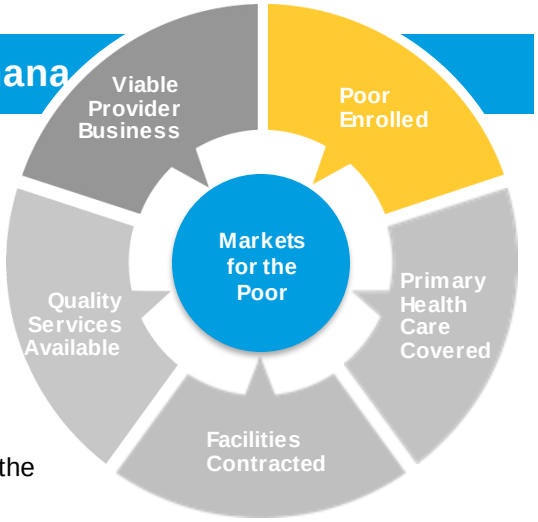
Snapshot 04 Connectivity Challenges for NHIS Registration of the Poor in Ghana

The National Health Insurance Scheme of Ghana (NHIS) uses a biometric system to register beneficiaries, but lack of connectivity presents a major challenge for NHIS enrolment in remote areas.



This snapshot explores the challenges related to NHIS registration in areas that lack connectivity, along with the some of the solutions AHME and its partners have implemented to address the problem.

Intervention

Ghana's National Health Insurance Authority introduced biometric registration in 2014 as the standard national process for issuing cards to social health insurance beneficiaries. The process required that client authentication is done in real time before a card is issued to avoid data duplication. Although Ghana has a relatively strong data network, it fails to reach large parts of the country.

To address connectivity issues, most permanent district Scheme offices have set up Very Small Aperture Terminals (VSATs), which serve as a satellite ground station using a small dish antenna. However, these centres tend to be located at considerable distances from poor, rural communities.

Mobile NHIS registration is therefore constrained. Even were network is accessible connectivity is often unreliable. Long queues form, with people waiting up to four days to sign up. When registration closes in the evening, individuals pitch camp at the registration centres sleeping on benches. Those living in the vicinity mark their place in line with rocks, returning early the next morning to resume the wait. High daily temperatures, combined with lack of shade or seating, make the effort particularly uncomfortable.

There are various alternative solutions to this problem. IFC purchased Access Point Name (APN) identifiers to link the mobile registration sites to existing telecommunications networks. But weak signals persist which rendered them inefficient. AHME recommended using a Virtualised Services Platform (VSP) to create zones of connectivity benefiting from satellite connection. This was rejected as too expensive to be replicable.

AHME also looked at converting the fixed VSAT satellite dishes to the mobile ones particularly in areas that have now got good internet coverage. The VSATs are however set on concrete platforms, and there are issues of a proprietary nature which needs to be negotiated with the suppliers of the equipment to the National Health Insurance Authority.

Mobile VSAT units could be purchased for approximately $110,000 plus tax with an annual recurrent cost of $20,400 plus tax, but this is beyond the current AHME budget. It might be a good solution but the cost effectiveness analysis has to be done.

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Examples and Evidence

An NHIS registration book observed in a remote area of Ghana's Upper East region showed a difference of one person being registered on one day, with 263 registered the following day, due to connectivity issues. The recent AHME monitoring report showed that waiting times extended up to four days for persons showing up for registration. This is a common feature mainly due to technology challenges.

Lessons Learned

With poor connectivity, having the registration team travel in tandem behind the team enumerating households for free NHIA benefit as envisaged in the AHME project design is not feasible. The card as is currently does not carry any data for validation at the point of service access. The validation process that has led to the long queues serves little purpose other than for statistical accuracy. This can be corrected through delayed localised validation and synching. NHIA should consider the development of offline modules to allow for off-line registration. The data can sync to the central server when there is connectivity.

New policies are coming into place that will make NHIS registration cards valid for five years, reducing the burden of annual registration renewals. This is highly commendable.

Outlook

NHIS registration and renewal pathways should optimise both offline and online modules to maximise efficiency. A complete technology gap and cost effectiveness analysis needs to be undertaken to advise NHIA on next generation technology before AHME exits.