

# ENABLING CITIZEN-DRIVEN IMPROVEMENT OF PUBLIC SERVICES

Leveraging Technology to Strengthen  
Accountability in Nigerian Healthcare



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Leveraging Technology to Strengthen  
Accountability in Nigerian Healthcare



THE WORLD BANK

REBOOT

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## PROJECT COLLABORATION

This project was the product of a unique collaboration across World Bank task teams and their Nigerian government counterparts. The task team leaders directed an intentionally inclusive and participatory process; as such, representatives from all of these groups were deeply involved in all aspects of the project. This ensured equal representation of each agency's priorities and constraints.

In particular, the World Bank Nigeria Health Team demonstrated significant openness towards innovative approaches, providing the Social Accountability team with the mandate to bring new technologies and approaches to the supervision of the NSHIP program. Without their active cooperation and support, My Voice wouldn't have been possible, as it would have lacked the institutional grounding necessary to make citizen feedback useful in the service provision chain.

The leadership and continued support to this initiative

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provided by the World Bank NSHIP task team made possible the active participation and support of representatives from the Nigerian government, both at the Federal Ministry of Health and throughout Nasarawa State. Officials frequently took time to review progress and provide feedback on key design decisions. Their inputs were critical in ensuring My Voice was designed to provide feedback that is useful within NSHIP's existing business processes and institutional capacity.

This close collaboration across agencies was a defining element of the project and offers an example of inter-agency collaboration that may be useful to apply in other projects.

## PROJECT HISTORY

The ICT4SA project began in 2011. From 2011–12, the project aimed to enhance social accountability in two World Bank programs: Fadama III, an agriculture program, and NSHIP. Due to technological implementation challenges that were beyond the control of the project team, the project was paused in late 2012. In 2014, after addressing the previous technical issues, ICT4SA was continued with a focus on integration with NSHIP, as by then Fadama III was in its close-out phase. The second iteration of ICT4SA began in April 2014. While this report is informed by lessons from work conducted between 2011 and 2012, it focuses primarily on project history and outcomes from April to October 2014.

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## ABOUT THIS REPORT

This report provides an overview of the Information and Communications Technology for Social Accountability (ICT4SA) project, carried out under the leadership and guidance of the World Bank's Nigeria Social Development and Health teams and implemented by Reboot. It summarizes ICT4SA's implementation context, methodological approach, and technical and programmatic design; presents analysis from its pilot implementation with the Nigeria States Health Investment Project (NSHIP); and provides an overview of planned further work.

Throughout the report, the text references supplementary materials that provide further or more technical details on various aspects of the project. They provide detailed designs and operational guidelines for future implementers of My Voice. They may also provide useful reference materials for development practitioners interested in leveraging ICTs to advance social accountability in development programming or to, more generally, improve public services based on citizen input. To access these materials, please contact Paula Rossiasco ([prossiasco@worldbank.org](mailto:prossiasco@worldbank.org)) or Panthea Lee ([panthea@reboot.org](mailto:panthea@reboot.org)).

# ACKNOWLEDGMENTS

The ICT4SA team is grateful to the many individuals who generously gave their time and expertise to the ICT for Social Accountability project. While there are too many individuals to list, we would like to especially acknowledge the contributions of the World Bank NSHIP task team leaders, Dr. Oluwole Odutolu and Dr. Dinesh Nair, and the multiple NSHIP task team members who tirelessly contributed to the conception and implementation of this project, including Dr. Benjamin Loevinsohn, Dr. Shunsuke Mabuchi, Dr. Gyorgy Fritsche, Ritgak Dimka, Mayowa Alade, Ugonne Eze, and Essienawan Ekpenyong. Their openness to new approaches, willingness to adapt along the way, and thorough inquiry not only allowed this initiative to take place in the first place, but were also integral to the outcomes of this project.

We also would like to specially acknowledge Dr. Nnenna Ihebuzor and staff from the NPHCDA; Dr. Janet Angbazo and staff from the Nasarawa SPCHDA; Ezekiel Jagga and staff from the Wamba LGA Department of Primary

Healthcare; and Juliana Umar and all the officers-in-charge and staff from Wamba LGA's PBF clinics. We are also grateful to the former Minister of Health, Dr. Muhammad Pate, and the Nigeria Communication Commission for their support in acquiring the SMS short code used to facilitate collection of My Voice feedback. The success of ICT4SA would not have been possible without these individuals' openness to new approaches and their guidance and insights throughout the project. We are grateful for your partnership and support.

Thank you to Caroline Sage and Merrick Schaefer who, along with Paula Rossiasco, first conceived of the project, and gave us the space to experiment, and to Abimbola Adubi and Dr. Dinesh Nair for their early support. Finally, many thanks to Sarah Fathallah, Jeremy Canfield, Beth Dunlap, Chris Francis, Akua Gyeke, Ryan Hartford, Anton De Winter, and Drew Roos, who all worked on a previous incarnation of this project.

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## ACRONYM LIST

<b>CHEW</b>	Community Health Extension Worker
<b>CSO</b>	Civil Society Organization
<b>DPHC</b>	Department of Primary Healthcare
<b>FMOH</b>	Federal Ministry of Health
<b>HMIS</b>	National Health Management Information System
<b>ICT</b>	Information and Communications Technology
<b>ICT4SA</b>	Information and Communications Technology for Social Accountability
<b>LGA</b>	Local Government Area
<b>MNO</b>	Mobile Network Operator
<b>NGN</b>	Nigerian Naira
<b>NPHCDA</b>	National Primary Healthcare Development Agency
<b>NSHIP</b>	Nigeria States Health Investment Project
<b>OIC</b>	Officer-in-Charge
<b>PBF</b>	Performance-Based Financing
<b>PHC</b>	Primary Healthcare (often used to describe Primary Healthcare Centers)
<b>RBF</b>	Results-Based Financing
<b>RBF-TA</b>	Results-Based Financing Technical Assistance Agency
<b>SMOH</b>	State Ministry of Health
<b>SMS</b>	Short Message Service (or text message)
<b>SPHCDA</b>	State Primary Healthcare Development Agency
<b>SPIU</b>	State Project Implementation Unit
<b>TTL</b>	World Bank Task Team Leader
<b>WDC</b>	Ward Development Committee

## 3 EXECUTIVE SUMMARY

- 6 APPROACH
  - 8 THE MY VOICE SYSTEM
  - 10 PILOT OUTCOMES
  - 12 FORWARD OUTLOOK
- 

### PART 1: 14 PROJECT CONTEXT

- 15 BACKGROUND
- 16 Leveraging ICTs to Enhance Social Accountability:  
Opportunities and Challenges
- 18 Understanding the Implementation Context

### PART 2: 28 SYSTEM DESIGN

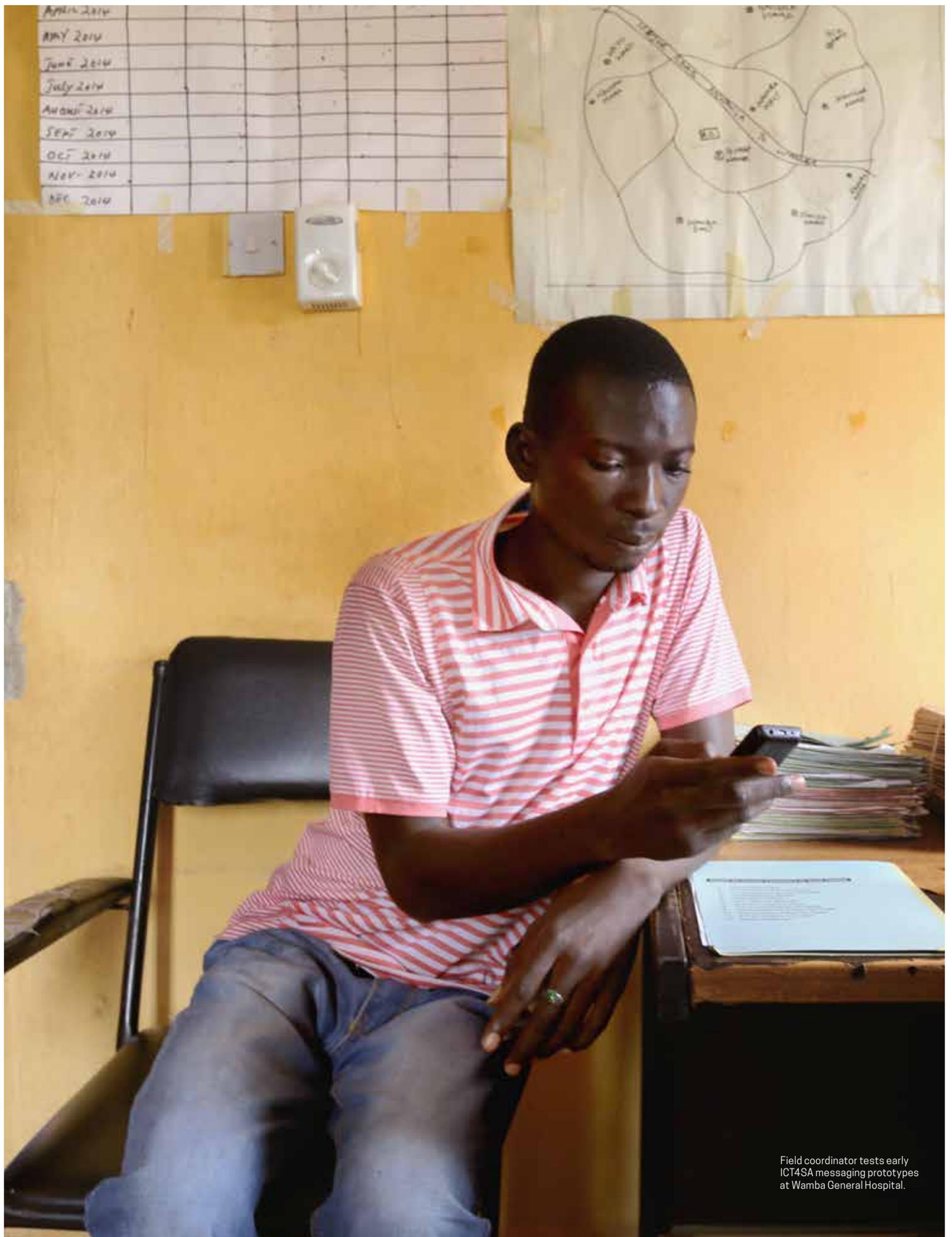
- 29 DESIGN APPROACH
  - 34 Project Stages and Activities
  - 39 Designing with ICT4SA Users
  - 46 THE MY VOICE SYSTEM
  - 48 How it Works
  - 51 My Voice: Step-by-Step
- 

### PART 3: 60 OUTCOMES & FURTHER APPLICATIONS

- 61 PILOT RESULTS
- 63 Pilot Analysis
- 74 Forward Outlook

## ANNEXES

- 78 ANNEX A. NSHIP INFORMATION NEEDS
- 79 ANNEX B. SELECT DESIGN COMPONENTS
- 91 ANNEX C. RESULTS DATA



Field coordinator tests early ICT4SA messaging prototypes at Wamba General Hospital.

# EXECUTIVE SUMMARY

The ICT for Social Accountability (ICT4SA) project was an initiative to strengthen the accountability of World Bank projects to their beneficiaries. It did so by collecting citizen feedback on their experiences with public services, then working with service providers and policymakers to adapt services and institutional procedures in response to citizen input. The project was implemented between April and October 2014.

ICT4SA resulted in the development of My Voice, a public service improvement model driven by citizen voice. My Voice was first piloted in Nasarawa State, Nigeria, from July to September 2014. Over a nine-week period, My Voice enabled unprecedented constructive dialogue among citizens, service providers, and policymakers around quality of primary healthcare services. Citizen feedback from the pilot led to changes in operational practices in local health facilities and informed larger program design and investment decisions.

## LEVERAGING ICTS TO ENHANCE SOCIAL ACCOUNTABILITY: OPPORTUNITIES AND CHALLENGES

A government that is responsive and accountable to its people is foundational to a legitimate democracy.

One of the most tangible expressions of public sector accountability is a state's ability to meet its citizens' basic needs through effective, efficient, and broadly accessible public services.

Over the past two decades, information and communications technologies (ICTs) have radically transformed the way that states interact with their citizens. By enabling rapid, low-cost dialogue between citizens and governments, digital technologies can help states better understand and serve their people and enable citizens to amplify their voices and participate in governance in powerful new ways.

Achieving constructive citizen-state engagement is difficult. An effective social accountability mechanism must address citizens' often diverse needs, behaviors, motivations, and constraints while remaining sensitive to government and service provider interests, processes, and capacities. Unless thoughtfully integrated with existing systems—and aligned with incentives across accountability actors—efforts to improve services by integrating citizen voice are likely to fail. While ICTs have the potential to greatly enhance citizen empowerment and government responsiveness, they can also introduce significant programmatic risks. These challenges speak to the need for intentional, contextually-informed design and implementation in any social accountability initiative.

## UNDERSTANDING THE IMPLEMENTATION CONTEXT

As in many other states in Sub-Saharan Africa, the quality of Nigeria's public health system is compromised by limited institutional capacity and funding. Resource constraints have exacerbated challenges within the healthcare system, including those related to the planning and execution of critical infrastructure and services. As a result, the country's performance across several key health indicators falls below regional and global norms. Compared to their peers around the world, Nigerian children are 2.5 times more likely not to live past the age of 5, and can expect to live 16 fewer years.

### **Collaboration between citizens and government can help strengthen Nigeria's public health system.**

By identifying and communicating their priority needs, citizens can help governments make effective, demand-driven investments to improve service delivery. This process, in turn, enhances the social accountability of the public health system.

The Government of Nigeria has recognized the potential of ICTs to enable greater citizen input to improve the allocative efficiency of public health resources. Existing initiatives, however, have struggled to make meaningful improvements in the accountability of public services.

In light of these historical challenges, ICT4SA set out to improve public services by collecting data on citizen needs and ensuring their integration into the relevant government service delivery processes. Central to its success was facilitating access to and usage of data that (1) policymakers needed, (2) citizens could provide, and (3) service providers could act on.

## THE NIGERIA STATES HEALTH INVESTMENT PROGRAM

ICT4SA was piloted within the Nigeria States Health Investment Project (NSHIP), one of the World Bank's key Health Results Innovation initiatives. Launched in 2012, NSHIP is a five-year, USD 170<sup>1</sup> million program to increase the delivery and use of high impact maternal and child health interventions and improve quality of care at selected health facilities<sup>2</sup>. It employs a results-based financing (RBF) approach to strengthen service delivery and institutional performance, and provides technical assistance to build state implementation capacity.

NSHIP is funded by the World Bank and implemented by the Government of Nigeria. It is currently operating in three states: Ondo, Adamawa, and Nasarawa. At state and local government area (LGA) levels, NSHIP provides annual funding for achievement against disbursement-linked indicators at state and local government (LGA) levels and performance based financing (PBF) at health facility level. Health facilities are assessed by their quantity of key services provided<sup>3</sup> and quality of care, and payments are provided based on performance.

NSHIP and ICT4SA shared a common vision: to both engage citizens and build government capacity to increase public sector accountability. As such, the two made natural partners. The ICT4SA pilot was structured to support NSHIP in realizing its objectives within the PBF component of the NSHIP project. ICT4SA worked closely with NSHIP stakeholders—patients, service providers, and policymakers—through design and development. ICT4SA's engagement with NSHIP aimed to integrate citizen feedback into existing NSHIP oversight mechanisms and processes to enhance the capacity of the health system to respond to citizen needs.



▲ Facility signboard for the Wamba Model Health Center, a primary healthcare facility located on Wamba town's main road.

## BUILDING UPON EXISTING ACCOUNTABILITY MECHANISMS

NSHIP's success depends on its ability to assess health system performance at various levels; understand the factors that enable or constrain quality of care; and make timely, evidence-based program decisions and adjustments. To do so, it uses various project oversight mechanisms—including business plans, staff performance evaluations, and quarterly quality checklists. Yet NSHIP recognized the limitations of its existing oversight mechanisms to integrate citizen perspectives on quality of care and was eager to explore how they may be enhanced or supplemented. Service providers needed more timely, specific data to better understand and serve patient needs. Policymakers needed to understand not just how facilities were performing but why. Understanding what program factors enhanced quality of care would then help them make investments and decisions to improve patient experience.

## THE PILOT CONTEXT: WAMBA LGA

The setting for ICT4SA's design and pilot implementation was Wamba, a rural and mountainous LGA in Nasarawa State, Nigeria. Existing cultural barriers to citizen-government engagement and norms and behaviors around technology usage in Wamba presented challenges for ICT4SA.

In Wamba, patients had few expectations for government as a service provider or to be otherwise responsive to citizens. In the public health system, Wamba patients were unaware of existing channels to provide feedback to service providers and believed that even if such channels existed, their comments would not be wanted or used. Service providers were also wary of opening themselves to patient scrutiny and worried about the risks such feedback might present for their careers. Many citizens in Wamba believed they had been previously misled or deceived by government initiatives, and were thus cynical toward public programs in general. Research also found that while most citizens could access mobile phones, mobile network strength and reliability are highly inconsistent.

# DESIGN AND IMPLEMENTATION APPROACH

**ICT4SA recognized that its success—and, indeed, the success of any social accountability initiative—was predicated on its ability to stimulate meaningful government response.**

As a result, the project prioritized deep engagement with government service providers and policymakers alongside research, design, and testing with citizens. The design of ICT4SA's programmatic model and technology platform emerged over time based on inputs and feedback from all three stakeholder groups.

Additionally, this project employed an intentional joint working relationship among project task teams

in the World Bank, NSHIP, and Reboot to ensure that project-relevant leaders and implementers were involved throughout the process and to allow for greater inclusion of multiple perspectives.

The project approach sought to illuminate contextual realities, build upon existing capabilities, and accommodate identified constraints. It was guided by five key principles.

## PROJECT STAGES AND ACTIVITIES

**Stage 1: Research and Design** focused on aligning stakeholder perspectives and expectations; conducting foundational design research; and developing, testing, and refining technical and programmatic designs.

**Stage 2: Pilot Implementation** centered around helping the NSHIP program in Wamba establish an effective, sustainable feedback loop between citizens and government by (1) generating awareness through training and communications outreach; and (2) facilitating service providers' utilization of feedback and local management of ICT4SA.

**Stage 3: Forward Planning** focused on responding to NSHIP's interest in continuing ICT4SA within Wamba and replicating in other geographies. As of publication, scaling activities were underway with the goal of ICT4SA implementation across NSHIP LGAs in Nasarawa State over the next year.

## KEY PRINCIPLES

### **1. Build deep contextual understanding and stakeholder trust by embedding in the local context.**

The consultant team lived among ICT4SA's target communities in Wamba LGA for the project duration and experienced firsthand various issues that would affect project design. Living in Wamba also helped build stakeholder trust in the project. As a result, later attempts to build institutional capacity were positively received by government counterparts.

### **2. Encourage institutional buy-in by tailoring to existing incentives and processes.**

ICT4SA aligned with existing NSHIP designs and operational procedures to make it easy for service providers and policymakers to incorporate citizen feedback into their work. ICT4SA incentivized institutional participation by appealing to the professional and personal motivations of stakeholders across the service delivery chain and responding to their information needs. It also reduced barriers to adoption by integrating ICT4SA data and processes into key NSHIP management mechanisms.

### **3. Optimize design and implementation through early, field-based prototyping and continuous iteration.**

A responsive, agile development approach enabled ICT4SA to optimize the technical and programmatic design based on user feedback. This approach also strengthened key counterparts' ownership over project outcomes. Prototypes were developed early in the project and tested with both citizen and government users. After product and program features had been refined based on testing feedback, a new prototype of higher fidelity was produced and then tested. This loop of test-refine-repeat was foundational to ICT4SA's design and implementation approach and was used through the end of the pilot.

### **4. Enable sustainability by respecting local capacity and building local ownership.**

ICT4SA's design was highly sensitive to considerations of NSHIP's capacity and resources. Institutional ethnography and ongoing engagement with service providers and policymakers helped develop a holistic, empirically grounded understanding of NSHIP's current and planned design, operational processes, and human and financial resources. This resulted in a program that was politically attractive and operationally realistic. As a result, at the end of the ICT4SA pilot, NSHIP elected to continue My Voice in Wamba and to support its replication in other geographic regions.

### **5. Guide institutional change with tailored, just-in-time training and support.**

For government to receive, process, and respond to citizen feedback required institutional process and cultural change. ICT4SA worked with NSHIP actors to navigate these changes by providing custom, hands-on support throughout the process. Recognizing their lack of prior experience in using patient feedback, ICT4SA provided on-site technical assistance and custom guides for NSHIP actors on how to interpret feedback reports, identify priority issues, explore root causes, and determine appropriate responses.

# THE MY VOICE SYSTEM

**One of the most visible project outputs is the My Voice platform through which ICT4SA enables social accountability for public services.**

My Voice is comprised of two integrated and mutually-reinforcing components: an open source technology platform and a programmatic model. Together, they enable My Voice to collect, manage, and analyze citizen inputs, and to support governments in providing meaningful responses to citizen needs.

The My Voice technology platform collects citizen feedback and presents it to service providers and

policymakers in formats tailored for their specific needs, technical capabilities, and operational resources: an online dashboard, print reports, or in-person meetings. My Voice's programmatic model then works to integrate citizen feedback into service providers' management processes and community fora to encourage and facilitate timely, responsive service improvements.

## KEY FEATURES

### **A free, easy-to-use SMS platform for collecting citizen inputs**

Simple user interactions and intuitive content accommodate literacy and language barriers among target user groups.

A reverse-billed shortcode ensures the system is free for all users, addressing financial barriers to participation.

### **Two models for feedback collection**

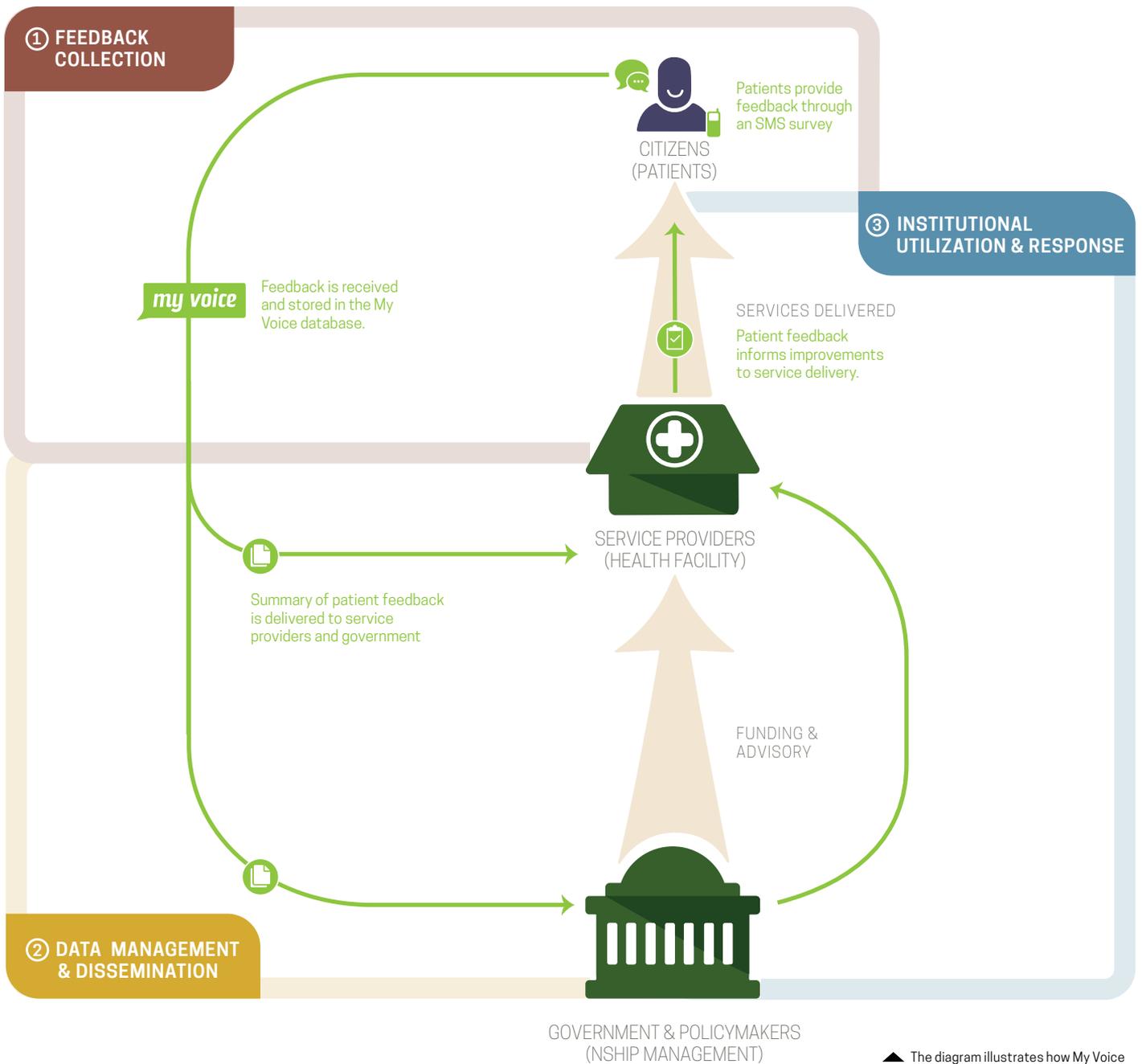
Institutionally-supported (through interactive surveys) and community-driven (through free-form reports), address individual preferences, capacities, and circumstances that may impact citizen participation. Both channels are integrated into familiar institutional processes or trusted community venues, helping encourage citizen use.

### **Custom data reporting**

A web dashboard presents citizen feedback to service providers and policymakers in custom formats and frequencies. By presenting tailored and easily accessible real-time intelligence, My Voice helps government actors use citizen feedback in their day-to-day work.

### **Training, guidance, and on-site support**

Training builds institutional capacity to provide timely, appropriate responses to citizen feedback. Helping government integrate citizen feedback into its program management channels and processes also supports My Voice's long-term sustainability.



# PILOT OUTCOMES

**Through intentional, contextually-informed programmatic and technological design, My Voice was able to integrate citizen feedback into existing NSHIP service delivery and management structures.**

My Voice was piloted in Wamba LGA across all NSHIP health facilities from July to September 2014. Although the pilot was only nine weeks in duration, results suggest that even in this limited period, My Voice enabled unprecedented constructive dialogue around quality of care between patients, service providers, and public health officials.

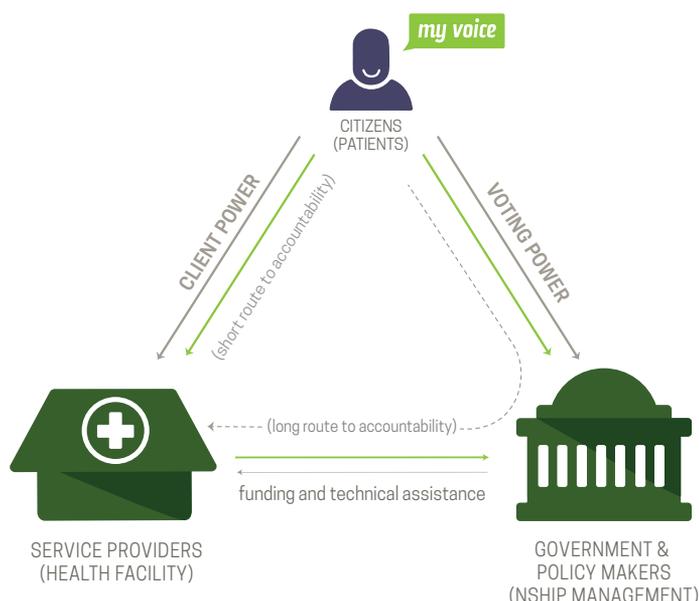
Patient feedback from the pilot has led to changes in operational practices of Wamba's PBF health facilities and Department of Primary Healthcare.

Through intentional, contextually-informed programmatic and technological design, My Voice was able to integrate citizen feedback into existing NSHIP service delivery and management structures. Beyond channeling citizen voice to NSHIP service providers and policymakers, My Voice also highlighted the potential benefits to each stakeholder in responding to citizen feedback and provided the technical assistance to help them do so. In working with service providers, My Voice enabled a more direct, 'shorter' path toward increased accountability in public healthcare. By providing policymakers with previously hard-to-access citizen perspectives, My Voice has helped them provide more effective oversight of service delivery; this, in effect, also strengthens the 'long' route to accountability.

During the pilot, My Voice registered 60 percent

(2,122) of total patients who visited Wamba's PBF facilities and received 460 completed reports of patient feedback.<sup>4</sup>

The volume of citizen participation in the My Voice pilot was significant given the historical lack of citizen trust in government in Wamba and citizens' limited engagement with the state. Other barriers include low citizen capacity to use mobiles and SMS, high rates of illiteracy, and poor telecommunications infrastructure in Wamba, which negatively influenced user experience.



▲ My Voice strengthens routes of accountability between citizens, services providers, and government.

At all levels of NSHIP, the degree of institutional responsiveness to collected patient feedback surpassed expectations. By providing NSHIP actors with timely, relevant patient feedback and analysis, My Voice enabled responsive service improvements and evidence-based decision-making across the program:

- **At the health facility level, service providers began developing and implementing action plans to address a range of concerns raised by citizens.** These included new initiatives to address perceived or actual price inflations, poor staff attitudes toward patients, irregular hours and lack of facility availability, and other issues that diminished quality of care.
- **At the local government level, the Department of Primary Healthcare (DPHC) developed protocols to guide and monitor facility responses to citizen feedback.** These included new procedures to enable DPHC oversight of facility commitments on demand-driven service improvements and revised protocols for staffing at PBF facilities.
- **At the state level, NSHIP began exploring how it may provide resources to support facility improvements and incentivize deeper staff engagement with My Voice.** State leadership was highly supportive of My Voice and, at the time of publication, was exploring how it could help fund facility improvements surfaced by citizens. It was also assessing how NSHIP could incentivize greater facility engagement with My Voice by incorporating My Voice results into the calculation of bonuses for facility management and staff. A longer period and wider geographic range of My Voice implementation is therefore likely to positively impact this process.
- **At the national level, NSHIP policymakers**

**began exploring how to expand use of My Voice across NSHIP and how to institutionalize citizen feedback as a program management tool.** Based on pilot results and support for My Voice from facility, LGA, and state counterparts, NSHIP leadership expressed interest in replicating My Voice in other regions and formally integrating its data and analysis within its program.

Both institutionally-supported and community-driven reporting models showed promise for citizen access to and use of My Voice.

Technical difficulties—including periodic network delays caused by unreliable mobile network signal, inconsistent prioritization of messages, and brief system malfunctions—delayed message delivery, impacting participation rates. While these technical challenges were not insignificant, ICT4SA and NSHIP agreed that the My Voice pilot utilization outcomes demonstrated that they were not insurmountable barriers to project success.

These results are significant, especially given the absence of formal programmatic integration between My Voice and NSHIP during the pilot. My Voice was quick to demonstrate value and produce visible results to citizens, service providers, and policymakers; this drove their increased and continued participation.

# FORWARD OUTLOOK

Based on pilot outcomes, NSHIP is continuing implementation of My Voice in Wamba and expanding the program across Nasarawa State. Additionally, NSHIP has expressed interest in scaling My Voice nationally and commissioning a third-party impact evaluation to inform future decisions about how to leverage the model to advance NSHIP objectives.

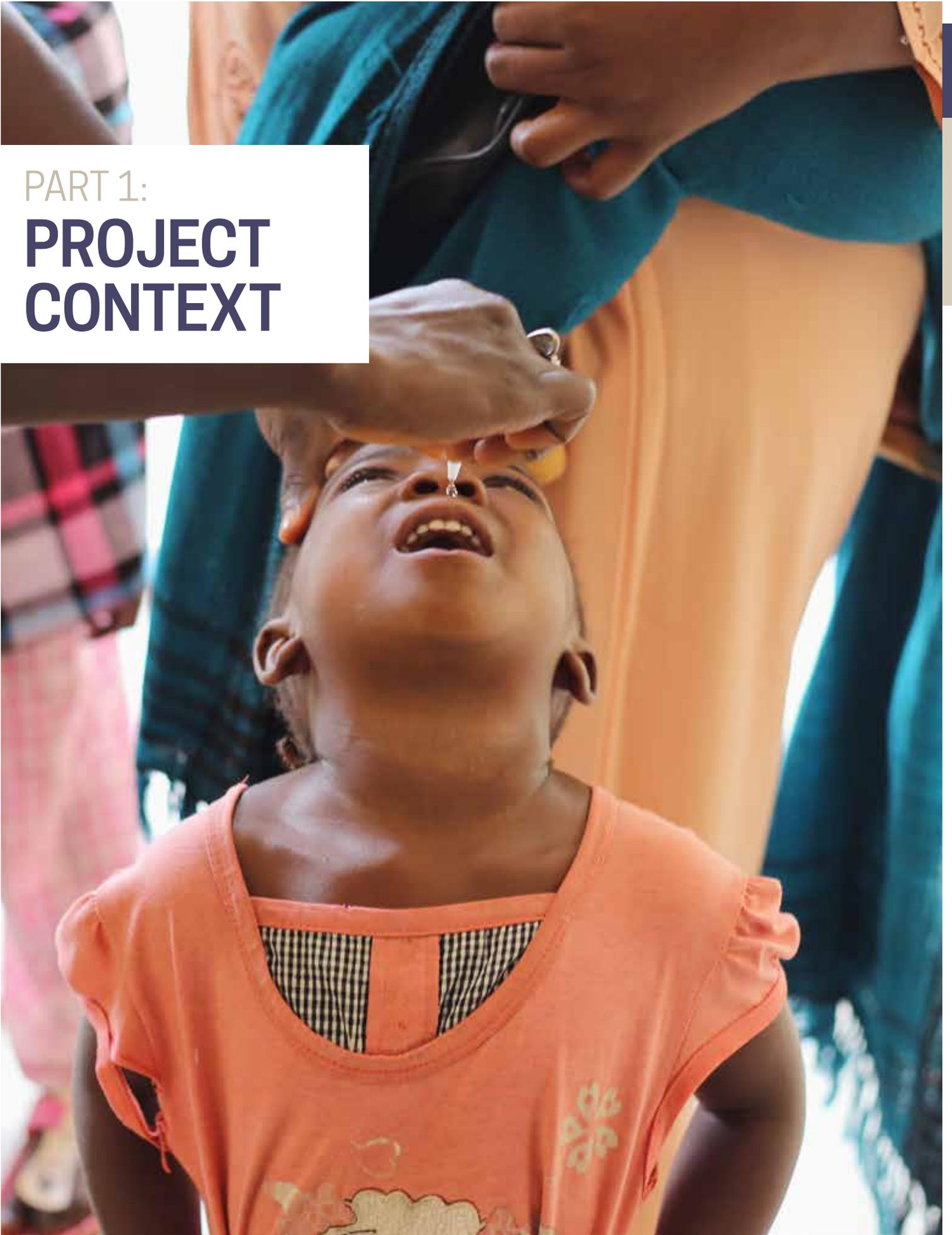
Translating the successes and learnings from the pilot into a scalable program requires a continuation of the approach employed during the pilot. As part of its expansion in the coming year, the My Voice implementation model—currently tailored for Wamba LGA—will evolve to support replication across NSHIP’s diverse implementation contexts. Iterations to My Voice’s technical and programmatic designs were identified based on pilot lessons and priorities articulated by NSHIP. Refinements will help My Voice increase citizen participation; integrate patient feedback into NSHIP PBF implementation instruments and processes; increase utilization of facility PBF funding for improvements in quality of care; support NSHIP dialogue around

implementation adjustments; and strengthen institutional capacity, ensuring the sustainability of ongoing, locally-owned implementation.

ICT4SA’s pilot outcomes were promising, and My Voice’s ability to enhance constructive citizen-government dialogue is only expected to increase with time. As citizens observe facility improvements based on their input, their use of My Voice will grow. Once NSHIP develops clear policies on how My Voice participation and performance will impact facilities and local DPHCs—and, specifically, as relevant to PBF payments and/or other resource support—service providers will increase their engagement with My Voice. Heightened participation from both citizens and service providers will lead to richer, more useful intelligence for NSHIP policymakers; this, in turn, should strengthen their interest in and use of My Voice in program planning and management. In concert, these actors’ inputs and actions can help deliver public services that are more effective, efficient, and responsive to citizen needs.



PART 1:  
**PROJECT  
CONTEXT**



# BACKGROUND

## **The ICT for Social Accountability (ICT4SA) project aimed to improve public services by creating a system for government to easily and effectively respond to citizen feedback.**

The initiative sought to strengthen the accountability of World Bank projects to their target beneficiaries. It did so by collecting citizen feedback on their experiences with public services, then working with service providers and policymakers to adapt services and institutional procedures in response to citizen input. The project ran from April–October 2014.

ICT4SA resulted in the development of My Voice, a public service improvement model driven by citizen voice. My Voice was first piloted in Nasarawa State, Nigeria, from July to September 2014, in collaboration with the Nigeria States Health Investment Project (NSHIP). Over a nine-week period, My Voice enabled unprecedented constructive dialogue around quality of primary healthcare services be-

tween citizens, service providers, and policymakers. Citizen feedback during the pilot led to changes in operational practices in local health facilities and demonstrated potential to inform larger program design and resourcing decisions.

The project was commissioned by the World Bank's Social Development Unit of the Urban, Rural and Social Development Global Practice, and implemented in collaboration with the Nigeria country office of the World Bank's Africa Health, Nutrition, and Population Unit. It was funded by the UK Department for International Development's Voice and Inclusion Trust Fund and implemented by Reboot, a social impact firm dedicated to inclusive development and accountable governance.

## LEVERAGING ICTS TO ENHANCE SOCIAL ACCOUNTABILITY: OPPORTUNITIES AND CHALLENGES

A government that is responsive and accountable to its people is foundational to a legitimate democracy. One of the most tangible expressions of public sector accountability is a state's ability meet its citizens' basic needs through effective, efficient, and broadly accessible public services.

Over the past two decades, information and communication technologies (ICTs) have radically transformed the way that states interact with their citizens. Widely-publicized successes in the fields of health, education, and financial services have underscored the ability of ICTs, and particularly mobile technology, to address persistent barriers to access and quality of services. Across sectors, ICTs are empowering governments to reach historically underserved populations.

Beyond facilitating the delivery of public services, ICTs also present significant opportunities to enhance the accountability of services—that is, their effectiveness in meeting and responding to citizen needs<sup>5</sup>. By enabling rapid, low-cost information dissemination and dialogue between citizens and governments, digital technologies can help states better understand and serve their people and enable citizens to amplify their voices and participate in governance in powerful new ways.

But achieving constructive citizen-state engagement is difficult. An effective social accountability mechanism must address citizens' often diverse needs, behaviors, motivations, and constraints while remaining sensitive to government incentives, processes, and capacities. Thoughtful design for both stakeholder groups is the key to its success—and its central challenge.

Too often, failure of social accountability initiatives is predetermined by inappropriate design that does not sufficiently address the web of social, political, and operational factors present in the implementation context<sup>6</sup>. Practitioners may assume that citizens will be eager to share their opinions, not recognizing that a history of state inaction or retribution in response to public input may dissuade citizens from doing so. Efforts are often biased towards generating citizen participation, and the lack of political interest and institutional capacity to respond to citizen feedback is only recognized too late. As a result, the feedback loop is compromised from the start.



And while ICTs have the potential to greatly enhance citizen empowerment and government responsiveness, unless thoughtfully integrated, they can also introduce significant programmatic risks. In development practice, the likelihood of success of an ICT-based intervention is nearly matched by the risk of failure. In a study of World Bank projects implemented between 2003 and 2010, 41 percent of those that included an ICT application did not achieve (or were not expected to achieve) their intended results. In 70 percent of such projects, the ICT component was delayed, canceled, or otherwise modified. Indeed, when overall project success hinges on its ICT components, carefully crafted technology and programming become even more critical.<sup>7</sup>

Rather than forming insurmountable barriers, these challenges speak to the need for intentional, contextually-informed design and implementation in any social accountability initiative.

▲ ICT4SA local field researchers engage healthcare management in a workshop on use of mobile phones for collection of patient feedback.

## UNDERSTANDING THE IMPLEMENTATION CONTEXT: PUBLIC HEALTH IN NIGERIA

As in many other states in Sub-Saharan Africa, the quality of Nigeria's public health system is compromised by limited institutional capacity and funding. In 2010, health sector expenditure was 5.7 percent of government spending<sup>8</sup>. This compares to an average of 9.6 percent across countries in the Africa region and a global average of 15.1 percent.

Resource constraints have exacerbated challenges within the healthcare system, including those related to the planning and execution of critical infrastructure and services. As a result, the country's performance across several key health indicators falls below regional and global norms<sup>9</sup>. Compared to their peers around the world, Nigerian children are 2.5 times more likely not to live past the age of 5, and can expect to live 16 fewer years. Nigeria's performance across a few common health indicators are presented in the following table:

	NIGERIA	REGIONAL AVERAGE	GLOBAL AVERAGE
Life expectancy at birth	54 years	58 years	70 years
Under-five mortality rate (per 1,000 live births)	124	95	48
Maternal mortality ratio (per 100,000 live births) <sup>10</sup>	560	500	210
Prevalence of HIV (per 100,000 population)	2,030	2,774	511
Incidence of malaria (per 100,000 population)	28,710	18,579	3,752



Collaboration between citizens and government can help strengthen Nigeria's public health system. By identifying and communicating their priority needs, citizens can help governments make effective, demand-driven investments to improve service delivery. And this process, in turn, enhances the social accountability of the public health system.

The Government of Nigeria has recognized the potential of ICTs to enable greater citizen input to improve the allocative efficiency of public health resources. In 2012, it revived the National Health Management Information System (HMIS), the country's centralized patient health information management platform. Other initiatives include Saving One Million Lives (to improve health services through digitized health inventories, mobile cash transfers, and other mechanisms); RapidSMS Birth Registration (to facilitate digital birth registration via SMS nationwide); and the Mobile-to-Application Data Exchange (MADEX)<sup>11</sup> (to improve health sector monitoring and evaluation through digital data management).

While they show significant potential, national initiatives such as HMIS and MADEX have struggled to translate their data into direct service improvements for citizens. More 'bottom-up' efforts, such as grassroots citizen reporting efforts, on the other hand, are unable to gain traction among government service providers or policymakers. Without integrating with the appropriate government bodies or processes, these citizen-driven initiatives struggle to make meaningful improvements in the accountability of public services.

In light of these historical challenges, ICT4SA set out to improve public services by collecting data on citizen needs and ensuring their integration into the relevant government service delivery processes. Central to ICT4SA's success was facilitating access to and usage of data that (1) policymakers needed, (2) citizens could provide, and (3) service providers could act on.

# THE NIGERIA STATES HEALTH INVESTMENT PROJECT

ICT4SA was piloted in partnership with the Nigeria States Health Investment Project (NSHIP), one of the World Bank's key Health Results Innovation initiatives.

Launched in 2012, NSHIP is a five-year, USD 150 million program to increase the delivery and use of high impact maternal and child health interventions and improve quality of care at selected health facilities.<sup>12</sup> It uses a results-based financing (RBF) approach to strengthen service delivery and institutional performance, and provides technical assistance to build state implementation capacity.

NSHIP is funded by the World Bank and implemented by the Government of Nigeria's National and State Primary Healthcare Development Agencies (NPHCDA, SPHCDA), with oversight from the Federal and State Ministries of Health (FMOH, SMOH).<sup>13</sup> It is currently operating in three states: Ondo, Adamawa, and Nasarawa.<sup>14</sup>

## PERFORMANCE-BASED FINANCING

As part of its RBF model, NSHIP employs performance-based financing (PBF) to strengthen the quality of care delivered by its facilities. A 2010 World Bank paper provides some context on the PBF approach:

*"Performance-based financing (PBF) can be defined as a mechanism by which health providers are, at least partially, funded on the basis of their performance. [The approach] can be contrasted with the line-item approach, which finances a health facility through the provision of inputs (e.g. drugs, personnel).*

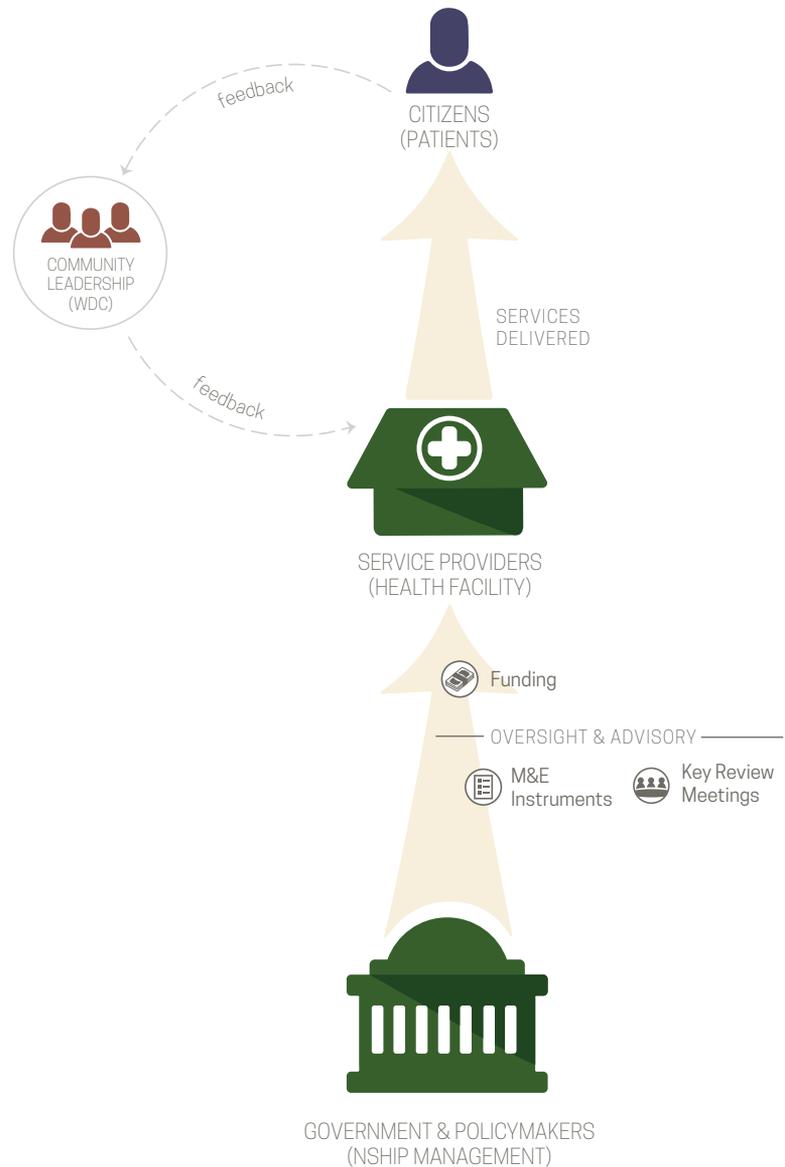
*PBF [represents] a radically different approach to the health system, giving organizational units substantial decision rights over their resources (i.e. autonomy). [...] As health facilities are remunerated according to their outputs, they have strong incentives to satisfy users. Granted more autonomy in exchange for greater accountability for results, health facilities can tailor initiatives to the populations they serve."<sup>15</sup>*

The PBF model implemented by NSHIP was developed by the African PBF Community of Practice in 2010 and implemented by the World Bank in 17 countries in Africa. This model directly distributes funding to health facilities and local and state governments based on the quantity and quality of services delivered each quarter. While NSHIP provides facilities with guidance on how to spend their PBF payments—a suggested 50 percent on staff bonuses and 50 percent on drugs and improved working conditions—facility management ultimately retain a high degree of autonomy in allocating these funds.<sup>16</sup>

In Nigeria's decentralized healthcare system, NSHIP intervenes at three levels: state, local government, and health facility. At state and LGA levels, NSHIP provides annual funding for achievement against jointly-agreed disbursement-linked indicators. Local Departments of Primary Healthcare (DPHC) receive funding based on their performance against a scorecard. Health facilities are assessed on their quantity and quality of care, and payments are provided based on performance. These PBF facilities have autonomy in how they allocate their performance payments between operational needs and bonuses to individual health workers.

The diagram to the right shows, at a high level, how NSHIP management, service providers, and citizens currently interact in the NSHIP process of healthcare service delivery.

NSHIP and ICT4SA shared a common vision: to both engage citizens and build government capacity to increase public sector accountability. As such, the two were natural partners. The ICT4SA pilot was structured to support NSHIP in the achievement of its goals and worked closely with NSHIP stakeholders—patients, service providers, and policymakers—through design and development.



## BUILDING UPON EXISTING ACCOUNTABILITY MECHANISMS

NSHIP's success depends on its ability to assess health system performance at various levels; understand the factors that enable or constrain quality of care; and make timely, evidence-based program decisions and adjustments.

To do so, it uses various oversight mechanisms—including business plans, staff performance evaluations, and quarterly quality checklists. Yet NSHIP recognizes the limitations of its existing mechanisms and resources to meet programmatic needs. For example, NSHIP's design stresses service provider autonomy and decentralized problem-solving, but LGA and facility staff often lack the data they need to do so.

Limited access to such information hinders evidence-based service delivery and management at all levels of NSHIP. Health facility management requires this information to guide investments of their PBF funds in maximizing the quality of care delivered. DPHC staff tasked with advising facilities on how to improve their services also lack the information they need to do so. They only have access to aggregated, quarterly reporting and analysis of facilities' performance on indicators such as quantity of services delivered. These rankings provide little insight on the contributing factors to quality of care.

NSHIP OVERSIGHT MECHANISM	LIMITATIONS OF MECHANISM	OPPORTUNITIES FOR ICT4SA
<p><b>Quality Checklist</b></p> <p>A quarterly health facility inspection conducted by LGA staff. A score above 60 percent qualifies the facility for receiving PBF funding.</p>	<p>Provides limited assessment of quality of care by assessing facilities largely on structural assets and physical presence of medical materials. Does not include patient perspectives, and is conducted via scheduled visits, allowing facilities to prepare in advance.</p>	<p>Citizen feedback could provide critical, supplemental perspectives, leading to more holistic assessment of facilities' quality of care provided. An ICT mechanism could enable patients to provide feedback at any time, allowing constant monitoring of health service delivery.</p>
<p><b>Quantity Verification</b></p> <p>A monthly exercise administered by SPIU (currently) to check PBF disbursement invoices for services delivered against services delivered recorded in other registers.</p>	<p>Only able to check quantity, not quality, of services delivered. Has limited ability to accurately validate service delivery, as process relies on data points (e.g. staff-recorded patient mobile numbers on invoice) that are difficult to verify.</p>	<p>Citizen feedback could supplement by providing perspectives on the quality of services delivered. ICT platform would capture accurate patient data (e.g. mobile numbers from usage). The data would only be accessible to authorized users and could be used for verification.</p>
<p><b>Facility Business Plan</b></p> <p>A quarterly 10-page planning tool prepared by facility management that outlines targets for quantity of services delivered and strategies for meeting goals in upcoming quarter.</p>	<p>Often seen as rote, time-consuming activity by facility management to set goals for increased client volume and visits. Feedback provided by LGA staff is often delayed, and quality is inconsistent. This in turns slow facilities' execution of activities against planned timelines.</p>	<p>Direct access to citizen feedback could motivate facilities to set performance targets related to quality of care, not just volume of clients or services delivered. ICT mechanism would enable timely capture and usage of citizen feedback, which could then be rapidly integrated into facility management processes.</p>
<p><b>Client Customer Satisfaction Survey (CCSS)</b></p> <p>A bi-annual survey administered to a random sample of patients, administered by a local CSO hired by the RBF-TA, to measure patient satisfaction on facility service delivery.</p>	<p>Labor-intensive for both customers and survey staff. RBF-TA has not been hired and so implementation of the survey is not yet consistent. As a result, utility and frequency of collected data are yet unknown.</p>	<p>ICT mechanism could enable assessment of client satisfaction from much broader sample of patients than is possible via survey administered in person. Once early investments made to develop ICT platform, ongoing implementation requires relatively low effort and resources. Ongoing implementation would not be reliant on the RBF-TA, a role which has not yet been filled.</p>

National- and state-level policymakers face similar challenges. A common concern was that the data and analysis generated by existing NSHIP oversight mechanisms largely report on how facilities performed, but not why. While policymakers know facilities' relative rankings on quality of care, they lack understanding of what factors contribute to high or low performance. As a result, strategic decisions may be taken on anecdotal accounts or personal experience. (For details on the information needs of different NSHIP stakeholders, see Annex A: NSHIP Information Needs).

NSHIP recognized its oversight mechanisms could be enhanced with timely, reliable, and actionable information on patient needs and factors that contribute to facility success.

NSHIP was eager to explore how ICT4SA could support in meeting these information needs. The table on the left summarizes limitations of existing oversight mechanisms, as surfaced through ICT4SA's design research process, and opportunities to enhance them through citizen feedback.

Information from NSHIP oversight mechanisms is reviewed in various management channels, which primarily take the form of multiple program meetings. These are regular, scheduled fora—from monthly facility staff meetings to quarterly national portfolio reviews—which also serve as key accountability channels for NSHIP. In these meetings, NSHIP actors discuss performance data to drive key operational and strategic decisions.

## KEY MANAGEMENT CHANNELS

### STAFF MEETING

MONTHLY

Facility management and staff discuss monthly performance in terms of quantity of services delivered, planned outreach events for community immunizations, and priority diseases.

### FACILITY PERFORMANCE REVIEW

QUARTERLY

Facility management and LGA DPHC discuss facility performance on quality checklists, PBF funding allocations based on quantity of services delivered, and business plans.

### TECHNICAL WORKING GROUP MEETING

QUARTERLY

NSHIP and MoH stakeholders at the national and state levels discuss performance across all states and share knowledge to suggest approaches to strengthen program achievements or overcome challenges.

### WDC MEETING

MONTHLY

Facility management and community representatives from the WDC discuss ways to increase facility patronage and address facility challenges.

### LGA STEERING COMMITTEE MEETING

QUARTERLY

LGA DPHC, the PBF Head of Facilities, and select officials from the SPIU and SPHCDA convene to discuss performance of all LGA PBF facilities and make resourcing or training requests to the State.

### SUPERVISORY MISSION

QUARTERLY

The World Bank and national-level NSHIP stakeholders review overall program progress and identify main issues or achievements across participating states.

## THE PILOT CONTEXT: **WAMBA LGA**

The setting for ICT4SA's design and pilot implementation was Wamba, a rural and mountainous LGA in Nigeria's Nasarawa State. Its population of 72,894 is dispersed across one main town and several smaller villages and settlements across the LGA and consists largely of smallholder and subsistence farmers, small shopkeepers, tradespeople, and nomadic herders.<sup>17</sup> The most common spoken language is Hausa, although many residents speak other local languages. English is the most widely recognized written language, but only 47 percent of the population is literate.<sup>18</sup>

In Wamba, cultural barriers to citizen-government engagement, as well as norms and behaviors around technology access and use, presented challenges for ICT4SA.

### ATTITUDE TOWARD FEEDBACK

While technical barriers such as literacy and network connectivity certainly presented challenges for the implementation of an ICT-supported social accountability system, the most significant hurdles were cultural. Research found that many citizens in Wamba believed they had been previously misled or deceived by government initiatives, and were thus skeptical of public programs in general. They had few expectations of government as a service provider or being otherwise responsive to citizens. As a result, communities were often highly self-reliant. Many pooled resources and self-organized to address common needs. Instead of relying on state law enforcement, for example, some villages supported their own vigilante groups, which were staffed by local youth and tasked with policing petty crime. Tired of waiting for government to build health clinics for them, some communities had erected their own facilities.

**Most citizens did not voice their concerns to government, even those related to core state functions or public services, due to the perceived futility of doing so.**

Rather, they raised concerns with traditional leaders such as *emirs* and *etsus*, village chiefs, and religious leaders. Depending on the issue, such leaders could then organize their communities to address the concern, mediate dispute resolution, or surface the issue to government officials. In the latter scenario, many citizens remained skeptical about the likelihood of government response and, as a result, communities simply tried to make the most of what they had.



▲ Community healthcare workers of Wamba Model Health Center waiting for the arrival of new patients at the facility's entrance.

In the public health system, patients in Wamba were unaware of existing channels to provide feedback to service providers. When presented opportunities to do so in early phases of ICT4SA, many remained hesitant to act; they did not believe that their comments were wanted or would be utilized.

Their skepticism was understandable. No key informants and respondents consulted during project research could recall prior examples of government requesting and using citizen input to make improvements in healthcare delivery. And while NSHIP's design includes a biannual patient satisfaction survey, at the time of the ICT4SA pilot, this feature had not yet fully been implemented in Wamba.

Service providers were also wary of opening themselves to patient scrutiny. In early concept and

design testing for ICT4SA, patient feedback delivered to health facilities was dismissed by staff, who cited patients' ingratitude or lack of education for the largely negative feedback.

Facility management staff were apprehensive about receiving patient feedback and worried about the risks such feedback might present for their careers.

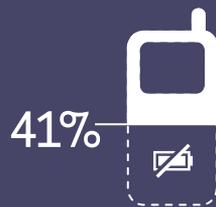
## UNDERSTANDING CONTEXTUAL LIMITATIONS TO ICT ACCESSIBILITY

Field research on Wamba's mobile access and usage landscape deeply informed the design of ICT4SA. While the project aimed to be broadly inclusive, several factors limited or skewed its reach.



**Greater male access to mobiles.** 95 percent of men in Wamba used mobile phones, but only 79 percent of women did so.

**Limited use of SMS.** Everyone who used a mobile phone used it for voice calls, while significantly fewer also used it for SMS. 50 percent of mobile users could send text messages—and of these, 61 percent were men.



41%

**Inconsistent access to working phones.** 23 percent of mobile users did not have a personal phone. Those who had phones did not always carry them on their person, nor could they always afford to keep their devices charged. In a user testing exercise, 41 percent of mobile owners couldn't use their phones because they were either out of battery life or otherwise not functional.

**Poor network signals.** While access to at least one major mobile network operator was available across Wamba's 11 PBF health facilities, other operators had unreliable and/or perpetually weak signals. In a test to reach patients registered on clinic registers via their recorded mobile numbers, only 23 percent of calls went through, indicating that users with phones are often inaccessible.



Despite these limitations, mobile platforms still represented a valuable option to gather much-needed and otherwise difficult-to-get citizen feedback to improve NSHIP services, as they constitute a more time and cost efficient option for continuous collection and processing of data, in comparison to other platforms. For example, in an attempt to address some of these limitations, ICT4SA considered and prototyped an interactive voice response (IVR) data collection option. However, test results indicated that the requirements for processing voice-recorded data were too time intensive for government officials.

## TECHNOLOGICAL LANDSCAPE

In an initial scoping survey in Wamba, 92 percent of respondents used mobile phones, 87 percent owned a mobile phone, and 50 percent used SMS. The strength and reliability of the four mobile networks (Etisalat, MTN, Glo, Airtel) are highly inconsistent; the strength of different networks varies across different wards. Of the 11 health facilities selected to participate in the pilot, six had only one mobile network providing reliable connectivity. Mobile signal is often restricted to specific locations in or around facilities.

**The successful introduction of any new social accountability system would need to integrate a concern for historical, cultural, and technological barriers to citizen engagement with a strong technical design.**

## IMPLICATIONS FOR ICT4SA

ICT4SA needed to overcome ingrained sociopolitical and institutional barriers to enable constructive engagement between citizens and government. And while citizen inputs form the foundation of any social accountability program, without government commitment to act on these inputs, public participation will be short-lived. People can be convinced to try a new offering, but sustained usage and adoption are impossible unless they see timely, meaningful returns on their efforts.

ICT4SA's success, in other words, was contingent on ensuring meaningful government response to citizen voice. Unless this condition was met, investment in other project components, such as the technology platform, would not yield target outcomes.

▼ Health facility staff registers patient for My Voice.



# PART 2: SYSTEM DESIGN



# DESIGN APPROACH

**ICT4SA recognized that its success—and, indeed, the success of any social accountability initiative—was predicated on its ability to stimulate meaningful government response.**

The project prioritized deep engagement with government service providers and policymakers alongside research, design, and testing with citizens.

While user-centered design is becoming more common in development programs, most interpretations focus on optimizing product or service experiences for target beneficiaries. Similar care and attention in designing for the unique needs and constraints of institutional stakeholders is often undervalued, particularly in ‘demand-driven’ initiatives. For social accountability programs, such an imbalance of design priorities leads to high-volume initial bursts of citizen participation that are ultimately short-lived, as citizen expectations for government response are not matched by institutional realities.

ICT4SA recognized that its success—and, indeed, the success of any social accountability initiative—was predicated on its ability to stimulate meaningful government response. The design of ICT4SA’s programmatic model and technology platform emerged over time based on inputs and feedback from all three stakeholder groups. Additionally, this project pursued deep integration between project task teams in the World Bank, Reboot, and NSHIP through project development and implementation. This helped ensure the diverse perspectives of each group were adequately represented through the project, providing an uncommon degree of flexibility and adaptability.

The project approach was guided by five key principles.

## PRINCIPLE 1:

## Build deep contextual understanding and stakeholder trust by embedding in the local context.

Extended, continuous immersion in the implementation context and close collaboration with local staff and stakeholders were critical to ICT4SA's success. This allowed the team to understand the social and technical characteristics of the problem in its context, and experience firsthand various issues that would impact project design.

The consultant team lived among ICT4SA's target communities in Wamba LGA for the project's duration. They experienced challenging environmental conditions such as poor electricity, plumbing, and telecommunications networks. They also encountered the subtle nuances of social dynamics and political power in Wamba. The

consultant team included four local staff from Wamba who played key roles through the research, design, and implementation phases, providing critical cultural translation and insights. These factors enabled ICT4SA to develop a rich understanding of its stakeholders and operating contexts and to produce creative, practical designs.

Living in Wamba also enabled the kind of frequent, human interactions between team members and project counterparts that are impossible in formal, scheduled meetings, and helped build stakeholder trust in the project. Both citizens and government partners interpreted the team's choice to live and work locally as a sign of the project's commitment to the local communities. They contrasted it with their previous experiences with development programs where their interactions with project teams were limited to brief and seemingly sporadic site visits. As a result, efforts to build institutional capacity—for example, at health facilities or at the LGA office—were regarded as valuable support and not imposed directives.

▼ ICT4SA team attended and observed training workshops for select NSHIP management.



## PRINCIPLE 2:

**Encourage institutional buy-in by tailoring to existing incentives and processes.**

Instead of trying to create new incentive structures to encourage government to participate in ICT4SA or new mechanisms by which they could respond to citizen input, ICT4SA built on what already existed. Aligning with existing NSHIP designs and operational procedures made it easy for service providers and policymakers to incorporate citizen feedback into their work.

ICT4SA incentivized institutional participation by appealing to the professional and personal motivations of stakeholders across the service delivery chain and responding to their information needs—a ‘pull’ promotional strategy. It equipped service providers with concrete, actionable citizen feedback that they could use to improve their services, thereby increasing their income. It supplied policymakers with previously unavailable program intelligence that enhanced their ability to do their jobs.

The project reduced barriers to adoption by integrating ICT4SA data and processes into key management mechanisms used by NSHIP stakeholders—a ‘push’ strategy. Research identified certain standing meetings across all levels of service delivery as the fora in which most management decisions were made. ICT4SA then observed these meetings to determine what data and in which formats would be most useful to inform their proceedings and the critical decisions being made.

ICT4SA team leads a pre-launch training session for Wamba healthcare staff. ▶

▼ Prototypes created for My Voice brand identity and promotion materials.



### PRINCIPLE 3:

## Optimize design and implementation through early, field-based prototyping and continuous iteration.

A responsive, agile development approach enabled ICT4SA to optimize the technical and programmatic design based on user feedback. This approach also strengthened key counterparts' ownership over project outcomes. Blurring the boundaries between the typically distinct phases of research, design, and implementation, prototypes were developed early in the project and tested with both citizen and government users. After product and program features had been refined based on testing feedback, a new prototype of higher fidelity was produced and then tested. This loop of test-refine-repeat was foundational to ICT4SA's design and implementation approach and was used through the end of the pilot.

Several programmatic concepts were developed (e.g. different combinations of in-person and digital

reporting; prioritization of certain user groups, such as pregnant women) in response to NSHIP priorities and foundational design research. These were tested in NSHIP facilities and their surrounding catchment areas through simulations of different conceptual models and workflows and consultations with target users. Understanding the strengths and limitations of each model was critical to developing a robust, practical design—for example, different models impacted the nature of feedback citizens felt comfortable providing as well as the effort required from NSHIP staff to process and use feedback. Similarly, technical prototypes first helped to select an appropriate technology solution—interactive voice response, SMS, and automated voice calls were all tested—and then to optimize user interaction through the refinement of product features and content.

Iterations were implemented as quickly as was feasible, sometimes within a 24-hour window, to enable further testing of updated prototypes. Such rapid response times also built trust in ICT4SA's commitment to acting on stakeholder inputs, and thereby bolstered counterparts' ownership in the project and its eventual outcomes.

## PRINCIPLE 4:

**Enable sustainability by respecting local capacity and building local ownership.**

ICT4SA's design was highly sensitive to considerations of NSHIP's capacity and resources. Institutional ethnography and ongoing engagement with service providers and policymakers helped develop a holistic, empirically grounded understanding of NSHIP's design, operational processes, and human and financial resources—both in its current state and what was planned and likely in the future. Beyond the formal, institutional structures and processes, ICT4SA also sought to understand the motivations, capacities, and informal roles of key actors within the NSHIP ecosystem in Wamba. This resulted in a program that was politically attractive and operationally realistic. Each design decision not only considered the feasibility of ongoing, sustainable implementation by NSHIP; it also identified the specific actors and processes that could support the continuation of that project element or process beyond ICT4SA.

As a result, at the end of the ICT4SA pilot, NSHIP elected to continue My Voice in Wamba and to support its replication in other geographic regions.

## PRINCIPLE 5:

**Guide institutional change with tailored, just-in-time training and support.**

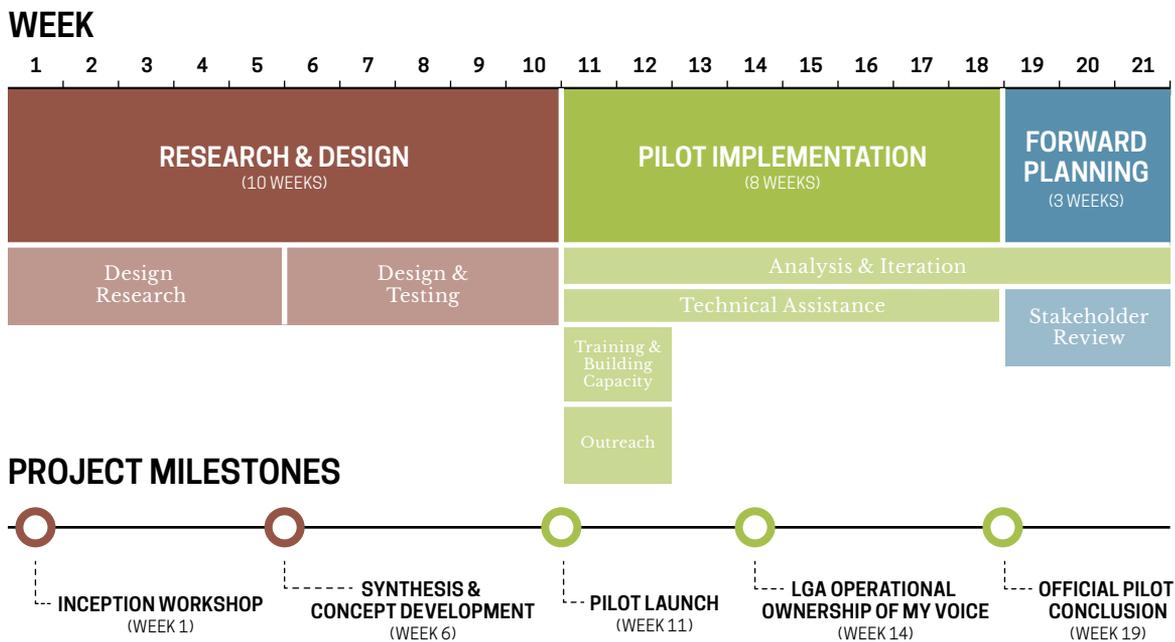
For government to receive, adequately understand, and respond to citizen feedback required institutional process and cultural change. ICT4SA worked with NSHIP actors to navigate these changes by providing custom, hands-on support throughout the process.

ICT4SA worked with service providers in facilities and LGAs, and policymakers at the state and national bodies to understand their perspectives on the new practices being introduced. Information sessions then illustrated how citizen input could bolster their PBF performance and address their specific concerns. For any new tasks required of them, NSHIP actors received hands-on training. Recognizing their lack of prior experience in using patient feedback, ICT4SA provided on-site technical assistance and custom guides for NSHIP actors on how to interpret feedback reports, identify priority issues, explore root causes, and determine appropriate responses. Facility and local government staff were also provided with support numbers they could call with questions or challenges during the pilot; the consultant team serviced these inquiries.

In any development program, it is impossible to anticipate the full range of potential negative, unintended consequences. As a new, unfamiliar input into an existing sociopolitical context, it was uncertain how the introduction of citizen feedback would impact the public health system in Wamba. To both (1) protect local staff and patients from professional or personal risk during the pilot, and (2) encourage productive problem-solving over rash or otherwise inexpedient actions, ICT4SA, with the support of NSHIP leadership, prohibited drastic punitive measures against staff during the pilot.

# PROJECT STAGES

ICT4SA was implemented in three stages: Research and Design, Pilot Implementation, and Forward Planning.



## STAGE 1: RESEARCH & DESIGN

Research and design focused on aligning stakeholder perspectives; conducting foundational design research; and developing, testing, and refining technical and programmatic designs.

### **Align expectations & establish common vision.**

Preliminary review of NSHIP program documentation and conversations with program leadership guided the development of a research framework that focused on understanding the interests, capabilities, and constraints of actors across the accountability chain: citizens, healthcare providers, and relevant government actors. An inception workshop with key project stakeholders included representatives from NSHIP facilities through its federal administrative body, helped align actors around project objectives, clarified roles and responsibilities, and developed shared ownership over the project roadmap.

### **Understand local context & stakeholders.**

A research sprint focused on understanding the NSHIP institutional ecosystem, as well as service delivery challenges, community dynamics, and ICT behaviors in Wamba LGA. Using institutional ethnography and design research approaches, ICT4SA conducted research in 22 primary health facilities in Wamba and their catchment areas, with NSHIP partners at the state and national levels, and with key World Bank actors. Research methods included in-depth interviews, participant observation, service trials, surveys, artifact analysis, and focus groups.<sup>20</sup> Findings from the research were synthesized to shape the development of several programmatic and technical design concepts. These were tested among various target user groups to assess the concepts' potential to achieve project objectives.<sup>21</sup>

### **Refine designs through continuous testing with all user groups.**

Technical and programmatic designs were tested and refined based on ongoing design research, user testing, stakeholder consultations, and analysis of NSHIP implementation.

The design of the feedback collection model was primarily informed by the needs and capacities of patients and facility staff. Concepts were tested for feasibility and effectiveness based on test trials in Wamba.<sup>22</sup> In these trials, facility staff and patients provided feedback on factors such as ease of use. The technical platform's interaction, specific messages, and choice of language were tested with patients and community members through working prototypes that simulated real user interaction.

The design of the institutional response model was informed by consultations and workshops with NSHIP stakeholders. These sessions focused on understanding their information needs and testing technical usability and programmatic utility of various approaches to information presentation and analysis. Actual data collected from facility exit interviews and SMS surveys were presented in different formats and the options tested via paper prototypes. NSHIP stakeholders were then asked to use presented data to perform various analytical tasks, such as identifying priority service delivery challenges.

## STAGE 2: PILOT IMPLEMENTATION

Pilot implementation centered around helping the NSHIP program in Wamba establish an effective, sustainable feedback loop between citizens and government. The first half focused on generating patient feedback through training, communications, and outreach; the second focused on facilitating utilization of the feedback by service providers and enabling independent local management of ICT4SA. Data on pilot performance was monitored throughout implementation and used to inform technical and programmatic iterations.

### **Provide tailored project introductions to service providers and institutional stakeholders.**

Prior to and during the pilot launch, hands-on training and support to service providers—primarily health facility and local government staff—were provided. Kickoff workshops and regular presence at the LGA and each of the 11 facilities over the first two weeks ensured that service providers were aware of their responsibilities, knew where to direct questions during the pilot, and understood both what they could expect to receive in terms of data and in what ways patient feedback data could be useful. A range of training and reference materials were provided, including user guides and FAQs.

### **Raise awareness through community engagement & promotional campaigns.**

An integrated outreach and promotion strategy generated awareness and usage among target users (patients of NSHIP facilities) and others that encouraged, supported, and/or otherwise facilitated their participation. Notices and endorsements from government and traditional leaders strengthened the legitimacy and appeal of ICT4SA among institutional partners and communities. A unique brand identity and messaging strategy was developed, informed by design research and rounds of user testing. Visually engaging posters, stickers, and handouts were distributed to NSHIP facilities and amongst WDC leaders to generate broader community and patient awareness.

### **Encourage & support institutional response to and utilization of patient feedback.**

Throughout pilot implementation, the ICT4SA team engaged regularly with facility and local government stakeholders to support their trial and usage of the system and to troubleshoot technical issues. Over time, the role of ICT4SA shifted from managing operational implementation to facilitating NSHIP's independent management of project processes and usage of patient feedback. By the end of the two-month pilot, for example, tasks such as the weekly printing and distribution of patient feedback reports to facilities had been fully transferred from ICT4SA to LGA staff.

ICT4SA provided targeted assistance to support the government's new practice of responding to citizen feedback. ICT4SA provided technical advisory for incorporating patient feedback into relevant management and decision-making channels and introduced problem-solving frameworks to help identify and prioritize challenges, explore root causes, determine appropriate responses, and prevent drastic punitive actions. These efforts encouraged constructive and responsible use of patient feedback within existing program management processes.

## Evaluate progress & identify opportunities for advancement.

ICT4SA monitored pilot performance data daily, using a pilot analysis framework. Indicators assessed performance in technical functionality, patient participation, institutional participation, and institutional response. Analysis and progress was reviewed weekly with the World Bank project team, and shared with NSHIP stakeholders at the state and national level on a regular basis, in line with their expressed interests. Technical issues identified through monitoring as well as feedback from NSHIP and the World Bank were recorded, prioritized, and addressed as feasible throughout the pilot. Based on feedback from users and stakeholders, technical and programmatic iterations were made during the pilot.



## STAGE 3: FORWARD PLANNING

### Co-design recommendations for further My Voice integration with NSHIP.

At the conclusion of the pilot, NSHIP stakeholders from Wamba NSHIP facilities and local government expressed interest in continuing ICT4SA. Within two weeks, a Pilot Technical Review Meeting was convened for key ICT4SA and NSHIP representatives to discuss pilot outcomes. Participants agreed that the pilot had demonstrated ICT4SA's value for NSHIP at large; NSHIP has elected to continue ICT4SA in Wamba and to explore models for expanding its geographic coverage. As of publication, development of a model for scaling activities was underway with the goal of ICT4SA implementation across three NSHIP LGAs in Nasarawa State over the next year; this included specific proposals for how NSHIP could formally integrate citizen feedback within its program.





# DESIGNING WITH ICT4SA USERS

The ICT4SA approach prioritized inclusion of users throughout the design, research, and implementation processes.

This enabled the ICT4SA team to design a system built for the needs of key users, which can be broadly divided into three groups: citizens who use NSHIP services, service providers who deliver health care services, and policymakers—both government officials and development partners—who manage and oversee the NSHIP program.

Understanding the lives and perspectives of these actors, both within and outside of the NSHIP con-

text, was critical to ICT4SA's design; and so, personas of each user group are presented here to provide insights on user interests, lifestyles, motivations, and interaction with the healthcare institution.

The following are representative profiles (“personas”) of actors from each of these three groups. These actors reappear in the next section to illustrate how the ICT4SA system works for these actors within NSHIP.

## USER ATTRIBUTES



### MOBILE KNOWLEDGE

Ranging from minimal knowledge to high-powered smartphone users.



### LEVEL OF EDUCATION

Ranging from partial secondary school completion to doctorate or terminal degree.



### COMPUTER KNOWLEDGE

Ranging from limited exposure to daily internet and wide range of software access.



### AMOUNT OF INFLUENCE ON NSHIP

Ranging from no entry points for interaction with NSHIP management to holding positions as key decision makers.

*Please note that the following persona stories are composites, not biographical accounts of specific individuals. For respondent privacy, all actual names have not been included, and photographs do not represent the individuals in accompanying personal content.*



 PATIENT  
**ZAINAB**

## Zainab lives in Wayo Matti in Wamba LGA. She has two children—the younger is two years old and the elder is seven—and she is currently pregnant with a third.

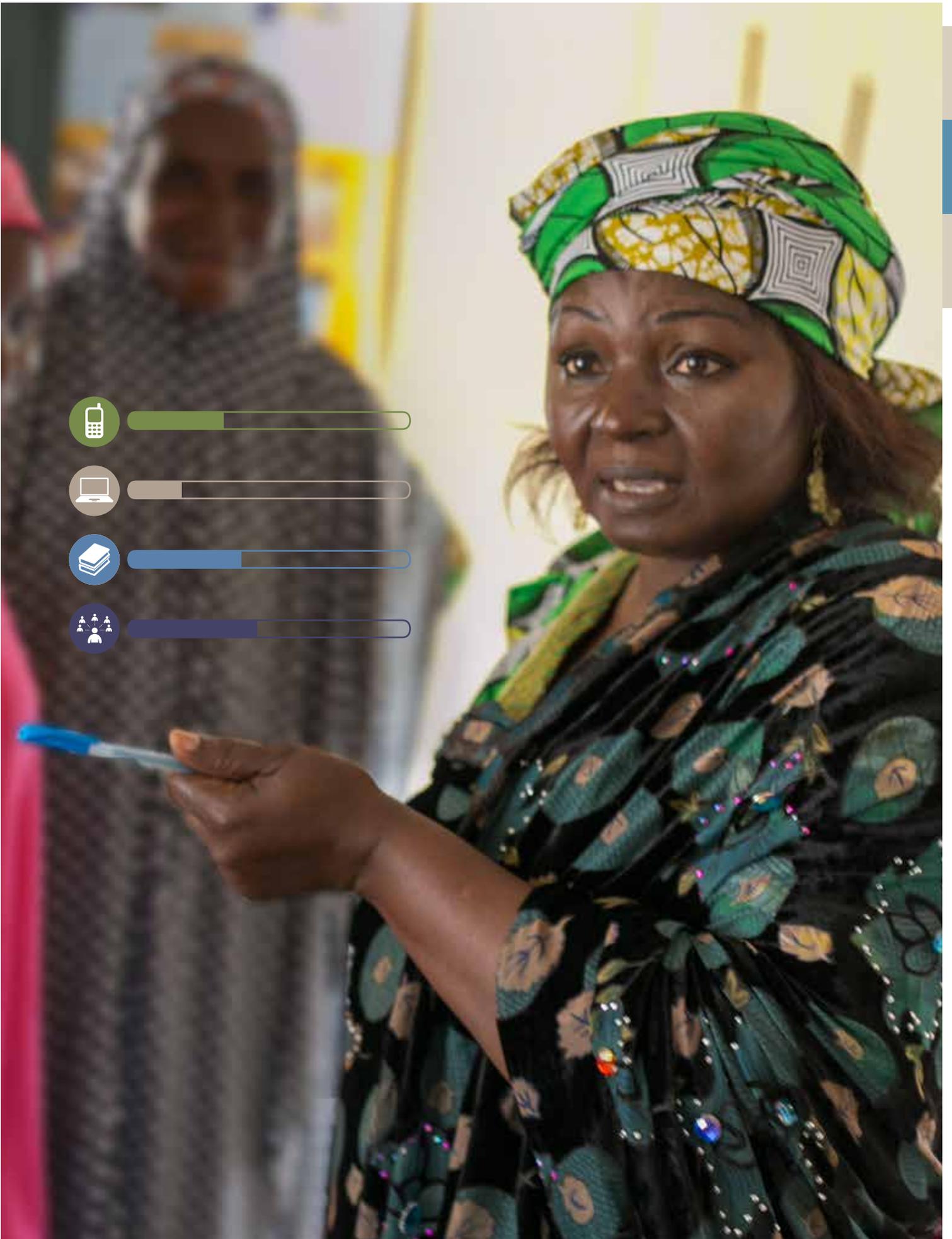
She has been married for nine years. Her husband, Ali Musa, is a teacher and a farmer. Zainab occupies her days with household chores and making sure her children and husband are well-fed; she helps with farming, too. It's a lot of work but she wants her children to have opportunities that she did not have. She only finished senior secondary school, and can read and speak English just a little bit. She doesn't have a mobile phone of her own but occasionally uses Ali Musa's to make or receive calls.

Every morning, she sells *akara* (deep fried breakfast snack made from ground beans and spices) with her sister to make a little extra money. She cherishes that time to talk about life and trade gossip; she also asks her sister for advice when something is happening with her pregnancy that she hasn't experienced before.

Her two children were born at home because the labor was easy and, at the time, she preferred home birth. Since then, village health workers have come

to encourage her to go to the clinic for antenatal care. Ali Musa was convinced and decided that Zainab should start doing so. Zainab knows the delivery is supposed to be safer at the clinic, but she has been warned by neighbors that the staff are mean, will not let her squat to deliver, and may charge her too much. Already they have asked her to purchase supplies to prepare for delivery, and she doesn't understand why.

Today, Zainab is feeling weak and has a high fever. Usually, she would go to the chemist for quick service and affordable medicines. The clinic is far away; traveling there means she won't have time to tend to other things at home or on the farm. And if the clinic is inexplicably closed, which it sometimes is, she would be doubly frustrated. But Ali Musa is concerned about her illness and worries that it might affect her pregnancy. Since he is on his way to town, he decides to take Zainab on his motorcycle to the nearest clinic.





FACILITY OIC  
**LANTA**

Lanta was born and raised in Kwarra Ward, Wamba. This, she believes, makes her a natural leader for the PBF facility in Kwarra. Due to her parents' local political prominence, entering the health field and earning respect from locals came easily to her. An LGA official and old family friend took her under his wing when she started her career, helping her get placed at a well-resourced clinic. She was a community health extension worker (CHEW) for 10 years and has been an OIC for the past five.

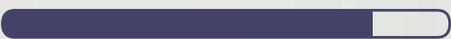
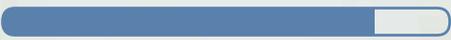
Her intimate knowledge of her clinic's surrounding community is not just personally rewarding but financially beneficial, too. Lanta is skilled at marketing the clinic: her PBF facility is one of the top revenue-generating ones in the state. Her success means Lanta now has a large house in Wamba Town with a gate, two generators, a car, and a motorcycle. Her three children attended a local university; two now live in Abuja and one in Lagos. Her husband works for the state government in Lafia.

Each day, she also needs to go home at least once to take care of housekeeping and see her husband. It takes 90 minutes round-trip in addition to her morning and evening commutes. Often, she is asked to attend PBF meetings in Lafia or Wamba Town, which can take her away from the clinic for up to a whole day. Lanta has a mobile phone, which she uses often, but she never learned to SMS.

Lanta sees the PBF evaluations as a means to earn more money. At this point, she knows how to run her clinic to achieve satisfactory quality and quan-

**As an OIC, Lanta works hard to ensure patients receive attentive care by managing her staff carefully. The amount of reporting required of her sometimes means long hours and late nights.**

tity scores. She wants more information, however, about how she can improve the care her clinic provides to her community. She knows that she can't always depend on her staff—she's heard rumors that when she's not there, they leave the facility, inflate prices, or treat patients poorly. Because Lanta often has to leave the clinic, she wants information to keep better tabs on her staff. She is most interested in specific evidence and examples of staff shortcomings or clinic challenges.





## NATIONAL LEVEL NSHIP ADMINISTRATOR

# DR. ALIYU

Dr. Aliyu is from Kebbi State but studied medicine in the United Kingdom and began his career as a practicing doctor there. After a few years, he realized he was more drawn to public administration and preferred to raise his family in his home country. So he returned to Nigeria to enter the civil service, taking on management positions of increasing seniority. Now highly experienced in public health policymaking and program design, he works for the NPHCDA as a senior official for the NSHIP program, based in Abuja. He is married and has two sons, both married and living in Lagos. His wife is also a doctor who practices at a prominent private health center in Abuja.

**Dr. Aliyu is often disheartened by the state of healthcare in his country. Despite Nigeria's growing economy, he recognizes that these gains are disproportionately distributed among his fellow citizens, especially when it comes to access to and quality of essential healthcare services.**

Dr. Aliyu is deeply passionate about advancing a more equitable healthcare system in Nigeria.

While he is idealistic, Dr. Aliyu is also pragmatic—and immensely hardworking. Whenever considering a significant decision, he relies heavily on personally-conducted research and his own expertise because much of the data he receives from various government and NSHIP sources, including the NSHIP surveys and PBF portal, lacks sufficient context and detail. At the same time, he recognizes that sitting in Abuja, with few opportunities for field visits, his own perspective may be limited. Dr. Aliyu, is therefore highly interested in patient perspectives on the performance of his program. He wants synthesized and up-to-date data and analysis that he or his assistant can easily access before key meetings, as well as comparative data across regions to help him allocate financial and technical assistance resources where they are most needed.

# THE MY VOICE SYSTEM

**One of the most visible outputs of ICT4SA—and the means through which it enables social accountability—is My Voice, a public service improvement model driven by citizen voice.**

My Voice is comprised of two integrated and mutually reinforcing components: a technology platform and a programmatic model. Together, they enable My Voice to collect, manage, and analyze citizen inputs, and to support governments in providing meaningful responses to citizen needs.

The My Voice technology platform collects citizen feedback and presents it to service providers and policymakers in easy-to-use formats. Implement-

ers and administrators of those services can then access citizen reports through a variety of channels and formats based on their specific needs, technical capabilities, and operational resources: an online dashboard, print reports, or in-person meetings. My Voice's programmatic model then works to integrate citizen feedback into services' management processes and community fora to encourage and facilitate timely government response in the form of service improvements.

## KEY FEATURES

### A free, easy-to-use SMS platform for collecting citizen inputs

Simple user interactions and intuitive content accommodate literacy and language barriers among target user groups. A reverse-billed shortcode ensures the system is free for all users, addressing financial barriers to participation.

### Two models for feedback collection

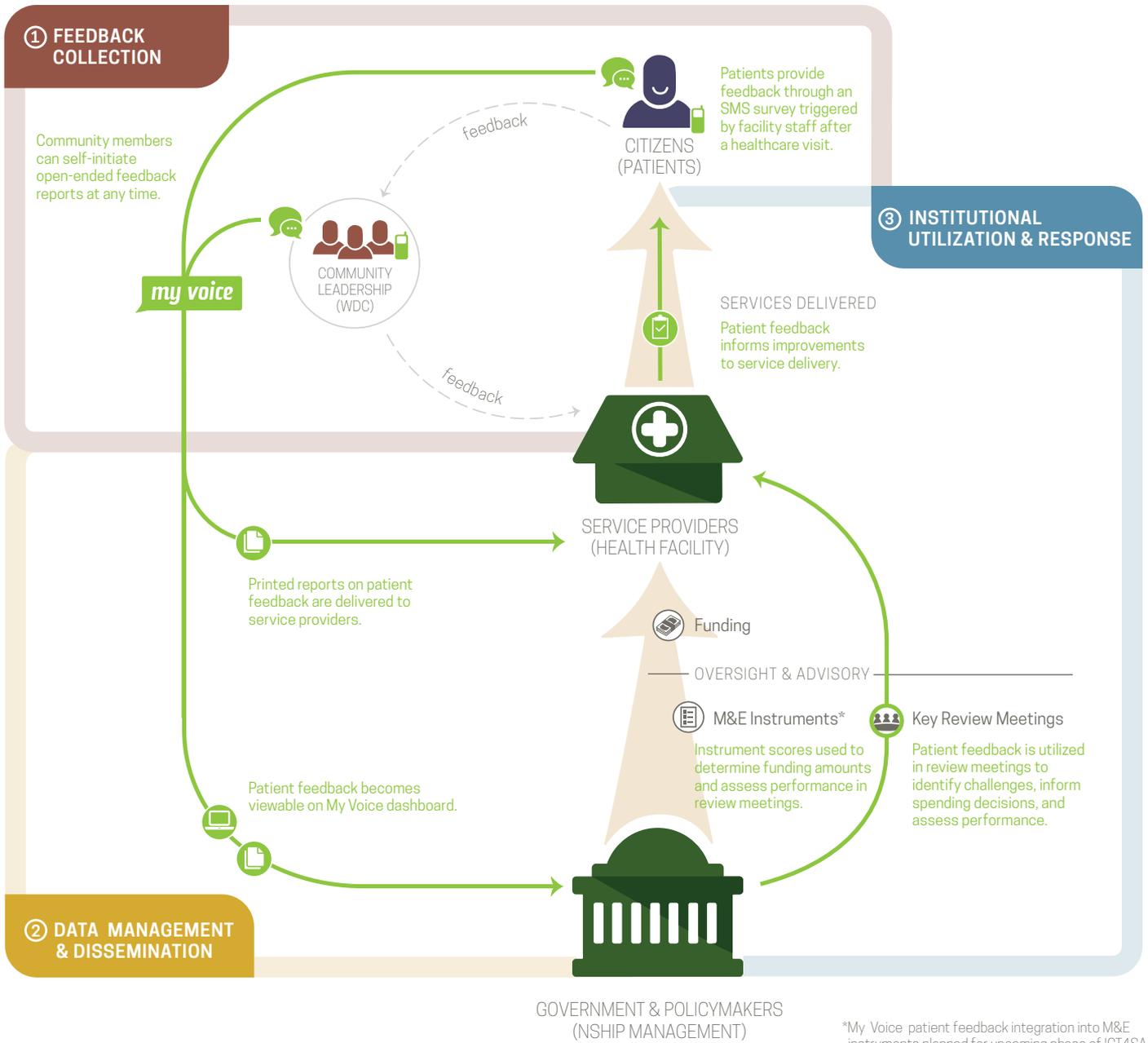
Institutionally-supported (through interactive surveys) and community-driven (through free-form reports), address individual preferences, capacities, and circumstances that may impact citizen participation. Both channels are integrated into familiar institutional processes or trusted community venues, helping encourage citizen use.

### Custom data reporting

A web dashboard presents citizen feedback to service providers and policymakers in custom formats and frequencies. By presenting tailored and easily accessible real-time intelligence, My Voice helps government actors use citizen feedback in their day-to-day work.

### Training, guidance, and on-site support

Training builds institutional capacity to provide timely, appropriate responses to citizen feedback. Helping government integrate citizen feedback into its program management channels and processes also supports My Voice's long-term sustainability.



My Voice was designed to integrate within and support the existing NSHIP program structure— throughout the process of feedback collection, data management, and institutional utilization. This diagram illustrates the My Voice design concept and its interaction with the NSHIP system, as of the conclusion of the ICT4SA pilot.<sup>23</sup> A more detailed explanation of the My Voice model is presented on the following pages.

# HOW MY VOICE WORKS

## IN-CLINIC REPORTING

### Registered patient responds to questionnaire

During the patient intake process at the health facility, staff members register patients by collecting their unique ID number, mobile number, and purpose of visit. Staff send this information in one SMS to the free My Voice shortcode.

Patient receives a mobile survey with a series of up to nine questions about their experience at the health facility. Patients respond by choosing from multiple-choice answers; they also have the option of providing additional, free-form comments.



## FEEDBACK COLLECTION



## OUT-OF-CLINIC REPORTING

### Patient sends feedback via mobile

Any person can send open-ended feedback on a health facility experience to the free My Voice shortcode at any time, regardless of whether they are registered with My Voice. To do so, they first send an SMS message with a trigger word. The system then prompts them to select a clinic and provide feedback via subsequent text messages. Select community groups and leaders are also encouraged to send feedback reported to them by local citizens.

### Patient feedback is stored in database

All received comments are organized and stored in the My Voice database. Authorized users can access a back-end administrative viewing panel to sort and download data by clinic, date of report, service delivered, and other relevant categories.



## DATA MANAGEMENT & DISSEMINATION

### Analyzed patient feedback data is displayed in summary reports on the My Voice web dashboard.

Program executives and policymakers from the relevant state, national, and World Bank bodies view patient feedback via the My Voice dashboard ([www.myvoicenigeria.com](http://www.myvoicenigeria.com)) which is updated in real-time.



### Printed reports are delivered weekly to service providers and local level NSHIP management

Reports on each facility are printed and delivered weekly by government health staff to each facility's management and the director of primary health care for the local area.

## Patient feedback is used to improve service delivery

Local government uses patient feedback to supplement data from other facility evaluation instruments and develop more holistic analyses of what drives or constrains health service delivery. Analyses inform key management discussions and decisions on program spending and technical support provision in meetings at state and national levels as well.



## Community leaders advocate for service delivery improvements

Community leaders—in this case, the local Ward Development Committees—use the My Voice reports to develop recommendations for improvements in health services and advocate for these improvements with local facilities and government.



## Facilities develop action plans to address identified challenges

Facility management and staff jointly use a problem-solving framework to discuss possible causes of challenges surfaced by patients. Based on this, they then develop action plans to address identified issues. The plan is shared with the local director of primary health care.



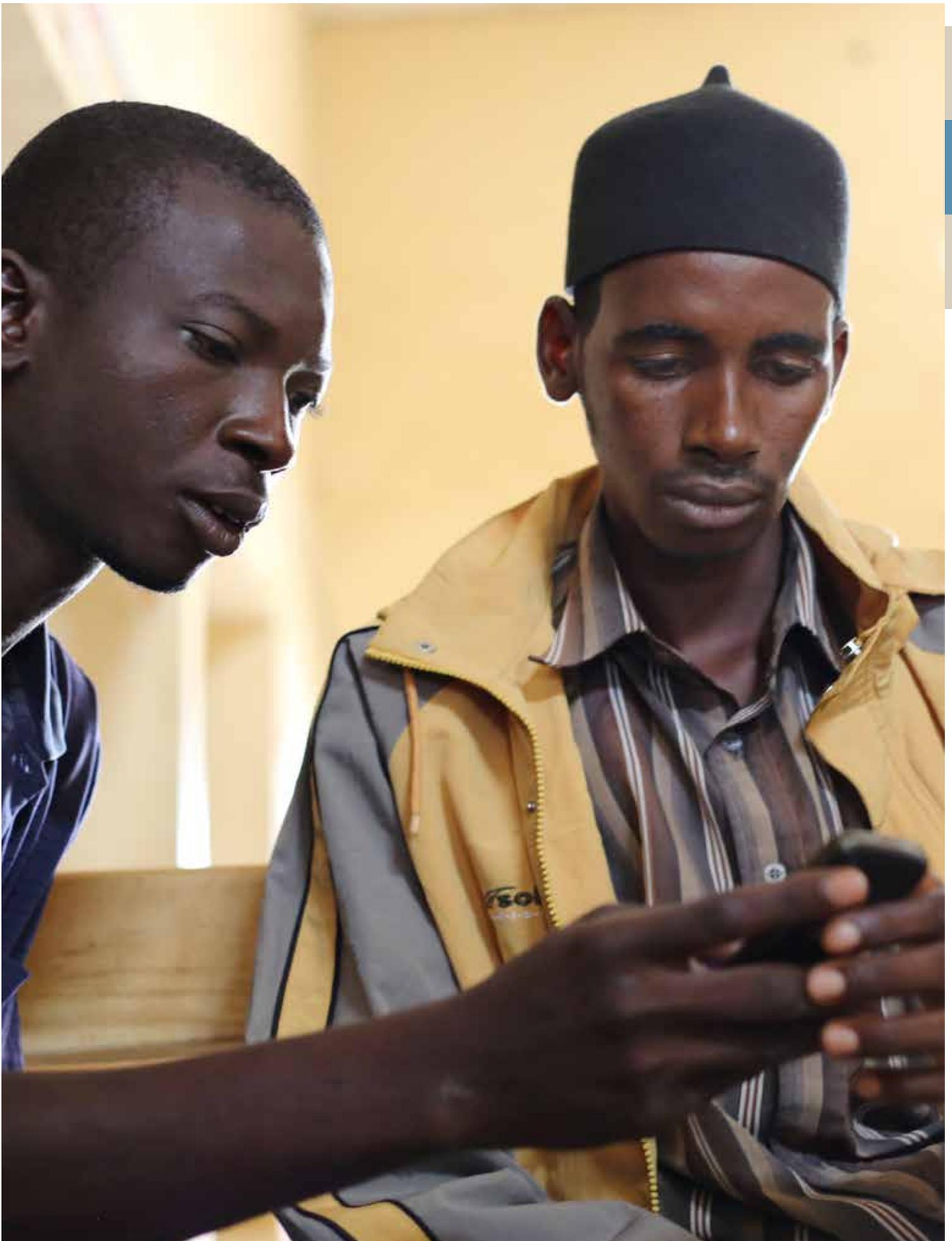
## Facilities discuss patient feedback and reflect on own practice

Facility management and local government health staff discuss the patient feedback from the weekly reports. They reflect on practices contributing to patient satisfaction that should be continued, and identify incidences of patient grievance that require further examination. The same process is repeated with facility staff.



# INSTITUTIONAL UTILIZATION & RESPONSE





# MY VOICE: STEP-BY-STEP

The following sections provide a closer look at the three key My Voice processes—feedback collection, data management and dissemination, and institutional response—in the context of the NSHIP implementation.

Each section details how the process works step-by-step, key features of the design, and rationale for system components. Usage scenarios illustrate how key players—citizens, service providers, and program management—would use My Voice.

## + DESIGN RATIONALE

These call-out boxes summarize rationale behind the technical and programmatic designs.

## DETAILED LOOK

# FEEDBACK COLLECTION

## KEY FEATURES

### My Voice gathers patient feedback through two data collection models

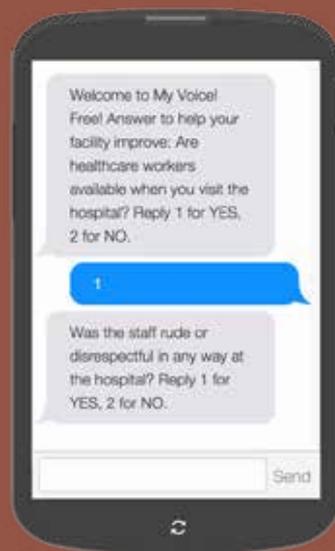
The in-clinic model initiates surveys through patient registration at health facilities, complementing existing clinic practices. The out-of-clinic model is initiated by community members living in PBF catchment areas, and supported by community leadership, representing a bottom-up approach.

### Free, easy-to-use messaging platform

My Voice integrates with all four mobile network operators in Nigeria. Users send messages through a five-digit shortcode to participate in a simple and intuitive questionnaire; all text messages are free of charge to users.

#### ⊕ INTEGRATION WITH CLINIC PROCESSES

The in-clinic model sought to maximize patient reach by (1) integrating My Voice registration into existing clinic operations, and (2) showing patients that their feedback was desired by the clinic. Service providers' request for feedback and emphasis of My Voice's anonymity helps reduce patient fears that their feedback may have negative repercussions for their clinic, its staff, themselves, or their families.



## SURVEY AT-A-GLANCE

Patients respond to a six-nine question survey that includes the following multiple-choice questions:<sup>26</sup>

- Are healthcare workers available when you visit the hospital?
- Was the staff rude or disrespectful in any way at the hospital?
- Did staff explain your sickness and treatment at the hospital?
- Did the hospital overcharge you?
- How long did you wait for treatment?
- Do you have any other praise or complaints?

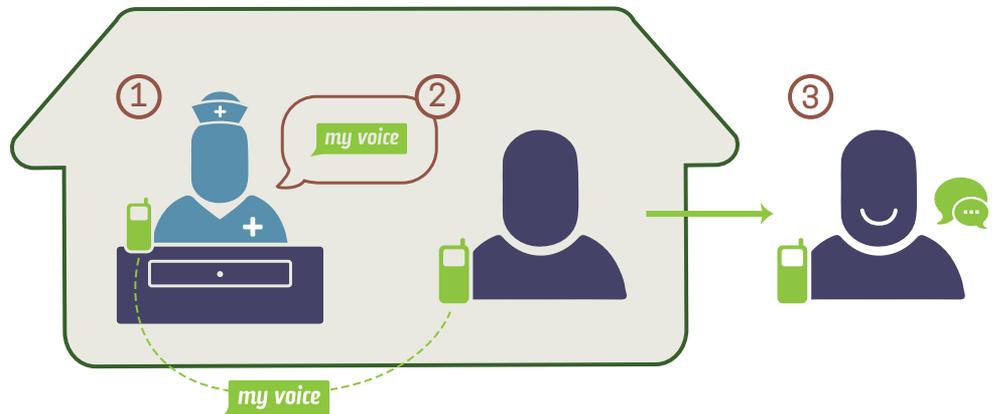
#### + REGISTRATION BY FACILITY STAFF

Facility staff were selected to register patients via SMS because research found that staff had both higher SMS fluency and more time for such a task than did OICs. My Voice registration occurs as a short, added step within the current patient intake process.

#### HOW IT WORKS:

### INSTITUTIONALLY-SUPPORTED (IN-CLINIC) MODEL

This model aims to embed a feedback mechanism into clinic processes to encourage service providers to take ownership of gathering (and utilizing) feedback, and leverage patients' respect for clinic protocol to incentivize participation as part of the service experience.



#### Clinic registrar enters basic patient data.

Clinic registrar receives the patient and sends the clinic code, patient serial number, mobile number, and PBF service sought via a structured SMS message. Registration triggers an SMS survey sent to the patient's phone.

#### Clinic staff promotes My Voice.

Facility staff briefly tells the patient about the My Voice feedback program, explains that they will receive a survey on their mobile phone, and it is important that they complete it honestly.

#### Patient completes questionnaire.<sup>25</sup>

#### + SURVEY CONTENT AND STRUCTURE

Questions were designed to align with both existing NSHIP performance assessment instruments (thereby enabling comparability and broader programmatic integration), and to respond to common patient challenges that are otherwise hard to surface (to address known gaps in existing M&E mechanisms and engage patient interest). The survey was optimized for broad patient accessibility and ease-of-use, requiring minimal texting responses to yes/no questions. The survey also

provides opportunities for patients to offer detailed, unstructured comments or complaints through additional open-ended questions, which are automatically triggered based on previous responses. The final survey question prompts patients to send free-form comments, a valuable data source for problem identification at facilities.

#### + SURVEY LANGUAGE & WORDING

My Voice messages are in English, as research showed low levels of Hausa literacy. People who could read, write, and text were more likely to do so in English, even if they primarily spoke an indigenous language. Wording was based on local vernacular and thoroughly tested for pa-

tient comprehension. For example, patients refer to all health facilities as "hospitals" and are not familiar with the words "clinic" or "facility." (For more information, see *In-Clinic Survey v2 in Annex B: Select Design Components.*)

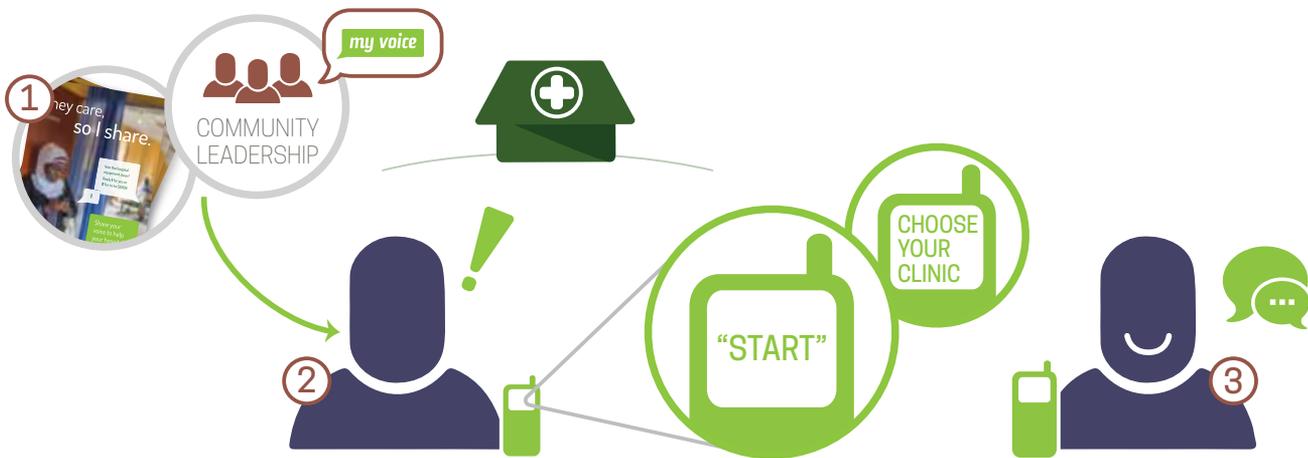
## COMMUNITY-DRIVEN REPORTING

NSHIP leadership, at state and national levels, stressed the important role of WDCs within PBF communities. This model builds upon NSHIP's investment in WDCs as a community feedback channel because while important, their capacity is often underutilized. WDCs demonstrated limited influence over facility management, which tends to determine how much consideration is given to issues raised or recommendations made. A direct reporting mechanism through My Voice could increase WDCs' ability to advocate for service improvements to facility management by providing empirical evidence.

## HOW IT WORKS

### COMMUNITY-DRIVEN (OUT-OF-CLINIC) MODEL

My Voice provides the option for community members living in PBF facility catchment areas to provide feedback through a self-initiated, open response feedback channel. This model is owned and promoted through local WDCs. WDC members are trained and encouraged to assist patients who do not have mobile phones or who have difficulty with text messages in submitting My Voice reports.



#### Patient learns about My Voice program.

Patient sees poster promoting My Voice in their community or hears about program through their WDC, encouraging them to share their experience on their PBF clinics.

#### Patient indicates interest in providing feedback.

Patient sends a trigger word ("start") to the free My Voice shortcode to begin reporting on their experience. Upon receipt of the patient's SMS, My Voice asks the patient to indicate which facility they are reporting on. The patient selects a clinic from a list provided in the My Voice SMS and replies with a simple, corresponding clinic code.

#### Patient provides feedback.

Once a clinic code has been received, My Voice asks the patient to share their feedback. The patient sends comments about their recent healthcare experience in an SMS response.

For question series, see Out-of-clinic Survey v1 in Annex B: Select Design Components.

### BRAND IDENTITY & PROMOTIONAL MATERIALS

A contextually-tailored brand identity, messaging system, and suite of visual collateral was designed and printed in-country and dispersed throughout facilities and communities. My Voice posters are displayed within high-traffic community areas and within clinics. WDCs hand out fliers to community members, and clinics share stickers and user guides with patients.



### USER SCENARIO: CITIZEN

Upon her arrival at the clinic, a staff member asks Zainab for her phone number and the reason for her visit. The staff tells her that she will receive a survey on her mobile phone, and that she should answer the SMS messages honestly to give the facility feedback on how it can improve. All messages sent, the staff member says, are free.

Zainab doesn't have her husband's mobile number memorized, so Ali Musa provides his number. The wait for treatment is not long. Zainab is given several tablets and remembers the health worker saying something about an infection and antenatal care (ANC) vitamins, but she doesn't understand what her illness is, what the pills do, or why she is charged NGN 1,450 (~USD \$8.00). Usually, she is not charged at the facility or the cost is less than NGN 500 (~USD \$2.75)

After they leave the clinic, Ali Musa shows her the message

that comes to his phone—"Welcome to My Voice! Free! Answer to help your facility improve: Are healthcare workers available when you visit the hospital? Reply 1 for YES, 2 for NO."—and helps her respond to the series of questions.

Ali Musa has also heard about another way to send their thoughts about the clinic where they can just text "start" to 55999 at any time. He is comforted to know that if anything bad should happen to Zainab in future visits, they can continue to send in comments without relying on the clinic staff to initiate a feedback survey.

## DETAILED LOOK

# DATA MANAGEMENT & DISSEMINATION

## KEY FEATURES

### Secure storage and intuitive data organization

All patient visits and survey responses are stored in the My Voice database. Via a simple administrative dashboard, data can be sorted by clinic, date, and service delivered. Authorized users can retrieve the phone numbers and patient serial attached to each patient report, and download patient feedback and patient registration data.

### Analysis and reporting via My Voice dashboard and summary reports

Patient feedback is organized and displayed on an interactive web dashboard accessible to authorized NSHIP actors. Via the dashboard, users can view, compare, and analyze patient feedback and My

Voice performance data across clinics and regions. Each week, summary reports are generated for each facility and LGA; printed and delivered by LGA staff to facility OICs, who lack regular internet access; and used to facilitate discussions with OICs on areas for improvement. The dashboard information design is also optimized for generating custom print reports.

### Basic content management capabilities

The administrative dashboard enables authorized users to update My Voice's survey language, edit patient comments for clarity, and hide inappropriate content (e.g. comments containing profanity or personally identifying details) from appearing on the dashboard. Authorized users can also grant similar content management privileges to new users.



### USER SCENARIO: SERVICE PROVIDER

When My Voice first launched in Wamba, Lanta, the OIC for the Kwarra PBF facility, was worried. She wondered if her patients would report fairly and honestly and if negative comments might reflect poorly on her hard work.

On Thursday, an LGA staff member comes to deliver and review this week's My Voice report. There are several patient comments about being overcharged for services. While Lanta has long suspected that some staff inflate prices when she is not around, she also wonders if patients understand the services they have received, and the cost of each. They discuss how Lanta might address this sensitive issue with her staff. She's pleased that the LGA representative treats her with respect and notes that there is no blame assigned for the negative feedback.

In the next staff meeting, Lanta raises the issue of perceived overcharging and cites specific examples from the report. At first, her staff are defensive. They say that patients often come to the clinic thinking they have one illness, but tests suggest that they have another which

requires more expensive treatment. Lanta uses the My Voice problem-solving framework to discuss the issue and what may be done about the issue, rather than continuing to accuse patients of being ungrateful or lying. After some conversation, staff agree that they could take more time to explain to patients what exactly they are being treated and charged for. Together, they complete the problem-solving framework and submit it to the Director of the LGA DPHC. He commends Lanta's approach to addressing the issue and says he will check in periodically to see how the clinic is advancing on addressing this and other challenges.

Although My Voice first seemed like one more task on top of an already sizable workload, Lanta now sees the benefits. The DPHC has indicated that part of its PBF funds will be used to support facility improvements surfaced through citizen feedback, and she has heard that there may be additional PBF payments based on their My Voice performance.

## HOW IT WORKS

All text messages are stored on the My Voice server. Patient registration data can be viewed and analyzed via an administrative dashboard. Patient feedback can be viewed on the My Voice dashboard, where it can also be sorted and analyzed. The dashboard also generates various summary reports, each tailored, in both content and structure, for specific NSHIP implementation and management staff:



### + LGA DPHC ROLE IN DATA DISSEMINATION & ANALYSIS

LGA DPHC staff expressed eagerness to use their spare capacity to contribute to ICT4SA in a meaningful way. Based on their potential for providing support to OICs and their frequent visits to facilities, they were assigned and trained to support data dissemination and analysis to facilities. LGA DPHC staff now distribute weekly reports to the facilities and advise OICs on report analysis and response.

**Facility Reports for OICs.** Summaries of each health facility's patient feedback, including overall patient participation and satisfaction for each key service area, are printed by the LGA DPHC and delivered to OICs weekly. Each report features feedback by NSHIP services delivered, and includes all detailed, open-ended comments from patients about that facility.

**LGA Summary Reports for Clinic Supervisors.** A summary report of patient participation and satisfaction for all Wamba PBF health facilities is printed by the LGA DPHC staff each week. These reports are distributed to LGA staff responsible for supervising PBF health facilities and to the Head of OICs. Supervisors use the summary reports to identify performance patterns across facilities and to provide technical assistance to facilities on specific issues.

**Custom Reports for NSHIP Management.** Data collected by My Voice is updated on the web dashboard in real-time. Authorized users can generate print reports based on custom analysis. This feature is most useful for policymakers at the state, national, and World Bank levels who are interested in specific analytical factors and/or trends over time, or who need summary data and analysis for meetings and reporting. Via the dashboard, authorized users can also access and print past and current facility and LGA summary reports.

*For more information on summary reports, see Annex B: Select Design Components.*

### + MULTIPLE DATA ACCESS & ANALYSIS TOOLS & FORMATS

The My Voice web dashboard is the data access tool for stakeholders who frequently use the internet. While this generally excludes most service providers, research also found that many government officials with consistent internet access still rely on other communication channels. Most state and national NSHIP executives, for example, rarely used the PBF web portal; they preferred to have their staff download and print reports from the portal. Based on these and other findings, the My Voice dashboard is optimized to generate standard and custom print reports for offline review.

## DETAILED LOOK

# INSTITUTIONAL UTILIZATION & RESPONSE

## KEY FEATURES

### Integrates with existing institutional decision-making channels

My Voice's feedback categories were selected based on common patient frustrations, known issues in PBF facilities, and the priorities of NSHIP management. Information analysis and presentation was designed for easy integration within existing decision-making processes and channels (e.g. technical and management meetings at the state and national levels).

### Provides guidance around appropriate responses to patient feedback

The receipt and utilization of patient feedback was new to service providers, namely NSHIP facility and LGA staff. My Voice provided training, guidance, and on-site support to facility and LGA staff on how to analyze and use patient feedback effectively and responsibly. Guidance materials included user guides and a problem-solving framework to analyze identified challenges, explore root causes, and collaboratively develop appropriate responses.



### USER SCENARIO: POLICYMAKER

Dr. Aliyu, an NSHIP official at the NPHCDA, is preparing for the upcoming NSHIP Quarterly Technical Review meeting. He knows that one of the key conversations will be around success factors for PBF facility. While he and his colleagues have various theories and anecdotal evidence, they have struggled to explain why certain clinics, LGAs, and states perform better than others. Answering this question will help NPHCDA strengthen those elements in high-performing clinics and work with low-performing facilities to address their challenges.

Dr. Aliyu goes to the My Voice dashboard to see how NSHIP has performed in the last quarter. While he finds the standard summary reports to be a useful starting point, he is soon slicing and sorting the data in different ways and digging deep into the comments section of each facility report to try and identify patterns that may explain performance.

He sees that many clinics struggle to stay open due to lack of staff capacity and that patients are not receiving clear explanations of their treatment and charges for services.

He observes how facility availability directly correlates with the amount of PBF revenue facilities bring in. He also notes other patterns that raise questions around the performance of certain facilities. Given the Wamba General Hospital consistently receives a high PBF quantity score, he is surprised to see that its patient comments are largely negative. He sees that patients are complaining of the same issues as last quarter: long wait times, disrespectful staff treatment, and high charges. He knows that the Nasarawa Hospital Management Board (HMB) has refused to lower their pricing structure for drugs, but this patient feedback provides the support he needs to advocate for reductions for certain critical treatments.

Dr. Aliyu has to rush off to an appointment, but his quick skim through the reports has convinced him that it will be worthwhile to add a session to the upcoming review meeting to discuss how NSHIP funding to the General Hospital can be used to improve quality of care. He also asks one of his project officers to add it to the agenda and to set up a meeting with the HMB to discuss their drug pricing policies.

## HOW IT WORKS

Research revealed several promising entry points to incorporate patient feedback into NSHIP management and decision-making. Below are six channels where My Voice feedback was used to empower responsive service delivery and decision-making at all levels of NSHIP.

### + TRAINING AND GUIDANCE ON FEEDBACK USAGE

As citizen feedback was an entirely new input to NSHIP, program staff, especially frontline service providers, needed guidance on how to process and respond to the feedback. Trainings largely targeted OICs, who have intimate knowledge of their facilities and are well-positioned to implement rapid adjustments. The choice to focus on OICs and LGA staff also responded to NSHIP's overall interest to empower LGAs to act more autonomously in providing quality services. Further, as a new, unfamiliar input into an existing sociopolitical context, it was uncertain how the introduction of citizen feedback would impact the public health system in Wamba. To protect staff from professional risk during the pilot and to discourage rash or otherwise inexpedient actions, My Voice, with the support of NSHIP leadership, prohibited drastic punitive measures against staff during the pilot.

CHANNEL & FREQUENCY	PRIMARY USER	MY VOICE DATA USE CASE
Facility Action & Feedback ( <i>On-going</i> )	Facility management and staff	OIC identifies patient challenges requiring timely, in-person resolution through direct intervention and/or feedback to facility staff.
Facility Staff Meetings ( <i>Monthly</i> )	Facility management and staff	OIC identifies high priority improvement areas for staff performance and facility operations; convenes and facilitates group discussion on how to address. Initiatives and/or adjustments implemented by appropriate staff.
LGA Performance Review ( <i>Bi-quarterly</i> )	Director of DPHC, OICs, select LGA Staff	LGA Director, OICs, and key LGA staff convene to identify areas requiring improvement and develop concrete operational and resourcing plans. Data is also used to prepare for facility supervisory visits and provide staff training.
State Technical Working Group ( <i>Quarterly</i> )	SPHCDA, LGA	NSHIP State Technical Working Group develops and implements plans to provide targeted technical guidance to management beyond what is available from existing oversight mechanisms.
National Technical Review ( <i>Quarterly</i> )	WB, NPHCDA	World Bank and NPHCDA use data analysis and feedback from other stakeholders to share lessons learned and develop adjustments to NSHIP implementation.

### + INTEGRATION IN ALL LEVELS OF MANAGEMENT MEETINGS

Specific meetings at various NSHIP management levels serve as primary channels for programmatic decision-making, including how to address specific challenges and implement program improvements. These were key entry points for My Voice and targeted to facilitate institutional response to patient feedback. ICT4SA successfully incorporated the review of My Voice reports as a standing agenda item in key meetings. This ensured that patient feedback would be reviewed—and appropriate responses and next steps discussed—in the fora where such feedback had the highest potential to prompt institutional response.

PART 3:

# OUTCOMES & FURTHER APPLICATIONS



# PILOT RESULTS

**Through intentional, contextually-informed programmatic and technological design, My Voice was able to integrate citizen feedback into existing NSHIP service delivery and management structures.**

The following section describes and analysis of pilot results, from participation to utilization, and recommendations for future My Voice program expansion. My Voice was piloted in Wamba LGA across all NSHIP health facilities from July to September 2014.

Although the pilot was only nine weeks in duration, results suggest that even in this limited period, My Voice enabled unprecedented constructive dialogue around quality of care between patients, service

providers, and local health officials. Patient feedback from the pilot has led to changes in operational practices of Wamba's PBF health facilities and Department of Primary Healthcare.

Beyond channeling citizen voice to NSHIP service providers and policymakers, My Voice also highlighted the potential benefits to each stakeholder in responding to citizen feedback and provided technical assistance to help them do so.

In working with service providers, My Voice enabled a more direct, 'short' path towards increased accountability in public healthcare. And by providing policymakers with previously hard-to-access citizen perspectives, My Voice has helped them provide more effective oversight of service delivery; this, in effect, also strengthens the 'long' route to accountability.

During the pilot, My Voice registered 60 percent (2,122) of total patients that visited Wamba's PBF facilities and received 460 completed reports of patient feedback.<sup>27</sup>

The volume of citizen participation in the My Voice pilot was significant given the historical lack of citizen trust in government in Wamba and citizens' limited engagement with the state. Other barriers included low citizen capacity to use mobiles and SMS, high rates of illiteracy, and poor telecommunications infrastructure in Wamba, which negatively impacted user experience.<sup>28</sup> Both institutionally-supported and community-driven reporting models showed promise for citizen access to and use of My Voice.

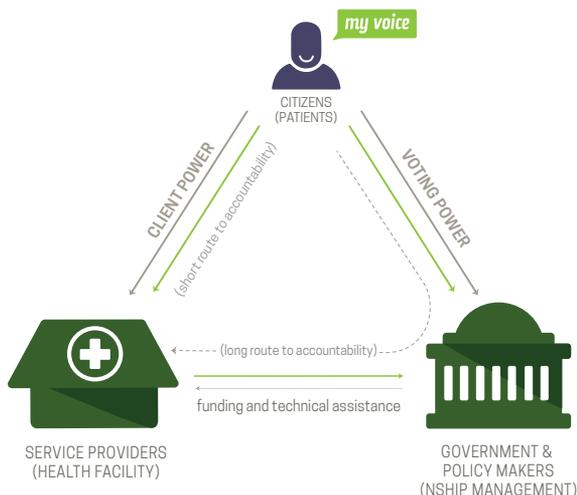
At all levels of NSHIP, the degree of institutional responsiveness to collected patient feedback surpassed project expectations. By providing NSHIP actors at all levels with timely, relevant patient feedback and analysis, My Voice enabled responsive service improvements and evidence-based decision-making across the program:

- **At the facility level, service providers began developing and implementing action plans to address a range of concerns raised by citizens.** These included new initiatives to address perceived or actual inflated pricing, poor staff attitudes toward patients, irregular hours and lack of facility availability, among other issues that

diminished quality of care delivered. My Voice also informed facility discussions on the drivers and constraints of service quality and supported collaborative problem-solving among staff.

- **At the local government level, the DPHC developed protocols to guide and monitor facility responses to citizen feedback.** These included new procedures to enable DPHC oversight of facility commitments on demand-driven service improvements and revised protocols for staffing at PBF facilities.
- **At the state level, NSHIP began exploring how it may provide resources to support facility improvements and incentivize deeper staff engagement with My Voice.** State leadership was highly supportive of My Voice and, at the time of publication, was exploring how it could help fund facility improvements surfaced by citizens. It was also exploring how NSHIP could incentivize greater facility engagement with My Voice by incorporating My Voice results into the calculation of bonuses for facility management and staff. A longer period and wider geographic range of implementation of My Voice is therefore likely to positively impact this process.
- **At the national level, NSHIP policymakers began exploring how to expand use of My Voice across NSHIP and how to institutionalize citizen feedback as a program management tool.** Based on pilot results and support for My Voice from facility, LGA, and state counterparts, NSHIP leadership expressed interest in replicating My Voice in other regions and formally integrating its data and analysis within its program. At the time of publication, activities were underway to replicate My Voice.

These results are significant, especially given the absence of formal programmatic integration between My Voice and NSHIP during the pilot. My Voice was quick to demonstrate value and produce visible results to citizens, service providers, and policymakers; this drove their increased and continued participation. More details on the pilot results follow. In aggregate, they suggest that the My Voice model has great potential to successfully engage citizens, service providers, and policymakers to improve the social accountability of public services.



# PILOT ANALYSIS

This section provides detailed analysis of My Voice's pilot outcomes; it includes an assessment of the progress toward achieving ICT4SA's objectives and explains the contributions of technical and programmatic factors in doing so. Beyond informing future implementations within NSHIP, the analysis may also provide useful lessons for development practitioners focused on social accountability issues or interested in leveraging citizen input to improve public services.

## CITIZEN PARTICIPATION

Over the two-month pilot, My Voice received 460 reports of citizen feedback on Wamba's 11 PBF facilities. By the end of the pilot, 58 percent of patients could accurately explain what My Voice was and how they could use it. Several patients noted, however, they had yet to see tangible changes based on their input. This was understandable given the short duration of the pilot—many facility-level improvements had been identified but were in either in the process of deliberation, planning and review, or early implementation. As more service improvements are implemented and their impacts felt, it is expected that citizens will appreciate the tangible returns on their investment of time and increase their use of My Voice. It is also expected that a longer implementation period would increase the volume of patient participation.

Both institutionally-supported and community-driven reporting models show promise for citizen access to and use of My Voice; citizen engagement, however, was higher in the latter model. In

the pilot, 62 percent of citizen reports were received via the institutionally-supported (in-clinic) data collection model and 38 percent via the community-driven (out-of-clinic) model. The in-clinic patient participation rate—the percentage of patients who received a survey and started responding to it—remained at a steady 19 percent average during the pilot's first month. These initial patient participation rates matched closely with anticipated pre-pilot targets of 20 percent, calculated based on initial user testing. For additional information and visualizations of the results data over the course of the pilot, reference Annex C.

In weeks 5 through 7, patient participation via this model decreased to an average of 8 percent, in part due to technical challenges. Community-driven (out-of-clinic) participation started low but rose steadily as more effort was put towards engagement with WDCs around outreach for My Voice.

## **PATIENT ENGAGEMENT VIA THE IN-CLINIC MODEL MAY HAVE BEEN NEGATIVELY IMPACTED BY THE QUALITY OF INFORMATION THEY RECEIVED ABOUT MY VOICE.**

Of 2,122 patients who were registered in My Voice, 13 percent started surveys; 46 percent of those who started surveys completed them. In cases where the patient received clear explanations from staff on how to use My Voice, how their feedback would be used, and the facility's desire for feedback, patient completion of their reports rose to 22%, exceeding expected participation targets. When even one of these elements was poorly explained, the likelihood of survey completion dropped significantly. Further work is needed to explore how to improve the in-clinic model. It is expected that once NSHIP clarifies the tangible benefits for facilities' PBF participation and performance, the quality of staff explanation will increase. Recommendations around incentivizing staff compliance are presented in the Looking Forward section of this report.

## **OUT-OF-CLINIC USERS REPRESENT A VALUABLE SOURCE OF CONSTRUCTIVE FEEDBACK THAT COULD BE FURTHER LEVERAGED.**

Reports from the community-driven model tended to be more specific, detailed, and therefore actionable for service improvements; by contrast, 92 percent of reports from in-clinic users included positive feedback. There are several possible explanations for differences in citizen participation and engagement between the two models. Patients reporting through the in-clinic model, for example, may have been biased by their surroundings (which can include facility staff nearby) to provide more positive feedback. Additionally, patients who made a concerted effort to report via the out-of-clinic model may have been compelled to do so because they had a particularly negative experience. More research on the drivers of and barriers to patient participation in My Voice is necessary to understand the strengths and limitations of the data collection models and how each may be most effectively leveraged.



▲ Local leadership and NSHIP management discussing My Voice.

## MY VOICE HAS EMPOWERED COMMUNITY LEADERS TO MORE EFFECTIVELY REPRESENT AND ADVOCATE FOR CITIZEN RIGHTS.

While NSHIP's design in Wamba expects WDCs to represent community interests, research found that WDCs lacked an efficient and systematic way to identify the issues that mattered to their constituents and to direct those issues to facility management on a timely basis. My Voice has empowered WDCs to better represent their communities and advocate for their needs. For example, in one ward where My Voice reports indicated a high volume of staff absenteeism, WDC members raised the issue with their facility OIC, citing specific evidence from the report to push for change. As a result, the OIC held a staff meeting specifically to address the issue and initiated performance improvement conversations with offending staff members. Another WDC generated a proposal to ensure staff remain at facilities through their shifts, including nights and weekends, and presented it to their facility's OIC for consideration.

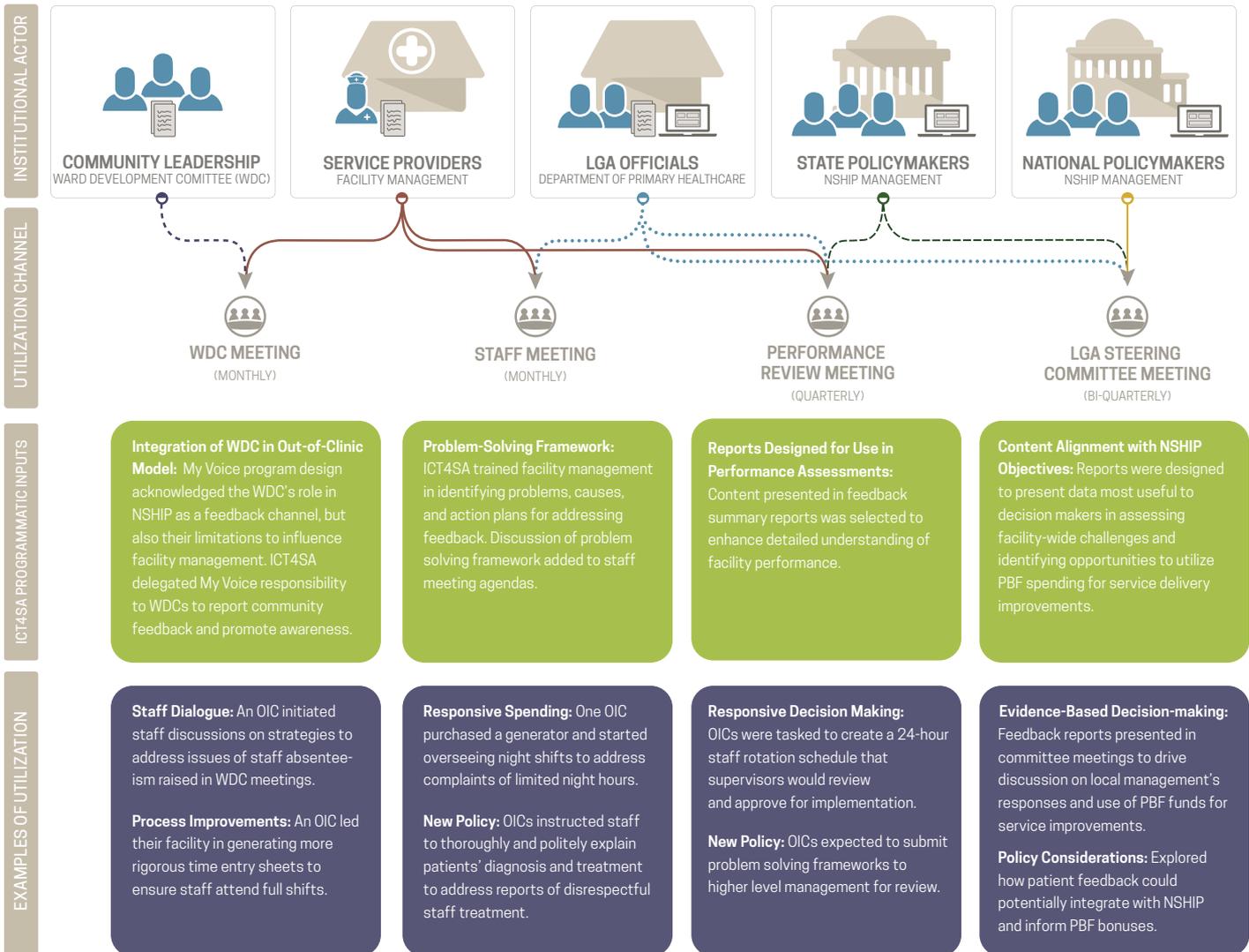
While the engagement of individual WDCs varied during the pilot—due to each WDC's interests and factors such as network connectivity in different areas—most were excited to use My Voice. Their prior process for communicating complaints to OICs was long, ad hoc, and often hindered by an unbalanced power dynamic. My Voice has allowed them to send complaints directly and anonymously to NSHIP. Encouraged, some WDCs have independently begun promoting My Voice through diverse channels, including churches and mosques, to increase their communities' participation.

# INSTITUTIONAL RESPONSE

The degree of NSHIP responsiveness to collected patient feedback surpassed expectations. Service providers developed several initiatives to respond to patient feedback. State and national policymakers began exploring how to better resource and institutionalize responsive, demand-driven service delivery.

The following diagram summarizes how patient feedback was used at key review and decision making meetings across community leaders, service providers, and policymakers. It also highlights select programmatic inputs which contributed to different institutional responses.

Despite their initial reservations, by the conclusion of the pilot, service providers seemed eager to use My Voice and receive patient feedback. While many health facilities expressed concerns about opening themselves up to patient scrutiny early in ICT4SA, during the pilot, PBF facilities in Wamba registered 60 percent of their total patients (2,122) through My Voice. Given that many facilities only update their paper registers monthly, the introduction of a regular, digital registration task—not to mention the technological learning curve and lack of clear, direct benefits to participate—such an outcome suggests a high degree of facility support for the My Voice model.



## SERVICE PROVIDERS

Service provider compliance was a result of effective facility management leadership, established loyalty to the PBF program, and an understanding of the potential value of patient feedback in improving facility performance as communicated through workshops and in-person training with ICT4SA implementation field staff.

Service providers begun making operational adjustments based on challenges and recommendations surfaced by patients. My Voice patient feedback helped facilities identify specific patient needs and challenges and informed staff discussions on drivers and constraints of service quality. Patient feedback enabled facilities to develop action plans to improve their quality of care. In response to reports of inflated drug costs, one facility, for example, revised its price list to reflect updated pricing and placed it prominently around its premises to educate patients and prevent staff overcharging. At another facility, new policies were implemented to ensure all facility staff were clearly explaining drug costs to patients, confirming patient understanding and consent, and allowing patients to ask questions. In response to feedback on poor staff attitudes toward patients and staff neglect, one facility provided customer care training to all staff. The OIC also mandated that consultations include sufficient opportunities for patients to discuss questions or concerns about their diagnosis or treatment.

Service providers, however, need further support in developing appropriate responses to patient feedback and clarity around the resources they may access to do so. Despite assurances that My Voice reports would not have direct repercussions for NSHIP staff, many facility workers continued to avoid taking responsibility for patient-reported challenges. Blaming patients for misunderstanding services received or for a lack of gratitude remained common first reactions when presented with patient feedback. These responses are unsurprising given existing sociopolitical dynamics and institutional history.

Despite this, OICs and staff found My Voice's problem-solving framework useful for exploring root causes of issues and for addressing concerns raised. Further work is needed to help them assess the quality and feasibility of proposed interventions. To address reported issues around unpredictable hours and unexpected closures at his facility, one OIC began tightly enforcing shift schedules among his staff and purchased a generator to prevent closure due to power outages; he also began sleeping in his facility when staff could not be present. The latter solution, while creative and resourceful, was unsustainable. During the pilot, ICT4SA and NSHIP LGA staff provided guidance to facilities on how to develop appropriate responses to My Voice feedback. Moving forward, continued LGA DPHC support will be helpful, as will greater clarity around how PBF funds may be used for demand-driven improvements.

## LGA OFFICIALS

At the LGA level, citizen feedback was used to inform operational decisions and programmatic planning. Key management meetings such as facility performance reviews and the LGA Steering Committee Meeting now include discussion of My Voice reports as a standing agenda item. In many meetings observed during the pilot, citizen feedback comprised a significant portion of the dialogue. These conversations have led to several new procedures and initiatives. For example, facility management now provide weekly reports to the LGA DPHC on commitments made and actions taken based on their feedback reports; implementation is monitored by LGA supervisors. Facilities with reported lack of staff availability are now mandated to create a staff rotation schedule that requires LGA DPHC approval before implementation.

## STATE POLICYMAKERS

At the state level, NSHIP is exploring how to provide resource support to encourage responsive service delivery and enable improvements based on patient reports. The head of the NSHIP State Primary Healthcare Development Agency (SPHCDA) was highly supportive of My Voice based on pilot results. Workshops were held with SPHCDA and State Program Implementation Unit (SPIU) staff on how to use the My Voice dashboard and analyze summary reports. At the time of publication, the SPHCDA was determining how it may allocate funds to support facility-level operational changes to respond to My Voice. It has also proposed that NSHIP use My Voice results to inform the calculation of bonuses for facility management and staff to increase facility-level support for responsive service delivery.

## NATIONAL POLICYMAKERS

Based on pilot results and local and state NSHIP support of My Voice, national NSHIP leadership began exploring how to formally integrate My Voice within its program and institutionalize citizen feedback as a program management tool. A pilot technical review meeting was held within two weeks after the conclusion of the pilot. In this meeting, NSHIP leadership from the NPCHDA, SMOH, SPHCDA, and World Bank, assessed pilot results and explored the value of formally integrating My Voice within NSHIP and of scaling it to other LGAs. Other meeting participants included 10 representatives from Wamba—including the Director of the LGA DPHC, facility OICs and staff, and community leaders—who shared their experiences and recommendations for using My Voice to improve health service delivery. Following this meeting, NSHIP formally expressed interest in replicating My Voice in other regions and in institutionalizing patient feedback as a program accountability mechanism. At the time of publication, activities were underway to respond to NSHIP's request.

## TECHNICAL FUNCTIONALITY

During the pilot, the My Voice technology system facilitated the processing of nearly 17,000 text messages. System uptime was approximately 86.5 percent, based on analysis of best-available data. Technical difficulties—including periodic network delays caused by unreliable mobile network signal, inconsistent prioritization of messages, and brief system malfunctions—delayed and at times stalled message delivery. The ICT4SA technology support team helped troubleshoot these issues over the course of implementation.

Contexts with limited and/or unreliable telecommunications capabilities require heavy investment in technical troubleshooting with users and technology partners. The pilot also provided useful lessons on how to do so. Technical challenges such as inconsistent mobile networks and persistent message delays impacted the success of the pilot. While ICT4SA engaged two respected Nigerian mobile aggregators to address the network challenges; both were unable to provide reliable analysis about the source of the issues and to implement timely solutions to address them. One key issue was that the scale of implementation, in line with similar pilot initiatives in the development sector, was too small to incentivize the

aggregators to invest in timely troubleshooting—their commercial projects are typically much larger in scale and therefore more lucrative.

As the low-connectivity implementation context prevented an on-site engineering team, technical team members were based remotely, in Lagos and the United States. Network challenges also highly constrained the communications capabilities of the field-based programmatic team. Establishing a productive working dynamic between the programmatic and technological teams thus required significant investment and flexibility from all stakeholders to enable successful project communication and technical execution.

While the technical challenges were not insignificant, ICT4SA and NSHIP agreed that the My Voice pilot outcomes demonstrated that they were not an insurmountable barrier to project success. Moving forward, My Voice expansion efforts include the implementation of a robust technical roadmap—in addition to new design features and additional functionality—to address specific challenges. More details on the expansion efforts are in the following section.



USER PERSPECTIVES:

## HEALTH OFFICIALS REFLECT ON THE MY VOICE EXPERIENCE

At the end of the NSHIP pilot, several service providers and staff shared their reflections on the project. Two perspectives are provided below with consent; they have been edited for length and clarity. The comments illustrate how, over time, My Voice has helped shift perspectives on the value of citizen feedback.



**“My Voice reminded me that I needed to communicate better with my patients.”**

FACILITY OFFICER-IN-CHARGE, YASHI MADAKI FACILITY

## SALISU IBRAHIM

BIRTHPLACE:

**UKANBU, WAMBA**

YEARS AS OIC:

**12**

FAMILY:

**2 WIVES, 7 CHILDREN**

EDUCATION:

**COMPLETED SECONDARY SCHOOL, TRAINED AS COMMUNITY HEALTH EXTENSION WORKER (CHEW)**

### *What has been your experience with My Voice?*

My experience was a good one with the coming of My Voice because I notice a great difference in the work I did before and the work I do now. People in the community are now thanking me for the work I do. My Voice has given me confidence to talk during our monthly OIC meeting. Before, the director always complained about my low performance, but I am [showing I can] improve in terms of quality performance. My Voice also gave me insight into what my patients are feeling about my services.

### *What did you think of My Voice when it was first introduced?*

At the beginning, I was running from My Voice. Even when ICT4SA called for meetings, I usually dodged from it and sent my staff instead. The worst part of it was I didn't like seeing the ICT4SA team coming to my facility because their interviews were so long. I felt My Voice was a waste of time and there would be no benefit derived from it; I felt it was brought [to my facility] because of my low performance. But now I am the happier man when you talk of My Voice.

### *What surprised you most about My Voice?*

What surprised me most was how it has helped me address particular issues or misunderstandings. I saw in a weekly report that a patient felt I over-charged him, and I realized that I had not explained anything to the patient after the treatment [about why I was providing additional services that would cost extra]. That was my mistake.

My Voice reminded me that I needed to communicate better with my patients.

### *How has My Voice helped you?*

My Voice has reminded me to explain treatment to patients and discovered patients that my staff have treated without recording them. It helped [me realize that I should] employ staff to cover night shifts; I have now created three shifts in the facility when I had only one before. [This is] because all of my weekly reports [show complaints] about my facility being closed, especially at nights and weekends. [Seeing] this made me think of how to solve the problem, since none of my staff want to stay without light, so I decided to encourage them to stay by buying a generator from my PBF management account.

DIRECTOR OF DPHC IN WAMBA LGA:

## EZEKIEL MUSA JAGGA

BIRTHPLACE:

**KLOGBA MBAKO, WAMBA**

YEARS AS DIRECTOR OF DPHC:

**18**

FAMILY:

**1 WIFE, 1 CHILD**

EDUCATION:

**MHM, BS.C, PGDM, ADHSSM,  
DIPLOMA IN PUBLIC HEALTH**

### *What has been your experience with My Voice?*

My Voice is a new innovation that brings us to the new technological world. It has brought change to the health sector in Wamba and Nasarawa State at large, because it help both [NSHIP] staffs and members of the communities understand how to text with their mobile phone. It has also brought positive change in the quality of healthcare services in Wamba.

### *What did you think of My Voice when it was first introduced?*

I first thought of My Voice as an additional burden because I would have to organize my staff to comply with the program, and it would also add financial commitment. I thought it would take much time and might not yield any result.

### *Did you ever think the program wouldn't work?*

Yes, because of the technology [component]. Some community members don't have mobile phones, even the literacy level of our people in communities [is low]. Also there are [mobile] network challenges in some of the communities where PBF facilities are located. And getting people to understand the importance of My Voice [seemed like it would be a challenge].

### *What surprised you most about My Voice?*

I never thought people will participate in the survey because of the literacy level of our communities until I started seeing community responses about their facilities through the My Voice weekly report. Another thing that surprised me was when ICT4SA handed the project of My Voice to me [to continue implementing].

### *How has My Voice helped you?*

It has helped me to plan for my supporting supervision to my staffs. When I get feedback comments, I am able to discuss them with OICs during our meetings to effect changes. My Voice also helps me to figure out one or two specific issues that will need to be addressed immediately when the LGA teams deliver the report each week. And it [allows me to have a] database where I can see and make reference for future plans [for example, by noting] the number of patient I see each facilities are registering.

### *What do you see as the potential for My Voice in the future?*

I believe that My Voice in the future can help make a great improvement the our quality of service since the [patients'] comments are of benefit to me and the OICs and help us adjust to better services. OICs are bringing changes to their facility, [My Voice is] helping them to make decisions on what the patients are saying.



**“My Voice is helping [health facilities] make decisions [based] on what the patients are saying.”**

# FORWARD OUTLOOK

**Based on pilot outcomes, NSHIP is continuing implementation of My Voice in Wamba—a decision informed, in part, by requests from Wamba’s facility and LGA service providers to do so—and expanding the program across Nasarawa State.**

As part of this effort, NSHIP seeks to formally integrate My Voice into key program management channels. Additionally, NSHIP has expressed interest in scaling My Voice nationally and considered commissioning a third-party impact evaluation to determine how it can best leverage the model in the future.

ICT4SA demonstrated the potential of citizen feedback to improve public services and strengthen the social contract between governments and citizens.

Translating the successes and learnings from the pilot into a scalable program requires a continuation of the approach employed during the pilot. As part of its expansion plan, the My Voice implementation model—currently tailored for Wamba LGA—must evolve to support replication across NSHIP’s diverse implementation contexts.

## UPCOMING ITERATIONS

Recommended iterations to My Voice’s technical and programmatic designs have been identified based on pilot lessons and priorities articulated by NSHIP. The iterations, along with the programmatic objectives they seek to serve, are outlined below and sample visual prototypes can be found in Annex B: Select Design Components. A selection of these will be implemented as part of My Voice expansion efforts over the coming year:

### Increase citizen participation in My Voice.

- Implement prioritized technical and programmatic iterations that would increase citizen interest or ability to use My Voice or that could otherwise lower barriers to participation.
- Adapt communications strategies and materials to increase citizen awareness and understanding of My Voice to encourage sustained use; increase promotional efforts in communities and through local leaders.
- Test citizen and facility interest in local language options and assess potential to increase My Voice’s reach and accessibility.

### Integrate patient feedback into NSHIP PBF implementation instruments and processes.<sup>30</sup>

- Integrate My Voice patient feedback into existing PBF financial incentives, implementation tools, and quality of care M&E instruments. Develop and implement incentives to encourage staff and OIC compliance with My Voice processes.
- Institutionalize My Voice patient feedback within existing PBF program mechanisms and processes, informed by PBF guidelines and implementation realities.

### Increase utilization of facility PBF funding for improvements in quality of care.

- Help facilities determine how to effectively invest PBF funds to improve quality of care by (1) revising structure and content of facility reports, and (2) developing frameworks for making spending decisions.
- These tools will also help DPHC staff in advising facilities on how to effectively invest PBF funds to improve quality of care.

### Support NSHIP dialogue around implementation adjustments based on My Voice experience and insights on local PBF institutions.

- Identify factors that prevent citizens from accessing PBF health facilities by extending My Voice to non-patients.
- Use My Voice integration with NSHIP to inform improved value-add of NSHIP program accountability mechanisms, such as community oversight of health facilities by the WDC.
- Ensure integration of My Voice into NSHIP includes sufficient flexibility for future adjustments and can be monitored and adapted by state and national level management.

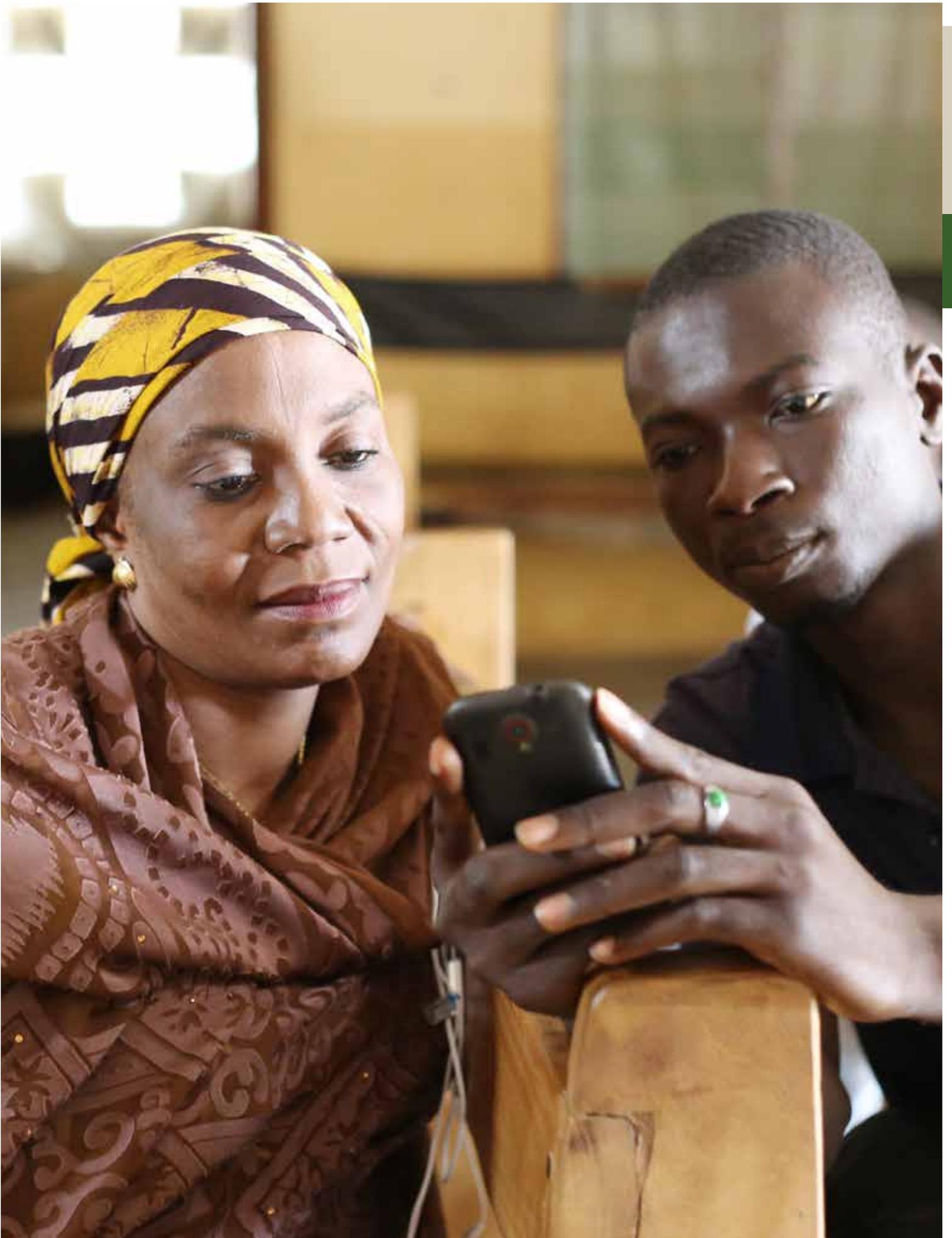
### Build upon pilot achievements to strengthen institutional capacity and ensure the sustainability of ongoing, locally owned implementation.

- Recruit and train at least one staff member and/or representative of each health facility, LGA, and WDC to carry out key My Voice functions and report to his/her respective supervisor; provide ongoing strategic support to the LGA DPHC to enable their effective leadership of the program.
- Integrate My Voice programmatic activities into NSHIP supervision tasks at the relevant levels/roles to reinforce accountability and reduce redundancies.
- Increase resources for technical user support and technical team management and coordination; refine and expand technical documentation and user guides to enable DPHC management and troubleshooting in future My Voice implementations.
- Strengthen local Nigerian technical development team's capacity and autonomy to manage the technical platform.

# LOOKING AHEAD

NSHIP is a relatively young program. As a result, replicating My Voice and integrating feedback into PBF management processes may require institutional capabilities that are not yet fully developed within NSHIP. The practice of operationalizing patient feedback remains new, technology resources and usage are variable, and facilities and LGAs are continually adapting to NSHIP's evolving processes. A broader implementation of My Voice must therefore be supported by product and program customization for each operating context and targeted institutional capacity strengthening necessary for a formal ownership transition of the system. Discussions are ongoing between the relevant NSHIP, World Bank, and Reboot teams on the most appropriate approaches to scaling My Voice at the lowest possible cost.

ICT4SA's pilot outcomes were promising, and My Voice's ability to enhance constructive citizen-government dialogue is expected to increase with time. As citizens observe facility improvements based on their input, their use of My Voice will grow. Once NSHIP develops clear policies on how My Voice participation and performance will impact facilities and local DPHCs—and, specifically, as relevant to PBF payments and/or other resource support—service providers will increase their engagement with My Voice. Heightened participation from both citizens and service providers will lead to richer, more useful intelligence for NSHIP policymakers; this, in turn, should strengthen their interest in and use of My Voice in program planning and management. In concert, these actors' inputs and actions can help deliver public services that are more effective, efficient, and responsive to citizen needs.



## ANNEX A

# NSHIP INFORMATION NEEDS

To make evidence-based programmatic decisions and adjustments, each NSHIP staff and management role has specific and different information needs. The ICT4SA team researched needs across

stakeholders from the facility level to the World Bank level; these findings informed My Voice design decisions. Summarized information needs are presented below:

NSHIP LEVEL	ACTOR ROLE AND INFORMATION NEED
Facility	<p><b>Officer In Charge</b> Detailed comments, with sufficient level of contextual detail, around patient experiences that provide evidence to enable him/her to address the issue with staff or through local procedures.</p>
LGA DPHC	<p><b>Director</b> Overview of severe and common issues to see which clinics and challenges require attention. Comparisons of facilities to measure performance across all facilities. Data that can support requests to the LGA and SPHC-DA for policy change or funding.</p>
SPHCDA	<p><b>Project Coordinator, SPIU</b> Comparisons to measure performance across all facilities (including progress over time), especially areas for challenges that might indicate opportunities for training. Analysis by LGA level of potential solutions.</p> <p><b>Executive Chairman</b> Comparisons of performance across different states to indicate success stories and limitation areas requiring additional support or guidance. Data to inform state of on-ground progress and context from a distance.</p>
NPHCDA (Systems Division)	<p><b>Director</b> Data to assess and analyze contributing factors for success or poor performance in clinics. Data that can inform iterative decisions to the Pilot design to improve success of the program.</p>
World Bank	<p><b>PBF Consultants, World Bank</b> Data to fill holes or gaps in existing data collection or accountability loops; data that counter verifies their ongoing data analysis. Special interest in the comparison between Quantity, Quality, and Customer Satisfaction and linkages between facility performance and certain service delivery.</p> <p><b>Health Specialists and Project TTLs</b> Thematic, quantified, verified data that indicates areas requiring attention or significant policy / design changes and decisions. Prioritizes dissemination of data to other system users to support their own autonomy.</p>

## ANNEX B

# SELECT DESIGN COMPONENTS

The promotional materials sought to create awareness around and develop brand recognition of My Voice to users and in doing so, foster participation and of the program. The My Voice brand builds on existing user research from ICT4SA Phase I to ensure contextual relevance and utility. The design of the My Voice brand was informed by inputs from local Wamba patients and key NSHIP stakeholders. A visual example of each promotional product is provided below, followed descriptions of the brand concept rationale, messaging, and product purpose:

The My Voice pilot tested four fundamental components of the design:

1. Survey Messaging
2. Feedback Reports
3. Dashboard Interface
4. Promotional Materials

Based on in-pilot user-testing results, some of these components have been proactively redesigned; pending scale-up plans these second iterations are recommended for implementation as part of the next phase of the project. The following pages present visual mockups and further details:

PRE-PILOT DESIGN	POST-PILOT RECOMMENDATIONS
<p><b>Survey Messaging</b></p> <p>In-Clinic Survey, v1                      In-Clinic Survey, Mid-Pilot Iteration, v2                      Out-of-Clinic Survey, v1</p>	<p><b>Survey Messaging</b></p> <p>Out-of-Clinic Survey—No Iteration Recommendation</p>
<p><b>Feedback Report</b></p> <p>Facility Report, v1                      LGA Summary Report, v1</p>	<p><b>Feedback Report</b></p> <p>Facility Report, v2                      LGA Summary Report, v2</p>
<p><b>Dashboard Interface</b></p> <p>Home Page, v1                      Analyst Dashboard, v1</p>	<p><b>Dashboard Interface</b></p> <p>Home Page, v2                      Analyst Dashboard—No Iteration Recommendation</p>
<p><b>Promotional Materials</b></p> <p>In-clinic Poster, v1</p>	<p><b>Promotional Materials</b></p> <p>Additional In-Clinic Visual Tools</p>

## IN-CLINIC SURVEY V1

The following questions were part of the original survey iteration designed for the launch of the My Voice pilot on July 7, 2014. They were informed by primary patient complaint topics and content within NSHIP health quality performance evaluations.

- 1 Welcome to My Voice - share your experience! Is this hospital open when you need it? Reply to 55999: 1 for YES, 2 for NO.

*If no: When is the hospital not open? Reply to 55999.*

- 2 Was the hospital staff respectful and caring? Reply to 55999: 1 for YES or 2 for NO.

*If no: What happened that was bad with hospital staff?  
Reply to 55999 in details.*

- 3 Was the hospital equipment clean? Reply to 55999: 1 for YES or 2 for NO.

*If no: What specifically was not clean at the hospital?  
Reply to 55999.*

- 4 Did the hospital overcharge you? Reply to 55999: 1 for YES or 2 for NO.

*If yes: What did you pay for? How much? Reply to 55999  
in details.*

- 5 What did you pay for? How much? Explain in details. Reply to 55999.

- 6 How long did you wait for treatment at the hospital? Reply to 55999: 1 for 1 hour or less, 2 for 2 hour or less, 3 for 3 hours or less, 4 for anything else.

- 7 Thank you! Say any other complaints or praises about this hospital now. Reply to 55999.

- 8 Complete! Your survey has been received. Thank you for participating in My Voice!

## CONTENT

The surveys were designed to capture comments from people most likely to have complaints, as detailed comments were the most valuable data for OICs in trying to address problems. Questions were curated to align with existing NSHIP performance assessment instruments and patient priorities in health services.

## LANGUAGE

Surveys are currently in English as research showed that people who could read, write, and SMS were more likely to know English. Other languages may be added to make it accessible to more people. The choice of words for the surveys was tested for patient understanding. For example, patients refer to all clinics as “hospitals” and are not familiar with the words “clinic” or “facility.”

## STRUCTURE

The survey structure was designed to gather information from patients as easily as possible by only requiring minimal responses to yes/no questions. The survey also allows the option of providing detailed comments that are sorted intelligently by the online dashboard to reveal useful insights for supervisors.

## MID-PILOT ITERATION

# IN-CLINIC SURVEY V2

The content of the pilot survey messages was designed with input from institutional users from the World Bank, Federal, State and local government healthcare executives, health clinic management, and local community members. Word choice was updated to reflect patient comprehension and language preferences. Additionally, question four on the V1 iteration was replaced with a more relevant question about explanation of sickness (question three below). Questions four to seven from V1 were unchanged.

- 1 Welcome to My Voice! It is free and no names are used. Answer next 6-9 questions : Are healthcare workers available when you visit the hospital? Reply 1 for YES, 2 for NO.

*If no: When are the healthcare workers not at the hospital?  
Reply to 55999 in details.*

- 2 Was the hospital staff rude or disrespectful in any way at the hospital? Reply 1 for YES or 2 for NO.

*If yes: How did the hospital staff disrespect you at the hospital?  
Reply to 55999 in details.*

- 3 Did staff explain your sickness and treatment at the hospital? Reply 1 for YES or 2 for NO.

*If no: What do you want to know about your sickness and treatment at the hospital? Reply to 55999 in details.*

## NEW QUESTION

Complaints from patients often derived from a lack of explanation by staff around treatment. This aspect of quality of care was also emphasized by several NSHIP decision makers. This question replaced a less relevant question about clean equipment, which patients did not seem to have expectations for or see the correlation between hygiene and health service quality.

## ADDITION

Patients continued to feel uncomfortable about revealing negative comments about their facilities and questioned whether the survey was free. The phrase “Free and no names are used” was added at the beginning of the survey. Additionally the number of questions asked was incorporated so patients knew what to expect. Moreover, rather than asking if the facility is open, the question was changed to ask if Healthcare workers are available, because a facility could be open, but for a patient to receive treatment, they require the presence of a CHEW.

## REVISION TO WORDING

Research showed that verbal or physical abuse by facility staff was a common (but not reported) complaint — experienced by 36 percent of patients interviewed. The V1 survey, however, was not capturing this information frequently through the yes/no question. From patients reporting respectful treatment, complaints on mistreatment would appear in the free response question, if patients reached the end of the survey. The change in question structure here, from a positive bias to negative, sought to test an option to glean more honest reporting from patients about their experiences.

## PRE-PILOT DESIGN

# OUT-OF-CLINIC SURVEY V1

The following questions were part of the original self-initiated survey iteration designed for the launch of the My Voice pilot on July 7, 2014.

1 Hello! We are happy to hear from you. Which hospital do you have a comment about? Reply 1 for Arum, 2 for Gwagi, 3 for Kwabe, 4 for Kwarra. Reply 5 for Mararaba Gongon, 6 for Nakere, 7 for General Wamba, 8 for Wamba Model, 9 for Wayo Matti, 10 for Yashi Madaki, 11 for Zalli, 0 for other.

2 Please tell us about the experience at this hospital.  
Reply now to 55999 FREE.

3 Complete! Your comment has been received. Thank you for participating in My Voice!

PRE-PILOT DESIGN

# FACILITY REPORT V1

The image below represents the initial facility report design, which was meant to help facilities visualize their performance, in terms of patient feedback responses on five survey question topics. This design attempts to quantify customer satisfaction and provide rankings for OICs to gauge survey sending and response achievements. It also lists all qualitative complaints and comment provided through both the in-clinic and out-of-clinic models.

## Arum Chugbu Facility Report

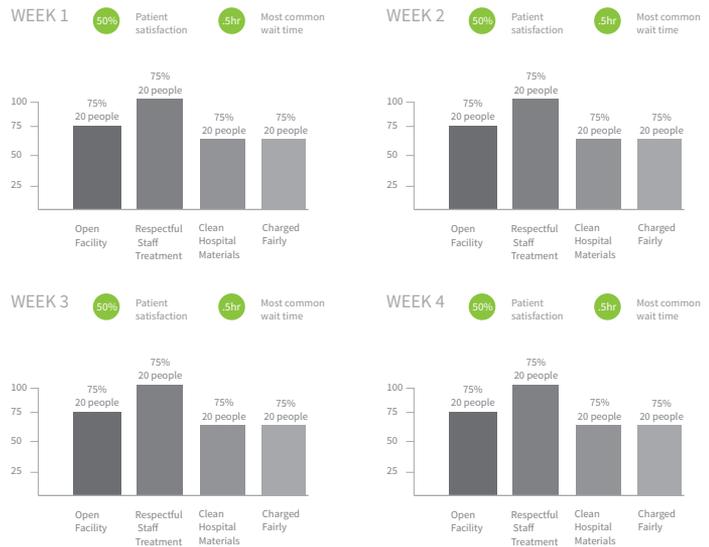
July 7–13, 2014

The following document was generated through the ICT4SA program, intended to provide trial period reporting to selected Wamba Clinic Staff. The following data was collected through SMS surveys of patients at \_\_\_\_\_ clinic.

### FEEDBACK PARTICIPATION

**72** Patients registered for survey  
**48%** Completed surveys  
**#2** Participation ranking among facilities

### FEEDBACK ANALYTICS



### FEEDBACK ON SERVICES

Number of patients with this service who reported this feedback between July 7–August 7, 2014.

July 7-13 2014	Open Facility	Respectful Staff Treatment	Clean Hospital Materials	Charged Fairly	Most Common Wait Time (hrs)
ANC	x% (# patients)	20% (32)	20% (32)	20% (32)	#
Normal Delivery	20% (32)	20% (32)	20% (32)	20% (32)	4
Immunization/Vaccination	20% (32)	20% (32)	20% (32)	20% (32)	1
OPD	20% (32)	20% (32)	20% (32)	20% (32)	1
Family Planning	20% (32)	20% (32)	20% (32)	20% (32)	.5

### DETAILED COMMENTS

Date	Comments
07/31/2014	OPEN FACILITY Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation.
07/31/2014	OPEN FACILITY Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation.

# LGA SUMMARY REPORT V1

The LGA Summary Report aggregates data across all of the 11 clinics in Wamba LGA.

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## Wamba LGA Summary Feedback Report:

The following document was generated through the ICT4SA program, intended to provide trial period reporting to selected NSHIP PBF staff. The following data was collected through SMS surveys of patients in 11 Wamba LGA PBF Integrated Clinics and some additional community members.

### FEEDBACK ON SERVICES

Number of patients with this service who reported this feedback between July 7–August 7, 2014.

August 2014	Open Facility	Respectful Staff Treatment	Clean Hospital Materials	Charged Fairly	Most Common Wait Time (hrs)
ANC	x% (# patients)	20% (32)	20% (32)	20% (32)	#
Normal Delivery	20% (32)	20% (32)	20% (32)	20% (32)	4
Immunization/ Vaccination	20% (32)	20% (32)	20% (32)	20% (32)	1
OPD	20% (32)	20% (32)	20% (32)	20% (32)	1
Family Planning	20% (32)	20% (32)	20% (32)	20% (32)	.5

### FEEDBACK REPORTED BY FACILITY

Number of patients with this service who reported this feedback between July 7–August 7, 2014.

August 2014	Feedback Participation	Patient Satisfaction	Quality (Score, Q1)	Quantity (Score, Q1)	Open Facility	Respectful Staff Treatment	Clean Hospital Materials	Charged Fairly	Most Common Wait Time (hrs)
Arum Chugbu	x% (#)	This response was generated by using key satisfaction indicators based on customer responses in SMS survey.			#	x% (#)	Question: Did the staff treat you with respect? (#)		
Gwagi	20% (43)	20% (43)	68	23	20% (43)	20% (43)	20% (43)	20% (43)	4
Kwabe	20% (43)	20% (43)	23	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)	2
Kwarra	20% (43)	20% (43)	63	83	20% (43)	20% (43)	20% (43)	20% (43)	1
M. Gongon	20% (43)	20% (43)	45	24	20% (43)	20% (43)	20% (43)	20% (43)	1
Nakere	20% (43)	20% (43)	63	13	20% (43)	20% (43)	20% (43)	20% (43)	.5
Wamba GH	20% (43)	20% (43)	68	23	20% (43)	20% (43)	20% (43)	20% (43)	2
Wamba PHC	20% (43)	20% (43)	23	7	20% (43)	20% (43)	20% (43)	20% (43)	.25
Wayo Matti	20% (43)	20% (43)	83	48	20% (43)	20% (43)	20% (43)	20% (43)	6
Yashi Madaki	20% (43)	20% (43)	24	32	20% (43)	20% (43)	20% (43)	20% (43)	1
Zalli	20% (43)	20% (43)	13	33	20% (43)	20% (43)	20% (43)	20% (43)	1



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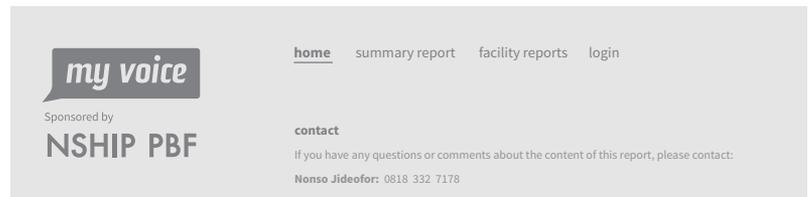
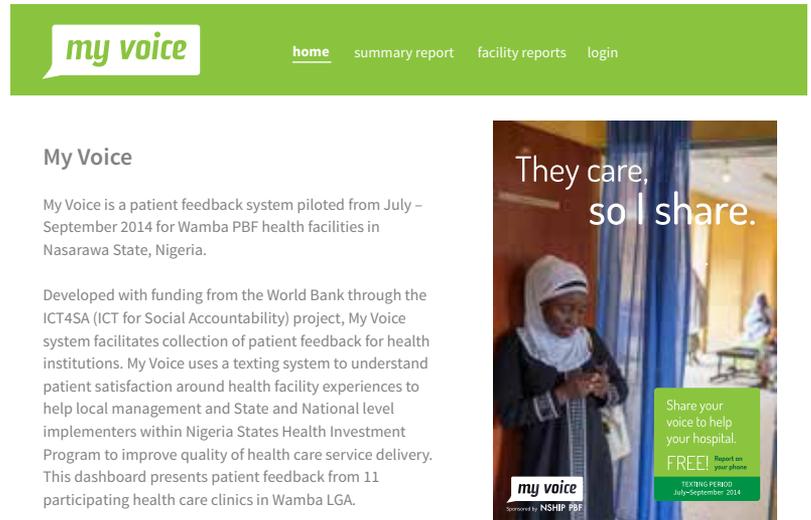
**contact**

If you have any questions or comments about the content of this report, please contact:  
Nonso Jidefor: 0818 332 7178

PRE-PILOT DESIGN

# DASHBOARD INTERFACE V1

The initial home page was built as a standard landing and navigation page for the My Voice dashboard prototype.



PRE-PILOT DESIGN

# IN-CLINIC POSTER

In-clinic poster targeted towards patients with the intention of raising awareness and developing brand recognition of My Voice. Additionally this poster design sought to simply demonstrate what the survey messaging process would be like and encourage patients to participate through familiar visual elements.



PRE-PILOT DESIGN

# ANALYST DASHBOARD V1

The analyst dashboard was designed to assist the internal ICT4SA team in analyzing data throughout the duration of the pilot. Design decisions were informed by evaluation metrics stated in the Pilot Analysis Framework. For example, it shows facility participation and completion rates for both in-clinic and out of clinic models, the amount of time taken to respond to specific questions and completion rates filtered by services.

## Analyst Summary

DOWNLOAD DATA

### COMPLETION RATE

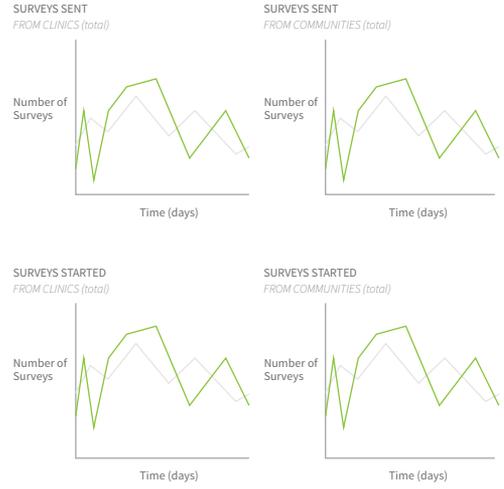
SELECT:  Start Date  End Date  Service  APPLY

Clinic	Number of Surveys Triggered	Number of Surveys Started	Number of Surveys Completed
Arum Chugbu	#	# (%)	# (%)
Gwagi	32	32 (50%)	32 (50%)
Kwabe	32	32 (50%)	32 (50%)
Kwarra	32	32 (50%)	32 (50%)
Mararaba Gongon	32	32 (50%)	32 (50%)
Nakere	32	32 (50%)	32 (50%)
Wamba GH	32	32 (50%)	32 (50%)
Wamba Model PHC	32	32 (50%)	32 (50%)
Wayo Matti	32	32 (50%)	32 (50%)
Yashi Madaki	32	32 (50%)	32 (50%)
Zalli	32	32 (50%)	32 (50%)
<b>Total</b>	<b>32</b>	<b>32 (50%)</b>	<b>32 (50%)</b>

### PARTICIPATION

SELECT CLINIC:

- ALL
- Arum Chugbu
- Gwagi
- Kwabe
- Kwarra
- M. Gongon
- Nakere
- Wamba GH
- Wamba PHC
- Wayo Matti
- Yashi Madaki
- Zalli



### FEEDBACK RATES BY QUESTION

SELECT:  Start Date  End Date  Clinic  Service  APPLY

Survey Question	Number of Respondents	Patient Response Time	System Response Time
1.1 Open Facility	#	hh:mm:ss	hh:mm:ss
1.2 Open Facility Comment	32	00:03:25	00:07:20
2.1 Respectful Staff Treatment	32	00:03:25	00:07:20
2.2 Respectful Staff Treatment Comment	32	00:03:25	00:07:20
3.1 Clean Hospital Materials	32	00:03:25	00:07:20
3.2 Clean Hospital Materials Comment	32	00:03:25	00:07:20
4.1 Charged Fairly	32	00:03:25	00:07:20
4.2 Charged Fairly Comment	32	00:03:25	00:07:20
5.1 Wait Time	32	00:03:25	00:07:20
6.1 Feedback Response	32	00:03:25	00:07:20
Generic	32	00:03:25	00:07:20

POST-PILOT RECOMMENDATION—  
FOR IN-CLINIC SURVEY V2

# FACILITY REPORT, V2

The image below represents a revised facility report design that applies insights gleaned from observing OICs and LGA staff interact with the reports. This report design displays question content from question iteration V2. It aims to reduce visual complexity and confusion and present data in a more direct and straight forward way, while preserving some of the best-functioning aspects of the V1 facility report. This new report has already been user tested with OICs in Wamba and reflects any of their recommendations for change; they preferred this report to V1 and requested that it be implemented should the program continue.

## CROSS-FACILITY COMPARISONS

OICs were motivated by seeing the results of other facilities and theirs in comparison. This bar chart shows surveys sent, started, and completed for each participating facility.

## MORE INTUITIVE PRESENTATION

OICs, while excited about the bar chart visuals initially, were not able to glean the most valuable information from patient feedback in that format. The results of the survey have been modified to be displayed in a way that presents both numbers and percentages. Results are explained within the context of the survey questions: "90% of patients said they were charged fairly. All of the facility's feedback is displayed alongside the LGA averages, so the OICs can see how their performance compares.

## WAYFINDING FOR PROBLEM-SOLVING

Alert symbols indicate for OICs and LGA staff where patient feedback warrants attention to help facilitate problem-solving discussions. Check marks help OICs know when they're performing better than average, as OICs are motivated by and take pride in boasting high performance.

## SIMPLIFIED PATIENT ENGAGEMENT RESULTS

Survey Participation Box is now more direct and easier to read. These numbers are used by OICs to mark a weekly performance chart, so they've been made more visible and the bar chart has been removed.

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### Arum Chugbu Facility Report

The following document was generated through the ICT4SA program, intended to provide trial period reporting to selected Wamba Clinic Staff. The following data was collected through SMS surveys of patients at Arum Chugbu clinic.

July 7–August 26

SURVEY PARTICIPATION

<b>154</b>	<b>25 (16%)</b>	<b>5 (3%)</b>
Surveys Sent	Surveys Started	Surveys Completed

---

PARTICIPATION BY FACILITY

Facility	Surveys sent	Surveys started	Surveys completed
Arum Chugbu	154	25	5
Gwagi	139	19	9
Kwabe	66	12	7
Kwarra	105	17	1
Mararaba Gongon	98	13	5
Nakere	60	11	9
Wamba GH	447	58	54
Wamba Model Clinic	383	50	23
Wayo Matti	105	17	7
Yashi Madaki	89	32	17
Zalli	37	0	0

**KEY**  
■ Surveys sent    ■ Surveys started    ■ Surveys completed

---

PATIENT FEEDBACK RESPONSES

Patients from **Arum Chugbu** said:

<b>23</b> (92%)	Healthworkers are available to provide service. ✓
<b>16</b> (89%)	The staff is respectful and kind. ▲
<b>13</b> (100%)	The staff explained sickness and treatment. ✓
<b>4</b> (50%)	They were charged fairly. ▲
<b>7</b> (100%)	They waited for less than 1 hour. ✓

Patients from other facilities said:

<b>215</b> (88%)	Healthworkers are available to provide service.
<b>165</b> (93%)	The staff is respectful and kind.
<b>138</b> (96%)	The staff explained sickness and treatment.
<b>81</b> (61%)	They were charged fairly.
<b>80</b> (71%)	They waited for less than 1 hour.

**KEY**  
✓ Better than average.    ▲ Problem area. Requires attention.

---

FEEDBACK ON SERVICES

Service	Open Facility	Respectful Staff Treatment	Clean Hospital Materials	Charged Fairly	Most Common Wait Time (hrs)
ANC	100% (1)	100% (1)	100% (1)	N/A	N/A
Normal Delivery	0% (1)	N/A (0)	N/A	N/A	N/A
OPD	96% (24)	88% (17)	100% (12)	63% (8)	1-2 hrs (5)

---

DETAILED COMMENTS

Comments from August 18–August 27

Date	Comments
CHARGE FOR SERVICES: What did you pay for? How much was it?	
26/07/2014	For tes is 530 and table is 420
GENERAL FEEDBACK	
26/08/2014	THE EXPERIENCE I HAVE FOR THE HOSPITAL IS THAT: (1) THE WORKERS ARE NOT STABLE (2) THEY CHAGE MORE THAN EXPECTATION (3) THEY HARDLY ATTEND TO ANY EMERGIN LASTLY WE NEED MORE WORKERS IN THE HOSPITAL SUPERVISION OF PUBLIC HOSPITAL SHOULD BE OBSERVE AND EQUIPMENTS SHOULD BE ADDED TO THE ARUM HOSPITAL.THANKS
26/08/2014	our hospito is to cos. and the no the stey till night ! ' is problem.
26/08/2014	I.want.2.thank.them

POST-PILOT RECOMMENDATION

# LGA SUMMARY REPORT V2

This iteration of the LGA Summary Report incorporates insights applied to V2 of the Facility Reports. It summarizes patient feedback responses across all clinics and also shows participation and completion rates for all clinics. Alerts are included in this iteration of the report to support the LGA identifying key problem areas to focus on.

## Wamba LGA Summary Feedback Report:

July 7–August 26

The following document was generated through the ICT4SA program, intended to provide trial period reporting to selected NSHIP PBF staff. The following data was collected through SMS surveys of patients in 11 Wamba LGA PBF Integrated Clinics and some additional community members.

### FEEDBACK ON SERVICES

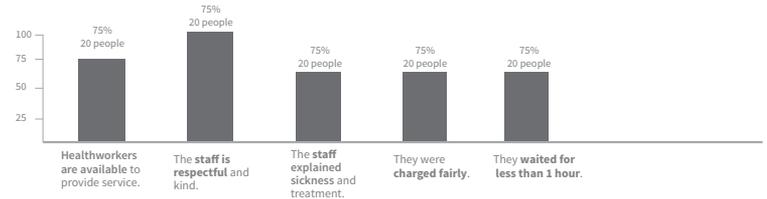
Service	Open Facility	Respectful Staff	Explained Sickness and Treatment	Charged Fairly	Waited for less than 1 hr
ANC	100% (1) ✓	100% (1)	100% (1)	N/A	100% (1)
Normal Delivery	0% (1)	N/A (0)	N/A ⚠	N/A	N/A (0)
Immunization/Vaccination	96% (24) ✓	88% (17)	100% (12)	63% (8)	88% (17)
OPD	0% (1)	0% (1)	0% (1)	0% (1)	0% (1)
Family Planning	96% (17)	96% (17)	96% (17)	96% (17)	96% (17)

**KEY**

- ✓ Better than average.
- ⚠ Problem area. Requires attention.

### LGA PATIENT FEEDBACK

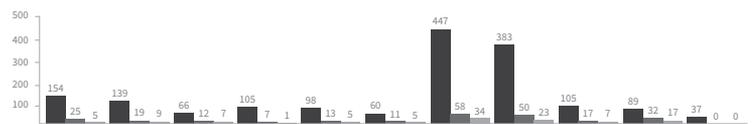
What patients reported on Wamba facility experience:



### FEEDBACK REPORTED BY FACILITY

Facility	Quality (Score, Q1)	Quantity (Score, Q1)	Available Health Workers	Respectful Staff	Explanation of Sickness and Treatment	Charged Fairly	Waited for less than an hour
Arum Chugbu	#	#	x% (#)	x% (#)	x% (#)	x% (#)	x% (#)
Gwagi	45	68	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Kwabe	24	23	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Kwarra	63	83	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
M. Gongon	45	24	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Nakere	63	13	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Wamba GH	68	23	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Wamba PHC	23	7	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Wayo Matti	83	48	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Yashi Madaki	24	32	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)
Zalli	13	33	20% (43)	20% (43)	20% (43)	20% (43)	20% (43)

### PARTICIPATION BY FACILITY



**KEY**

- Surveys sent
- Surveys started
- Surveys completed

POST-PILOT RECOMMENDATION

# DASHBOARD INTERFACE V2

This revised home page iteration is more visually engaging. Because the pilot has ended, this page would need to serve as a historical archive and summary of pilot results. It includes an infographic diagram with highlights from the two-month pilot. In the future this could update summary statistics in real-time.



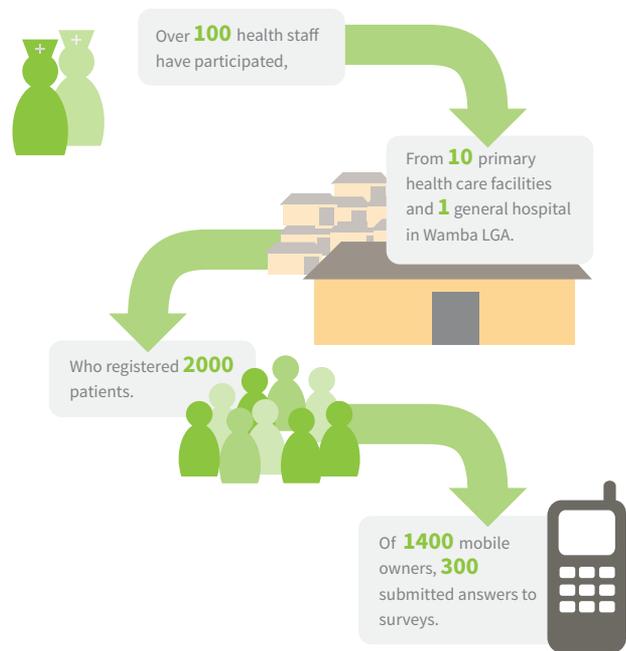
## The My Voice Pilot

My Voice is a patient feedback system piloted from July – September 2014 for Wamba PBF health facilities in Nasarawa State, Nigeria.



Developed with funding from the World Bank through the ICT4SA (ICT for Social Accountability) project, My Voice system facilitates collection of patient feedback for health institutions. My Voice uses a texting system to understand patient satisfaction around health facility experiences to help local management and State and National level implementers within Nigeria States Health Investment Program to improve quality of health care service delivery. This dashboard presents patient feedback from 11 participating health care clinics in Wamba LGA.

### PROGRESS TO DATE



POST-PILOT RECOMMENDATION

# ADDITIONAL IN-CLINIC VISUAL TOOLS

These two new posters are targeted at facility staff and patients. Not intended to replace the original poster collateral but supplement, as they have a different purpose. They are meant to be used to help staff more thoroughly and accurately explain the process of My Voice to patients so that they are more inclined to provide honest feedback. The posters are designed to be highly visual and graphic so if facility staff fail to explain, patients are still able to understand how their feedback is used, and what questions they should anticipate having to answer.

## EXPLAINS HOW PATIENT COMMENTS ARE USED

Shows the patient that their feedback is seen by the facility staff, the LGA, the state, and the national level decision makers. Conveys to the patient that their feedback is wanted and used to improve healthcare services.

Visit the clinic.      Receive short SMS survey.      All responses collected and put into reports.      Reports distributed to national, state, LGA, and hospital staff.

**my voice**  
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We are all working to make health care better!

## EXPLAINS WHAT PATIENTS CAN EXPECT ON THE SURVEY

This poster visually shows what kinds of questions are asked on the survey and reminds the patient that the process is free and their identity is anonymous.

**We want to hear your complaints and praises on:**

- Are health care workers available to provide treatment when you visit the hospital?
- Was the staff rude or disrespectful in any way at the hospital?
- Did staff explain your illness and treatment at the hospital?
- Did the hospital overcharge you?
- How long do you wait at the hospital?

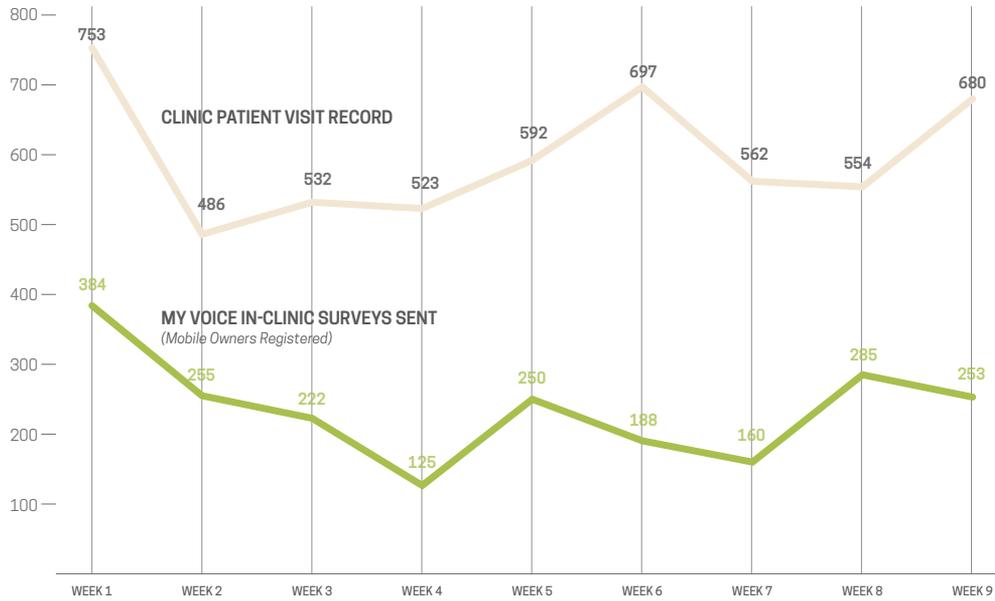
Text "START" to 55999  
**FREE!**  
Your name will be unknown.

**my voice**  
Sponsored by NSHIP PBF

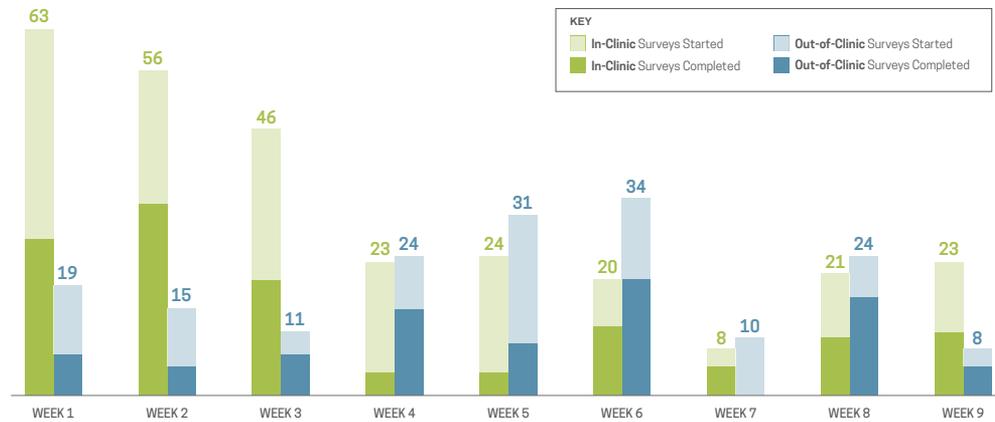
# ANNEX C

# RESULTS DATA

## PATIENT REGISTRATION



## MY VOICE PILOT PARTICIPATION



# ENDNOTES

1. USD 170 million investment from the World Bank Group is comprised of USD 150 million from the International Development Association and USD 20 million from the Health Results Innovation Fund (HRITF)
2. National Primary Healthcare Development Agency, "Nigeria State Health Investment Project Performance-Based Financing User Manual" Federal ministry of Health, 14 December 2014. [http://sitere-sources.worldbank.org/EXTPBFTOOLKIT/Resources/7364043-1386179878087/131214\\_PBF\\_UserManual\\_NG-FINAL.pdf](http://sitere-sources.worldbank.org/EXTPBFTOOLKIT/Resources/7364043-1386179878087/131214_PBF_UserManual_NG-FINAL.pdf).
3. There is a select number of activities that are tariffed through the PBF program (20 activities at PHC level and 22 at the General Hospital level) and which focus on advancing progress toward Millennium Development Goals such as reducing child mortality, improving maternal health, and combating HIV/AIDS and malaria.
4. Patient registration was negatively impacted by both poor mobile network connectivity in the pilot geography as well as variable service provider compliance to My Voice protocol. The latter factor was expected given the nascent collaboration between ICT4SA and NSHIP. As a result, during the pilot, service providers lacked clear incentives or consequences for compliance to My Voice patient registration procedures.
5. Social accountability is an evolving area of practice. According to Fox (2014), it commonly encompasses citizen monitoring and feedback processes; citizen consultation and involvement in public sector resource allocation; access to information about government activities and decision-making processes; avenues for citizen complaint and addressing of grievances related to public sector service delivery. Gigler et al (2014).
6. Independent Evaluation Group / World Bank / IFC / MIGA, Capturing Technology for Development: An Evaluation of World Bank Activities in Information and Communication Technologies, Washington DC: World Bank, 2011. [http://ieg.worldbankgroup.org/Data/reports/ict\\_evaluation.pdf](http://ieg.worldbankgroup.org/Data/reports/ict_evaluation.pdf).
7. Independent Evaluation Group / World Bank / IFC / MIGA, Capturing Technology for Development: An Evaluation of World Bank Activities in Information and Communication Technologies, Washington DC: World Bank, 2011. [http://ieg.worldbankgroup.org/Data/reports/ict\\_evaluation.pdf](http://ieg.worldbankgroup.org/Data/reports/ict_evaluation.pdf).
8. World Health Organization, World Health Statistics, 2013, p.131-140, [http://apps.who.int/iris/bitstream/10665/81965/1/9789241564588\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/81965/1/9789241564588_eng.pdf?ua=1).
9. World Health Organization, Nigeria Country Profile, 2012, <http://www.who.int/gho/countries/nga.pdf?ua=1>.
10. World Health Organization, World Health Statistics, 2013, p.131-140, [http://apps.who.int/iris/bitstream/10665/81965/1/9789241564588\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/81965/1/9789241564588_eng.pdf?ua=1).
11. National Primary Healthcare Development Agency, "How our mHealth innovations help reduce maternal mortality," NPHCDA.org, 2013, <http://nphcda.org/how-our-mhealth-innovations-help-reduce-maternal-mortality/>.
12. National Primary Healthcare Development Agency, "Nigeria State Health Investment Project Performance-Based Financing User Manual" Federal ministry of Health, 14 December 2014. [http://sitere-sources.worldbank.org/EXTPBFTOOLKIT/Resources/7364043-1386179878087/131214\\_PBF\\_UserManual\\_NG-FINAL.pdf](http://sitere-sources.worldbank.org/EXTPBFTOOLKIT/Resources/7364043-1386179878087/131214_PBF_UserManual_NG-FINAL.pdf).
13. Ibid.
14. At the time ICT4SA was implemented, NSHIP was entering scale-up phase after an 18-month pre-pilot.
15. Bruno Meessen, Agnès Soucat, and Claude Sekabaraga, "Performance-based financing: Just a donor fad or a catalyst towards comprehensive health-care reform?" World Bank, 2010, <http://documents.worldbank.org/curated/en/2010/11/16461573/performance-based-financing-just-donor-fad-or-catalyst-towards-comprehensive-health-care-reform>.
16. National Primary Healthcare Development Agency, "Nigeria States Health Investment Project Performance-Based Financing User Manual" Federal Ministry of Health, 13 April 2012.
17. National Population Commission, "Population Distribution by Sex, State, LGAs and Senatorial Districts: 2006 Census Priority Tables Vol.3" <http://www.population.gov.ng/index.php/publications/140-population-distribution-by-sex-state-lgas-and-senatorial-district-2006-census-priority-tables-vol-3>.
18. Estimated from survey of patients who participated in exit interviews during ICT4SA Phase II research.
19. Figures are based on a May 2014 survey of 150 community members conducted across ten wards in Wamba LGA conducted by ICT4SA. Full details can be found in the ICT4SA Research Report.
20. Research included 76 in-depth interviews among NSHIP actors, facility management, community and traditional leaders, and community members; canvassing of mobile access and usage behaviors of 150 respondents across 22 clinics; and focus group meetings with 64 participants. Detailed research findings can be found in the ICT4SA Phase 2 Research Report (July 2014). The final program and platform design was summarized in the ICT4SA Program Design Concept Note (July 2014).
21. Over 15 different user testing trials were conducted to understand facility processes, participation capabilities and incentives, and the potential for various ICT formats.
22. It does not include technical or programmatic refinements necessary to extend and expand the project. To learn how My Voice has evolved since October 2014, contact the World Bank ([prossiasco@worldbank.org](mailto:prossiasco@worldbank.org)) or Reboot ([hello@reboot.org](mailto:hello@reboot.org)) task teams.
23. For the NSHIP pilot implementation, the Out-of-Clinic Model tested the degree to which patients would be proactive in providing feedback (1) via a channel that is made available but where participation is not seen as compulsory, and (2) based on an outreach model that builds on existing community leadership structures and requires minimal investment from NSHIP.

24. Literate users with texting capabilities will receive and fill out the SMS survey themselves. Low-literacy users will be encouraged to seek help from a relative to complete the survey.

25. These questions reflect a mid-pilot iteration of survey questions that incorporated feedback and insights from NSHIP stakeholders and how OICs utilized reports.

26. According to register data provided by participating facilities, from July 7–September 7, 2014.

27. Patient registration was negatively impacted by both poor mobile network connectivity in the pilot geography

as well as variable service provider compliance to My Voice protocol. The latter factor was expected given the nascent collaboration between ICT4SA and NSHIP. As a result, during the pilot, service providers lacked clear incentives or consequences for compliance to My Voice patient registration procedures.

28. According to register data provided by participating facilities, between July 7 and September 7, 2014.

29. Specific recommendations for My Voice integration with NSHIP oversight mechanisms were developed by the ICT4SA team and pending review by NSHIP stakeholders at the time of this document's production.

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