

Knowledge Brief

Health, Nutrition and Population Global Practice

UNLOCKING SDG 3 SUCCESS: THE POWER OF DATA COLLECTION ON HEALTH SERVICE DELIVERY

Kathryn Andrews
Jigyasa Sharma

November 2023



Source: WB Flickr

KEY MESSAGE:

To accelerate progress toward global goals such as Universal Health Coverage and to overhaul primary health care, we must harness high-quality data on system performance vis-à-vis an average citizen's experience of receiving care; the World Bank's revamped Service Delivery Indicators Health Survey is stepping up to meet this crucial need.

INTRODUCTION

This year holds special significance as the midpoint in implementation of the Sustainable Development Goals (SDGs). With each step closer to the end of the SDG implementation window, efforts to measure progress and achievement toward these goals will only intensify. While rhetoric often emphasizes the importance of data for development, the global community has yet to fully translate this discourse into substantial investments in high-quality data for evidence-based decision-making. Beyond just financial commitments to robust data collection, there is a pressing need for greater political and scientific dedication.

Measurement should serve as a catalyst for action and accountability, but in turn, there must be accountability in measurement processes. Choices regarding what to measure, how to measure it, what remains unmeasured, and to whom findings are disseminated reflect political decisions and underlying conceptualization of “problems” and “solutions,” and can profoundly impact policy directions.

Comprehensive, framework-driven measurement activities are crucial to provide an unbiased and holistic platform for decision-making and for holding leaders and institutions

accountable. Furthermore, when done right, using a framework to guide domains of measurement induces accountability in the measurement processes by ensuring that measurement priorities are driven by an evidence-based common understanding of theories of change.

MEASUREMENT FOR CATALYZING IMPROVEMENT IN QUALITY OF CARE

In 2018, three global reports released on the quality of care emphasized the role of measurement of care quality and service delivery in accelerating progress toward Sustainable Development Goal 3 and related global objectives like Universal Health Coverage (Berwick et al. 2018). Measurement continues to stay in the spotlight since the era of the Millennium Development Goals, with substantial investments over the last two decades in health system performance measurement and information systems (WHO 2018).

Global efforts have concentrated on improving routine data collection through health management information systems (HMIS), which serve important reporting and auditing purposes, but are inherently limited in comprehensively assessing quality of care or performance of health systems in delivering services to their users. Routine administrative data, important in their own right,

often lack essential clinical details required to evaluate care quality, such as patient experiences, provider adherence to guidelines, and treatment appropriateness, and may be subject to biases, inaccuracies, and gaps.

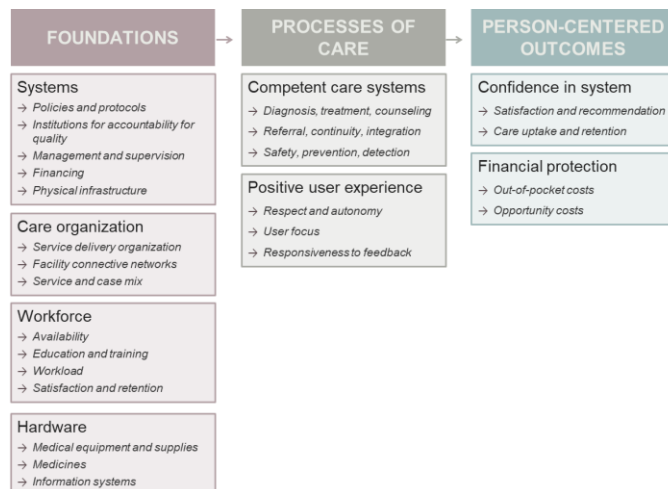
To surmount these weaknesses, survey data and complementary sources are crucial in providing a more holistic, patient-centered perspective on quality of care, which is essential for achieving improved health outcomes. Given the critical role of robust and reliable measurement in accelerating progress toward global goals, it is now imperative that the global development community aligns both its rhetoric and its actions with unwavering clarity and audacity to drive meaningful advancements in measuring quality of care.

OPPORTUNITIES AND DEFICITS IN HEALTH SYSTEM MEASUREMENT

There are several large-scale health facility survey programs already in existence to help shed light on service availability and quality. Specifically, the United States Agency for International Development’s (USAID’s) Service Provision Assessment (SPA) Surveys, the World Health Organization’s (WHO’s) Service Availability and Readiness Assessments (SARAs), and the World Bank’s Service Delivery Indicators (SDI) Health Surveys are all designed to collect nationally representative data on health care services.^{1, 2, 3} However, there are crucial shortcomings, both in terms of the quantity and quality of these data.

On the quantity side, limited investment in these types of data collection efforts has meant limited data availability. As an indication of the relative prioritization of these two types of data, the Demographic and Health Surveys (DHS) Program has conducted over 450 population-based surveys and just over 30 facility-based surveys since its inception.⁴ On the quality side, historically, the content and methodologies of SPA, SARA, and SDI have suffered from key shortcomings, including an emphasis on infectious and maternal and child health conditions, a focus on physical inputs and infrastructure, and outdated survey methodologies relating to questionnaire design and sampling. For example, the SDI Health Survey used methodologies that were cutting-edge upon program inception over a decade ago, including in measuring presence/absence of health care providers at the facility during a surprise visit by enumerators, provider competency assessments using simulation cases known as “clinical vignettes,” and direct observation of availability and functioning of key equipment and supplies. However, notable limitations included lack of a guiding theoretical framework, a unidimensional approach to measurement relating to health care providers, absence of any data collection from patients, and outmoded question design and sampling methodologies.

FIGURE 1: Theoretical Framework Guiding the Revamped Content of the World Bank’s Service Delivery Indicators Health Survey



Source: World Bank

IMPROVED MEASUREMENT FOR ACTION AND ACCOUNTABILITY

To address these widely recognized limitations, the World Bank’s SDI Health Survey team has undertaken a comprehensive revamp of the SDI Health Survey (Andrews and Sharma 2021). Leveraging a decade’s worth of insights and grounded in a fresh theoretical framework drawn from the latest literature, the survey uses a systems-based approach to measuring quality of care (Figure 1) (Kruk et al. 2018).

The survey content is also responsive to evolving global priorities (including pandemic preparedness and response, climate resilience, human resources retention and burnout, supply chain challenges, and a growing burden of noncommunicable diseases) (Sharma, Andrews, and Bhatia 2022; Bhatia, Andrews, and Sharma 2022). This new generation of SDI Health Surveys, introduced since 2021, represent a leap forward in the quality of primary data on service delivery (Andrews and Sharma 2021).

The revamped SDI surveys feature comprehensive measurement of the foundations, processes, and person-centered outcomes of primary care and employ best practices in survey question design. This efficiently captures the national and subnational patient experience (including in both public and private facilities), while robust quality assurance mechanisms improve data quality and interpretability. The clinical vignettes have undergone a meticulous revision process to rectify previous inaccuracies, align with the latest global and national guidelines for correct diagnosis and treatment of common conditions, and capture the drivers behind incorrect diagnoses and treatments.

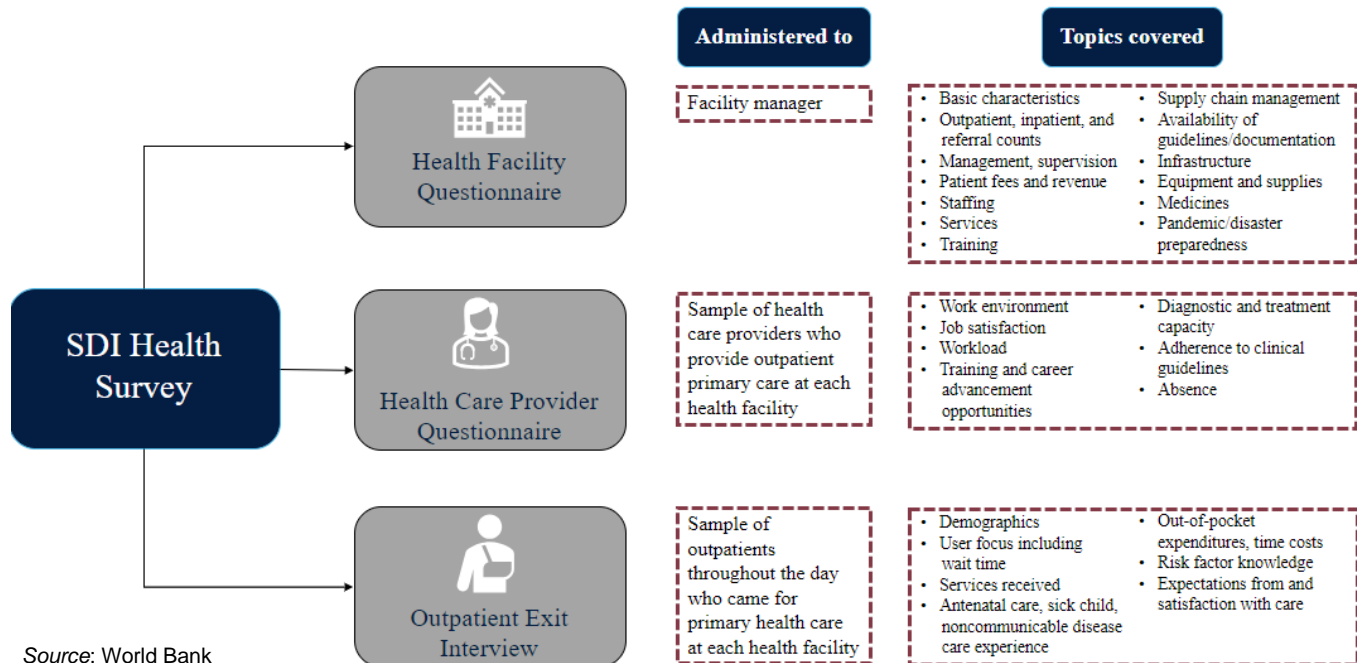
Shifting away from the notion of health care providers as inputs into (or worse, cogs in) the system, the SDI Health Survey tools now more appropriately spotlight providers as subjects of the system whose retention and well-being are key measures of a healthy service delivery system (Bhatia, Andrews, and Sharma 2022). Perhaps most notably, the new generation of SDI Health Surveys now include patient interviews (Figure 2), conducted using an innovative sampling methodology to mitigate bias.

approaches. This approach empowers decision-making, facilitates result monitoring, and enhances impact evaluation, thereby ensuring a more comprehensive and effective assessment of health system quality.

A CALL TO ACTION

The global community must recognize the imperative of strategic investments in primary data collection on service

FIGURE 2: Content and Structure of World Bank’s Revamped Service Delivery Indicators Health Survey



SITUATING SDI HEALTH SURVEYS IN THE BROADER MEASUREMENT LANDSCAPE

While SDI surveys are independent and reliable tools, other tools such as routine data collection platforms and rapid phone surveys play a complementary role. Periodic surveys play a vital role in validating both HMIS and rapid phone survey data while also bridging gaps that extend beyond the scope of these individual sources.

Moreover, their collective use enables a process of data triangulation, enhancing the overall understanding of health system quality. This synergy enables health systems to strategically plan interventions, adapt to diverse contexts, and continually improve the delivery of care.

The paramount challenge and opportunity in health system quality measurement lies in optimizing the “what,” “when,” and “how” of data collection. It entails a shift from isolated considerations of tools and methodologies to a strategic emphasis on selecting the most appropriate blend of

delivery—an essential cornerstone for informed diagonal decision-making.

While substantial resources are mobilized to reform health systems, a pronounced gap exists in prioritizing primary data collection that can and should accompany the reform process. To holistically assess progress, pinpoint areas for intervention, and promote effective learning and accountability, this critical element must not be relegated to the periphery.

Amidst the rhetoric surrounding evidence-based policy, substantive investments in primary data collection are indispensable. It is incumbent upon us to realize that evidence generation extends far beyond specialized or bespoke research initiatives; it embodies a global public good and the ethical responsibility inherent in our commitment to effective implementation and development activities.

References

- Andrews, K., and J. Sharma. 2021. *Service Delivery Indicators (SDI) Health Survey Refresh Fact Sheet*. Washington, DC: World Bank.
- Andrews, K., and J. Sharma. 2021. "A Revolution in Health Service Delivery Measurement." *World Bank Blogs*. <https://blogs.worldbank.org/health/revolution-health-service-delivery-measurement>.
- Berwick, D. M., E. Kelley, M. E. Kruk, S. Nishtar, and M. A. Pate. 2018. "Three Global Health-Care Quality Reports in 2018." *Lancet* 392: 194–95.
- Bhatia, R., K. Andrews, and J. Sharma. 2022. "Putting People First: Innovations in Measuring Health Care Worker Job Satisfaction." *World Bank Blogs*. <https://blogs.worldbank.org/health/putting-people-first-innovations-measuring-health-care-worker-job-satisfaction>.
- Kruk, M. E., A. D. Gage, C. Arsenault, K. Jordan, H. H. Leslie, S. Roder-DeWan, O. Adeyi, et al. 2018. "High-Quality Health Systems in the Sustainable Development Goals Era: Time for a Revolution." *Lancet Global Health* 6: E1196–E1252.
- Sharma, J., K. Andrews, and R. Bhatia. 2022. "Responding Better in Emergencies: Innovations in Measuring Health Facility Resilience for Pandemics and Other Disasters." *World Bank Blogs*. <https://blogs.worldbank.org/health/responding-better-emergencies-innovations-measuring-health-facility-resilience-pandemics-and>.
- WHO (World Health Organization). 2018. *Global Efforts in Measuring Quality of Care*. Geneva.

This HNP Knowledge Note highlights the key innovations of the revamped Service Delivery Indicators (SDI) Health Survey. For more information, please visit: www.worldbank.org/en/programs/service-delivery-indicators/health.

The authors are grateful to Jumana Qamruddin, Senior Health Specialist, World Bank, and Victoria Fan, Senior Fellow, Center for Global Development for their thoughtful review and feedback on the content of this knowledge brief.

Endnotes

¹ The DHS program. The DHS Program—Quality Information to Plan, Monitor and Improve Population, Health, and Nutrition Programs. <https://dhsprogram.com/Methodology/Survey-Types/SPA.cfm>.

² WHO (World Health Organization). Service Availability and Readiness Assessment (SARA). [https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-\(sara\)#:~:text=The%20Service%20Availability%20and%20Readiness,managing%20of%20a%20health%20system](https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-(sara)#:~:text=The%20Service%20Availability%20and%20Readiness,managing%20of%20a%20health%20system).

³ World Bank. Health Service Delivery Indicators. <https://www.worldbank.org/en/programs/service-delivery-indicators/health>.

⁴ The DHS Program. *The DHS Program—Survey Types*. <https://dhsprogram.com/Methodology/Survey-Types/index.cfm>.