/o las decisiones a lo largo del proceso de definición de prioridades.<br>**Participación significativa—**Las comunidades colaboran en la interpretación de los datos y en el proceso de definición de prioridades y tienen la misma voz y poder de decisión que otras partes interesadas, como los dirigentes del sistema de salud y los funcionarios de la administración local. | Percentage of Health Area units that collect and use data from EBAIS to effectively translate national and/or subnational policies into local PHC priorities and strategic action plans on at least an annual basis (or more frequently, if stipulated by national guidelines) | <25% | 25-50% | 51-75% | >75% |
| | Involvement of communities and local leaders in data interpretation and priority setting | None | Minimal | Moderate | Significant |

### MEASURE 25 CONTEXTUAL INFORMATION

Local priority setting is the process of identifying health priorities specific to the local community and developing action plans informed by community needs as well as national or regional priorities.[39] Just like priority setting at the national and sub-national levels, local priority setting should be an evidence-based and participatory process. Community member and health care user engagement in priority setting helps the health system to be more efficient, improves relevance of services offered and community health status, and can facilitate stronger patient-provider respect and trust. The involvement of communities and local leaders in data interpretation and priority setting is best when the engagement empowers the community as partners in the identification of and decision-making around problems and solutions.[40]

The measure refers to priority setting at the sub-regional level (Health Area), as defined at the beginning of the assessment, but in some countries local priority setting may occur at a level even closer to the community.

## Measure 26: Community engagement

Community engagement is a process of developing relationships that enable stakeholders to work together to address health-related issues and promote well-being to achieve positive health impact and outcomes.[41] Stakeholders could include community members, patients, caretakers, health professionals, policy-makers, and other sectors. The desired relationships between communities and the health system are characterized by respect, trust, and a sense of purpose.

| CRITERIA | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Minimal impact—**Community input on how PHC is structured and delivered is taken into consideration and feedback is provided on whether and how feedback impacted decision making.<br>**Moderate impact—**Community input on how PHC is structured and delivered is often directly incorporated into decisions and solutions, but final decision-making power resides with non-community representatives.<br>**Significant impact—**Communities are collaborators in determining how PHC is structured and delivered and are given equal voice and decision-making power as other stakeholders, such as health system leaders and local government officials. | Percentage of Health Area units that regularly solicit EBAIS input on the design, financing, governance and implementation of PHC from diverse members of the community | <25% | 25-50% | 51-75% | >75% |
| | Impact of community engagement/input on the way in which services are structured and delivered | Almost none | Minimal | Moderate | Significant |

### MEASURE 26 CONTEXTUAL INFORMATION

Community engagement is the inclusion of local health system users and community members in all aspects of health planning, provision, and governance. It is a central component of ensuring that the services delivered are tailored to population needs, priorities and values, which can be achieved through the involvement of communities in the design, financing, governance, and implementation of PHC. To ensure that the needs of all community members are met, it is important that community engagement efforts include representation from diverse members of the community. This may require multiple mediums for engagement, to best capture the needs and opinions of traditionally underrepresented community members.

## Measure 27: Empanelment

"La sectorización/territorialización (a veces denominada *asignación*) es un proceso continuo e iterativo para identificar y asignar poblaciones a los establecimientos, equipos de atención o proveedores que tienen la responsabilidad de conocer a las personas de su población asignada y prestarles de forma proactiva una atención primaria coordinada... Tanto los pacientes como los proveedores deben ser conscientes de su relación, y los paneles resultantes (listas de pacientes) deben revisarse y actualizarse periódicamente".

Existen diferentes métodos para asignar a las personas a los paneles, entre ellos la territorialización geográfico, la territorialización basada en el seguro y la elección individual. Lo más importante es que se conozca, se siga y se gestione a lo largo del tiempo a cada una de las personas, y no sólo el número de ellas. Es importante destacar que las zonas de captación geográficas no equivalen a la territorialización geográfica, que requiere que todos los individuos específicos dentro de una zona de captación sean conocidos y puedan ser rastreados

| CRITERIA | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Patient panel—**The list of individuals assigned to a provider/facility/care team | Proportion of the population that is empaneled to a provider, care team or facility | Minimal (<25%) | Fewer than half (only for specific categories of patients, i.e. based on insurance status, based on specific diagnoses, or patients in specific catchment/ geographic areas only) | The majority (>50%) | Complete or nearly complete (>90% of the population) |
| | Frequency at which patient panels are updated | N/A | N/A | Patient panels are not regularly updated | Patient panels are updated at least annually |
| | Patient choice | N/A | N/A | N/A | Patients are able to choose and/or switch the facility/ provider/ team to which they are empaneled |

### MEASURE 27 CONTEXTUAL INFORMATION

Empanelment is more than the identification of a facility's catchment population; it means that facilities/providers/care teams know not just how many people they are responsible for, but exactly who all the individuals in that group are. Empanelment establishes a list (panel) of individuals for whom facilities/providers/care teams are responsible, regardless of whether or not those individuals actively seek out care in a facility. Empanelment is the organizational foundation for population health management; it establishes a point of care for individuals and simultaneously holds providers and care teams accountable for actively managing care for an enumerated panel of individuals. Empanelment also provides a population denominator for measurement efforts to track performance and effectively plan services. Finally, empanelment is not a static process; panels must be regularly reviewed and updated to account for births, deaths, relocations, etc.

Empanelment can take many forms. In some countries, empanelment is insurance-based, in which an insurance scheme assigns patients to a primary provider/facility/care team responsible for their care. In other countries, the population is empaneled geographically, meaning that everyone within a certain catchment area is empaneled to a health team/provider who is responsible for their care. Note that this goes beyond simply demarcating catchment areas to the actual identification of individuals (not just a denominator of patients) and active assignment of these individuals to the specific responsibility of care team/provider/facility.

Some countries have *empaneled* their entire population, but most have not. Empanelment can also occur for select groups of patients—for example, in some countries people living with HIV may be empaneled to a care team for ongoing, continuous care.

## Measure 28: Proactive population outreach

Proactive population outreach involves health systems actively reaching out to communities, particularly those that are underserved or marginalized, to provide necessary services aligned with local priorities and burden of disease, and link those in need to primary health care. Examples of proactive population outreach interventions include mobile health units, transport systems, home based care, telemedicine, and proactive follow-up with patients with chronic illness.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Underserved or marginalized**[43] Person(s) and/or communities excluded from mainstream life based on race, religion, sex, culture, or financial status. Examples may include:<br>• the chronically ill and disabled;<br>• low-income and homeless communities;<br>• lesbian, gay, bisexual, transgender and queer (LGBTQ) communities;<br>• geographically underserved communities (remote or rural);<br>• immigrants;<br>• indigenous groups etc. | Percentage of Health Area units which provide proactive population outreach according to Health Area health needs and priorities | <25% | 25-50% | 51-75% | >75% |
| | Percentage of Health Area units that have registries or lists to identify relevant patients for proactive outreach (i.e. HIV/TB patients; NCD patients; pregnant women; vulnerable geographies; etc.) | <25% | 25-50% | 51-75% | >75% |

### MEASURE 28 CONTEXTUAL INFORMATION

Proactive population outreach is the active provision of care in homes and communities rather than exclusively in facilities. These services are often preventive or promotive (though may also be curative) and initiated by the health system rather than by patients. Such services are often provided by community health workers (CHW) or similar occupations. Examples of common proactive outreach services include health promotion activities, health education, identification of acute cases and pregnant women needing referrals to health facilities, family planning provision, and chronic disease adherence follow-up.

“Sub-regional unit” was defined for the country at the beginning of the assessment as Health Area. Note that the relevant types of registries will differ based on context and burden of disease.

## Measure 29: Team-based care organization

Team-based care is a strategic redistribution of work among members of a practice team. Team-based care means that all members of the team play an integral role in providing patient care and share responsibilities for better patient care.44 Care teams are characterized by:

- A team identity
- Regular team meetings
- Clearly defined roles and responsibilities that are uniformly understood by all team members
- Shared goals of providing quality patient care that individual teammates cannot achieve on their own
- Mutual accountability structures in which each team member can be held accountable by any other team member

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Team identity—** Having a team identity means that team members see themselves as part of one larger, cohesive unit with shared methods, ideals, and goals. | Percentage of facilities (or primary health care networks, if teams are split across physical locations) where all primary health care providers work as part of a team, defined as when all 5 characteristics above are present | <25% | 25-50% | 51-75% | >75% |

### MEASURE 29 CONTEXTUAL INFORMATION

As defined above, having care teams means more than just having multiple personnel working at the same location. Effective care teams operate as a single unit with a shared identity to provide effective, coordinated care. This is facilitated by teams meeting regularly to discuss their goals and progress towards them and to identify patients about whom they are concerned and agree to a plan for how to support the patient. Team members have a shared responsibility to provide quality patient care that no individual team member could achieve on their own.

Note that all team members may not work in the same facility. For instance, a community health worker who is based in the community would be considered a member of a team-based care organization if he or she is part of a reporting and supervision structure of a larger facility-based team. “Primary health care network” is a term defined at the beginning of the assessment and refers to a group of facilities that share operational and managerial structures and processes, for example a group of health posts that report into a health center which is responsible for management and reporting requirements for the full group of facilities. Primary health care networks also often share responsibility for patient care, with higher-level facilities in the network providing more advanced or specialized services to support service delivery throughout the network. In some countries, the primary health care team may be considered to span across the primary healthcare network.

## Measure 30: Facility management capability and leadership

Facility management capability and leadership are essential for facilitating the continuous delivery of high-quality health services.[45] Many of the tasks and functions that good managers perform are described elsewhere (See Measure 26: Community Engagement, Measure 29: Team- based Care Organization, Measure 31: Information Systems Use, and Measure 32: Performance Measurement and Management). This measure instead focuses on the degree to which facility management is professionalized and whether or not facility managers are regularly evaluated based on their management capabilities and performance.

| COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|
| Percentage of primary care facilities that are led by a manager(s) who has official management training (for example, a certification, diploma, or degree). | <25% | 25-50% | 51-75% | >75% |
| Percentage of primary care facility managers that receive an annual review and feedback on their management capabilities and performance | <25% | 25-50% | 51-75% | >75% |

### MEASURE 30 CONTEXTUAL INFORMATION

Training on facility management can take many forms. Ideally, training would include a focus on the core functions of management, such as organizing facility operations; engaging, motivating, and managing staff; managing budgets and deploying resources; and reacting to new challenges. These competencies can be defined as a combination of knowledge, motive, skill, and self-image. Review of training curricula is, however, outside the scope of this assessment. Management training should be defined at the country level.

## Measure 31: Information system use

Information systems use includes the routine and timely collection and reporting of public health data (including surveillance data) and facility data and the use of this data for clinical purposes and quality improvement across all levels of PHC. Effective data use is dependent on sufficient staff capacity to capture, report, and review data using available information system infrastructure. At higher levels of performance, it can drive quality improvement.

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Staff capacity for information systems use—**Staff ability to input data into information systems and subsequently access, interpret, analyze, understand and make decisions based on the information systems content<br>**Routine—**Performed as part of a regular procedure rather than for a special reason | Percentage of primary care facilities/primary health care networks that have staff capacity for information systems use | <25% | 25-50% | 51-75% | >75% |
| | Percentage of primary care facilities/primary health care networks that routinely use information systems for capturing and reporting comprehensive patient data and facility data in a timely manner | <25% | 25-50% | 51-75% | >75% |
| | Percentage of primary care facilities/primary health care networks that routinely use information systems for conducting quality improvement activities. | <25% | 25-50% | 51-75% | >75% |

### MEASURE 31 CONTEXTUAL INFORMATION

Information systems use is the effective utilization of existing information systems and the data they produce at the facility level to coordinate and track patient care and drive quality improvement activities. Note that this measure is specifically about the use of information systems. By contrast, Measures 14, 15 and 16 address the presence and functioning of information systems. Effective information systems use involves the compilation and interpretation of data and can support a variety of purposes ranging from priority setting in day-to-day service delivery to clinical tasks and education. This requires sufficient staff literacy and capacity to capture, report, and review data, transforming it to relevant information and then leveraging that information to deliver quality care. For the purposes of this measure, “staff capacity” does not mean that there needs to be a dedicated person at the facility who is solely responsible for information systems use, but that there is at least one person (and ideally many) at the facility with the knowledge and skills to use information systems. Routine use of information systems means that information systems are used as part of regular procedure rather than for a special reason.

Note that not all facilities may be expected or have the autonomy to enter their own information. “Primary health care network” is a term defined at the beginning of the assessment and refers to a group of facilities that share operational and managerial structures and processes. For example, a group of health posts that report into a health center which is responsible for management and reporting requirements for the full group of facilities. Primary health care networks also often share responsibility for patient care, with higher-level facilities in the network providing more advanced or specialized services to support service delivery throughout the network. In some countries, information system use may be a joint effort of multiple facilities in a network—that is acceptable for this measure as long as the lower level facilities are active partners in the use of information systems and not passive recipients of information or outputs.

## Measure 32: Performance measurement and management (1/2)

Performance measurement and management includes both supportive and continuous supervision of staff *(see Measure 33)* as well as the routine establishment of performance targets, monitoring of progress towards these targets, and implementation of quality improvement initiatives to address identified gaps.[44,46]

| DEFINITIONS | COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|---|
| **Established performance indicators—**Carefully chosen metrics that are recognized and accepted by staff across the facility, designate facility targets and indicate how progress towards targets will be tracked. | Percentage of primary care facilities/primary health care networks that use established performance indicators for PHC | <25% | 25-50% | 51-75% | >75% |
| | Percentage of primary care facilities/primary health care networks that conduct routine monitoring of these performance indicators | <25% | 25-50% | 51-75% | >75% |
| **Routine—**Performed as part of a regular procedure and embedded into the existing environment and practices. | Percentage of primary care facilities/primary health care networks that have documented quality improvement work linked to underperforming areas | <25% | 25-50% | 51-75% | >75% |

### MEASURE 32 CONTEXTUAL INFORMATION

Performance measurement and management involves a continuous process of establishing targets, monitoring performance against those targets, and implementing and adapting improvement efforts. Targets within a health facility may relate to myriad functions or outcomes including equipment and supplies, the process or outcomes of specific clinical or quality interventions, efficiency, quality, provider competence, or patient and provider satisfaction, to name just a few. Performance indicators should give useful information on the state of achievement of these targets. Facilities should measure these indicators using systems that easily integrate into their already existing environment and practices to facilitate their routine collection. Once facility performance data is received, health systems stakeholders must have processes in place to interpret data and use results to drive adaptation and improvement processes.

Note that not all facilities may have the autonomy to set their own targets. “Primary health care network” is a term defined at the beginning of the assessment and refers to a group of facilities that share operational and managerial structures and processes. For example a group of health posts that report into a health center which is responsible for management and reporting requirements for the full group of facilities. Primary health care networks also often share responsibility for patient care, with higher-level facilities in the network providing more advanced or specialized services to support service delivery throughout the network. In some countries, performance measurement and management may be a joint effort of multiple facilities in a network—that is acceptable for this measure as long as the lower level facilities are active partners in the process and not passive recipients of information or outputs.

## Measure 33: Performance measurement and management (2/2)—Supportive supervision

Performance measurement and management includes both supportive and continuous supervision of staff as well as the routine establishment of performance targets, monitoring of progress towards these targets, and implementation of quality improvement initiatives to address identified gaps.[44,46]

This measure is specifically about supportive supervision, a component of performance measurement and management. Supportive supervision is characterized by collaborative problem solving and open dialogue. Supervision routinely includes mentoring to address gaps in performance, knowledge, and skills and setting individual goals and reviewing progress towards their achievement.[47,48]

| COMPONENTS | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 |
|---|---|---|---|---|
| Percentage of primary care facilities that implement or receive supportive supervision on at least an annual basis (or more frequently if stipulated by national and/or Huetar Atlantica guidelines) | <25% | 25-50% | 51-75% | >75% |

### MEASURE 33 CONTEXTUAL INFORMATION

Supportive supervision of individual providers is a key component of performance measurement and management. Rather than using punitive or corrective action, supportive supervision is focused on collective problem solving and identifying gaps and opportunities to fill them. This approach strengthens relations between staff and builds pathways to improvement through active collaboration between providers and supervisors.

# Annex 1 Bibliografía


1. Mikkelsen-Lopez I, Wyss K, de Savigny D. *An approach to addressing governance from a health system framework perspective.* BMC Int Health Hum Rights. 2011 Dec 2;11:13.
2. Bitton A, Veillard JH, Basu L, Ratcliffe HL, Schwarz D, Hirschhorn LR. *The 5S-5M-5C schematic: transforming primary care inputs to outcomes in low-income and middle-income countries.* BMJ Glob Health. 2018 Oct 2;3(Suppl 3):e001020.
3. Clarke D. Law, regulation and strategizing for health. In: G S, D R, S K, editors. *Strategizing national health in the 21st century: a handbook.* Geneva: World Health Organization; 2016.
4. World Health Organization. *Checklist and Indicators for Monitoring Progress in the Development of IHR Core Capacities in States Parties.* 2013 Apr.
5. International Health Partnership. *Joint Assessment of National Health Strategies and Plans, Joint Assessment Tool: the attributes of a sound national strategy*. 2011 Nov;Version 2.
6. World Health Organization, Organisation for Economic Co-operation, Development, Bank TW. *Delivering quality health services: A global imperative for universal health coverage.* Geneva; 2018.
7. Reference from the WHO is forthcoming.
8. World Health Organization. *A Vision for Primary Health Care in the 21st Century: towards universal health coverage and the Sustainable Development Goals.* 2018.
9. World Health Organization. The Helsinki Statement on Health in All Policies. Health Promot Int. 2014 Jun;29 Suppl 1:i17-8.
10. WHO | Public health surveillance [Internet]. [cited 2019 Feb 1]. Available from: https://www.who.int/topics/public_health_surveillance/en/
11. UN Stats. Indicator 3.d.1: *International Health Regulations (IHR) capacity and health emergency preparedness.* 2016 Aug 1.
12. World Health Organization. *Joint External Evaluation Tool.* 2005.
13. World Health Organization. *International Health Regulations.* 2005.
14. *What is Interoperability?* | HIMSS [Internet]. [cited 2019 Mar 15]. Available from: https://www.himss.org/library/interoperability-standards/what-is-interoperability
15. World Health Organization, International Health Partnerships. *Monitoring, evaluation and review of national health strategies: a country-led platform for information and accountability.* 2011 Nov 10.
16. World Bank Group. Stakeholder Engagement and Grievance Mechanisms. *Guideline Notes on Tools for Pollution Management.* 2012;
17. World Health Organization. *Innovation towards integrated, people-centred health services.* World Health Organization; 2016. p. 3.
18. WHO | Essential medicines [Internet]. [cited 2019 Mar 15]. Available from: https://www.who.int/topics/essential_medicines/en/
19. USAID. *The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities.* 2011.
20. WHO | Medical devices [Internet]. [cited 2019 Mar 15]. Available from: https://www.who.int/medical_devices/en/
21. WHO | Medical devices by health care facility. WHO [Internet]. 2015 [cited 2018 Nov 13]; Available from: https://www.who.int/medical_devices/innovation/health_care_facility/en/index1.html
22. World Health Organization. WHO | Service Availability and Readiness Assessment (SARA). 2015.
23. The DHS Program - Service Provision Assessments (SPA). [cited 2018 Jan 21]; Available from: https://dhsprogram.com/What-We-Do/Survey-Types/SPA.cfm
24. Service Delivery Indicators (SDI) | Data Catalog [Internet]. [cited 2019 Mar 15]. Available from: https://datacatalog.worldbank.org/dataset/service-delivery-indicators
25. World Health Organization, WHO Expert Committee A. Annex 4. *Fifty-first report of the WHO Expert Committee on Specifications for Pharmaceutical Preparations.* Geneva: World Health Organization; 2017. p. 103–77.
26. World Health Organization. 1. Health service delivery. *Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies.* Geneva: World Health Organization; 2010. p. 2–22.
27. World Health Organization. *Infection Prevention and Control Assessment Framework at the Facility Level.* 2018.
28. *Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level.* Geneva: World Health Organization; 2016.
29. World Health Organization. *SCORE to reach your health goals technical package* [in press].
30. *Civil registration: why counting births and deaths is important* [Internet]. [cited 2019 Mar 15]. Available from: https://www.who.int/news-room/fact-sheets/detail/civil-registration-why-counting-births-and-deaths-is-important
31. World Health Organization. *Global strategy on human resources for health: Workforce 2030.* 2016.
32. World Health Organization. *Working Together for Health: The World Health Report.* 2006.
33. World Health Organization. 2. *Health Workforce. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies.* 2010. p. 24–42.
34. March 2019: *Working Draft of the Global Competency Framework for Universal Health Coverage.* World Health Organization; 2019 Mar.
35. *WHO guideline on health policy and system support to optimize community health worker programmes.* Geneva: World Health Organization; 2018.
36. Dener C, Watkins J, Dorotinsky WL. *Financial management information systems: 25 years of world bank experience on what works and what doesn't.* The World Bank; 2011.
37. World Bank Group. Managing Change in PFM System Reforms: A Guide for Practitioners. *Financial Management Information System Community of Practice*. 2015 Jun;
38. Kindig D, Stoddart G. *What is population health?* Am J Public Health. 2003 Mar;93(3):380–3.
39. McDonald J, Ollerenshaw A. *Priority setting in primary health care: a framework for local catchments. Rural Remote Health.* 2011 Jun 6;11(2):1714.
40. International Association of Public Participation. Public participation pillars. Available from: https://c.ymcdn.com/sites/iap2.site-ym.com/resource/resmgr/files/IAP2_Federation_-_P2_Pillars.pdf
41. World Health Organization. *WHO Community engagement framework for quality, people-centred and resilient health services.* 2017.
42. The Joint Learning Network for Universal Health Coverage Person-Centered Integrated Care Collaborative. *Empanelment and Panel Management: A Foundational Component of Primary Health Care* (in progress) .
43. Popay J. *Understanding and Tackling Social Exclusion.* WHO Social Exclusion Knowledge Network; 2008 Feb.
44. Sinsky C, Rajcevich E. *Engage the entire team in caring for patients | Implementing Team-Based Care | STEPS Forward.* [cited 2018 Aug 9]; Available from: https://www.stepsforward.org/modules/team-based-care
45. Bloom N, Sadun R, Van Reenen J. *Does Management Matter in Healthcare?* 2013.
46. Armstrong, M. & Baron, A. (1998), Performance Management Handbook, IPM, London [Internet]. [cited 2019 Jan 30]. Available from: http://www.sciepub.com/reference/151290
47. Expanded Programme on Immunization of the Department of Immunization Vaccines and Biologicals. Training for mid-level managers (MLM). World Health Organization; 2008.
48. Vallières F, Hyland P, McAuliffe E, Mahmud I, Tulloch O, Walker P, et al. *A new tool to measure approaches to supervision from the perspective of community health workers: a prospective, longitudinal, validation study in seven countries.* BMC Health Serv Res. 2018 Oct 22;18(1):806.

# ANNEX 2

ANNEX 2

## Síntesis de los datos y las puntuaciones: desglose de los COMPONENTS

| DOMINIO | MEDIDA | PUNTUACIÓN |
|---|---|---|
| GOBERNANZA Y DIRECCIÓN | 1: Políticas de atención primaria en salud (1/2) | Level 4 |
| | 2: Políticas de atención primaria en salud (2/2) - Dirección | Level 3 |
| | 3: Infraestructura para la gestión de la calidad | Level 4 |
| | 4: Responsabilidad social (1/2) | Level 4 |
| | 5: Responsabilidad social (2/2) - Acción multisectorial | Level 2 |
| AJUSTE A LAS NECESIDADES DE SALUD DE LA POBLACIÓN | 6: Vigilancia | Level 4 |
| | 7: Definición de prioridades | Level 4 |
| | 8: Innovación y aprendizaje | Level 2 |
| MEDICAMENTOS Y SUMINISTROS | 9: Disponibilidad de medicamentos esenciales y productos consumibles | Level 4 |
| | 10: Equipo básico | Level 4 |
| | 11: Suministros de diagnóstico | Level 4 |
| INFRAESTRUCTURA DE LAS INSTALACIONES | 12: Distribución de los establecimientos | Level 4 |
| | 13: Servicios de los establecimientos | Level 3 |
| | 14: Precauciones y equipos de seguridad estándar | Level 4 |
| SISTEMAS DE INFORMACIÓN | 15: Registro civil y estadísticas vitales | Level 4 |
| | 16: Sistemas de información de gestión de salud (HMIS) | Level 4 |
| | 17: Registros de cuidado del paciente | Level 4 |
| FUERZA LABORAL | 18: Densidad y distribución de la fuerza laboral de la APS | Datos insuficientes |
| | 19: Aseguramiento de la calidad de la fuerza laboral de la APS | Level 3 |
| | 20: Competencias de la fuerza laboral de la APS | Level 4 |
| | 21: Promotores de salud comunitarios | Level 4 |
| FONDOS | 22: Presupuestos de los establecimientos | Level 4 |
| | 23: Sistema de información de gestión financiera | Level 4 |
| | 24: Remuneración | Level 3 |
| GESTIÓN DE LA SALUD DE LA POBLACIÓN | 25: Definición de prioridades locales | Level 2 |
| | 26: Participación de la comunidad | Level 2 |
| | 27: Sectorización | Level 3 |
| | 28: Acercamiento proactivo a la población | Level 4 |
| ORGANIZACIÓN Y GESTIÓN DE LAS INSTALACIONES | 29: Organización del cuidado en equipo | Level 3 |
| | 30: Dirección y capacidad de gestión de las instalaciones | Level 4 |
| | 31: Uso de sistemas de información | Level 3 |
| | 32: Medición y gestión del desempeño (1/2) | Level 4 |
| | 33: Medición y gestión del desempeño (2/2)—Supervisión de apoyo | Level 4 |

## Data Synthesis and Scores: Component Breakdown

| MEASURE 1: PRIMARY HEALTH CARE POLICIES (1/2) | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Is there an active national health plan or national strategic plan in the country | Proyecto de Red Integrada de Servicios de Salud is a health plan/strategy based on PHC that is specific to Huetar Atlantica. The plan focuses on addressing the fragmentation of the system that was identified in previous situation analyses to create one network of care in Huetar Atlantica. There are also other health plans and strategies at the national level which influence the development of the Huetar Atlantica specific plan. | Yes |
| Is the national health plan and/or National Strategic Plan designed around PHC? | The organization and provision of services in the Health Network model seeks to operationalize Costa Rica's Primary Health Care Strategy. Primary health care is also integrated into each level of the system, from the primary level through the tertiary level. | Yes |
| Are policies around PHC evidence based? | Huetar Atlantica's Proyecto de Red Integrada de Servicios de Salud was created based on evidence from a situational analysis performed by the CCSS. Additionally, the management of the Health Network Model, DRIPSS, is reliant on collecting evidence from Health Areas both in the form of data and also participation. This includes trend analyses, context, demand, demographic, epidemiological and supply analysis. | Yes |
| Are policies around PHC formulated through a participatory process? | Huetar Atlantica's Network Plan is created through data collection that also includes understanding the distribution of health and disease. Identification of health needs includes aspects related to behavioral, values, beliefs, and other cultural elements. This information is directly obtained from the population of interest, community leaders, health boards, key informants, religious leaders, and local authorities. While this information is collected from the community and used as an input, community members do not have an active role in formulating policy. | Yes |
| Are policies around PHC embedded in a legal framework | Huetar Atlantica's Health Network Model is embedded in policy and supported in its implementation by the CCSS. All agreements related to the provision of services are embedded in law. | Yes |
| Do policies around PHC include the fundamentals: a service package defined, financing mechanism, and M&E framework? | DRIPPS is responsible for establishing all three components for Huetar Atlantica. These processes include: determining resource requirements based on programing, establishing management of goods and services, monitoring infrastructure and physical resource management, human resource management, management of financial resources, and information technology management. This includes indicators for monitoring and evaluation. | Yes |
| Is there a joint review of the progress towards the objectives set out in PHC-related policies? | There is a retrospective monitoring process that occurs on a yearly basis. | Yes |
| **Measure 1 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Definición, conformación y funcionamiento del Gobierno de las Redes Integradas de Prestación de Servicios de Salud en la CCSS, Nov 2020

# ANNEX 2

| MEASURE 2: PRIMARY HEALTH CARE POLICIES (2/2)—LEADERSHIP | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| A national coordinating authority(ies) (whether an individual or other governmental organizational entity) exists that is accountable for coordinating, monitoring, integrating, and implementing national PHC strategies and policies. | The Dirección de Red Integrada de Prestación de Servicios de Salud (DRIPSS) consists of a director and a Network Management Team. The Network Management Team includes the Advisory Council of the Network and the Council of Health Boards. The function and role of DRIPSS is clearly articulated in the Definición, conformación y funcionamiento del Gobierno de las Redes Integradas de Prestación de Servicios de Salud en la CCSS. | Level 4 |
| Sub-national/sub-regional operational capacity and reach of the national coordinating authority(ies) | The operational capacity and reach of DRIPSS is clearly illustrated in its guiding document where a structure is laid out to help articulate the varying structures that exist at all levels within the Huetar Atlantica Region. This includes engaging with all Health Areas and Regional Hospitals at both primary and secondary levels of care. This feeds up into DRIPSS at the regional level. | Level 4 |
| Proportion of time the national coordinating authority(ies) has adequate authority, budget and staff | Key informant responses and discussion from Costa Rica's scoring workshop indicate that Huetar Atlantica and its Health Areas have adequate budget and clear authority for coordinating activities, however they do not always have the human resource capability and staff to seamlessly fulfill all that is required of their role. | Level 3 |
| **Measure 2 Score** | | **Level 3** |

MEASURE DATA SOURCES

Definición, conformación y funcionamiento del Gobierno de las Redes Integradas de Prestación de Servicios de Salud en la CCSS

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 3: QUALITY MANAGEMENT INFRASTRUCTURE | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Articulation of national direction on quality, often outlined as a national quality policy or strategy, or integrated with broader health systems planning. | In Huetar Atlántica there is "Definición, conformación y funcionamiento del Gobierno de lasRedes Integradas de Prestación de Servicios de Salud en la CCSS" This document articulates the evaluation framework and quality criteria for the services provided by the units in Huetar Atlantica health network model. The evaluation is carried out on an annual and retrospective basis to assess the individual performance of each unit within the network for compliance with indicators that the management level has established. This includes a ranking of results into performance quintiles. While network guidance refers to this evaluation, these standards are a part of broader institutional regulations established by the Caja. | Yes |
| Identification and implementation of a package (2+ interventions) of appropriate quality interventions to create an enabling systems environment. | 1. The network quality direction includes an annual/retrospective assessment of performance across every unit within the network. (DRIPSS, Established)<br>2. Annual evaluation includes ranking of results into performance quintiles. (DRIPSS, Established) | Yes |
| Identification and implementation of a package (2+ interventions) of appropriate quality interventions to reduce harm to patients. | 1. Protocol de atención a la persona usuaria - a guidance on providing patient-centered and quality care to patients. (CCSS, Established)<br>2. Pharmacological guidance on selection and safe prescription of drugs. (CCSS, Established) | Yes |

| MEASURE 3: QUALITY MANAGEMENT INFRASTRUCTURE | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Identification and implementation of a package (2+ interventions) of appropriate quality interventions to improve clinical effectiveness of health services. | 1. Regulatory framework of interventions including the implementation of Standards, Guides, Guidelines, and Technical Sheets. (Network Management Team, Established)<br>2. Direct Supervision: includes direct monitoring of staff, training, performance targets, etc (Every care center, established by clinical management teams) | Yes |
| Identification and implementation of a package (2+ interventions) of appropriate quality interventions to engage patients, families and communities. | 1. The network quality direction includes measurement of the satisfaction of users. User satisfaction is measured at the level of each establishment and is a process established at the institutional level. (Health Area/Health Network, established).<br>2. Health Boards solicit local/community input on the delivery and quality of primary care. (Health Area/Health Network, established). | Yes |
| Active systems that routinely collect and publish data on quality health systems. | Yes, the "Evaluación del desempeño de la prestación de servicios de salud de la red y sus unidades" is a report published by CCSS and carried out for each unit of the Health Network by the Health Services Purchasing Department. This evaluation is carried out annually and retrospectively. It brings together a series of technical files, in which the indicators to be evaluated are observed. This evaluation considers the dimensions of access, continuity, acceptability, and effectiveness. | Yes |
| A culture of learning on quality across the health system, including development of systems to collect and share learning on quality of care at facility, sub-national and national levels. | While there is a "Standardization of Skills" carried out by the Network Management team to orient staff to knowledge and implementation of standards, guidelines, and technical sheets, there are no routine convenings of forums established to share learnings on quality and development across the system. Key informants suggest that there is a culture of learning that exists at the unit level, but there is room for improvement within the network model itself. Informants also note that in previous years there have been successes with pilot forums, but there have been few to none since the COVID-19 pandemic. | No |
| Clearly stated leadership commitment to institutionalize quality of care throughout the health system. | Yes, in Huetar Atlantica the "Dirección de la Red a la Evaluación del Cumplimiento de los Criterios de Calidad de las prestaciones de Servicios de Salud de la Red y sus Unidades" also states clear leadership commitment to quality. | Yes |
| **Measure 3 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Definición, conformación y funcionamiento del Gobierno de las Redes Integradas de Prestación de Servicios de Salud en la CCSS
Protocolo de atención a la persona usuaria
Ariadne Labs Costa Rica Case Study, page 46
Reglamento de Decreto, Juntas de Salud, sin fecha
"Evaluación del desempeño de la prestación de servicios de salud de la red y sus unidades"
Key informant perspectives from data collection and scoring workshop with Caja.

# ANNEX 2

| MEASURE 4: SOCIAL ACCOUNTABILITY (1/2) | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Engagement around PHC-related issues with the private sector, civil society and/or non-governmental organizations (NGOs) occurs: | Regularly and consistent in methods and structure. Juntas de Salud are formalized mechanisms for engagement with local actors representing a variety of interests through elected roles. Every hospital, clinic, and Health Area is held accountable by Junas de Salud. There are explicit guidelines and roles written out in law by the CCSS for engagement with Juntas de Salud. | Level 4 |
| Involvement of the private sector, civil society and/or NGOs in health care planning, policy formation, and monitoring and evaluation | Significant. According to the "REGLAMENTO JUNTAS DE SALUD," the functions of the Health Board include the following:<br>a. Collaborate with the Directors of the health establishments, in the preparation of preliminary projects and budget modifications of these centers, in accordance with budget allocations and limits set by the Fund's Board of Directors<br>b. Ensure the correct execution of the approved budget<br>c. Issue criteria, prior to the pre-negotiation, on the Commitments of Management of the health center<br>d. Issue criteria regarding the candidates for the position of CEO of the health establishment, before appointment, provided that the appointment is by competition in a vacant position, or by substitutions for more than one year or indefinitely.<br>e. Participate with opinions and recommendations, in the definition of General priorities and policies of the establishment in terms of investment, administrative contracting and promotion and incentives for health center workers, in accordance with the Fund's policies. | Level 4 |
| Public disclosure on the status of PHC implementation and results occurs: | Key informants conclude that public disclosure on the status of PHC implementation is systematic, occurs on a pre-established schedule, and is published online on the Caja website. In particular, the publication on the status implementation for PHC is released biannually for EBAIS and AS. However, all key informants do agree that although it is publicly available and downloadable, the information is oftentimes difficult to navigate to and can be an area for further improvement. | Level 4 |
| **Measure 4 Score** | | **Level 4** |

MEASURE DATA SOURCES

Reglamento Juntas de Salud

Compromisos de Gestión (desde 2008-2009)

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 5: SOCIAL ACCOUNTABILITY (2/2)—MULTI-SECTORAL ACTION | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Cross-government groups on primary health care | Key informants indicate that there are some cross-government groups but they are limited in scope and are not clearly defined. Most often, examples of multi-sectoral action exist between the Ministry of Health and the CCSS, however these are both health-related entities. In instances where other sectors are involved, collaboration is occurring on a more ad hoc and situation-dependent basis. | **Level 2** |
| Evidence of cross-sector integrated planning exists. | Key informants indicate that there is minimal cross-sectoral integrated planning, and that it is rare and largely advocated by specific individuals or departments/initiatives. Like the formation of intergovernmental groups, this is largely ad hoc and depends on the situation. | **Level 2** |
| **Measure 5 Score** | | **Level 2** |

MEASURE DATA SOURCE

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 6: SURVEILLANCE | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Track health and burden of disease metrics (morbidity, mortality, incidence) | Yes. Evidence shows that CCSS provides actuarial statistics that can be downloaded and provides a breakdown by region and health area. This includes Huetar Atlantica and its 8 Health Areas. This ranges from general birth/death rates to more specific data on burden of disease including the incidences of deaths from various cardiac events, various cancers, respiratory disease, alcohol use, among others. It also includes the incidence of disease such as dengue, pneumonia, etc. | Yes |
| Detect, report, and investigate notifiable diseases, events, symptoms, and suspected outbreaks or extraordinary occurrences | Yes. Huetar Atlantica has notifiable disease broken down by laboratory-based surveillance, specialized surveillance, and regulatory surveillance.The varying surveillance methods include: lab based, health surveillance, epidemiological surveillance, entomological surveillance, nutritional surveillance, pharmacovigilance, and syndromic surveillance. These are reported to Centro Nacional de Virologia. There is a weekly Epidemiological Report that documents notifiable diseases and is collated by REDES and by the epidemiological team at each Health Area. Processes for investigating notifiable diseases seem to exist as a study suggests the weekly Epidemiological Report can be used to mobilize containment resources. | Yes |
| Continuously collect, collate and analyze the resulting data | Yes. The National Center for Virological Reference collects, collates and analyzes data into reports that are published and publicly available. The CCSS also does this for different morbidity, mortality, and burden of disease data. This information is also published and publicly available. | Yes |
| Submit timely and complete reports from local to higher levels of the system and from higher levels of the system back to lower/community levels | Yes. Notifiable diseases are reported on an online system and by phone. The cadence of reporting and whether it is online or by phone depends on what the disease is. There are events that are reported on a weekly basis, and high priority diseases are reported within 24 hours of identification. Timely reporting is also an article within Costa Rica's surveillance law. Costa Rica's surveillance system law also requires integration between the varying levels of the system. | Yes |
| Format of surveillance systems | Based on Costa Rica's law which establishes a protocol for the country's surveillance system, there is a written objective that it is the goal of CCSS to make the entire system electronic, interoperable, and interconnected. However, it is unclear if it is fully capacitated to do this in the current moment. Given the level of implementation is unclear, this component has been scored a Level 3 which assumes that the system is largely electronic with limited interoperability and interconnectedness. | Level 3 |
| **Measure 6 Score** | | **Level 3** |

MEASURE DATA SOURCES

Statistical report for canton of Limon

Statistical report for Costa Rica, including a breakdown for Huetar Atlantica

CCSS Actuarial Statistics

National Center for Virological Reference Reports on: Influenza, Measles/Rubella, ArboVirus

Eventos bajo vigilancia

Law on Surveillance

Strengthening data collection and use for quality improvement in primary care: the case of Costa Rica

Key informant perspectives from data collection and scoring workshop with Caja.

# ANNEX 2

| MEASURE 7: PRIORITY SETTING | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Degree to which data (health, burden of disease, user needs and preferences, service delivery evaluations, and cost effectiveness) are used to set service delivery priorities at the national and sub-national level. | Evidence indicates that the identification of needs is a critical step in the planning, priority setting, and resource allocation process at both the Health Area and Huetar Atlantica levels. The identification of needs is a formal step driven by data from EDUS, Integrated Agenda and Appointment Systems (SIAC), Ficha Familiar (SIFF), and Individual Health Records (SIES), which captures burden of disease, health service utilization, and other epidemiological data. There are two key steps in identifying needs: 1. creating status reports of health areas and 2. disclosing and socializing the results. The purpose of the identification of health needs is to drive the provision of services and planning, both medical and public health, across Regions and Health Areas. | Level 4 |
| Proportion of priority setting exercises where stakeholder engagement occurs | Evidence indicates that both RIPSS officials and Health Areas are involved in the identification of needs and the priority setting process. There are 2 key required steps in identifying needs, both the RIPSS and Health Areas are involved in these steps. Reports from the health areas: each of them must make a report after applying the needs identification methodology. Said report must:<br>• Summarize the health needs identified in the people of the assigned population space<br>• Present the conclusions and recommendations that allow guiding local and regional planning<br>• Provide feedback on the methodology applied to identify health needs<br>The DRIPSS validates each one of the reports from the health areas, however, it is not feasible to prepare or validate the report without first verifying that the previous stages of the methodology, namely, Planning, Data Collection and Processing and Analyzes were carried out effectively.<br>The reports of the Health Areas will be validated by the DRIPSS and the reports of the DRIPSS by the higher authority that manages them, being able to schedule sessions for discussion, which can be planned as feedback activities in which the participants are clarified the execution of the methodology the suggested changes and the reasons for them. Once the observations made as feedback to the reports by the higher authority have been addressed, the report is declared finished and ready for the next stage. The findings on identified needs and the suggested lines of action will be inputs for the elaboration of local and regional planning. This happens for all priority setting—Health Areas and RIPSS work closely together. | Level 4 |
| Frequency at which allocation of resources is based on results of the priority setting exercise. | Evidence from the current RIPSS Management Plan clearly indicates a resource allocation process in Huetar Atlántica and its Health Areas is always based on the results of the prioritization exercise. The evidence clearly indicates that the process of identification of needs gives rise to lines of action that are applied in regional and local planning. Once needs identification is complete, the results are socialized and disseminated to ensure their incorporation into allocation and planning activities. | Level 4 |
| **Measure 7 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Programme for strengthening the provision of health services. Methodology for the Identification of Health Needs. December, 2020.

Integrated Network for the Provision of Health Services Huetar Atlántica. Identification of Health Service Delivery Needs. Cariari Health Area

Strengthening data collection and use for quality improvement in primary care: the case of Costa Rica

| MEASURE 8: INNOVATION AND LEARNING | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| State of mechanisms to recognize, evaluate, and scale successful innovations | Key informant suggests that there is a document that exists for each innovation and an annual report. While this appears to be systematic and transparent, more detail would be helpful for report writing. Examples of innovations include non-conventional care modalities, and even the network model itself. | Level 4 |
| Scope of stakeholders (government and private) involved in innovation and learning in PHC | Key informants indicate that from the perspective of the CCSS, there is limited participation of other governments and/or private entities in innovation or evaluation processes. These stakeholders are only conveyed for specific purposes. Stakeholders for innovation and learning in PHC are most often from the CCSS and Ministry of Health. | Level 2 |
| Engagement of stakeholders (government and private) in innovation and learning in PHC | Key informants indicate that the stakeholders who are involved in innovation and learning are engaged when they are needed, however their roles and responsibilities are not always clearly defined. Although the scope of stakeholders involved is minimal, the group of actors who are involved demonstrate commitment to their roles but there is need for further clarity and definition of their roles and responsibilities. | Level 3 |
| As a result of the performance of the above components, the occurrence of innovation and learning in PHC and scaling of successful innovations | Key informants indicate that successful innovations are occasionally scaled beyond the pilot level. In particular, pilot innovations with successful results sometimes receive support to be replicated and scaled up in other areas of the country. This most often occurs with innovations that are piloted in one Health Area may be implemented at another. Key informants also indicate that there is a lack of a systematic structure for sharing learnings on innovations between parties, and thus the consistent scale of innovations is not currently happening. | Level 3 |
| **Measure 8 Score** | | **Level 2** |

MEASURE DATA SOURCES

Integrated network project.

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 9: AVAILABILITY OF ESSENTIAL MEDICINES AND CONSUMABLE COMMODITIES | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Proportion of primary care facilities that have all primary care-specific essential medicines and consumable commodities available | According to the Caja, in consultation with the DRIPSS Huetar Atlántica Pharmacy Supervisor, at least 90% of primary care facilities in HA have all essential medicines and specific primary care consumable commodities available consistently. | Level 4 |
| Variation in availability between subnational areas and/or facility types | According to the Caja, in consultation with the DRIPSS Huetar Atlántica Pharmacy Supervisor, there is no variation in essential medicines and consumable commodities between Health Areas in HA and hospitals. | Level 4 |
| **Measure 9 Score** | | **Level 4** |

MEASURE DATA SOURCES

Lista Oficial Medicamentos Y Normativas, CAJA COSTARRICENSE DE SEGURO SOCIAL DIRECCIÓN DE FARMACOEPIDEMIOLOGÍA COMITÉ CENTRAL DE FARMACOTERAPIA, 2014

Direct consultation with CCSS and DRIPSS

# ANNEX 2

| MEASURE 10: BASIC EQUIPMENT | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Proportion of primary care facilities that have all basic equipment present and functioning | According to the Caja, at least 90% of primary care facilities in HA have all listed basic equipment present and functioning. | Level 4 |
| Variation in availability between subnational areas and/or facility types | According to the Caja, there is no variation in the availability of basic equipment between health areas in HA nor hospitals. | Level 4 |
| **Measure 10 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Catálogo de Equipamiento Médico,Caja Costarricense de Seguro Social Gerencia de Infraestructura y Tecnologías Dirección Equipamiento Institucional, Área Gestión Tecnológica, 2015

GUÍA BÁSICA PARA MANTENIMIENTO DE LA INFRAESTRUCTURA FÍSICA, CAJA COSTARRICENSE DE SEGURO SOCIAL, not dated

Direct consultation with CCSS and DRIPSS

| MEASURE 11: DIAGNOSTIC SUPPLIES | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Proportion of primary care facilities that have all of the identified supplies needed to conduct the diagnostic tests. | According to the Caja, at least 90% of facilities have all the supplies needed to perform the identified diagnostic tests in a consistently available manner. | Level 4 |
| Variation in availability between subnational areas and/or facility types | According to the Caja, there is no variation in the availability of diagnostic supplies between Health Areas and Hospitals in Huetar Atlantica. | Level 4 |
| **Measure 11 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Direct consultation with CCSS

| MEASURE 12: FACILITY DISTRIBUTION | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Has there been an assessment of primary health care density and distribution in the country? | PHC facility distribution is a function of the organization of EBAIS to serve the population of Huerta Atlantica.<br>• There are 118 EBAIS teams in Huerta Atlantica based out of 79 EBAIS Headquarters. Some EBAIS have their own headquarter, others share them.<br>• PHC facilities also include the 2 hospitals in the Huetar Atlantica region | Level 4 |
| Are there documented targets for optimal health facility density and distribution to meet population health needs? | El número de EBAIS formados está directamente relacionado con la distribución de la población asignada a la RIPSS; esto significa que las RIPSS con mayor cantidad de población son los que más EBAIS registran. | Level 4 |

| MEASURE 12: FACILITY DISTRIBUTION | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| What action has been taken towards achieving targets? | The EBAIS Inventory study is updated twice a year and the data from the last report period serves as a reference parameter to introduce changes with technical criteria. | Level 4 |
| **Measure 12 Score** | | **Level 4** |

MEASURE DATA SOURCES

Consultation with the CCSS, data provided from December 2021

Memoria de áreas de salud, sectores, EBAIS, sedes de área, sedes de ebáis y puestos de visita periódica en el ámbito nacional al 30 de junio de 2019, Área Análisis y Proyección de Servicios de Salud (ÁAPSS), Augusto 2019

| MEASURE 13: FACILITY AMENITIES | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Proportion of primary care facilities that have all of the identified amenities | According to the Caja, at least 90% of primary care facilities have all facility amenities identified and available consistently. | Level 4 |
| Variation in availability between subnational areas and/or facility types | According to the Caja, there is minimum (<10%) variation in the availability of facility amenities between types of facilities and Health Areas in Huetar Atlantica. | Level 3 |
| **Medida 13 Puntuación** | | **Level 3** |

MEASURE DATA SOURCES

Consulta directa a la CCSS

| MEASURE 14: STANDARD SAFETY PRECAUTIONS AND EQUIPMENT | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Proportion of primary care facilities that have all of the identified standard safety precautions and equipment in place | According to the Caja, at least 90% of primary care facilities in HA have all of the identified safety precautions and standard equipment. | Level 4 |
| Variation in availability between subnational areas and/or facility types | According to the Caja, there is no variation in the availability of safety precautions and standard equipment between Health Areas or hospitals. | Level 4 |
| **Measure 14 Score** | | **Level 4** |

MEASURE DATA SOURCES

Consulta directa a la CCSS

# ANNEX 2

| MEASURE 15: CIVIL REGISTRATION AND VITAL STATISTICS | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Completeness of registration of births nationally | Capture of birth data is complete and published on the website of Actuary Statistics (Estadisticas Actuarlaes), it can be downloaded by region and breaks down by health area. This includes the Huetar Atlantica region and its 8 Health Areas. | Level 4 |
| Completeness of registration of deaths nationally | Capture of death data is complete and published on the website of Actuary Statistics (Estadisticas Actuarlaes), it can be downloaded by region and breaks down by health area. This includes the Huetar Atlantica region and its 8 Health Areas | Level 4 |
| **Measure 15 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Website of Actuary Statistics, Huetar Atlantica Region

| MEASURE 16: HEALTH MANAGEMENT INFORMATION SYSTEMS (HMIS) | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Proportion of primary health care facilities in which Health Management Information Systems are in place. | Evidence describes the existence of a Costa Rica-wide initiative to capture health information, including patient care, referrals, and administrative information, in a single digital health record through the EDUS. EDUS is intended to be implemented across every health region and its health areas, and at all levels of the health system (primary through tertiary care). It is intended to be accessible by all levels of the health system, integrated across the country, and secure for both clinical and management decision-making. The five objectives/benefits described include: 1) integration of patient information in a safe and immediate way, 2) access to information from any health center, 3) standardization of clinical care and administrative processes, 4) saving/optimizing use of institutional resources, 5) improvement of institutional perception by decreasing appointment wait times and increasing access.<br>The report provided indicates that all hospitals across Costa Rica, including the two hospitals in Huetar Atlantica, had implemented the system by 2018. Data in the report also indicates that all (100%) of the 1041 EBAIS units in Costa Rica, including those in Huetar Atlantica, have implemented the necessary components of EDUS implemented by 2016:<br>• SIFF - the integrated family file system<br>• SIAC - the integrated identification system agendas and appointments<br>• SIES - the integrated health records system<br>Data suggests that while this has been fully implemented, further development of workflows and clinical processes may help to further promote quality, efficiency and safety. The EDUS website provides supplemental manuals for the use and navigation of this system.<br>These data are used to create Monthly Statistical reports which catalogs all diagnoses see, procedures performed, and appointments conducted by the Health Areas. | Level 4 |
| Format of HMIS | EDUS, the HMIS system is fully digitized and interoperable across the entirety of Costa Rica via internet connection. Data evidence from the EDUS report indicates that there is no EBAIS unit in Costa Rica that is paper-based only as of 2018. In addition, Costa Rica is building a mobile application for digitized/easier access for the patient side. | Level 4 |
| **Measure 16 Score** | | **Level 4** |

MEASURE DATA SOURCES

CAJA COSTARRICENSE DEL SEGURO SOCIAL, EXPEDIENTE DIGITAL ÚNICO EN SALUD. Unit EDUS Project. 2019.

CCSS EDUS Webpage- landing page view (accessed March 2022)

Strengthening data collection and use for quality improvement in primary care: the case of Costa Rica

# ANNEX 2

| MEASURE 17: PERSONAL CARE RECORDS | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Use of personal care records | Yes – all primary health care facilities have a comprehensive and longitudinal personal care record that meet the criteria below. | Level 4 |
| Unique patient identification (ID) | Yes - each patient has a Unique Digital Health File - which is the basis for the EDUS system | Yes |
| Problem lists | Yes - EDUS Unique Digital Health File has a space that lists out medical diagnoses | Yes |
| Care history and notes | Yes - The Unique Digital Health Record (EDUS) includes documentation of reports, procedures, hospital admissions, surgical and patient records. This includes history and medical/care notes, as well as epidemiological and social background notes. Huetar Atlántica also has a family record system that is included in a family file, but shas not yet been integrated into an individual patient record. | Yes |
| Medication lists and allergies | Yes - EDUS Unique Digital Health File has a place for recording medications and allergies | Yes |
| Referrals and results of referrals | Yes - Unique Digital Health File includes a place for scheduling and appointments (agenda y citas) | Yes |
| Laboratory, radiology and other test results | Yes - EDUS Unique Digital Health File includes features for laboratory results, pathology, medical imaging. | Yes |
| Format of personal care records | Electronic - evidence suggests that there are no EBAIS units that are using primarily paper based any more. Interoperable across all levels of health and across the entirety of Costa Rica. EDUS was implemented across all EBAIS by 2016, across all secondary/ tertiary care by 2018 | Level 4 |
| **Measure 17 Score** | | **Level 4** |

MEASURE DATA SOURCES

CCSS EDUS Webpage

CAJA COSTARRICENSE DEL SEGURO SOCIAL, EXPEDIENTE DIGITAL ÚNICO EN SALUD. Unit EDUS Project. 2019.

Ariadne Labs Case Study

| MEASURE 18: WORKFORCE DENSITY AND DISTRIBUTION | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Workforce density<br>(Ratio of active skilled health professionals per 10,000 population.) | The Huetar Atlántica region does not have figures on the rate of health professionals per 10,000 inhabitants, which makes it difficult to establish whether it is adequate or insufficient. The WHO establishes a standard of 44.5 doctors, nurses and midwives for every 10,000 inhabitants and Costa Rica has 49 doctors and nurses for every 10,000 inhabitants according to PAHO data. If only the health personnel registered with the CCSS are taken into account, this rate is 17 health professionals for every 10,000 inhabitants. https://iris.paho.org/handle/10665.2/38590 | No se cuenta con datos en la Región Huetar Atlántica |
| Percentage of Health Area administrative units that have a health workforce density below 50% of the Huetar Atlantica regional median density | Limon's Human Development Plan for 2016-2041 (Plan Desarrollo Humano Cantonal Local: Canton de Limon 2016-2041) includes data on Huetar Atlantica's 8 Health Regions and breaks down the distribution of EBAIS by Health Area. In 2008, there were no Health Areas that had an EBAIS density below 50% of Huetar Atlantica's median density. | Level 4 |
| **Measure 18 Score** | | **Insufficient data** |

MEASURE DATA SOURCES

Perfil del Sistema y Servicios de Salud de Costa Rica, PAHO/WHO/Salud Universal, 2019

Page 64, Plan de Desarrollo Humano Cantonal Local: Cantón de Limón 2016-2041

| MEASURE 19: QUALITY ASSURANCE OF PRIMARY HEALTH CARE WORKFORCE | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Capacity of the system to ensure that the primary health care workforce has the required qualifications | Evidence suggests that there are a few entities charged with ensuring that the workforce has required qualification. This includes CENDEISSS, a unit within CCSS that is responsible for planning and strategic development of service personnel. CENDEISSS also provides accredited virtual courses for further certifications of the health workforce including auxiliary nurses, ATAPs, and management. The second entity is the National Observatory of Human Resources in Health which monitors workforce trends and supports dialogue between professional associations, the Ministry of Health, CCSS, private employers, academia and other stakeholders. Standards and the accreditation of medical and nursing schools is managed by the Sistema Nacional de Acreditación de la Educación Superior (SINAES). SINEAS also sets the stands of competencies required to become an MD. | Level 4 |
| Capacity of the system to ensure that all actively practicing primary health care workforce are qualified, including workforce with foreign credentials | Costa Rica has regulations about the training of each health professional. Costa Rica has a licensing system for all health professionals including ATAPs. For example, all MDs need to register in the Colegio de Medicos. They also have a regulation for temporary licensing MDs who are trained abroad. The process for foreign trained MDs to license in Costa Rica is included on the embassy website and notes the need to pass a licensing exam in spanish. | Level 4 |
| Capacity of the system to ensure that quality standards are met in practice | Key informants indicate that there are mechanisms for ensuring quality standards including investigation of complaints and registration/re-licensing of professionals by professional associations. There are also education opportunities provided by CCSS for the ATAPs. However, the capacity of the system to ensure these quality standards are consistently met were deemed to be moderate. In particular, key informants note that there is room for improving the process of re-licensing as there are currently differences between workforce cadres. An example given was that the process for re-licensing and sanctioning is stricter for nurses than it is for medical doctors. Additionally, periodic revalidation is required for nurses, but not for medical doctors. | Level 3 |
| **Measure 19 Score** | | **Level 3** |

MEASURE DATA SOURCES

Estudios de la OCDE sobre los Sistemas de Salud: COSTA RICA EVALUACIÓN Y RECOMENDACIONES. February 2017. English Version. Spanish Version.

Sistema Nacional de Acreditación de la Educación Superior (SINAES)

Ciencias de la Salud - Medicina

REGLAMENTO DEL ASISTENTE TÉCNICO DE ATENCIÓN PRIMARIA EN SALUD (ATAPS)

Normativa para la autorización temporal del ejercicio profesional para médicos generales y médicos especialistas

Key informant perspectives from data collection and scoring workshop with Caja.

# ANNEX 2

| MEASURE 20: PRIMARY HEALTH CARE WORKFORCE COMPETENCIES | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Are competencies specific to the PHC service package established for all occupations of the PHC workforce | According to data collected, the entire PHC workforce, including physicians, nurses, pharmacists, ATAPs, and REDES, have competencies related to PHC delivery. Some examples include:<br>• ATAPs - responsibilities include updating the Ficha Familiar, taking vitals, providing community outreach and education, and even authorization for vaccines. They are not authorized to complete any other medical procedures. These competencies are enforced/taught through one year of mandatory training (Costa Rica Case Study, pg 35).<br>• REDES - responsibilities include patient intake, verification of identity and insurance, uploading information to the correct monitoring bodies, and collecting/collating/standardizing format of epidemiological data (Costa Rica Case Study, pg 35).<br>• SINAES - sets competences and accreditation standards for medical and nursing schools. | Level 4 |
| Number of elements below that can be answered positively:<br>• Competencies relevant to PHC are evidence-based<br>• Competencies relevant to PHC are adapted to the country context, meaning that competencies reflect the list of interventions at the PHC level and structure of the PHC workforce in the country<br>• Competencies relevant to PHC incorporate all key functions of primary health care: first-contact access, continuity, comprehensiveness, coordination, and people-centered<br>• Standards for education that are based on competencies relevant to PHC have been set for all occupations of the PHC workforce | Evidence suggests that Costa Rica uses the competencies for PHC teams proposed by PAHO. These generic competencies include communication, information management, management of resources, and public health. The PAHO recommendations adopted by Costa Rica are evidence based, and include PHC-relevant competencies. Evidence also suggests that the Huetar Atlantica Region has adapted the competencies to its context. For instance,evidence shows that Huetar Atlantica has a specific approach to engaging with its indigenous population. There is also evidence of adapting approach to meet the moment (ie. COVID-19). Lastly, there is evidence on the educational standards for all PHC Workforce members relevant to PHC. | Level 4 |
| **Measure 20 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Costa Rica Case Study, pg 35

Sistemas de Salud basados en la Atención Primaria de Salud Estrategias para el desarrollo de los equipos de APS. PAHO 2008.

ATAPS hacen trabajo especial en zona indígena de Chirripó durante la pandemia

| MEDIDA 21: PROMOTORES DE SALUD COMUNITARIOS | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Is there an occupation of health worker whose primary responsibility is to conduct proactive outreach in the community to meet local population health needs? | Yes - the Technical Assistant in Primary Care (ATAP), or technical assistant, acts as the EBAIS clinic's liaison with the community, providing disease prevention and health promotion education and activities through group visits and home visits | Level 4 |
| Number of blow criteria the occupation meets:<br>• Trained and accredited to provide a suite of preventative, promotive, and curative (where appropriate) health services, tailored to the local population<br>• Formally employed and remunerated appropriately, in accordance with the local health worker salary scale<br>• Supported at frequent, regular intervals by a designated supervisor<br>• Integrated into local health facility service delivery system or teams<br>• Integrated into local health data reporting and feedback systems | ATAPs are trained by nursing professionals at the Center for Strategic Development and Information in Health and Social Security (CENDEISSS) and in some authorized higher education centers. ATAPs are highly trained with a full year of mandatory training beyond high school. They provide community outreach, education, and vaccines. They are not authorized to complete any other medical procedures.<br>They are formally employed in EBAIS teams. This cadre of professionals are employed by the CCSS with an employment contract and continuous monitoring/training procedures. One of their preliminary functions is to complete the Ficha Familiar, which collects household and epidemiological data by family and flows into the EDUS system. This achieves all 5 criteria for this component. | Level 4—all criteria met |
| **Measure 21 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Ariadne Labs Costa Rica Case Study (2017)

Reglamento del Asistente Técnico de Atención Primaria en Salud (ATAPS)

Ataps constituyen pilar fundamental en proceso de vacunación contra covid-19

| MEASURE 22: FACILITY BUDGETS | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Maintenance of an annual budget for primary care facilities/ primary health care networks | This process in Costa Rica is highly centralized. The CCSS establishes an annual budget for each region and each EBAIS. The budget and its use can be consulted on the CCSS website. An annual report is provided that summarizes the budget, execution, income/expenses, implementation, etc. Individual facilities also prepare an annual budget every September/October in line with CCSS standards for approval. They are required to prepare a monthly report on financial updates for the CCSS. In addition to local budgets, Huetar Atlantica also establishes a budget to meet the objectives of the Network Care Model. | Level 4 |
| Proportion of primary care facilities/primary health care networks that use a comprehensive annual budget to engage in a systematic forecasting exercise | Data is used on an annual basis by the CCSS to engage in systematic forecasting and budgeting exercises for the future. This includes all health regions, EBAIS, and sservice types. | Level 4 |
| **Measure 22 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

CCSS Budget Information Website

Informe de evaluación anual y plan de ejecución - presupuesto 2021 (31 Diciembre 2021)

Financiamiento y cobertura del Seguro de Salud en Costa Rica: desafíos de un modelo exitoso

REGIÓN HUETAR CARIBE PLAN DE DESARROLLO Competitividad y Ordenamiento Territorial al 2030

| MEASURE 23: FINANCIAL MANAGEMENT INFORMATION SYSTEM | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Maintenance of a financial management information system for primary care facilities/primary health care networks to track revenue and expenditure flows | Key informants indicate that there is a financial management information system in place with the ability to manage and track expenditure, staff, and line item budgets across all primary care facilities and the network. | Level 4 |
| **Measure 23 Score** | | **Level 4** |

**MEASURE DATA SOURCES**

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 24: REMUNERATION | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Stability of primary health care staff remuneration | The key informants indicate that the CCSS has an efficient mechanism for paying wages on a stable and regular basis. The remuneration is stable and the salary is fixed and available/disclosed by job category. | Level 4 |
| Timeliness of primary health care staff remuneration | According to key informants, the timeliness of remuneration is most often on time as payment is often received through direct deposit. However, there are a few instances in which payment may be delayed for interim staff who are temporary or substituting for other employees. Often, this is not a result of institutional delays but rather of ongoing situations at the local level. | Level 3 |
| Predictability of primary health care staff remuneration | Key informants indicate the remuneration is highly predictable because both the timing and mechanism payment delivery can be anticipated. The payment intervals can be anticipated by an individual's contract, and the mechanism of delivery if most often bank transfer. The CCSS payroll system has been the same for many years. | Level 4 |
| Differences in reliability (stability, timeliness, and predictability) of remuneration across sub-national areas and/or facility type. | Key informants indicate that there are no differences in the reliability of remuneration across health areas and/or facility types as they are all a part of the same institutional system. | Level 4 |
| **Measure 24 Score** | | **Level 3** |

MEASURE DATA SOURCES

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 25: LOCAL PRIORITY SETTING | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of sub-regional units that collect and use data to effectively translate national and/or subnational policies into local PHC priorities and strategic action plans on at least an annual basis (or more frequently, if stipulated by national guidelines) | Community groups exist (called "Health Boards") to participate in the "planning and management" of health facilities and to "monitor" the quality of services. Per the evidence, Health Boards are implemented in all Health Areas, clinics, and hospitals as auxiliary entities.<br>There are several data sources used at the Health Area and Health Facility levels to guide local priority setting. This includes:<br>• Local Management Plan. A data repository with 300+ indicators used for strategic planning of the Health Area and is collected four times per year. This data is sent to both the Health Region (Huetar Atlantica) and to the national budget department. The data is used to monitor activity and stimulate changes in programming to achieve healthcare targets.<br>• Statistical Report. A monthly catalog of all diagnoses, procedures, and appointments taken on by a Health Area. This is sent to the national statistical area and is used to ensure that all departments are seeing the appropriate number of patients and for quality improvement.<br>• The Healthcare Delivery Index. A ranking of the quality of all Health Areas based on evaluation of patient charts occurs on a yearly basis and is sent to regional and national management. This is used to monitor progress towards improvement targets.<br>• Regional Audit and Oversight by DRIPSS. This occurs yearly to track general and region-specific targets for Health Areas. It is used at the regional level to ensure Health Area quality. | Level 4 |

# ANNEX 2

| MEASURE 25: LOCAL PRIORITY SETTING | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Involvement of communities and local leaders in data interpretation and priority setting | According to key informants, the involvement of communities in data interpretation and local priority setting is a strategic improvement area for Huetar Atlantica. Involvement of communities at the facility level depends on the Juntó de Salud. At the hospital level, there tends to be more participation. However, there is a significant difference in participation of the community depending on the Health Area. While there is participation, the level of community participation is not often related to priority setting and is not often decisional. | Level 2 |
| **Measure 25 Score** | | **Level 2** |

MEASURE DATA SOURCES

Profile of the health services system of Costa Rica 2nd edition, PAHO, 27 May 2022 *(not shared by World Bank / internal AL review)*

Reglamento de Decreto, Juntas de Salud, NO DATE

CCSS convocó elección de integrantes de las 138 Juntas de Salud, CCSS Noticias (Sharmila Gomez Solis), 26 August 2021

Strengthening data collection and use for quality improvement in primary care: the case of Costa Rica

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 26: COMMUNITY ENGAGEMENT | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of sub-regional units that regularly solicit local input on the design, financing, governance and implementation of PHC from diverse members of the community | Health Boards are a legal entity present in all Health Areas in Huetar Atlantica. The board members are elected by committed and provide feedback on the quality of health services and also help to promote preventative care activities in communities. These Health Boards do not co-design or regularly provide input regarding the design, financing, governance and implementation of PHC. There are some units, between 25-50%, that provide this sort of local input but it is not more consistent. | Level 2 |
| Impact of community engagement/input on the way in which services are structured and delivered | Based on evidence and key informant interviews, it appears that communities provide input on their perception of PHC service delivery but not necessarily how it is structured. Health Boards ensure that health services comply with/are oriented to the priority needs of an area, however, key informants indicate that the impact of their input depends on the Health Area itself but it is at least minimal. | Level 2 |
| **Medida 26 Puntuación** | | **Level 2** |

MEASURE DATA SOURCES

Profile of the health services system of Costa Rica 2nd edition, PAHO, 27 May 2022 *(not shared by World Bank / internal AL review)*

Reglamento de Decreto, Juntas de Salud, NO DATE

CCSS convocó elección de integrantes de las 138 Juntas de Salud, CCSS Noticias (Sharmila Gomez Solis), 26 August 2021

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 27: EMPANELMENT | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Proportion of the population that is empaneled to a provider, care team or facility | 100% of the population is empaneled to a public health service. However, the number of uninsured patients and patients choosing private sector services are on the rise. | Level 4 |
| Frequency at which patient panels are updated | Patient panels are updated on at least an annual basis as ATAPs visit every household and update the Ficha Familiar at least yearly. This population data feeds into updating patient panels and on the distribution of EBAIS. | Level 4 |
| Patient choice | In Costa Rica there is only one insurance and the CCSS offers a single network of benefits. The allocation of the population is made by geographical residence and there is no freedom of choice. Patients can also access the private sector. This responds to a political decision and not a system weakness. However, since the presence of patient choice in empanel systems is a global normative standard, this component cannot receive a level 4 score. It has subsequently been given a level 3. | Level 3 |
| **Measure 27 Score** | | **Level 3** |

MEASURE DATA SOURCES

800 000 personas carecen de seguro de salud de la CCSS, Silvia Arativa (La Nación), 4 de diciembre de 2019

Costa Rica case study: primary health care achievements and challenges within the framework of social health insurance, The World Bank, January 2019

| MEASURE 28: PROACTIVE POPULATION OUTREACH | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of sub-regional units which provide proactive population outreach according to local health needs and priorities | All EBAIS in Huetar Atlantica provide mobile health units, transport systems, home based care, and telemedicine. All are examples of proactive population outreach. ATAPs also have a significant role in providing outreach for vaccines and conducting at least an annual home visit to all families. | Level 4 |
| Percentage of sub-regional units that have registries or lists to identify relevant patients for proactive outreach (i.e. HIV/ TB patients; NCD patients; pregnant women; vulnerable geographies; etc.) | Health Areas have access to data on the social, economic, and health characteristics of the population in the form of family health records collected by ATAPs and integrated into EDUS. RIPSS actively tracks high risk populations as part of their proactive population outreach strategy. In Huetar Atlantica, this tracking provides the information to generate robust patient registries to monitor and inform outreach of high-risk populations. | Level 4 |
| **Measure 28 Score** | | **Level 4** |

MEASURE DATA SOURCES

Expediente Digital Único en Salud, Seguro Social de Costa Rica, 2022

Disclosable Version of the ISR - Strengthening Universal Health Insurance in Costa Rica - P148435—Sequence No : 05 (English)

Building a thriving primary health care system: the story of Costa Rica, Ariadne Labs, 2017

# ANNEX 2

| MEASURE 29: TEAM-BASED CARE ORGANIZATION | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of facilities (or primary health care networks, if teams are split across physical locations) where all primary health care providers work as part of a team, defined as when all 5 characteristics are present | All primary care providers work as an "EBAIS team". EBAIS teams work across Health Areas and deliver services at the primary care level. EBAIS teams meet four of the five characteristics required by the measures. There is no evidence on the existence of mutual accountability structures which are critical to the functioning and quality assurance of a team. | **Level 3** |
| **Measure 29 Score** | | **Level 3** |

MEASURE DATA SOURCES

Building a thriving primary health care system: the story of Costa Rica, Ariadne Labs, 2017

| MEASURE 30: FACILITY MANAGEMENT CAPABILITY AND LEADERSHIP | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of primary care facilities that are led by a manager(s) who has official management training (for example, a certification, diploma, or degree). | All manager have higher education, most often a master's degree in service administration, that is required to be in the role of facility manager. | Level 4 |
| Percentage of primary care facility managers that receive an annual review and feedback on their management capabilities and performance | All Health Area units managed by the CCSS are evaluated on an annual basis. Per the evidence, local evaluators, representatives, and a DSCC conduct a synchronous, online assessment of the Health Area unit. | Level 4 |
| **Medida 30 Puntuación** | | **Level 4** |

MEASURE DATA SOURCES

Curso de Gestión Local de Salud para Técnicos del Primer Nivel de Atención, Sexta Unidad Modular: Gestión en Atención Primaria, Caja, 2004

Evaluación en línea de los servicios de salud de atención primaria en Costa Rica, Armando Mauricio Cortes Ruiz (CCSS), 19 de noviembre de 2020

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 31: INFORMATION SYSTEM USE | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Key informant perspectives from data collection and scoring workshop with Caja. | Every EBAIS team is required to employ a Medical Data Clerk (REDES) whose responsibility is data collection in each EBAIS clinic. REDES assists in patient intake and verification of identity and insurance cards, and provides this information to their Health Area administration, who, in turn, sends the information to the CCSS headquarters. REDES also collates the epidemiologic data collected by the EBAIS team and sends it in a standardized format to the regional and national level.<br><br>REDES are responsible for collecting and contributing to the following types of data: Epidemiological Report, Local Management Plan, Statistical Report, Regional Auditing, and Internal Health Area Monitoring. | Level 4 |

| MEASURE 31: INFORMATION SYSTEM USE | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of primary care facilities/primary health care networks that routinely use information systems for capturing and reporting comprehensive patient data and facility data in a timely manner | All EBAIS teams and hospitals routinely use information systems to comprehensively collect both patient data and facility data. These are collected in EDUS and interoperable across the region.<br>Patient Care Records are updated daily, Epidemiological reports weekly, Local management plans four times per year, Statistical reports monthly, Regionally Auditing Annually. Many of these data collections/evaluations are populated from the EDUS which is required to be kept consistently up to date. | Level 4 |
| Percentage of primary care facilities/primary health care networks that routinely use information systems for conducting quality improvement activities. | Key informants indicate that most primary care establishments use information system data to generate quality improvement initiatives, however there is room for improvement in terms of the quality metrics that are tracked and the effectiveness of follow-up that comes from the use of such information thereby leading key informants to a score of Level 3. | Level 3 |
| **Measure 31 Score** | | **Level 3** |

MEASURE DATA SOURCES

Building a thriving primary health care system: the story of Costa Rica, Ariadne Labs, 2017

CCSS EDUS Webpage

CAJA COSTARRICENSE DEL SEGURO SOCIAL, EXPEDIENTE DIGITAL ÚNICO EN SALUD. Proyecto de Unidad EDUS. 2019.

Strengthening data collection and use for quality improvement in primary care: the case of Costa Rica

Key informant perspectives from data collection and scoring workshop with Caja.

| MEASURE 32: PERFORMANCE MEASUREMENT AND MANAGEMENT (1/2) | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of primary care facilities/primary health care networks that use established performance indicators for PHC | Each facility defined the "compromisos de gestion" with indicators on quality and performance. At the Health Area level, there is also Regional Auditing that takes place on an annual basis to track general and region-specific targets for Health Areas. | Level 4 |
| Percentage of primary care facilities/primary health care networks that conduct routine monitoring of these performance indicators | The Local Management Plan is a data repository with 300+ indicators for long-term strategic planning of a Health Area. This includes data inputted by REDES from every health care facility/EBAIS team and is sent to the Health Region. Health Areas then receive progress reports and have discussions about targets. This suggests that all primary care facilities conduct routine monitoring of these quality/performance indicators.<br>Additionally, the Healthcare Delivery Index annually ranks the quality of all Health Areas based on the evaluation of patient charts. This information is sent to regional and national management and is published publicly. It is ultimately used to stimulate quality improvement activities for the next year. | Level 4 |
| Percentage of primary care facilities/primary health care networks that have documented quality improvement work linked to underperforming areas | The Local Management Plan and Healthcare Delivery Index both annually help to identify progress on quality improvement efforts that have been defined. In addition, these are used to have conversations among Health Areas and Health Regions to identify targets for the following year. | Level 4 |
| **Measure 32 Score** | | **Level 4** |

MEASURE DATA SOURCES

Strengthening data collection and use for quality improvement in primary care: the case of Costa Rica

# ANNEX 2

| MEASURE 33: PERFORMANCE MEASUREMENT AND MANAGEMENT (2/2) - SUPPORTIVE SUPERVISION | | |
|---|---|---|
| **COMPONENTS** | **RATIONALE** | **PRELIMINARY SCORE** |
| Percentage of primary care facilities that implement or receive supportive supervision on at least an annual basis (or more frequently if stipulated by national guidelines) | All workers within a unit, region, hospital, health area, EBAIS, or CAIS receive direct supportive supervision on at least an annual basis. Staff are supervised by immediate leadership/supervisors at all three levels of care, in accordance with the organizational structure of the institution.<br>The aim of these "supervision tours" is to address performance gaps and promote knowledge, attitudes, and skills that are essential to the success of the individual's performance. Supervisors use instruments/manuals endorsed by the Medical Management (DCSS) to guide this process. This process offers supervisors the opportunity to "learn from work that has been done; reflect critically on the matter; provide feedback to the local staff; and where appropriate, provide specific guidance to make improvements". Based on the evidence, it appears that this is a collaborative process that happens in all Health Area units, supporting a score of level 4. | Level 4 |
| **Measure 33 Score** | | **Level 4** |

MEASURE DATA SOURCES

Evaluación de la prestación de servicios de salud: Informe 2013, CCSS, July 2014

Manual de supervisión de enfermería para los tres niveles de atención, DCSS, 2018

Ariadne Labs
401 Park Drive
Boston MA 02215

Please visit us at:
www.ariadnelabs.org

ARIADNE LABS

PRIMARY HEALTH CARE