Primary health care capacity assessment in Qatar: the primary health care progression model as an assessment method

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Abstract

Background: The Primary Health Care Performance Initiative (PHCPI) was developed as a measurement of Primary Health Care (PHC) to evaluate the PHC systems, improve services, and maximize health outcomes. With the limitation of data sources and metrics of PHC capacity, PHCPI designed the PHC Progression Model, as a rubric-based mixed-methods assessment tool for capacity measurement through a participatory process. This paper uses the PHC progression model to assess the system capacity of primary health care in Qatar.

Methods: The PHC Progression Model consists of a set of 33 quantitative and qualitative measures, each of which is assessed using a rubric that classifies the level of performance into 4 levels, ranging from Level 1 (low capacity) to Level 4 (high capacity). The assessment measured both quantitative and qualitative information.

Results: The assessment showed that PHC in Qatar has a strong capacity with an overall score of the key measures of capacity governance (3.6), inputs (4.0), and population health management (4.0).

Conclusion: The main strength of the system was in the key inputs such as facility, workforce, fund, information system, and drugs and supply. Also, the assessment showed strong population health and facility management including standardized team organization, measuring performance, community engagement, and use of the information system data.

Keywords: Primary health care, progression model, health system evaluation, health care capacity, Qatar

Introduction

Primary health care (PHC) has been considered as the first line of interaction between patient and health care system, and a core component to build an efficient and effective health system for the countries regardless of their socio-economic status(1,2). In the last 40 years, countries have started to invest in PHC with increasing efforts of the World Health Organization (WHO) to achieve universal health coverage (UHC) (1). However, there remains a large gap between the community's needs, and the quality and effectiveness of PHC services (3). To address this gap, the Primary Health Care Performance Initiative (PHCPI) was developed as a measurement of PHC to outline the core systems, inputs, and service delivery. This measurement is necessary to set up a PHC improvement plan that maximizes the service outputs and health outcomes(4).

Although PHCPI's Vital Signs Profile was developed to measure the performance of a country's PHC system, the quantitative information about PHC systems' capacity to deliver high-quality care was affected by the limitation of data sources and metrics. PHCPI designed the PHC Progression Model, as a rubric-based mixed-methods assessment tool for capacity measurement through a participatory process by country teams and revision of WHO's PHCPI team to validate results(5,6). The tool was piloted in more than 10 countries and it was found to be feasible to implement, produce valid results, was highly acceptable by stakeholders, and yielded actionable insights into PHC strengths and weaknesses(7–9).

Primary Health Care services in Qatar have been considered an essential component of the healthcare system serving most of the population through a network of 31 primary healthcare centers covering the country. The PHC services in Qatar range from preventive services such as vaccination, disease screening, and smoking cessation, to therapeutic services through the family medicine model for non-communicable diseases, antenatal care, mental health, and dental services for all age groups(10,11).

This paper details the experience of using the PHC Progression Model to measure the capacity of Qatar's PHC system as a part of the PHCPI project.

Methods

The assessment tools

The PHC Progression Model is a validated mixed-methods assessment tool to systematically measure the capacity components of the Vital Signs Profile in three domains: governance and leadership, inputs, and population health management, as shown in Figure 1. Despite the role of capacity elements in the delivery of high-quality services and improving health outcomes, they are insufficiently measured by existing quantitative, globally comparable data sources.

The PHC Progression Model consists of a set of 33 quantitative and qualitative measures, each of which is assessed using a rubric that classifies the level of performance into 4 levels, ranging from Level 1 (low capacity) to Level 4 (high capacity), see Figure 1.

The assessment was conducted as per the guidelines outlined in the Progression Model Assessment Guide (4). Figure 2 illustrates the assessment's three phases, broken down into 11 steps.

The project was approved by the Ministry of Public Health (MOPH) and Primary Health Care Corporation (PHCC) management, as part of the participation of the country in the regional PHCPI project in the Eastern Mediterranean Region (EMR).

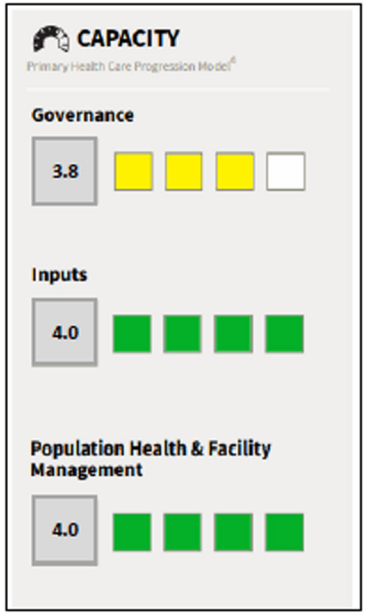
Capacity Measures and Levels of Achievement

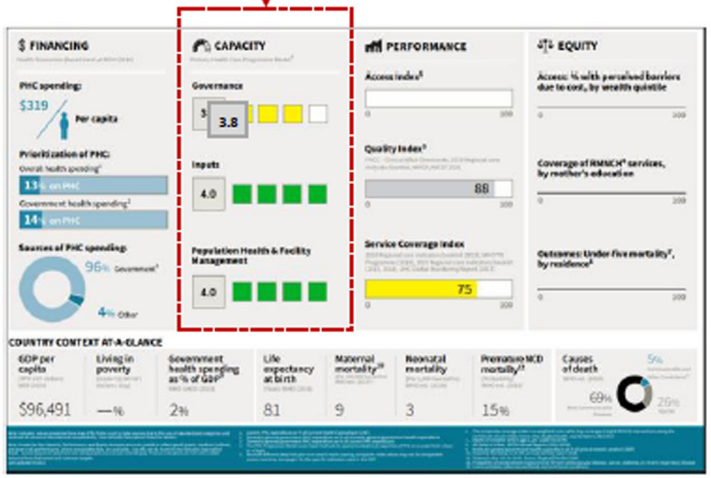
WHO Vital Signs Profile - VSP

Level 1	Level 2	Level 3	Level 4

Criteria are applied to determine levels of achievement per measure

Capacity Measure Domain	Sub Domain	No. of Measures
Governance	Governance and Leadership	**5**
	Adjustment to Population Health needs	**3**
Inputs	Drugs and Supplies	**3**
	Facility Infrastructure	**3**
	Information Systems	**3**
	Workforce	**4**
	Funds	**3**
Population Health and Facility Management	Population Health Management	**4**
	Facility Organization and Management	**5**
Total Measures		**33**

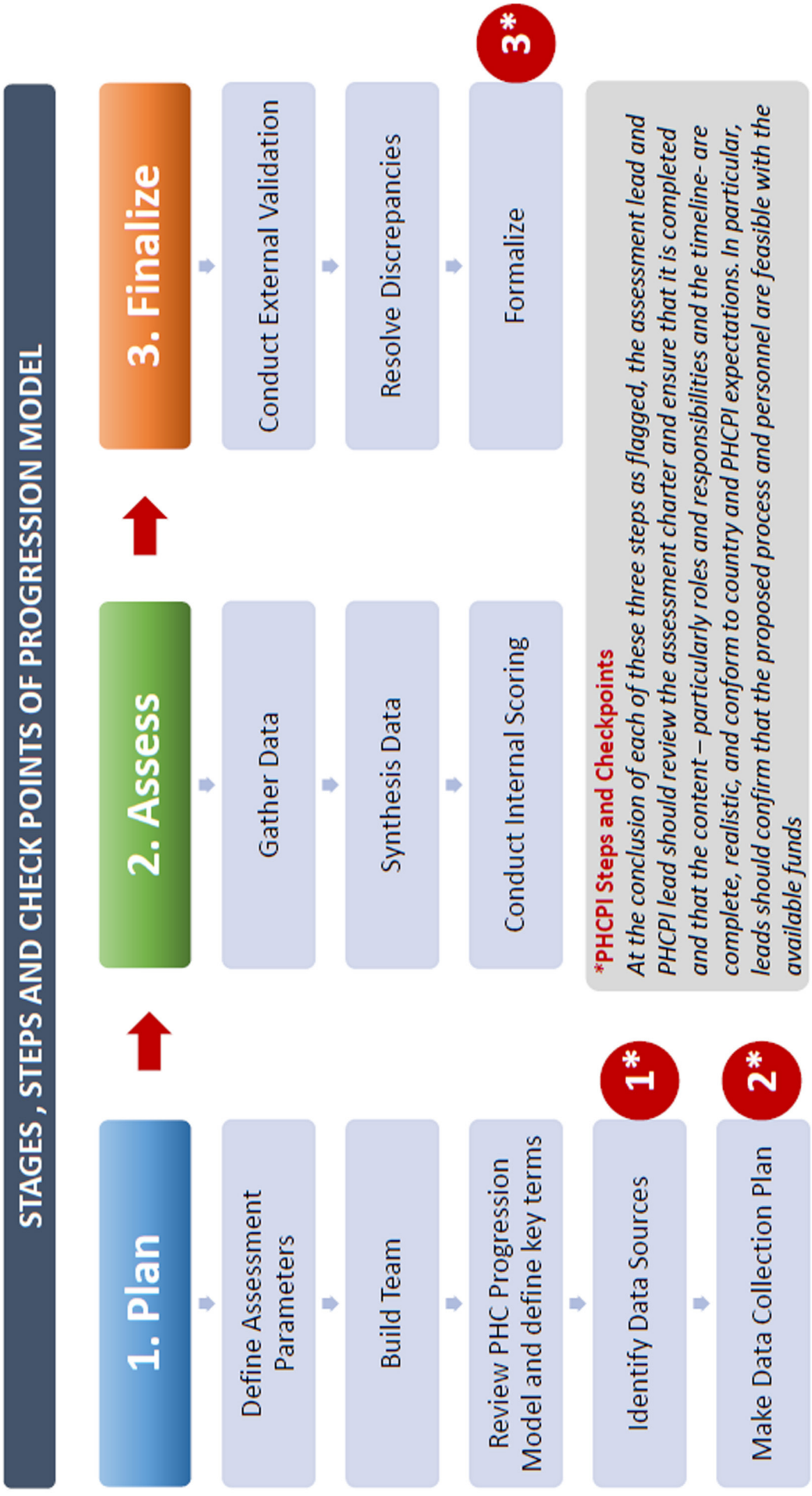




Source: https://www.improvingphc.org/primary-health-care-progression-model

Figure 1 Structure of the PHC Progression Model and its relationship to the Vital Signs Profile (VSP).

Figure 2. Steps in carrying out the PHC Progression Model Assessment



Source:
https://www.improvingphc.org/primary-health-care-progression-model

Data Collection

The baseline assessment was designed to be conducted at three levels of the Qatari health system (national, regional, and Health Center facility levels). The assessment measured both quantitative and qualitative information. It entailed use of existing health databases, survey reports, and facility records (HMIS). Qualitative information was collected through interviews with key health system stakeholders including the health officials at the national, regional, and facility levels; and external stakeholders who work in the domain of community health in the country.
Data collection methods and data collection templates were sourced from Qatar's PHC assessment team with representatives from the PHCC steering committee, MOPH, and Academia.

Scoring and validation of the results

The assessment team used the data as evidence of internal scoring for each measure and use the rubric to assign one of the four performance levels. If assessment teams were assigned a score of level 1 it identified sufficient data to score a measure.

The results of the internal scoring and all supporting evidence were shared with the WHO's PHCPI team for external validation to ensure that the available evidence justified the scores given by the country team and that measurement standards were applied according to the guidelines. The external assessment process identified the measures that need further evidence to justify the internal scores. Both external and Qatar's PHC assessment teams reviewed the score and additional evidence until an agreement was reached. The results obtained from that assessment were integrated into the Vital Signs Profile as the capacity pillar. The whole assessment process was completed in approximately 4 months.

Results

The PHC progression model assessment for the PHC's capacity in Qatar showed a score of 4 in two out of the three domains. The final scores in the input domain and population health and facility management domain were 4, while the governance domain was rated 3.6, as shown in Table 1.

1. Governance:

In the governance domain, the assessment indicated a higher score in governance and leadership than the adjustment to the population needs (3.8 vs. 3.3). This score was supported by the presence of PHC strategy, updated evidence-based policies, and a quality management plan.

The lowest score in the governance domain was 3 for social accountability in governance and leadership due to the limited involvement of civil society/NGOs, and the private sector in health care planning, policy formulation, and monitoring. In addition to that priority setting, innovation, and learning rated scored 3 in adjustment to the population needs (see Table 2). Despite having health needs assessment and innovation plans as evidence, the score was affected by a lack of evidence about the engagement of stakeholders in PHC innovation and setting the population priority.

2. Inputs:

Concerning the inputs domain, PHC in Qatar scored 4 based on having good geographical coverage with the presence of a network of 31 health centers distributed across the country, and a physician density of 5.8/10,000 population. The assessment of the input showed the presence of essential medications, diagnostic equipment, and safety measures in all PHC centers. Moreover, all PHC centers are supported by having a united electronic health record (EHR), unique health numbers for the patients, and centralized health intelligence with evidence of information reports and dashboards that are used for planning and decision-making.

Table 1: Overall PHC Progression Model Result for Qatar

VSP Capacity Score	Category	Score
Governance	OVERALL GOVERNANCE	3.6
	Governance and Leadership	3.8
	Adjustment to Population Health Needs	3.3
Inputs	OVERALL INPUTS	4.0
	Drugs and Supplies	4.0
	Facility Infrastructure	4.0
	Information Systems	4.0
	Workforce	4.0
	Funds	4.0
Population Health and Facility Management	OVERALL POPULATION HEALTH AND FACILITY MANAGEMENT	4.0
	Population Health Management	4.0
	Facility Organization and Management	4.0

Table 2 Qatar's PHC Progression Model Score Sheet for the 33 measures

Category/ Measure	Score					
Governance						3.6
Governance and Leadership					3.8	
1: Primary health care policies (1/2)						
2: Primary health care policies (2/2) - Leadership						
3: Quality management infrastructure						
4: Social accountability (1/2)						
5: Social accountability (2/2) - Multi-sectoral action						
Adjustment to Population Health Needs					3.3	
6: Surveillance						
7: Priority Setting						
8: Innovation and Learning						
Inputs						4.0
Drugs and Supplies					4.0	
9: Availability of essential medicines and consumable commodities						
10: Basic equipment						
11: Diagnostic supplies						
Facility Infrastructure					4.0	
12: Facility Distribution						
13: Facility amenities						
14: Standard Safety Precautions and Equipment						
Information Systems					4.0	
15: Civil Registration and Vital Statistics						
16: Health Management Information Systems (HMIS)						
17: Personal Care Records						
Workforce					4.0	
18: Workforce Density and Distribution						
19: Quality assurance of PHC workforce						
20. PHC workforce competencies						
21: Community Health Workers						
Funds					4.0	
22: Facility budgets						
23: Financial Management Information System						
24: Remuneration						
Population Health and Facility Management						4.0
Population Health Management					4.0	
25: Local priority setting						
26: Community engagement						
27: Empanelment						
28: Proactive Population Outreach						
Facility Organization and Management					4.0	
29: Team-based care organization						
30: Facility management capability and leadership						
31: Information system use						
32: Performance measurement and management (1/2)						
33: Performance measurement and management (2/2)						

3. Population Health and Facility Management: With a score of 4 in the population health and facility management domain, PHC in Qatar showed strong evidence of managing PHC centers in a unified managerial structure and managed by trained leadership. At the level of the services provision, all PHC centers have the same multidisciplinary team providing all the services including preventive, curative, diagnostic and pharmacy. The assessment showed that rate of community engagement at all levels had a score of 4, with community representatives in different committees starting from the highest level represented by the senior executive committee. This representation has been expanded in all PHC centers. This engagement has a role in response to different local priorities in designing the clinical services and allocation of the new health centers.

PHC in Qatar invested in recent years in developing the data warehouse to gather all organizational level data from clinical to resources data to develop the centralized health intelligence system, which provides timely information for the decision-makers, providers, patient representatives, and MOPH.

From a performance management perspective, the assessment showed that PHC in Qatar has established different performance tools from the individual level to the strategic level. With the adoption of the balanced scorecard (BSC) system, PHC monitors the progress of the strategy implementation through 60 KPIs distributed in 4 different perspectives (customer, financial, capacity, and process). In addition to that, all the health centers have been covered by operational and quality KPIs.

Detailed system capacity indicators and categories with scores are provided as supplementary material- Table S1.

Discussion

Using progression model assessment allowed PHC providers in Qatar to measure their capacity for the first time since the PHC was introduced into Qatar's healthcare system in 1979. This assessment gave health sector leaders deep insight to identify the weaknesses and strengths and develop suitable interventions.

The results indicated that Qatar has a high level of PHC capacity in the three different domains, particularly in input and population health and facility management. Even in the leadership and governance domain, PHC in Qatar has shown a higher level of capacity in comparison to other countries that used the progression model in African countries and Argentina(5,8). This can be referred to as different factors such as the economic status, complexity of the health care system (decentralized system), or population and geographical size.

In comparison to other Arabian gulf states Qatar shares similar capacity features in PHC in terms of availability of drugs, diagnostics, services coverage, and presence of policies(12). However having centralized and independent PHC provider represented by PHCC gives advantage to Qatar's PHC through availability unified EHR, standardized facility requirement, focus on disease prevention, and patient engagement.

PHC in Qatar has implemented two strategic cycles which have a great role in building the high level of PHC capacity obtained in the progression model assessment. The first one "PHC as Foundation 2011-2015" focused on building human capacity, infrastructure, prevention of diseases, and improving quality of the services. It was followed by the "PHC corporate strategy 2018-2023" which invested in the family medicine model and preventive services as the main services in all PHC centers. Also, the strategy directed the efforts and resources to enhance accessibility by increasing the number of PHC centers, and clinical providers, using telephone and virtual consultation(13,14). It is documented that moving toward technology-enabled health care delivery model has the potential to increase the role and relevance of primary care as supporting the efforts of increasing accessibility, improving the patient experience, and enhancing the efficiency and integration of PHC services(15).

The high level PHC capacity in Qatar may be attributed to the new organization in the health care system in Qatar. PHC has been empowered with the establishment of PHCC as an independent provider of PHC services, managing its resources and strategic direction with dedicated funds. Between 2018-2022, the total PHC spending per capita was constant and ranged between USD 261-406 (16).

The assessment showed the need for improving the stakeholders' engagement in PHC, particularly the private providers. Currently in Qatar some PHC services are provided by employers in some industries e.g. Gas and Oil industry, military, or some private clinics through private health insurance. Such engagement will lead to better resource management, coordinated care, and standardization of the PHC services at the national level.

Application of the PHC progression model in Qatar was feasible due to the size of the country, the nature of the health care system, and the availability of evidence. For instance, as PHCC in Qatar is considered the main provider of PHC services in Qatar, all the centers, resources, strategies, quality initiatives, and related information are available with that provider.

Feedback from stakeholders and assessors

The feedback obtained from stakeholders serves as a valuable resource for enhancing future assessments of PHC system capacity. The assessment process involved data collection from various sources, including published reports, operational reports compiled by various functional entities, and conducting interviews with stakeholders that would further validate the collected data. Obtaining meaningful inputs from key stakeholders, including health officials at national, regional, and facility levels, and external stakeholders from collaborating ministries as well as academia, was key to the data collection process. This required persistent efforts and effective communication

channels to ensure that we gather diverse viewpoints and expertise in evaluating the capacity of PHC systems.

One of the key strengths identified through the interviews was the holistic nature of the assessment. Stakeholders appreciated the comprehensive approach employed in measuring performance across multiple domains, including governance and leadership, inputs, and population health management. This comprehensive evaluation allowed for a more nuanced understanding of the strengths and weaknesses of PHC systems, facilitating targeted actions for improvement. Moreover, stakeholders expressed their appreciation for the participatory approach utilized during the assessment. Involving key stakeholders from various levels and perspectives contributed to a more inclusive and representative assessment of the PHC system's capacity.

While acknowledging the strengths of the assessment process, stakeholders also highlighted several areas for improvement. Inclusion of representatives of the community as a potential source for feedback regarding performance was suggested. They emphasized the importance of fostering ongoing dialogue and collaboration with other health care entities in the country, especially the private sector, to remain actively involved and informed about the assessment process.

Assessors emphasized the need for enhanced data collection and analysis techniques to further improve the accuracy and relevance of the assessment. They suggested exploring innovative approaches and leveraging technology to streamline data collection, ensuring the availability of timely and reliable information for evaluation purposes and transforming this assessment to a real-time monitoring platform. The assessors also highlight the significance of the external validation phase of scores. Discrepancies between internal scores assigned by the assessment team and external evaluations, led to rigorous discussions and the collection of additional evidence, to justify the internal scores. This iterative process of review and consensus-building with the external assessment team played a crucial role in ensuring the accuracy and validity of the final assessment results.

Conclusion

The PHC Progression Model assessment is instrumental in evaluating the capacity of PHC systems and guiding decision-making processes for improving healthcare outcomes. The assessment has shown that PHC in Qatar has a strong capacity in key inputs factors including facility, workforce, fund, information system, and drugs and supply logistics. Also, the assessment showed strong population health and facility management including standardized team organization, measuring performance, community engagement, and use of the information system data. The PHC system in Qatar has some areas to be improved in the system of governance and leadership. Despite the presence of robust strategy, policies, quality management system, and surveillance as part of the governance, PHC in Qatar needs more engagement of the stakeholders particularly the private sector, investment in system innovation, and setting strategic priorities based on the population's needs.

The assessment exercise also brought forward various challenges in conducting such an assessment in the future. The experiences and feedback described in this study can yield more accurate and effective evaluations of PHC system capacity. The study serves as a significant step forward in understanding the complexities of evaluating PHC system capacity. We recommend further research and collaborative efforts to refine assessment methodologies and establish robust data collection and validation processes. By doing so, health policymakers, and stakeholders can make informed decisions and implement targeted actions for improving PHC systems across the world.

References

1. Pettigrew LM, De Maeseneer J, Anderson MIP, Essuman A, Kidd MR, Haines A. Primary health care and the Sustainable Development Goals. Lancet. 2015;386(10009):2119-2121. doi:10.1016/S0140-6736(15)00949-6
2. Starfield B, Shi L, Macinko J. Contribution of Primary Care to Health Systems and Health. Milbank Quarterly. 2005;83(3):457-502. doi:10.1111/j.1468-0009.2005.00409.x
3. Bitton A, Ratcliffe HL, Veillard JH, et al. Primary Health Care as a Foundation for Strengthening Health Systems in Low- and Middle-Income Countries. J Gen Intern Med. 2017;32(5):566-571. doi:10.1007/s11606-016-3898-5
4. Primary Health Care Performance Initiative. About PHCPI. http://www.phcperformanceinitiative.org/
5. Ratcliffe HL, Schwarz D, Hirschhorn LR, et al. PHC Progression Model: a novel mixed-methods tool for measuring primary health care system capacity. BMJ Glob Health. 2019;4(5):e001822. doi:10.1136/bmjgh-2019-001822
6. Veillard J, Cowling K, Bitton A, et al. 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. Milbank Q. 2017;95(4):836-883. doi:10.1111/1468-0009.12301
7. Khalid MJ. How to Scale-Down: Adapting a National Primary Health Care Measurement Tool to Subnational Governments. Harvard T.H. Chan School of Public Health; 2020. https://dash.harvard.edu/handle/1/37365690
8. Yitbarek K, Serawit A, Medhin G, et al. Capacity of the Ethiopian primary health care system to achieve universal health coverage: a primary health care progression approach. Health Policy and Planning. 2023;38(4):474-485. doi:10.1093/heapol/czad013
9. Rezapour R, Khosravi A, Farahbakhsh M, Ahmadnezhad E, Azami-Aghdash S, Tabrizi JS. Developing Iranian sub-national Primary Health Care Measurement Framework: a study protocol. Prim Health Care Res Dev. 2022;23:e62. doi:10.1017/S1463423622000469

10. Al Kuwari MG, Bakri AH, Kandy MC, et al. The impact of COVID-19 on primary health care services in Qatar: 2 years of response and coping 2020-2021. J Family Med Prim Care. 2022;11(12):7743-7749. doi:10.4103/jfmpc.jfmpc_1259_22
11. Primary Health Care Corporation. Annual Statistical Report 2022. Primary Health Care Corporation, Qatar; 2023.
12. Al Saffer Q, Al-Ghaith T, Alshehri A, et al. The capacity of primary health care facilities in Saudi Arabia: infrastructure, services, drug availability, and human resources. BMC Health Serv Res. 2021;21(1):365. doi:10.1186/s12913-021-06355-x
13. Primary Health Care Corporation. National Primary Health Care Strategy 2013-2018. Primary Health Care Corporation, Qatar; 2014. https://Primary Health Care Corporation.qa/portal_-new/admin/images/documents/2019/Corporate% 20Strategic%20Plan%202019-2023%20English.pdf.
14. Primary Health Care Corporation. Primary Health Care Corporation Corporate Strategic Plan 2019 – 2023. Primary Health Care Corporation, Qatar; 2019. https://Primary Health Care Corporation.qa/portal_-new/admin/images/documents/2019/Corporate% 20Strategic%20Plan%202019-2023%20English.pdf.
15. Young HM, Nesbitt TS. Increasing the Capacity of Primary Care through Enabling Technology. J Gen Intern Med. 2017;32(4):398-403. doi:10.1007/s11606-016-3952-3
16. Primary Health Care Corporation. Strategy Planning and Health Intelligence Balanced Scorecard 2022. Primary Health Care Corporation, Qatar; 2023.

Supplementary tables

Table S1. Detailed scores for specific measure and constituent components

Measure	Components	Final Score
Measure 1: Primary health care policies (1/2)	Is there an active national health plan or national strategic plan in the country	Yes
	Is the national health plan and/or National Strategic Plan designed around PHC?	Yes
	Are policies around PHC evidence-based?	Yes
	Are policies around PHC formulated through a participatory process?	No
	Are policies around PHC embedded in a legal framework	Yes
	Do policies around PHC include the fundamentals: a service package defined, a financing mechanism, and M&E framework?	Yes
	Is there a joint review of the progress towards the objectives set out in PHC-related policies?	Yes
M1 Score		**4**
Measure 2: Primary health care policies (2/2) - Leadership	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.	4
	Sub-national/sub-regional operational capacity and reach of the national coordinating authority(ies)	4
	Proportion of time the national coordinating authority(ies) has adequate authority, budget and staff	4
M2 Score		**4**
Measure 3: Quality management infrastructure	Articulation of national direction on quality, often outlined as a national quality policy or strategy, or integrated with broader health systems planning.	Yes
	Identification and implementation of a package (2+ interventions) of appropriate quality interventions to create an enabling systems environment.	Yes
	Identification and implementation of a package (2+ interventions) of appropriate quality interventions to reduce harm to patients.	Yes
	Identification and implementation of a package (2+ interventions) of appropriate quality interventions to improve clinical effectiveness of health services.	Yes
	Identification and implementation of a package (2+ interventions) of appropriate quality interventions to engage patients, families and communities.	Yes
	Active systems that routinely collect and publish data on quality health systems.	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.	Yes
	Clearly stated leadership commitment to institutionalize quality of care throughout the health system.	Yes
M3 Score		**4**

Measure	Components	Final Score
Measure 4: Social accountability (1/2)	Engagement around PHC-related issues with the private sector, civil society and/or non-governmental organizations (NGOs) occurs:	4
	Involvement of the private sector, civil society and/or NGOs in health care planning, policy formation, and monitoring and evaluation	3
	Public disclosure on the status of PHC implementation and results occurs:	4
M4 Score		**3**
Measure 5: Social accountability (2/2) - Multi-sectoral action	Cross-government groups on primary health care	4
	Evidence of cross-sector integrated planning exists.	4
M5 Score		**4**
Measure 6: Surveillance	Track health and burden of disease metrics (morbidity, mortality, incidence)	Yes
	Detect, report, and investigate notifiable diseases, events, symptoms, and suspected outbreaks or extraordinary occurrences	Yes
	Continuously collect, collate and analyze the resulting data	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
	Format of surveillance systems	4
M6 Score		**4**
Measure 7: Priority setting	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.	4
	Proportion of priority setting exercises where stakeholder engagement occurs	3
	Frequency at which allocation of resources is based on results of the priority setting exercise.	4
M7 Score		**3**
Measure 8: Innovation and learning	State of mechanisms to recognize, evaluate, and scale successful innovations	4
	Engagement of stakeholders (government and private) in innovation and learning in PHC	3
	As a result of the performance of the above components, the occurrence of innovation and learning in PHC and scaling of successful innovations	4
M8 Score		**3**
Measure 9: Availability of essential medicines and consumable commodities	Proportion of primary care facilities that have all primary care-specific essential medicines and consumable commodities available	4
	Variation in availability between subnational areas and/or facility types	4
M9 Score		**4**
Measure 10: Basic equipment	Proportion of primary care facilities that have all basic equipment present and functioning	4
	Variation in availability between subnational areas and/or facility types	4
M10 Score		**4**

Measure	Components	Final Score
Measure 11: Diagnostic supplies	Proportion of primary care facilities that have all of the identified supplies needed to conduct the diagnostic tests.	4
	Variation in availability between subnational areas and/or facility types	4
M11 Score		**4**
Measure 12: Facility distribution	Has there been an assessment of primary health care density and distribution in the country?	4
	Are there documented targets for optimal health facility density and distribution to meet population health needs?	4
	What action has been taken towards achieving targets?	4
M12 Score		**4**
Measure 13: Facility amenities	Proportion of primary care facilities that have all of the identified amenities	4
	Variation in availability between subnational areas and/or facility types	4
M13 Score		**4**
Measure 14: Standard safety precautions and equipment	Proportion of primary care facilities that have all of the identified standard safety precautions and equipment in place	4
	Variation in availability between subnational areas and/or facility types	4
M14 Score		**4**
Measure 15: Civil registration and vital statistics	Completeness of registration of births nationally	4
	Completeness of registration of deaths nationally	4
M15 Score		**4**
Measure 16: Health management information systems (HMIS)	Proportion of primary health care facilities in which Health Management Information Systems are in place.	4
	Format of HMIS	4
M16 Score		**4**
Measure 17: Personal care records	Use of personal care records	4
	Unique patient identification (ID)	Yes
	Problem lists	Yes
	Care history and notes	Yes
	Medication lists and allergies	Yes
	Referrals and results of referrals	Yes
	Laboratory, radiology and other test results	Yes
	Format of personal care records	4
M17 Score		**4**
Measure 18: Workforce density and distribution	Workforce density (Ratio of active skilled health professionals per 10,000 population)	4
	Percentage of subnational administrative units that have a health workforce density below 50% of the national median density	4
M18 Score		**4**

Measure	Components	Final Score
Measure 19: Quality assurance of primary health care workforce	Capacity of the system to ensure that the primary health care workforce has the required qualifications	4
	Capacity of the system to ensure that all actively practicing primary health care workforce are qualified, including workforce with foreign credentials	4
	Capacity of the system to ensure that quality standards are met in practice	4
M19 Score		**4**
Measure 20: Primary health care workforce competencies	Are competencies specific to the PHC service package established for all occupations of the PHC workforce	4
	Competencies relevant to PHC are evidence-based	Yes
	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	Yes
	Competencies relevant to PHC incorporate all key functions of primary health care: first-contact access, continuity, comprehensiveness, coordination, and people-centered	Yes
	Standards for education that are based on competencies relevant to PHC have been set for all occupations of the PHC workforce	Yes
M20 Score		**4**
Measure 21: Community health workers	Is there an occupation of health worker whose primary responsibility is to conduct proactive outreach in the community to meet local population health needs?	4
	Trained and accredited to provide a suite of preventative, promotive, and curative (where appropriate) health services, tailored to the local population	Yes
	Formally employed and remunerated appropriately, in accordance with the local health worker salary scale	Yes
	Supported at frequent, regular intervals by a designated supervisor	Yes
	Integrated into local health facility service delivery system or teams	Yes
	Integrated into local health data reporting and feedback systems	Yes
M21 Score		**4**
Measure 22: Facility budgets	Maintenance of an annual budget at primary care facilities/primary health care networks	4
	Proportion of primary care facilities/primary health care networks that use a comprehensive annual budget to engage in a systematic forecasting exercise	4
M22 Score		**4**
Measure 23: Financial management information system	Maintenance of a financial management information system for primary care facilities/primary health care networks to track revenue and expenditure flows	4
M23 Score		**4**

Measure	Components	Final Score
Measure 24: Remuneration	Stability of primary health care staff remuneration	4
	Timeliness of primary health care staff remuneration	4
	Predictability of primary health care staff remuneration	4
	Differences in in reliability (stability, timeliness, and predictability) of remuneration across sub-national areas and/or facility type.	4
M24 Score		4
Measure 25: Local priority setting	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)	4
	Involvement of communities and local leaders in data interpretation and priority setting	4
M25 Score		4
Measure 26: Community engagement	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	4
	Impact of community engagement/input on the way in which services are structured and delivered	4
M26 Score		4
Measure 27: Empanelment	Proportion of the population that is empaneled to a provider, care team or facility	4
	Frequency at which patient panels are updated	4
	Patient choice	4
M27 Score		4
Measure 28: Proactive population outreach	Percentage of sub-regional units which provide proactive population outreach according to local health needs and priorities	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.)	4
M28 Score		4
Measure 29: Team-based care organization	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	4
M29 Score		4
Measure 30: Facility management capability and leadership	Percentage of primary care facilities that are led by a manager(s) who has official management training (for example, a certification, diploma, or degree).	4
	Percentage of primary care facility managers that receive an annual review and feedback on their management capabilities and performance	4
M30 Score		4

Measure	Components	Final Score
Measure 31: Information system use	Percentage of primary care facilities/primary health care networks that have staff capacity for information systems use	4
	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	4
	Percentage of primary care facilities/primary health care networks that routinely use information systems for conducting quality improvement activities.	4
M31 Score		**4**
Measure 32: Performance measurement and management (1/2)	Percentage of primary care facilities/primary health care networks that use established performance indicators for PHC	4
	Percentage of primary care facilities/primary health care networks that conduct routine monitoring of these performance indicators	4
	Percentage of primary care facilities/primary health care networks that have documented quality improvement work linked to underperforming areas	4
M32 Score		**4**
Measure 33: Performance measurement and management (2/2) - Supportive supervision	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)	4
M33 Score		**4**