Integrated community health pilot

A holistic approach to improving community health in Guinea

eHealth Africa (eHA) is driven by the philosophy that focusing on improving the overall basic standard of healthcare, rather than using a disease-based model of healthcare, can lead to population-wide health improvements that achieve value for money.

eHA Guinea's Integrated Community Health Pilot (ICHP) implemented connected reforms in order to improve community health at scale through sustainable platforms. ICHP was funded by The Paul G. Allen Family Foundation, and its project realisation phase was less than one year. The Guinean Ministry of Health (MOH) was critical to the project's success, as they were engaged from ICHP's onset and selected the subprefecture of Timbi Touni as the pilot's site.

Continuously engaging the Timbi Touni community to collaboratively implement evidence-based and locally-adapted solutions was key to achieving health infrastructure and medical supply improvements, connectivity and the digitisation of health data, and healthcare worker (HCW) capacity building.

Infrastructure and Supplies

In order to provide electricity, running water and sanitation systems to nine selected health facilities for the first time, buildings needed to be created and upgraded. Infrastructure improvements included constructing one health centre, one larger health post, nine waiting areas, and several homes for HCWs. Seven additional health posts were renovated and expanded to each include three new tiled bathrooms with sinks, toilets, and one shower. A combined water, sanitation and health and waste management system was created for every facility. These were inclusive of solar water pumps, solar autoclaves and incinerators. Solar power systems were locally constructed to provide sustainable solar power for every facility and solar fridges were installed to improve cold chain storage. All facilities received an improved supply of specific and necessary medicines, medical supplies and medical equipment.

Connectivity and digitisation

In order to become the first subprefecture in Guinea to send monthly digital health reports from health posts directly to the MOH, the digitisation of health records was prioritised. After Timbi Touni's paper-based medical records and reporting systems were analysed, data collection alternatives were considered, and a data management platform (Guinea Connect) was created. WiFi enabled smartphones, laptops, phone credit, and internet connectivity were provided to HCWs. The resulting digital health records are health facility monthly reports and patient-level consultation records. Health record digitisation aims to simultaneously decrease HCWs' workloads, improve data quality, and advance health outcomes. Additionally, geographic information systems (GIS) analysts conducted a micro census of the area, which provided useful geographic and population-level data.

Capacity building

In order to decrease the global HCW shortage and prepare for programme sustainability, HCWs' capacities needed to be strengthened in skills ranging from diagnosing diseases to utilising ehealth tools. Thus, training for HCWs was comprehensive, individualised, and included follow-up. A medical doctor trained HCWs on disease diagnostics, administering medicines, medical supply usages, sanitation practices, and medical procedures. These courses were tailored to HCWs' levels of education and knowledge gaps, local disease prevalence, and local customs. Capacity building also included trainings from health informatics specialists on IT equipment, data collection tools, and digital health reporting tools. Follow-up visits provided individual support, information retention monitoring, and answers to HCW's skills and knowledge questions.

Community engagement

In order to improve population health through implementing best practices in global public health tailored to local needs, engaging the Timbi Touni community was essential. Since inception, geographically and culturally diverse community members and community leaders were involved in the decision making processes. This occurred through frequent consultations, community-member labor, local capacity building, and continuous project updates. Community members were essential to leveraging flexible-funding to implement solutions (eg building perimeter fences to improve security) before obstacles arose and as community needs changed.

The ICHP model highlights an integrated approach in which infrastructure and medical upgrades, connectivity and digitisation, capacity building, and community engagement work together to improve service delivery in health structures. Each component individually impacts health service delivery, and collectively they have the potential to generate a larger positive impact on community health.

To learn more about eHealth Africa and implementing an integrated community health programme, contact Taylor M. Snyder, MPH, Senior Technical Advisor: taylor.snyder@ehealthafrica.org