

# **BACKGROUND AND INTRODUCTION**

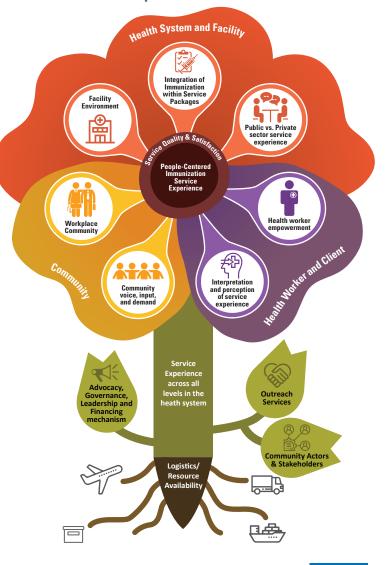
After rising for more than two decades, routine immunization coverage rates began to stagnate in 2010, with an estimated 19.4 million children under the age of one not receiving basic vaccines in 2018. While immunization services have historically focused on supply and delivery functions, inequities have highlighted the significance of demand generation—and the need for a people-centered model that incorporates health worker and client perspectives for a more positive immunization service experience.

Partners in the Vaccination Demand Hub Service Experience Workstream are collaborating to inform a new direction in people-centered quality immunization service delivery and re-orient immunization services to include caregiver, client and health worker perspectives and needs. In support of this effort, John Snow Research & Training Institute, Inc. (JSI), in collaboration with Gavi, the Vaccine Alliance, consolidated existing knowledge and conducted rapid learning around immunization service experience at global and regional levels through desk reviews and key informant interviews (KIIs). Results from these KIIs were organized into nine main components, as shown in Figure 1.

These components formed the basis for additional insight gathering in four countries, including Ghana. The Ghana Health Service (GHS) mainstreamed quality health services approximately two decades ago with the adoption of several policies and programs, including the creation of a Quality Assurance Strategy, new protocols and guidelines, and the five-year National Healthcare Quality Strategy (NHQS) adopted in 2016.¹ However, these frameworks do not provide guidance on how to improve the quality of immunization services or the service experience for clients, communities, and service providers.

To understand if and how the global and regional findings resonate in country (and efforts underway in Ghana to address the immunization service experience), in June and July 2020, JSI

Figure 1. Key components of a positive, people-centered immunization service experience











conducted a review of the grey and peer-reviewed literature to gather the following information:

- The experience of clients and caregivers in the healthcare system
- Health system and facility factors that affect the immunization service experience
- Health worker and client factors and perceptions that impact service delivery and experience
- Community contributions to service design and delivery

The published and grey literature were identified through a web-based search and suggestions gathered from key stakeholders. The search, which yielded over 46 documents, focused on immunization issues as well as maternal, newborn and child health, HIV/AIDS, family planning, and antenatal care. Additional information was obtained from 13 key informants representing the Ghana health sector. Following analysis of the literature review and interviews, the GHS EPI team also met to provide input and build consensus on the recommendations.

This case study shares findings from the literature review and KIIs and offers practical recommendations to improve the immunization service experience for clients, caregivers, and health workers in Ghana.

## **FINDINGS AND DISCUSSION**

#### **OVERARCHING THEMES**

### Service experience across all levels of the health system

Although quality of care in Ghana's health services is a priority, assessments have revealed challenges such as: ineffective administrative structures, insufficient human resources and commodities, unprofessional staff attitudes, and clients' noncompliance with treatment regimens.<sup>2</sup> Additional barriers include the lack of privacy in facilities, long waiting times, limited choice of services, and a lack of transportation for clients.<sup>3</sup> Several agencies and organizations are responsible for addressing these quality care challenges.<sup>3</sup> Service provider groups, such as the GHS and the Christian Health Association of Ghana (CHAG), implement quality assurance and client safety programs. GHS Quality Assurance teams ensure that quality care is delivered across its facilities. Similar programs exist in facilities that are not part of the GHS, such as CHAG.<sup>1</sup>

In 2016, the GHS led the development and adoption of the five-year National Healthcare Quality Strategy NHOS (2017-2021), which provides an "8-point framework for action across all levels of the health system." In compliance with the strategy, service providers are trained in the delivery of quality care. However, the training needs of community service providers are frequently unaddressed due to lack of dedicated capacity building focus for this cadre nor skills transfer from senior staff

who participate in capacity building.<sup>1</sup> In addition, quality assessments at the district and facility level are inconsistently carried out due to funding constraints <sup>1,4</sup>

The implementation of policies and approaches to improve the quality of care is often hindered by resource limitations. Furthermore, data accuracy and usage are insufficient to monitor and evaluate quality interventions. <sup>4,5</sup> Context-specific challenges, including those related to geography, also impact policy implementation. <sup>6</sup> To be successful, efforts to improve quality of care must address political, organizational, and institutional barriers and resource constraints. <sup>7</sup>

## Quality of the interactions and services provided

The National Health Policy calls for the GHS to scale up communityand facility-based interventions for newborn and child health and cites implementation of the Expanded Program on Immunization (EPI) to improve immunization quality of care.<sup>8</sup> However, neither the policy nor the NHQS defines a quality immunization service experience.<sup>1</sup>

Not surprisingly, public health and clinical delivery points assess the client's experience of immunization services in dissimilar ways. When clinical services interact with preventive care, two different patient management structures converge, which can result in unclear roles and responsibilities, confusion, missed opportunities for vaccination, and high dropout rates. <sup>1,9</sup> Collaboration between preventive care and clinical services is imperative to improve clients' care experiences. <sup>1,4,9</sup>

Many immunization clients experience rushed interactions with health workers during immunization services, with clients receiving insufficient information about the services offered and unaware of their right to give informed consent. <sup>10</sup> Language barriers and provider stigma also contribute to negative immunization service experiences. <sup>11</sup>

### **HEALTH SYSTEM AND FACILITY THEMES**

### Integration of immunization in a package of services

Immunization services are delivered as part of child health services through the Growth Platform, which provides growth monitoring,

nutrition, immunization, and counseling services for children up to five. 4,9 This approach supports the uptake of immunization by reducing the cost and time associated with accessing multiple services. 1 It also facilitates the provision of comprehensive services to



Implementation of policies and approaches to improve the quality of care is often hindered by resource limitations. Furthermore, data accuracy and usage are insufficient to monitor and evaluate quality interventions. <sup>4,5</sup> Context-specific challenges, including those related to geography, also impact policy implementation. <sup>6</sup> To be successful, efforts to improve quality of care must address political, organizational, and institutional barriers and resource constraints. <sup>7</sup>

address childhood morbidity, especially in low-income communities. 12 Conversely, when other health services are weakened or unavailable, the quality of immunization services is compromised. For example, the lack of breastfeeding and changing rooms in a maternal health facility can affect caregivers' perceptions of the overall quality of the facility's services. 4 Service providers' interactions with clients can also be compromised by inordinately long hours of service delivery, unmet staffing demands, and inadequate compensation, all of which contribute to service provider fatigue and can result in unprofessional interactions with clients. 4

Client perceptions of quality of care in a given facility impact their careseeking behavior for all services.<sup>13</sup> At times, caregivers have refused immunization following an unpleasant interaction with a service provider in a different health program.<sup>4</sup>

# Public vis à vis. private sector service experiences

All hospitals are required to provide the full range of EPI services. <sup>14</sup> Free immunization services and vaccines are provided in public facilities. <sup>4,15</sup> Some clients prefer to pay for services at private facilities <sup>15</sup> because they

Photo: Kate Not.

... sometimes we forget to take into consideration the types of services that we want to deliver in the facility. You see, a clinic is built and you do not have a cold room, you do not have a refrigerator. If a community health nurse needs to ride or motor 50 kilometers in and out to get vaccines from another place to come and provide services, it doesn't help." - Key Informant

are perceived to have superior provider training, resources, and physical environments.

At the district level, private facilities are not directly involved in immunization services due to the cost and vaccine procurement difficulties. Some private not-for-profit facilities like CHAG collaborate with the GHS to provide free immunization services. Increased collaboration between private and public health services and additional infrastructure and resources for immunization services (including in urban settings) have the potential to improve the client experience and reduce missed opportunities for vaccination.

## **Facility environment**

The environment of health facilities affects the immunization service experience and care quality. Challenges such as faulty vaccine fridges, cold boxes, and icepacks for outreach services are prevalent, especially in hard-to-reach communities where providers travel kilometers between cold storage and service delivery points. These conditions result in long waiting times and influence the client's experience of care. All

The physical environment of a facility also influences clients' perception of care quality and their utilization of the facility. Clients reported they would be more likely to use immunization services at a facility with proper seating areas and shelter.<sup>11</sup> Simple adjustments to enhance the physical comfort of clients and caregivers at the locations where they receive immunization and other health services can influence careseeking behavior.

# HEALTH WORKER AND CLIENT THEMES Interpretation and perception of service experience

While studies indicate that clients are mostly satisfied with their care, <sup>18-20</sup> they note that factors such as responsiveness, reliability, courtesy, and empathy shape clients' perceptions and utilization of services. <sup>20</sup> More tangible factors that contribute to perceptions of care include facility cleanliness, wait times, the presence of trained staff, the availability of medications, and multiple referrals. <sup>19,21</sup>



In Zokkor in the Upper East region, a midwife serves cold "flour water" to help refresh pregnant women who have traveled ten kilometers for antenatal services. This simple change, which has improved clients' perceptions of the service experience, was accompanied by record low maternal deaths in the region over a five-year period. In most facilities, such actions are dependent on the initiative of individual service providers.<sup>22</sup>

When clinical services interact with preventive care, two different patient management structures <sup>4</sup> converge, which can result in unclear roles and responsibilities, confusion, missed opportunities for vaccination, and high dropout rates.<sup>1,9</sup>

Service providers' interactions with clients can also be compromised by inordinately long hours of service delivery, unmet staffing demands, and inadequate compensation, all of which contribute to service provider fatigue and can result in unprofessional interactions with clients. 4



While some NGOs use Ghana's Patients' Charter to raise community awareness of the rights and responsibilities of clients and service providers, more than half of all nurses have reportedly had no training on the Charter. All Integrating the Charter into interpersonal communication (IPC) training may improve health workers' understanding of clients as customers with rights.

### **Health worker empowerment**

A key component of health worker empowerment is capacity building. Although health workers receive pre-service training, the content and time allocated to immunization issues are limited. EPI policy requires that structured trainings be provided to all staff every three years, with

Most [health workers] are trained technically in their area, but in terms of communication and being able to really manage the clients as a customer. . . there is more that needs to be done. - Key Informant remedial trainings conducted as needed. <sup>14</sup> In-service immunization trainings are often restricted to certain staff roles and topics, such as strengthening mid-level managers' capacity to provide leadership and management in immunization services. <sup>14</sup> These trainings also aim to build the self-confidence and interpersonal and communication skills of providers, <sup>4</sup> often linked to the introduction of new vaccines. <sup>9</sup> However, because these trainings are delivered to supervisors, they do not build junior staff's capacity in management and communications, including skills to address clients' misunderstandings or hesitancies related to immunization, leaving some ill-equipped to respond when clients refuse immunization. <sup>4</sup> It may be beneficial to educate policymakers about the importance of integrating training on issues such as program management, conflict resolution and a rights-based approach to services into IPC and competency-based trainings.

### **COMMUNITY THEMES**

**Community voice, input, and demand** Community involvement in immunization activities is stipulated in many legal and policy frameworks. <sup>14,24</sup> Community-driven In the absence of strong governmental and NGO support for social mobilization, platforms such as communities of health practitioners and social media campaigners could be leveraged to advocate for immunization.<sup>4</sup>

strategies have been integrated into immunization program planning, resource mobilization, <sup>25</sup> and implementation. <sup>26</sup> The Reaching Every District, Reaching Every Child (RED/REC) approach, adopted by the GHS and partners, helps to engage communities with immunization service delivery. <sup>4,26</sup>

Community Health Management Committees (CHMCs) support the management and operations of the Community-based Health Planning and Services (CHPS) program, including childhood immunization, for example, by providing logistics and welfare packages for health workers and facilities. 9.27.28 Community members provide support to community health officers who manage CHPS by carrying out case tracing, referrals, health education, counseling sessions, and home visits. CHPS has been most effective in rural areas where community members are more willing to volunteer time to the program. 29,30 Where functioning, the CHPS model has significantly increased community participation in immunization activities. 9

Some NGOs engage in community durbars and radio phone-in programs on immunization<sup>11</sup> as a means of social mobilization to drive demand for immunization and strengthen community participation. In the absence of strong governmental and NGO support for social mobilization, platforms such as communities of health practitioners and social media campaigners could be leveraged to advocate for immunization.<sup>4</sup>

# **Workplace community**

While the EPI calls for integrated, supportive supervision of immunization service staff, such supervision is inconsistent, which negatively impacts the transfer of knowledge and skills to junior staff. Gavi, the World Bank, and the Department for International Development support integrated supportive supervision through Health Systems Strengthening (HSS) interventions. Because the government has yet to prioritize this initiative, advocacy will be required to shift this stance.

Consideration of health worker needs—and reliability of basic materials and resources to perform their jobs effectively—are important aspects of building community between health workers and the health system.<sup>31</sup> As one key informant noted, in supporting health workers to carry out their responsibilities (e.g., via remuneration for providing services in hard-to-reach areas, supplying motorbikes), the health system can holster health workers' motivation

#### **MEASUREMENT & METRICS**

There are a lack of indicators or measurements in place to assess care quality and clients' experience in immunization services. Potential indicators could be extrapolated from existing indicators of quality of care (e.g., the attitude of the service provider, the availability of medicines and diagnostic services, facility cleanliness and safety, the child's level of pain and support for the client to respond, and the

provision of information about the service to clients).4,11



Sometimes the communities... invite the health workers and say, 'We have a very convenient place... so please come and render services in our community.' And so, if the community is empowered, they can make their voices heard and they can demand for the service. - Key Informant

A variety of mechanisms could be used by the health system to monitor the immunization service experience:

 GHS quality assurance teams conduct periodic satisfaction surveys to assess clients' experiences with child health services, including immunization.<sup>24</sup>

# Table 1. Recommendations for a Positive, People-Centered Immunization Service Experience

## **RECOMMENDATIONS**

#### AT THE COMMUNITY LEVEL

- Introduce people-centered approaches that employ human-centered design (HCD) to develop community driven, bottom-up approaches to community participation in immunization service data collection, policies, and programming
- The GHS/EPI should establish steps to integrate community feedback into policymaking and service review processes as well as formal mechanisms to report to communities as part of the essential components of quality of care approach in immunization (including, for example, learning from NGOs and their work with the Patient Charter and other resources)
- The GHS/EPI and partners should map relevant communities and organizations (both traditional and professional) to assess the impact of their participation on the immunization service experience and to leverage each community's contributions

#### AT THE HEALTH FACILITY LEVEL

- Adopt defaulter tracing registers and improved follow-up mechanisms for routine immunization as a source for data on the service
  experience, including actively engaging with community structures
- Develop and implement in all health divisions a bottom-up immunization communication strategy that is created with community participation
- Provide education to health workers about the client experience during routine immunization services in child welfare clinic sessions

## AT THE SUBNATIONAL LEVEL

- Integrate a rights-based framework into IPC training as part of pre-service and in-service training for providers, including consideration of the Ghana Patients' Charter
- Provide capacity-building training on using data in decision making to improve the immunization service experience
- Support the use of an HCD approach to assess the immunization service experience and quality issues
- Update the Advocacy, Communication, and Social Mobilization and Social and Behavior Change Communication (ACSM/SBCC) Plan for
  use in the immunization service experience

### AT THE NATIONAL LEVEL

- With communities, co-design and adopt a model for quality of care in immunization (this could be implemented as "centers of excellence" for routine immunization services)
- The GHS should include indicators to measure clients' immunization service experience in health utilization surveys (similar to the National Malaria Control Program's service utilization surveys) and support and assessment on service experience/quality of care for the next EPI Review
- Advance the integration of EPI activities into training schools' curricula, including incorporating quality of care issues in health worker immunization knowledge and skills training

#### AT THE GLOBAL LEVEL

- Technical partners and donor organizations should provide technical support to countries to develop immunization service experience guidelines and to identify and measure indicators
- Technical partners and donor organizations should support in-depth country-level research on the client experience of immunization services to consolidate data and facilitate evidence-based advocacy to integrate quality of care into immunization services
- Technical partners and donor organizations should support the review of and build capacity for an updated ACSM/SBCC Plan that integrates quality of care into the immunization service experience

- The EPI integrates assessments of service quality into periodic comprehensive reviews through exit interviews with clients.<sup>9</sup>
- Mechanisms from other health services could be leveraged to
  monitor the quality of immunization services. This could include the
  periodic clinical reviews of clients' complaints and requests that
  occur in outpatient departments and the one-on-one sessions that
  NGOs conduct to review a client's experience as part of monitoring
  community-based health services.<sup>4</sup>
- Tools like the Demographic and Health Survey,<sup>31</sup> EPI periodic cluster surveys, and the Open Data Kit could be used to assess care quality during immunization campaigns.<sup>16,32</sup>
- Community feedback opportunities could be leveraged, including anecdotal reports gathered in facility review meetings, client complaint reports, and community scorecards employed by CHMCs.<sup>4</sup>

Consolidation would be required to interpret the data on immunization care quality collected via these tools. In addition, consideration would need to be given to how relevant findings would be integrated to improve the immunization service experience and how impacts would be monitored.

# **RECOMMENDATIONS/NEXT STEPS**

Many factors across the health system affect the immunization service experience for clients and health workers. Table 1 features recommended

actions to achieve a more positive, people-centered experience.

## **CONCLUSION**

Ghana has many initiatives and a health system committed to improving quality of care. Immunization services in Ghana, however, face significant hurdles related to financing — for vaccine availability and supply, cold chain facilities and equipment, and ensuring equitable services among urban poor, hard to reach, and under- and un-immunized communities. <sup>9,11</sup> As a result, there is limited support and funding for efforts to improve, monitor, and evaluate the immunization service experience.

Strengthening of the immunization service experience must be integrated into existing quality assurance interventions and national strategies on improving the quality of health services. Independent information gathering and recommendations from case studies such as this are critical; however, it is equally important to align global frameworks with in-country experience and interests to advance actions supportive of immunization service care quality in Ghana (and to share these lessons across countries).



#### References

- 1. Ghana Ministry of Health. December 2016. Ghana National Healthcare Quality Strategy (2017-2021). Accra, Ghana: Ministry of Health. Available at https://www.moh.gov.gh/wp-content/uploads/2017/06/National20Quality20Strategy20Ghana.pdf.
- 2. Escribano-Ferrer, B., F. Cluzeau, D. Cutler, C. Akufo, and K. Chalkidou. 2016. "Quality of Health Care in Ghana: Mapping of Interventions and the Way Forward." Ghana Med. J. 50: 238–247.
- 3. Ganle, K. K., M. Parker, R. Fitzpatrick, and E. Otupiri. 2014. "A Qualitative Study of Health System Barriers to Accessibility and Utilization of Maternal and Newborn Healthcare Services in Ghana After User-Fee Abolition." BMC Pregnancy Childbirth 14: 425.
- 4. Response from Key Informant Interviewee.
- 5. wum-Danso, N. A. Y. et al. 2012 "A Nationwide Quality Improvement Project to Accelerate Ghana's Progress Toward Millennium Development Goal Four: Design and Implementation Progress." Int. J. Qual. Heal. Care 24, 601–611.
- 6. Twum-Danso, N. A. Y. et al. 2014. "Using Quality Improvement Methods to Test and Scale Up a New National Policy on Early Post-Natal Care in Ghana." Health Policy Plan 29: 622–632.
- 7. Simmons, R., J. Brown, and M. Diaz. 2002. "Facilitating Large-Scale Transitions to Quality of Care: An Idea Whose Time Has Come." Stud. Fam. Plann. 33: 61–75.
- 8. Ghana Ministry of Health. 2014. Health Sector Medium Term Development Plan, 2014-2017. Accra, Ghana: Ministry of Health. Available at: https://www.moh.gov.gh/wp-content/uploads/2016/02/2014-2017-Health-sector-medium-term-dev-plan.pdf.
- 9. Ghana Ministry of Health. 2019. Ghana Health Service Comprehensive EPI Review Final Report (July 29-August 2, 2019). Accra, Ghana: Ghana Ministry of Health.
- 10. Oti, A. A. et al. 2016. "Informed Consent under the Ghana Health Service Patients Charter: Practice and Awareness." J. Biosci. Med. 04: 63–67.
- 11. John Snow Incorporated Research and Training Institute. 2018. Technical Assistance for Improving Immunization Service Delivery for Urban Poor in Ghana: Report of Situational and Barriers Analysis in Seven Urban Centres (July 2016). Boston, MA: JSI, Inc.
- 12. Bawah, A. A. et al. 2010. "The Impact of Immunization on the Association Between Poverty and Child Survival: Evidence from Kassena-Nankana District of Northern Ghana." Scand. J. Public Health 38: 95–103.
- 13. Nesbitt, R. C. et al. 2016. "The Influence of Distance and Quality of Care on Place of Delivery in Rural Ghana. Sci. Rep. 6.
- 14. Government of Ghana. 2016. National Policy Guidelines on Immunizations in Ghana 2016. Accra, Ghana: Government of Ghana.
- 15. Sally, E. T. and E. Kenu. 2017. "Evaluation of Access and Utilization of EPI Services Amongst Children 12-23 Months in Kwahu Afram Plains, Eastern Region, Ghana." Pan Afr. Med. J. 28: 238.
- 16. Response from Debriefing Exercise with Ghana Ministry of Health EPI Team. August 21, 2020.
- 17. Bazzano, A. N., B.R. Kirkwood, C. Tawiah-Agyemang, S. Owusu-Agyei, and P.B. Adongo. 2008. "Beyond Symptom Recognition: Care-Seeking for III Newborns in Rural Ghana. Trop. Med. Int. Heal. 13: 123–128.
- 18. Crissman, H. P. et al. 2013. Shifting Norms: Pregnant Women's Perspectives on Skilled Birth Attendance and Facility-Based Delivery in Rural Ghana. Afr. J. Reprod. Health 17: 15–26.
- 19. Turkson, P. 2010. "Perceived Quality of Healthcare Delivery in a Rural District of Ghana." Ghana Med. J. 43: 65.
- 20. Essiam, J. O. 2013. "Service Quality and Patients' Satisfaction with Healthcare Delivery: Empirical Evidence from Patients of the Out Patient Department of a Public University Hospital in Ghana." Eur. J. Bus. Manag. 5: 52–59.
- 21. Bosu, W. K. et al. 1999. "Quality of Care at Cape Coast Central Hospital, Ghana: Users' Perspective." Ghana Medical Journal 33(2): 50-55.
- 22. Gething, P. W. et al. 2012. "Geographical Access to Care at Birth in Ghana: A Barrier to Safe Motherhood. BMC Public Health 12: 991.
- 23. Xavier, K. F., R. Mmusi-Phetoe, and G. Thupayagale-Tshweneagae. 2019. "Nurses' Perception of Ethics and Legal Training of Nurses in Ghana." Int. J. Nurs. Educ. 11: 191.
- 24. Blake, C. et al. 2016. "Scorecards and Social Accountability for Improved Maternal and Newborn Health Services: A Pilot in the Ashanti and Volta Regions of Ghana." Int. J. Gynecol. Obstet. 135: 372–379.
- 25. Bhutta, Z. A., R.A., Salam, Z.S. Lassi, A. Austin, and A. Langer. 2014. "Approaches to Improve Quality of Care (QoC) for Women and Newborns: Conclusions, Evidence Gaps and Research Priorities." Reproductive Health 11 S5.
- 26. Vandelaer, J., J. Bilous, and D. Nshimirimana, D. 2008. "Reaching Every District (RED) Approach: A Way to Improve Immunization Performance." Bulletin of the World Health Organization 86 A.
- 27. Ghana Ministry of Health. 2007. National Health Policy: Creating Wealth through Health. Accra, Ghana: Ministry of Health. Available at: https://www.moh.gov.gh/wp-content/uploads/2016/02/NATIONAL-HEALTH-POLICY.pdf.
- 28. Johnson, F.A. et al. 2015. Evaluating the Impact of the Community-Based Health Planning and Services Initiative on Uptake of Skilled Birth Care in Ghana." PLOS One. Available at: https://doi.org/10.1371/journal.pone.0120556.
- 29. Nwameme, A. U., P.T.N. Tabong, and P.B. Adongo. 2018. "Implementing Community-Based Health Planning and Services in Impoverished Urban Communities: Health Workers' Perspective." BMC Health Services Research 18: 186.
- 30. Adongo, P. B. et al. 2014. "Does the Design and Implementation of Proven Innovations for Delivering Basic Primary Health Care Services in Rural Communities in the Urban Setting: The Case of Ghana's Community-based Health Planning and Services (CHPS)." Heal. Res. Policy Syst. 12.
- 31. World Health Organization (WHO). 2017. In-Depth Evaluation of the Reaching Every District Approach in the African Region. Brazzaville, Congo: WHO. Available at: http://www.immunizationbasics.jsi.com/Docs/AFRO\_RED\_Eval\_Dec07.pdf
- 32. Adetunji, J. A. and J.D. Shelton. 2011. Ethical Issues in the Collection, Analysis and Dissemination of DHS Data in Sub-Saharan Africa. Available at: http://uaps2011.princeton.edu/papers/110641.