

# MEASURING AND IMPROVING PRIMARY HEALTH CARE:

## TOOLS FROM THE PRIMARY HEALTH CARE PERFORMANCE INITIATIVE



A REFERENCE GUIDE

**PURPOSE:**

This report summarizes the tools and resources developed by the Primary Health Care Performance Initiative (PHCPI), and the groundbreaking progress that this partnership has made in just seven years in understanding, measuring, and improving primary health care.

As countries around the world strive towards universal health coverage, these tools will continue to serve health system leaders in advocating for PHC to make health systems more resilient and responsive, while improving the quality and equity of care.



Photo: Saumya Khandelwal

**INTRODUCTION/BACKGROUND**

Primary health care (PHC) has been recognized as the foundation of strong health systems since the [Alma Ata declaration](#) in 1978. The vast majority of health care around the world is delivered through PHC, which, when operating at its full potential, provides all people with the right care, at the right time, right in their community. Strong PHC is critical for achieving the Sustainable Development Goal of universal health coverage.

Despite PHC's importance to national and international health goals, it has only been within the last decade that global attention has begun to focus on what factors contribute to effective PHC and how to measure success. Without a comprehensive understanding of the system, the tools to measure a systems' strengths and weaknesses, or evidence-based resources to make improvements, country leaders rarely had an accurate picture of where their system was performing well, where it was weak, and what they could do to improve. Even in countries actively striving for better systems, leaders faced an uphill battle to create change.

This report details the evolution of core products released by the Primary Health Care Performance Initiative, which was a partnership of:



Cover photo: Drs Produces

**In 2015, the Primary Health Care Performance Initiative (PHCPI) was formed to begin to shed light on the “black box” of PHC delivery.** While evidence has existed for some time that quality PHC services result in better outcomes, it has been less clear to health system leaders, donors, and policymakers exactly how this happens and where investments and interventions might yield the greatest improvements. Initially founded by the Bill & Melinda Gates Foundation, the World Bank Group, and the World Health Organization, in collaboration with Ariadne Labs and Results for Development, the partnership later grew to include UNICEF and The Global Fund to Fight AIDS, Tuberculosis, and Malaria, all focused on trying to better understand and measure the distinct elements of PHC, with a special focus on service delivery.

Since then, PHCPI has made significant progress in equipping health system leaders around the world with the tools, data, and resources they need to understand the strengths and weaknesses of their own system and make progress toward improvement. PHCPI has provided policy makers, administrators, and practitioners with resources and assistance to analyze and interpret their health system data, making it digestible and actionable for a broad audience of PHC stakeholders. PHCPI has worked with governments and development partners around the world to strengthen primary health care, providing them with the data, information, and support to drive evidence-based improvements.

While there has been progress, trends in recent years have further driven home the importance of strong PHC and highlighted how much work remains to achieve the goal of universal health coverage. Rates of noncommunicable disease are on the rise. There is greater attention to changing population health needs and the importance of health security.<sup>1</sup> Infectious disease outbreaks, including the 2014 Ebola outbreak in West Africa and the COVID-19 pandemic, have tested our health care systems and exposed where weaknesses remain.

Despite the continued work ahead, countries around the world are better equipped to tackle these challenges than they have been in decades. The PHCPI partnership concluded in 2022, but through the tools and resources created, and through shared efforts working directly with countries around the world to create change, we know that measuring and improving primary care is achievable.

In this report, we'll look back on the evolution of PHCPI's products and how they will continue to empower countries around the world to build on the work we have done and learn from the insights gained through all of PHCPI's efforts.

<sup>1</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5400754/#CR10>



Photo: Tim Llewellyn

**“I think on a global basis, PHCPI has really been a leader in driving the conversation around the importance of primary health care and helping organizations A) understand why it’s important, and B) that it’s feasible and possible to measure and invest in and improve primary health care.”**

— JEFF MARKUNS, EXECUTIVE DIRECTOR, PRIMARY HEALTH CARE PERFORMANCE INITIATIVE (PHCPI)

## MEASUREMENT TOOLS TO UNPACK THE BLACK BOX OF PHC SERVICE DELIVERY

### THE PHCPI CONCEPTUAL FRAMEWORK

To begin improving health systems, PHCPI first aimed to define the building blocks of PHC. They began with assessing, through literature reviews and consultations with international experts, what factors underpin a health system’s functioning.

**“You can say that the systems are strong or weak, but the specific things that require investments are very different.”**

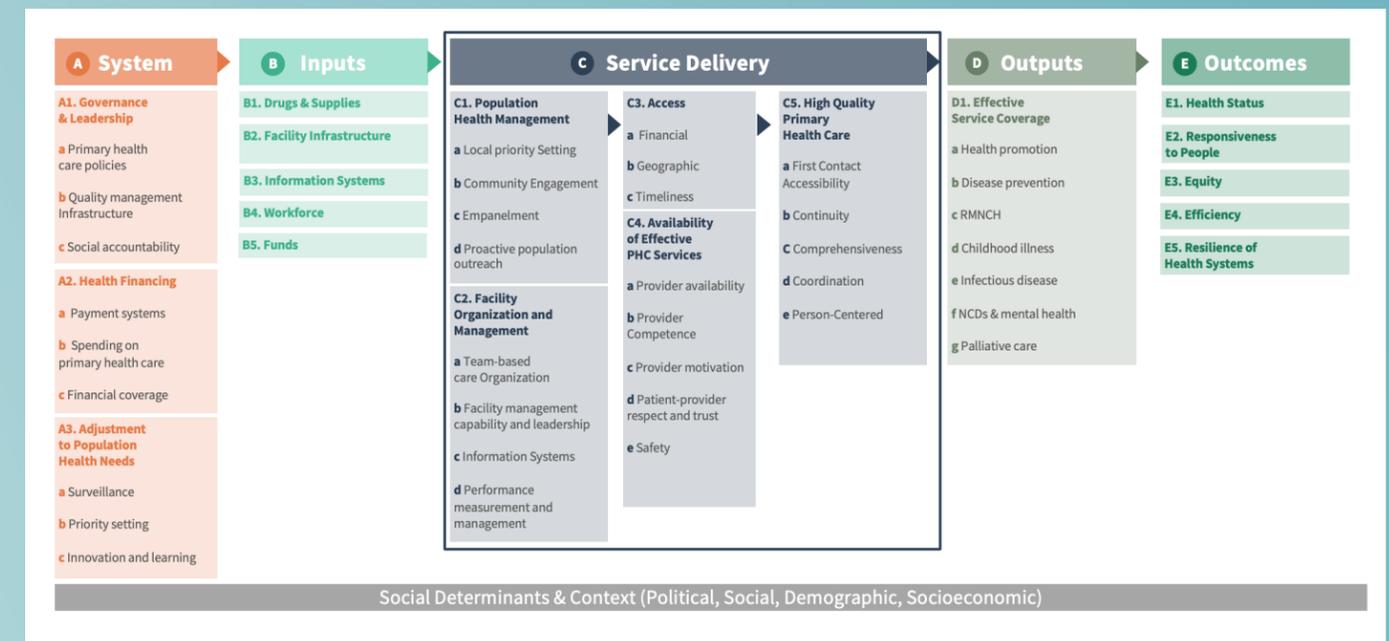
— DR. MANUELA URIBE, SENIOR HEALTH SPECIALIST, WORLD BANK

While numerous frameworks existed, PHCPI found that they were missing key elements and that there was no global consensus on what factors were most important. Many frameworks relied heavily on physical inputs — funding, supplies, facility infrastructure — but did not adequately capture foundational elements, like policies, payment systems, or market structures and did not sufficiently consider the experiences of the providers, families, communities, and patients involved with the system. They also failed to adequately consider service delivery, including how communities keep their populations healthy, how facilities organize their systems, what barriers patients face in accessing care, what services are available, and, importantly, whether the services being delivered are of high quality.

PHCPI set out to build a framework that would clearly define all of these elements, with a special emphasis on service delivery and specifically in the context of low- and middle-income settings, to show what needed to be measured to inform and drive improvement efforts. The resulting Conceptual Framework, pictured to the right, defines the system components, key inputs, and service delivery functions that underpin PHC, as well as the outputs and outcomes of the system, and it provided a framework that major players in global health could begin to align behind. Underlying the entire framework is the understanding that social determinants and political, social, demographic, and socioeconomic contexts all have an influence on the strength and functioning of PHC as a whole.

The PHCPI Conceptual Framework was an important step in defining the building blocks of strong PHC and would inform the development of the next phases of PHCPI’s work. With the United Nations’ shift from the Millenium Development Goals to the Sustainable Development Goal on health, with a focus on ensuring healthy lives and promoting well-being for all at all ages, it was clear that there was global interest in a more holistic and integrated approach to the fundamentals of health.

**Learn How the Conceptual Framework was developed.**  
**DOWNLOAD**



However, it was less clear that the proposed Sustainable Development Goal targets provided a sufficient focus for driving progress on PHC. PHCPI’s Conceptual Framework thus provided shared guidance on what should be measured to begin to inform efforts to improve care. The next step would be determining how best to measure each of those conceptual domains; for many, there were no existing global measures. At the time of the framework’s completion in 2015, only 11 of 19 sub-domains mapped to existing globally-comparable and available core indicators.

To address these data gaps PHCPI began an effort to generate a tool that would provide leaders with a user-friendly visualization to aid in understanding and analyzing PHC performance, leveraging both quantitative and qualitative data on a country’s health system. The result became the PHC Vital Signs Profile.

**“I think one of the things that PHCPI has done is it has brought to light the importance of understanding measurement. It has provided a conceptual framework for how to understand primary health care.”**

— DR. MANUELA VILLAR URIBE, SENIOR HEALTH SPECIALIST, WORLD BANK VITAL SIGNS PROFILES

## CREATING THE VITAL SIGNS PROFILE

**“One thing I like about the VSP is understanding the national context at a glance, looking at the health system, seeing where we are. It’s all encompassing.”**

—VICKY OKINE, EXECUTIVE DIRECTOR, ALLIANCE FOR REPRODUCTIVE HEALTH RIGHTS, GHANA

While a core goal of PHCPI was to help countries collect more and better data on PHC, PHCPI partners knew this data would only be impactful if it could be communicated to decision makers in a useful, compelling, and actionable way. PHC involves a complex approach with many elements, and the data can easily become overwhelming — and therefore, important details and concepts are at risk of being overlooked or misunderstood.

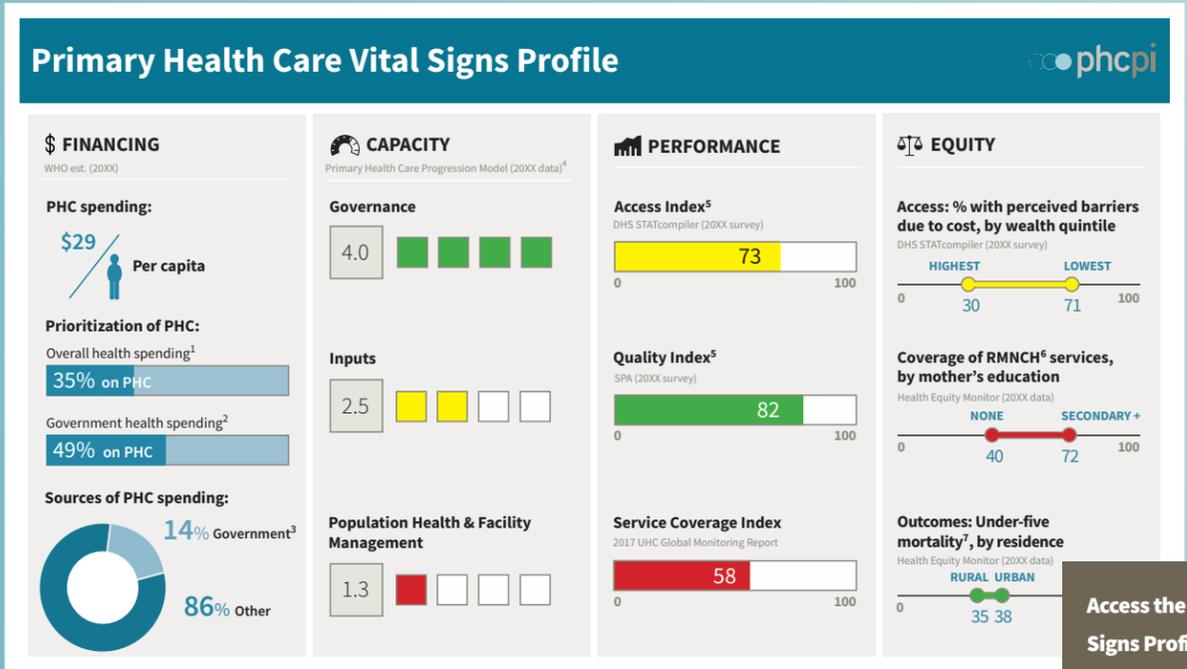
The PHC Vital Signs Profile (VSP) was created as a digestible, actionable tool to allow countries to understand at a glance where their health systems are performing well and where they need improvement. Using the domains and subdomains of the Conceptual Framework as a foundation, PHCPI developed and identified relevant data sources to populate the VSP. This visual snapshot builds a richer, more nuanced picture of PHC in a country while highlighting practical areas of critical importance to PHC stakeholders. The VSP uses measurements organized across four key pillars: Financing, Capacity, Performance, and Equity.

Quantitative data sources include standardized global surveys and may also include “alternative indicators,” or country-specific, customized data collected from facility surveys and country information systems. The Profiles were developed primarily to be useful to individual countries, rather than for country-to-country comparison; thus, finding a way to include data from local alternative indicators was crucial to maximizing utility to countries. To incorporate these customized metrics, PHCPI developed a review process to ensure that these unique data sources can be incorporated into the VSP while still measuring the same core concepts. Qualitative data sources include key informant interviews and document reviews, used to score rubrics whose values then populate the Capacity pillar. This country-level data is key to informing improvement and investment efforts on a country-by-country basis.

The VSP ultimately provides a snapshot of PHC in individual countries, shining a light on where systems are strong, where they are weak, and where there are gaps in the country leaders’ own understanding of local PHC performance. As more countries have developed profiles, it has become clear that each country has its own very unique strengths and challenges in PHC, so no two VSPs look alike.

Read more about the methodology behind the PHC Vital Signs Profiles.

DOWNLOAD



Access the Vital Signs Profile here.

VISIT THE LINK

**“Our advocacy partners in Kenya have really been on the front line in using the VSPs to champion for investment and the prioritization of primary health care. I think the VSPs have really helped us to make some significant steps in strengthening primary health care in Kenya.”**

—HELEN KIARIE, HEAD OF MONITORING AND EVALUATION, MINISTRY OF HEALTH, KENYA

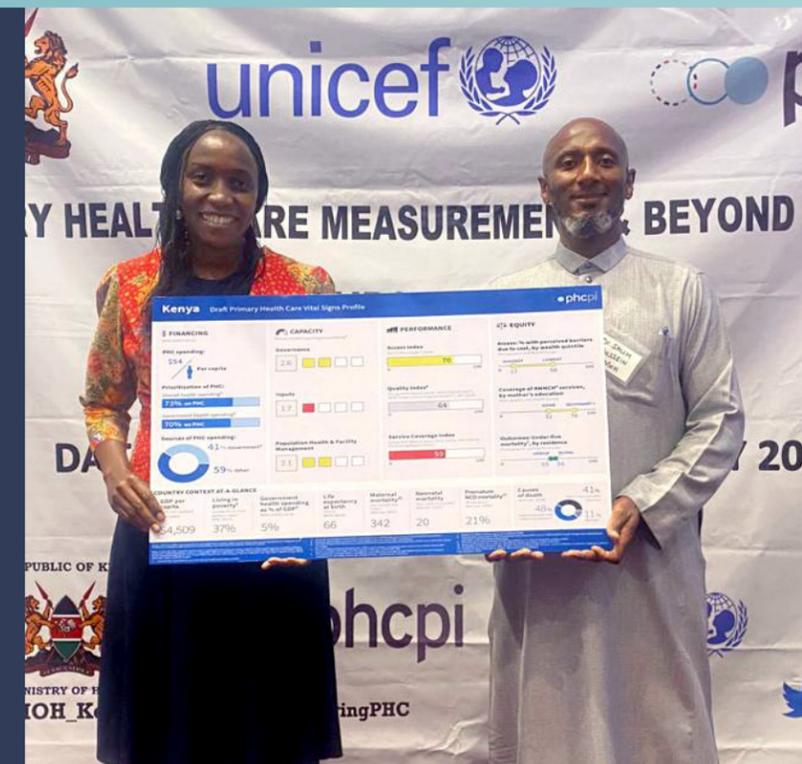


Photo: PHCPI staff

Each of the four pillars of the VSP provides answers to some of the most critical questions about PHC in a country, with each pillar helping to spotlight areas that have not traditionally received sufficient focus in the past:



## FOUR PILLARS OF THE VSP — FINANCING

### HOW MUCH DOES A GOVERNMENT SPEND ON PRIMARY HEALTH CARE?

The VSP begins with the Financing pillar, recognizing financial resources as underpinning the entire health system. The Financing pillar draws on initial efforts by the WHO to track PHC expenditures using a globally standardized measure and approach. It summarizes how much money is spent per person on PHC in a country, how much is spent on PHC as a proportion of total health spending, and the potential sources of that funding. Understanding these measures is an important first step toward understanding how to fund primary health care more effectively and efficiently.

**“When we were developing the VSP, we realized we didn’t have data on the costs of primary health care services, we just had one lump sum figure for health services. As a result of that, we have been able to do costing of primary health care services. Quite a number of counties are now increasingly prioritizing and investing in primary health care. We have a lot of dispensaries, health centers that have been built, increasing the capacity of and access to health services at the primary health care level.”**

— HELEN KIARIE, HEAD OF MONITORING AND EVALUATION, MINISTRY OF HEALTH, KENYA

## FOUR PILLARS OF THE VSP — CAPACITY

**DOES THE SYSTEM HAVE THE POLICIES, INFRASTRUCTURE, AND OTHER PHYSICAL AND HUMAN RESOURCES REQUIRED TO DELIVER STRONG PRIMARY HEALTH CARE?**

The Capacity pillar examines the fundamentals of a system’s ability to deliver care, such as population health management; physical inputs, such as drugs and supplies, facility infrastructure, and information systems; and governance and leadership support.

### MEASURING CAPACITY: THE PROGRESSION MODEL

With few existing measures to populate elements of the capacity pillar, PHCPI pioneered a new measurement tool, the PHC Progression Model. It is made up of 33 measures, each focused on a specific PHC system, input, or service delivery element.

Learn more about the methodology behind the PHC Progression Model.

DOWNLOAD

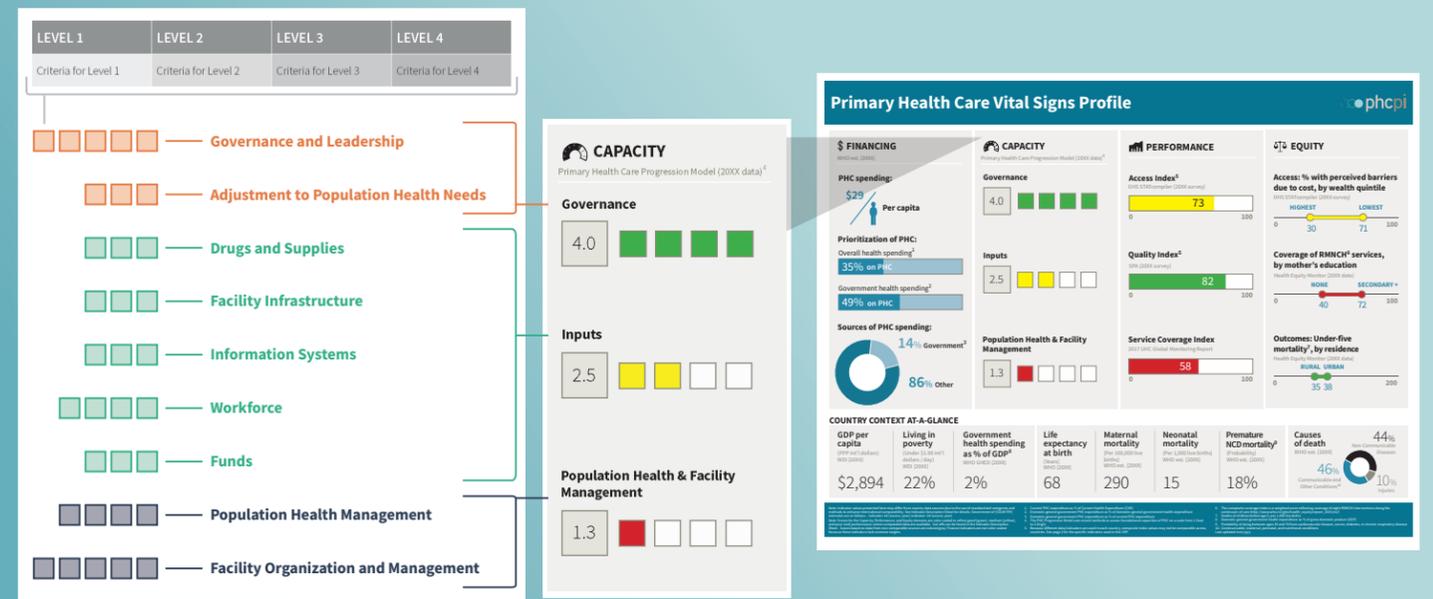
To complete this pillar, a team of technical experts and policymakers, often including representation from the government, development partners, civil society organizations, and non-governmental organizations, come together. This group collectively assesses performance on each of the 33 measures using a ranking system, and the results are summarized as the three Capacity scores on the VSP. Progression Model assessments are designed to be participatory and allow stakeholders with complementary knowledge to share their insights. This model capitalizes on the wealth of information, evidence, and data that is often available but rarely captured in a way that generates usable information.



Photo: Tim Llewellyn

**“The data opened our eyes to see and understand that Ghana was not doing very well in terms of inputs - equipment at health care facilities, very basic equipment. This is really key.”**

— VICKY OKINE, EXECUTIVE DIRECTOR, ALLIANCE FOR REPRODUCTIVE HEALTH RIGHTS, GHANA



## FOUR PILLARS OF THE VSP — PERFORMANCE

### DOES PRIMARY HEALTH CARE IN YOUR COUNTRY DELIVER QUALITY CARE THAT MEETS ALL PEOPLE'S HEALTH NEEDS?

The Performance pillar looks to quantify system performance by focusing heavily on PHC service delivery, with emphasis on access, quality, and service coverage.

Performance is measured using multiple data sources in three key areas:

- **Access:** People's ability to get the PHC they need when they need it, regardless of where they live or how much money they have.
- **Quality:** Core PHC functions provide services that are person-centered, comprehensive, and coordinated to ensure first contact accessibility and continuity of care.<sup>2</sup> Services themselves are provided by competent providers who follow appropriate safety practices.
- **Service Coverage:** The proportion of the population that is receiving the range of essential services they need, including for infectious diseases, maternal and child health, and non-communicable diseases.

<sup>2</sup> Bitton A, Veillard JH, Basu L, et al. The 5S-5M-5C schematic: transforming primary care inputs to outcomes in low-income and middle-income countries. *BMJ Global Health* 2018;3:e001020.

## FOUR PILLARS OF THE VSP — EQUITY

### IS PRIMARY HEALTH CARE IN YOUR COUNTRY EFFECTIVELY SERVING THE MOST MARGINALIZED AND DISADVANTAGED GROUPS IN SOCIETY?

The Equity pillar seeks to highlight the importance of reduced health inequities as a vital outcome of stronger PHC. This pillar examines whether people are able to receive the care they need, regardless of where they live, their income, or their education level.

Equity is measured by barriers to care due to treatment costs associated with different degrees of wealth; the availability of reproductive, maternal, newborn, and child health services based on education level; and the difference in mortality rates for children under five in urban versus rural settings

**“PHCPI has enabled us to experience PHC advocacy from different angles. The best advocacy is always strengthened with data. You have to have credible data to make your case. That's one of the key processes that PHCPI enabled.”**

— VICKY OKINE, EXECUTIVE DIRECTOR, ALLIANCE FOR REPRODUCTIVE HEALTH RIGHTS, GHANA

The VSP provided a comprehensive tool to measure and visualize where PHC in a country needs improvement. With a completed VSP, countries can see where to prioritize improvement efforts and recognize where they are doing well. The VSP provides all stakeholders, including policymakers, donors, advocates, and citizens, with an easy to use, actionable tool to better understand, and ultimately improve, primary health care.

## LAUNCH AND IMPLEMENTATION OF THE TRAILBLAZER VITAL SIGNS PROFILES

In October 2018 leaders from around the world convened at the Global Conference on Primary Health Care in Astana, Kazakhstan to endorse the Declaration of Astana, a renewed commitment to strengthen primary care worldwide and work toward achieving universal health care. During the conference, PHCPI debuted the first completed VSP.

In 2021, after working with a number of countries to populate and publish validated VSPs and to mark the third anniversary of the Declaration, PHCPI released *If Health Systems Could Talk: Illuminating the Vital Signs of Strong Primary Health Care*, a report capturing the results and impact of the flagship VSP across 23 countries. The report compiled findings from these Profiles, showing that it is possible to define and examine the strength of PHC in a rigorous, standardized way. The report highlighted that every country takes its own path to strong primary health care and that better measurement helps countries to understand their strengths and weaknesses and allocate resources strategically to address the most critical gaps. The report also offered lessons learned from across the pillars.



## IMPROVEMENT STRATEGIES & PROMISING PRACTICES

After completing a VSP, countries have a better picture of where they need to improve their systems. Next, they need to be able to act on those opportunities.

To turn the VSP into action, PHCPI developed a set of interactive knowledge management modules — known as Improvement Strategies — that can be used to identify specific ways to strengthen PHC in a country based on the Profile results and/or country-level priorities and needs. Each module addresses a topic that is critical for strong PHC capacity and performance. Modules include curated evidence on PHC improvement to help users identify appropriate strategies, relate these to other parts of the health system, and begin improvements.

Within each module, users can navigate to the content most relevant to their role within the health system and country context. The sections in each module are designed to help country stakeholders develop a nuanced understanding of topics related to strong PHC and use this knowledge to plan for and enact improvement efforts in their context.

Short case studies in each module provide examples of different countries' pathways to improvement and offer lessons to other leaders from the experience of in-country experts and examples of innovative and promising approaches.

Access the  
Improvement  
Strategies here.

VISIT THE LINK



Photo: PHCPI staff

### RELEASE OF THE WORLD HEALTH ORGANIZATION'S AND UNICEF'S PRIMARY HEALTH CARE MEASUREMENT FRAMEWORK AND INDICATORS (PHCMFI)

In 2022, the World Health Organization and UNICEF released their [Primary health care measurement framework and indicators](#). This first-ever globally normative and endorsed primary health care measurement and monitoring framework establishes a common language to discuss PHC performance, allowing for more shared tools and aligned investments.

This framework builds upon the original PHCPI Conceptual Framework, and while it is organized differently, the key concepts of PHC promulgated by PHCPI are well represented. With the success of the PHC measurement framework and indicator development and the integration of many of the principles and lessons from PHCPI's products, PHCPI has reoriented its materials to better align with the new framework and indicators. Specifically, the Improvement Strategies are now integrated into the PHC Digital Hub and organized around the WHO-UNICEF PHC measurement framework and indicators. Secondly, PHCPI developed a second generation VSP to make improvements on the original version and better align with the PHC measurement framework and indicators.

**“The foundations for a larger global primary health care measurement framework and indicators that UNICEF and WHO developed, has been developed on the foundations of PHCPI. So that has been a very significant contribution that PHCPI has made.”**

— DR. LAKSHMI BALAJI, HEAD OF PRIMARY HEALTH CARE AND HEALTH SYSTEM STRENGTHENING UNIT, UNICEF

## PHC DIGITAL HUB

Throughout PHCPI’s journey, it has been clear how crucial it is to not only collect more and better data on PHC, but also to make it easier to understand and act on.

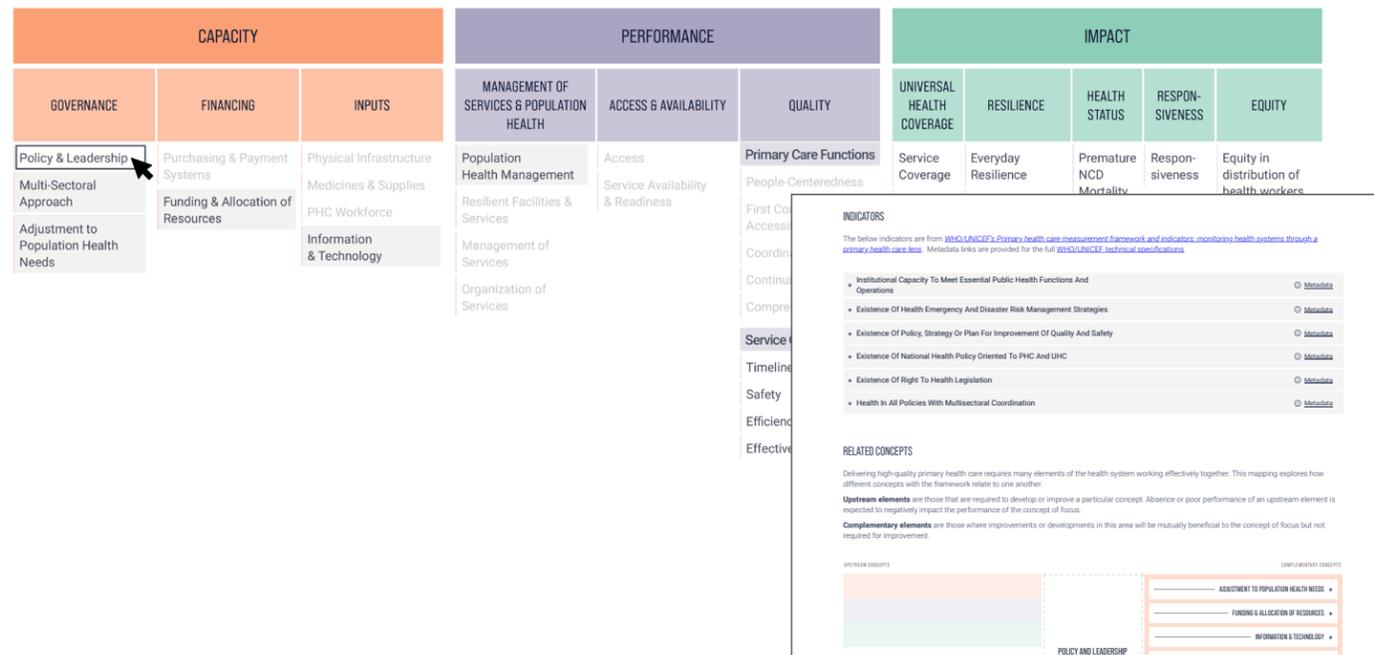
In this spirit, at the 2022 Health Systems Research Symposium, PHCPI debuted a new PHC Digital Hub that acts as a centralized place to explore, understand, and act on key building blocks of strong PHC. These foundations have been adapted from the new WHO-UNICEF global framework and leverage the structure, content, and lessons from other PHCPI tools and resources, such as the VSP and Improvement Strategies.

The PHC Digital Hub also provides VSP users with an improvement planning navigation tool linking results from capacity and performance measures to Improvement Strategies and global donor investment priorities.

Access the PHC Digital Hub here.

VISIT THE LINK

The Hub is built upon two relationship maps to help make the complexities of the PHC system concepts and stakeholders easier to understand and navigate. The first is a related elements mapping which allows users to visualize important relationships among PHC concepts, including identifying any key elements that are upstream or complementary to priority concepts. The second, a global frameworks mapping, shows how each concept ties back to relevant global commitments and funding. This mapping helps point users of the VSP to potential funding and partnership opportunities for those building an investment case, or for those working on an active program and wanting to see how a particular organization’s PHC frameworks relates back to priority areas and VSP results.



## SECOND-GENERATION VITAL SIGNS PROFILE

Accompanying this effort to help people explore, make sense of, and act on the concepts included in the WHO-UNICEF PHC measurement framework and indicators, PHCPI partners jointly developed a Beta version of a second-generation Vital Signs Profile as a way to help interested stakeholders and countries visualize and act on PHC data across the health system. This tool draws extensively on PHCPI’s experience and lessons from the first-generation VSPs, while being more closely aligned with and utilizing the recommended sources from the WHO-UNICEF PHC measurement framework and indicators.

A preview and Beta version of this resource can be found within the [PHC Digital Hub](#). Available materials include:

- Sample interactive visualizations of what a completed second-generation VSP might look like, featuring mock data from three example (artificial) countries
- Beta version of the digitized second-generation VSP
  - This provides downloads of digital files that can be used to independently create a user-generated digital VSP, including a file that can be used for data entry in Excel, a beta version of the digital visualization for use with the PowerBI platform, and a technical user guide for those with baseline competency in the use of PowerBI.
- Full methodology note for the second-generation VSP, detailing the approach to development, recommended indicators, and the formulas and guidelines used to calculate and display the various indices of the second-generation VSP.
- Required disclaimers & attributions for use of Beta products

These products have been released as global public goods. While all templates and methodologies were developed and approved by the PHCPI partnership, the second-generation VSP was not entered into live field testing with real data during the period of partnership. While it is anticipated that the WHO, UNICEF, and the World Bank will be exploring mechanisms to pilot and/or publish official second-generation VSPs at [Improvingphc.org](#) – drawing on validated data from a global data repository generated from recommended PHCMFI sources, as well as novel country data collected using new PHCMFI collection tools under development at WHO – there are no other sources of official validated second-generation VSPs at the time of conclusion of the partnership.

**“I think we’re at a turning point for primary health care and are able to really build on the measurement work that countries have been already doing in a more standardized way going forward.”**

— DR. LAUREL HATT, SENIOR PROGRAM DIRECTOR, RESULTS FOR DEVELOPMENT (R4D)



## LOOKING AHEAD

The work of PHCPI has laid a strong foundation for defining, measuring, and improving PHC. Through this global partnership, we have developed the tools that can now be adapted and used by countries around the world to maximize their impact. The tools described throughout this report will continue to be relevant, both for global level knowledge dissemination and advocacy, as well as for national level adaptation and implementation to support PHC measurement and improvement efforts. The hope of all PHCPI partners is that others can now continue to build on this work, drawing on the lessons that have emerged over the course of PHCPI's journey, to continue to strengthen our ability to measure and improve PHC.

**“PHCPI has been a leader in creating a methodology to measure primary health care delivery and the tools to put the data into a digestible format that stakeholders can use to make meaningful change. With the resources that PHCPI has created in the past seven years, leaders around the world are better equipped to improve health care in their countries than ever before.”**

— ASAF BITTON, EXECUTIVE DIRECTOR, ARIADNE LABS

## APPENDIX: PHCPI CORE PRODUCTS

### CONCEPTUAL FRAMEWORK

[Millbank Quarterly: Better Measurement for Performance Improvement in Low- and Middle-Income Countries: The Primary Health Care Performance Initiative \(PHCPI\) Experience of Conceptual Framework Development and Indicator Selection](#)

*A publication outlining PHCPI's work to develop the conceptual framework to begin to measure the strength of PHC.*

### VITAL SIGNS PROFILES

[If Health Systems Could Talk: Illuminating the Vital Signs of Strong Primary Health Care](#)

*A 2021 report on the lessons and impact of the Vital Signs Profiles.*

[Detailed Methodology Note: Primary Health Care Vital Signs Profiles](#)

*A deep-dive into the methodology underpinning the Vital Signs Profiles, including a detailed description of the indicators that are factored into each pillar.*

[Primary Health Care Progression Model Assessment Tool](#)

*Access the complete Progression Model assessment.*

[Completed Vital Signs Profiles](#)

*Explore the data of completed Vital Signs Profiles from more than 25 countries.*

### IMPROVEMENT STRATEGIES

[Improvement Strategies](#)

*Case Studies and Promising Practices*

### PRIMARY HEALTH CARE MEASUREMENT FRAMEWORK AND INDICATORS

[WHO: Primary health care measurement framework and indicators: monitoring health systems through a primary health care lens](#)

*Explore the first ever globally-normative framework for primary health care measurement.*

### PHC DIGITAL HUB

[PHC Digital Hub](#)

*Access tools, data, and resources from PHCPI — including the Beta version of the second-generation Vital Signs Profile — in a convenient, interactive hub.*



This report was prepared by the Ariadne Labs team, in consultation with the Secretariat of the Primary Health Care Performance Initiative: a partnership dedicated to transforming the global state of primary health care, beginning with better measurement, that concluded at the end of 2022. All products described in this report were the result of joint collaboration among PHCPI partners. With the conclusion of the partnership, this guide and its content should not be considered to necessarily reflect the official policy or position of any former PHCPI partner organization.

