

APR 2025

Looking upstream to support a data-driven public health system

How understanding the behavior of high-level stakeholders can shape norms around data and drive more impactful interventions

The Challenge

Nigeria's maternal and neonatal mortality rates are among the highest in the world, and have persisted despite substantial attention and investment from the country's public health system and donors. Supporting data-driven decision-making is critical to ensure that public health spending is targeted to the greatest needs and most impactful interventions to reduce mortality. Health information systems—through which quantitative data are collected, processed, reported, and used to influence policymaking, program action, and research—are considered a foundation of public health. Yet while most births still occur at the community level in Nigeria, decision-makers rarely access and use data that captures these births and related mortality for program monitoring and quality improvement.

To address a need for comprehensive and high-quality community data on maternal and neonatal mortalities, state governments in Nigeria have been working with the Clinton Health Access Initiative (CHAI) to implement Community Based Health Management Information Systems (CBHMIS) and gather valuable insights for government decision-making and action. However, increased availability of quality data does not itself improve health outcomes; CHAI has identified gaps in use of the data for action among key stakeholders as an opportunity to strengthen their work—encouraging them to use all sources of data available to them to the greatest extent possible to save women's and children's lives.

Our Approach

CHAI Nigeria and ideas42 partnered to explore how upstream public health actors in Nigeria perceive and interact with maternal and newborn health data and the behavioral factors that influence their demand for and utilization of data for action. We interviewed 45 state-level public health actors involved in maternal health programming in either Lagos, Kaduna, and Kano states, focusing on high-level decision-makers as well as the implementers, analysts, and partners working with them.

Highlights

- Supporting data-driven decision-making is critical to reduce maternal and neonatal mortality and ensure that public health spending is targeted to the greatest needs and most impactful interventions.
- Partnering with the Clinton Health Access Initiative (CHAI) Nigeria, we're exploring how public sector health officials interact with and act on maternal and newborn health data.
- Our research uncovered five key insights and suggests opportunities to support effective utilization of high-quality data to strengthen policies and programs.

Results

Our findings provide insight into how high-level decision-makers' choices and behavior shape the norms, expectations, and possibilities for those downstream, and suggest ways to support effective utilization of high-quality data to strengthen policies and programs. Here we share five key insights and their implications for designing solutions:

1. **Narrow mental models of what constitutes a “decision” and what it means for a decision to be “data-informed” may limit opportunities for data-informed decision-making.**

Stakeholders were quick to emphasize that their state's work plans should be informed by data. However, the threshold for actions to be considered “data-informed” is often low. By presenting work as aligned with state priorities and indicators (e.g., reducing maternal mortality), and maintaining a robust monitoring and evaluation (M&E) data collection and reporting system, stakeholders feel justified to say everything they do is data-driven. Moreover, many steps within and outside the planning and budgeting process—such as prioritizing between activities, between implementation areas, between requests to make—present opportunities for high-level stakeholders to make recommendations or choices but that may not be recognized as “decisions” that could or should be informed by data, although they ultimately impact what is implemented.

“Most of whatever anybody is bringing up has to do with the data. So, if there's data to back up that there's a problem there, then we have to address the problem.”

—State Health Executive

DESIGN IMPLICATION

Capitalize on stakeholders' desire to present themselves as making data-informed decisions, and expand mental models of what it means to do so.

2. **The translational role of advocating for program recommendations is complex and at times ambiguous.**

High-level stakeholders play a key translational role between the technical teams under them and the political approvers above. While they expressed having high agency to make program recommendations and requests, stakeholders recognize the limitations of their own authority. They described a complex process that requires an array of hard and soft skills, relationships, and formal and informal communication to effectively advance priorities. Stakeholders described how gaps in communication skills, as well as technical and analytical abilities, can hold decision-makers back from being effective advocates. The ambiguity that comes with complex, multi-level processes where stakeholders can influence decisions that they cannot make autonomously may also lead to some diffusion of responsibility.

“So, I have realized it's knowledge and skill. The main problem we've had for years is our advocates are wrong. Yes. So, we are in the room and can't communicate the problem ... They don't have the data they need; they don't have the knowledge. They don't have the skill; they don't have the communication capacity. And we cannot answer the question and present the data, that has always been the problem.”

—State Health Executive

DESIGN IMPLICATION

Guide stakeholders to be more effective advocates in their translational role, considering not only hard skills in data analytics but also soft skills needed to advance priorities.

3. Performance monitoring and evaluation norms and processes focus attention and accountability on implementation rather than impact.

The way performance is evaluated often sends signals to stakeholders about what they should pay attention to. Evaluating an individual's performance against how well they or their teams executed against the annual work plan emphasizes implementation outputs, rather than impact, and may distract from whether or not the activities being implemented are best suited to achieve impact on priority outcomes. The way stakeholders present and review monitoring data during monthly and quarterly meetings also channels attention towards changes in indicators that are new or surprising—changes that may indicate data reporting or implementation failures that need correction, rather than chronically underperforming areas, which implementers may feel less agency to address.

“It is the activities. There is no other criteria [to evaluate performance] than in your activities.”

—Department Director

DESIGN IMPLICATION

Redirect attention toward outcomes and boost perceived agency to act on underlying challenges.

4. Follow-through on high-level decisions requires holding implementers accountable and being responsive to requests from the ground.

Stakeholders at all levels judge decision-makers' seriousness by whether they use available monitoring structures to follow up after a decision is made, which signals it as a priority for implementation. At the same time, downstream implementers cited many barriers to being able to follow through on planned programs and activities—such as insufficient budgets, human resource and infrastructure constraints, and political interference and corruption—which require high-level leadership and advocacy to navigate. Effectively translating decisions to action will require upstream actors to hold downstream actors accountable for implementation, while also providing the necessary problem solving and advocacy support they need to follow-through.

“There is need for political will because the people under him will not just say because a decision has been taken, they will just implement to be implemented. They are looking up to him to see if he is serious about that decision.”

—Non-government Partner

DESIGN IMPLICATION

Make it easier for upstream actors to send clear signals downstream, while reinforcing feedback mechanisms from the ground.

5. Perceptions about the value and reliability of community-based health data may limit its use.

Stakeholders recognized the limitations of using only health facility-based data to monitor health outcomes and were eager to access a more complete picture of the situation on the ground through community-based data. However, some perceived the potential uses of community data as relatively narrow, such as only for community engagement rather than informed policy-making. Moreover, stakeholders saw recent efforts to generate community-level data as still limited in scale, leading to incomplete or inconsistent data, and expressed concerns that low-skilled data collectors would generate less reliable data than is generated by health facilities, which is likely to color their interpretation of the data going forward.

“First, we have to achieve collecting that data accurately. And once that data can be collected accurately ... then we can start having the conversations.”

—Data Analyst

DESIGN IMPLICATION

Demonstrate a wide range of uses for community data. Highlight the risks of not using community data for decision-making, and reassure stakeholders that it is sufficiently reliable to meet their needs.

Takeaway

Effective governance and decision-making are critical to make further progress on reducing maternal and neonatal mortality. Understanding the behavior of high-level stakeholders with the agency to shape expectations and norms around data use will be critical to supporting a data-driven public health system. Engaging directly with stakeholders through the behavioral design process can inform practical solutions to support data-informed decisions and actions that target public health spending to the greatest needs and most impactful interventions for women and children.