



Data Use Partnership

FEBRUARY 2016

Theory of Change



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Theory of Change

TOC for the Data Use Partnership:

Factors that accelerate the use of data for improved health system performance

eHealth building blocks*

with examples of data use accelerators

Electricity, connectivity, and server infrastructure are available when and where needed

INFRASTRUCTURE

Health workers are available and incentivized to collect and use information in care delivery

WORKFORCE

Formal policy making processes require evidence

LEGISLATION, POLICY & COMPLIANCE

Endorsed data platforms are supported by strong project and change management capacity

SERVICES & APPLICATIONS

Political champions promote data use at each level of the health system

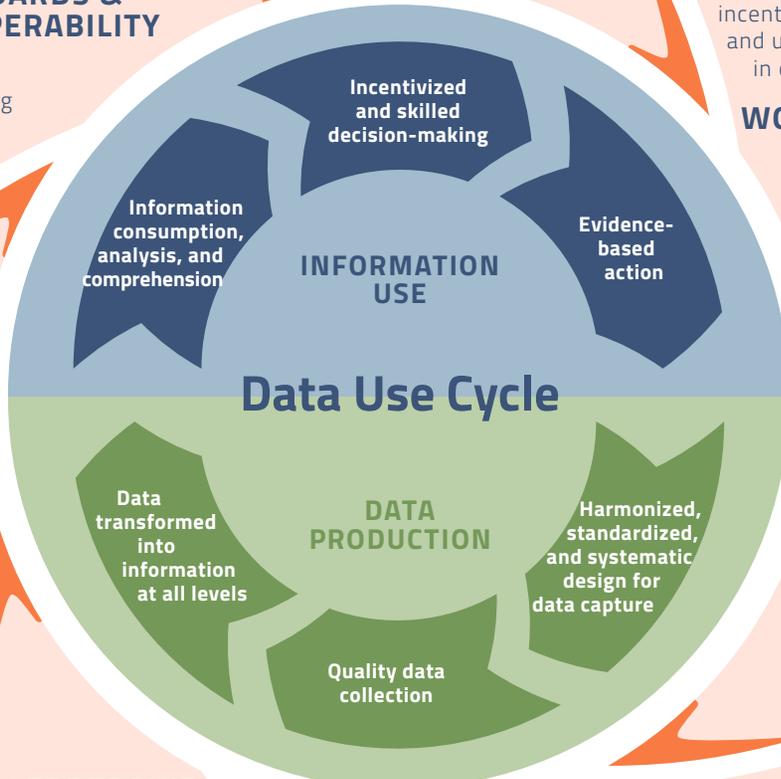
LEADERSHIP & GOVERNANCE

STRATEGY & INVESTMENT

Investment in health strategies requires transparent performance metrics

STANDARDS & INTEROPERABILITY

Guidelines and standards governing data terminology and exchange are in place and widely implemented



IMPROVED HEALTH SYSTEM PERFORMANCE

PATIENT-CENTERED CARE

- Increased awareness and demand for preventive care
- Accurate and timely diagnosis, treatment, and referral
- Adherence to treatment regimen

SERVICE DELIVERY

- Efficient patient throughput
- Accessible and stocked treatment sites
- Adequate numbers of qualified staff to meet site needs
- Linked financial and clinical planning at site level

PROGRAM MANAGEMENT

- Rational allocation and efficient use of resources
- Increased capacity to deliver and coordinate services
- Performance metrics drive improved quality



IMPROVED HEALTH OUTCOMES

LEARNING AGENDA FOR THE DATA USE PARTNERSHIP

- WEIGHTING** - What is the relative weight of each accelerator's impact on the data use cycle and health system performance?
- PHASING** - Are there dependencies between the accelerators that suggest an optimal phasing or sequencing in different contexts?
- INTERPLAY** - What is the potential multiplicative effect among the different accelerators?
- CONTEXT** - Does the context (including health system maturity) make a difference in the impact these accelerators have on the data use cycle and health system performance?

* eHealth components from WHO and ITU's National eHealth Strategy Toolkit

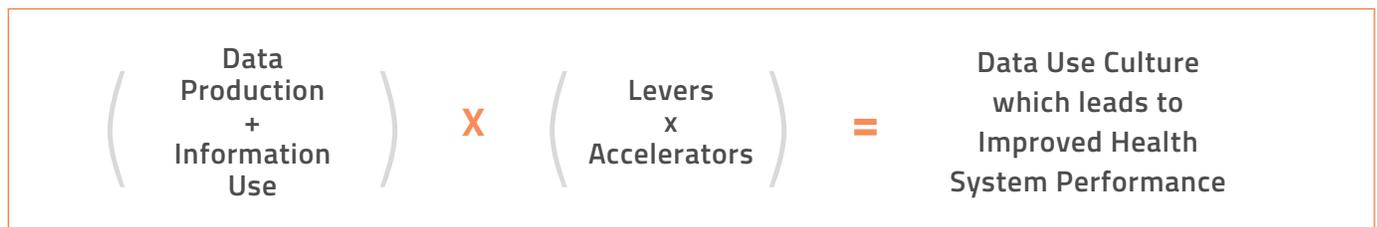
Theory of Change

The Data Use Partnership (DUP) Theory of Change (TOC) document includes this narrative and supporting graphic to illustrate our theory on how to improve data systems¹ and accelerate data use over a ten year period in order to perpetuate a cycle of better data production and enhanced use of information to improve the performance of health systems. *The principal hypothesis is that better data and regular data use will create a data use culture, leading to better decisions, an improved health system, and improved health outcomes.*

The DUP aims to examine to what degree various factors accelerate the cycle of data production and information use, and how that leads to improvements in health system performance in the identified focus countries. The eHealth building blocks from the World Health Organization (WHO) and International Telecommunication Union (ITU)'s National eHealth Strategy Toolkit² provide a framework and categorization of these factors, which we are terming "levers" in this TOC.

The presence of these levers enables an environment for data use, meaning that there is sufficient legislation, policy and compliance; services and applications; leadership and governance; strategy and investment; standards and interoperability; infrastructure; and, workforce to support the transformation. We believe that when these levers are acted upon or invested in, they improve and intensify data production and information use, generating momentum in the cycle of data use, which leads to an improved data use culture. Accelerators to each lever further amplify their impact, enabling evidence-based decisions that drive health system performance. Many contextual influences must be considered when working towards improved health system performance; however, these influences are well-documented elsewhere and therefore not explicitly presented in this depiction.

This theory can be conveyed by this formula:



Several activities within the data use cycle are further called out as being critical to the creation of a data use culture. Harmonized and systematic design for data capture of both clinical care and programmatic management coupled with quality data collection leads to data that is transformed into information at all levels. (These activities taken together are known as data production.) This consumable information can be further analyzed, comprehended, and employed by skilled decision makers who take and promote evidence-based actions. (These activities are known as information use.)

The evidence-based actions consequently fuel the need for more information and drive an increased demand for data, creating an improved data use culture. When data use culture is present, the stage is set for improving health systems outcomes such as improved systems management, facility management, and patient management.

The DUP aims to assess the relative importance of each of the levers that support and accelerate the data use cycle by improving data production and information use.

¹ 'Data systems' includes paper-based as well as digital health systems, incorporating both mHealth and eHealth technologies.

² World Health Organization and International Telecommunication Union. National eHealth Strategy Toolkit. Geneva: 2012. Available at: http://apps.who.int/iris/bitstream/10665/75211/1/9789241548465_eng.pdf?ua=1. Accessed February 2, 2016.