LEVERAGING MHEALTH TO STRENGTHEN HEALTH SYSTEMS AND IMPROVE CARE
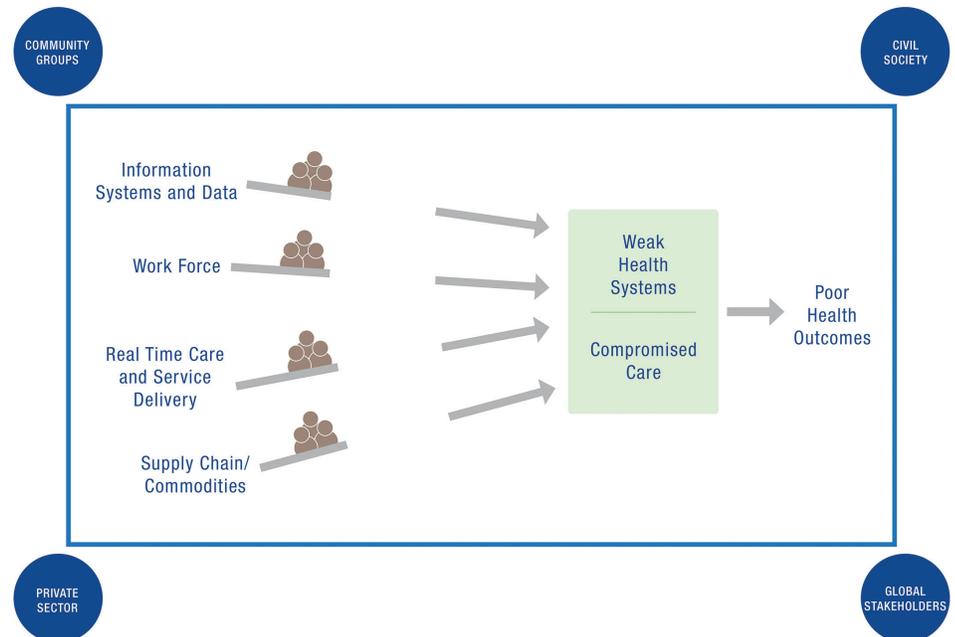
Poor quality of health services (community and facility) and weak health systems continue to impede delivery of proven health care interventions for leading causes of mortality and morbidity worldwide. Poor quality of care, such as low adherence with best practices, low provider competence, inadequate health information systems, and inefficient organization of services, hurts people and diminishes the return on global health investments.

Over the last fifteen years, mobile and electronic technologies have dramatically changed the health sector landscape. When used appropriately, mHealth technologies can help strengthen essential system functions as part of broader system strengthening efforts to improve quality of care and health outcomes. As health systems extend coverage of essential services in the era of Universal Health Coverage (UHC), it is imperative to optimize the design and use of mHealth technologies that can best augment health system and service delivery improvement efforts.

USAID ASSIST mHealth System Strengthening Framework

The USAID ASSIST Project is a five-year project of the Office of Health Systems of the USAID Global Health Bureau designed to improve health care in USAID-assisted countries, strengthen their health systems, and advance the frontier of improvement science. ASSIST considers mHealth technologies to be powerful tools for augmenting system strengthening efforts when appropriately applied.

A primary purpose of the USAID ASSIST mHealth Systems Strengthening Framework is to guide consideration and use of mHealth technologies that can best augment system strengthening and quality improvement efforts to improve care and health outcomes. The framework examines promising applications and evidence related to use of mHealth technologies to help

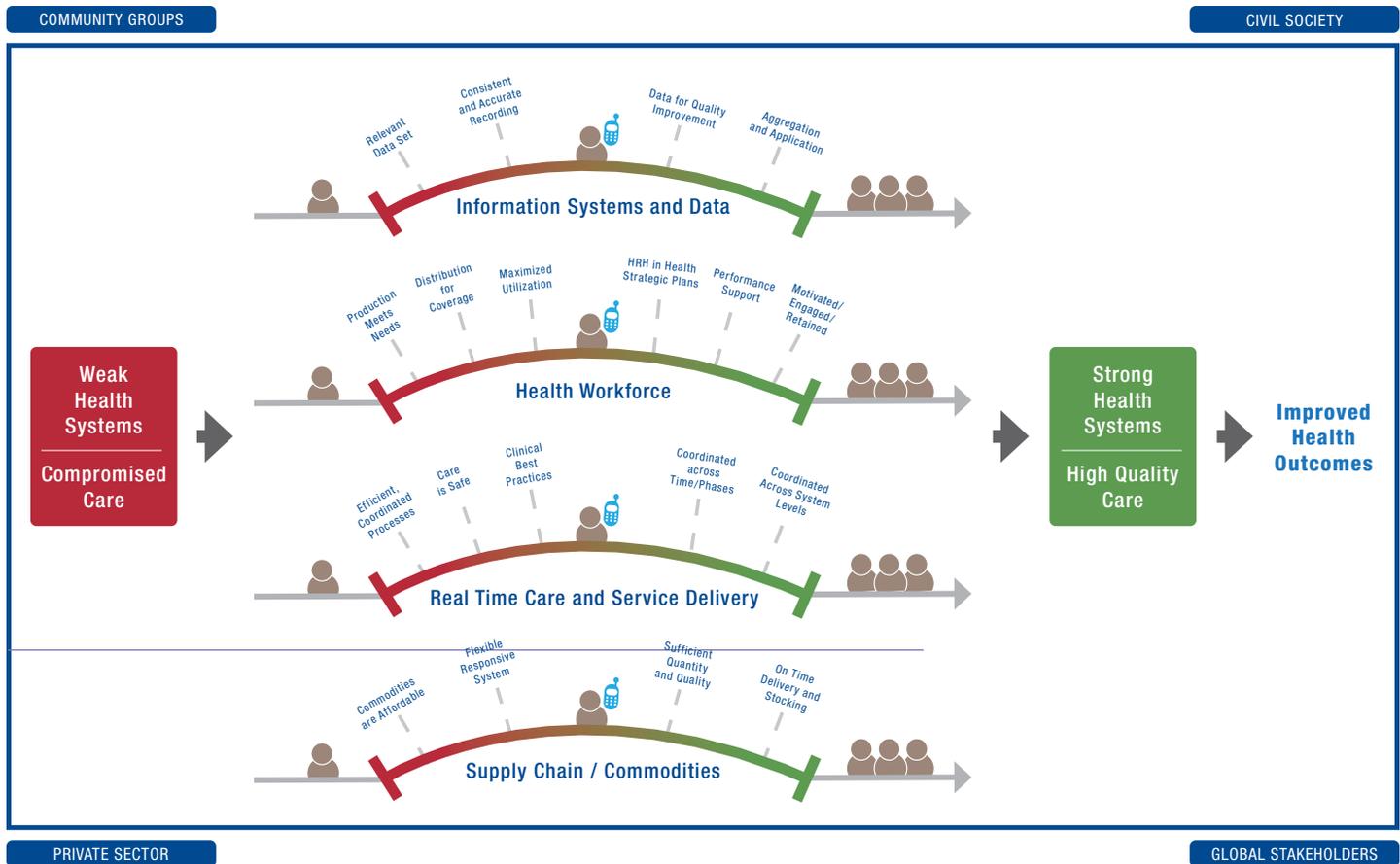**Figure 1. Common Gaps in Four Health System Domains**

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overcome common gaps in four domains in sub-national (e.g., district) health systems (see **Figure 1**).

Figure 2: ASSIST mHealth Systems Framework: Bridging Gaps

Depicted in **Figure 2,** the mHealth Systems Framework describes common gaps in essential system functions likely to be amenable to use of mHealth technologies in low- and middle-income countries across the four framework domains and builds on the contributions of many partners and ongoing efforts. A technical report outlining the framework and outputs of key activities informing development of the framework will soon be available at www.usaidassist.org.

Applying the mHealth Systems Framework to Improve Care in USAID Priority Countries

The USAID ASSIST Project applies mHealth technologies to augment systems strengthening and improvement efforts to help achieve priority health outcomes.

Illustrative examples include, but are not limited to:

- Design and use of simple mHealth communications tools (e.g., voice calls, text messages) for ensuring real-time communications between primary care clinic staff, hospital staff, and emergency transport

- Adaptation or design of simple clinical decision support tools (e.g., e-checklists, e-algorithms) for promoting adherence to evidence-based clinical guidelines

- Development of standardized referral protocols using mobile and electronic technologies

- Adaptation and application of lightweight electronic patient records for tracking and flagging essential health data (e.g., blood pressure)

- Application and adaptation of electronic health information platforms to track priority quality of care measures and analyze aggregated results to inform district-level supervision and continuous improvement at service delivery level

ASSIST works closely with Ministries of Health and local stakeholders to integrate use of mHealth technologies into system strengthening and improvement efforts to support national government and USAID priorities.

USAID Applying Science to Strengthen and Improve Systems

University Research Co., LLC, 5404 Wisconsin Ave., Chevy Chase, MD 20815-4811 USA TEL 301-654-8338 • FAX 301-941-8427 • www.usaidassist.org • assist-info@urc-chs.com