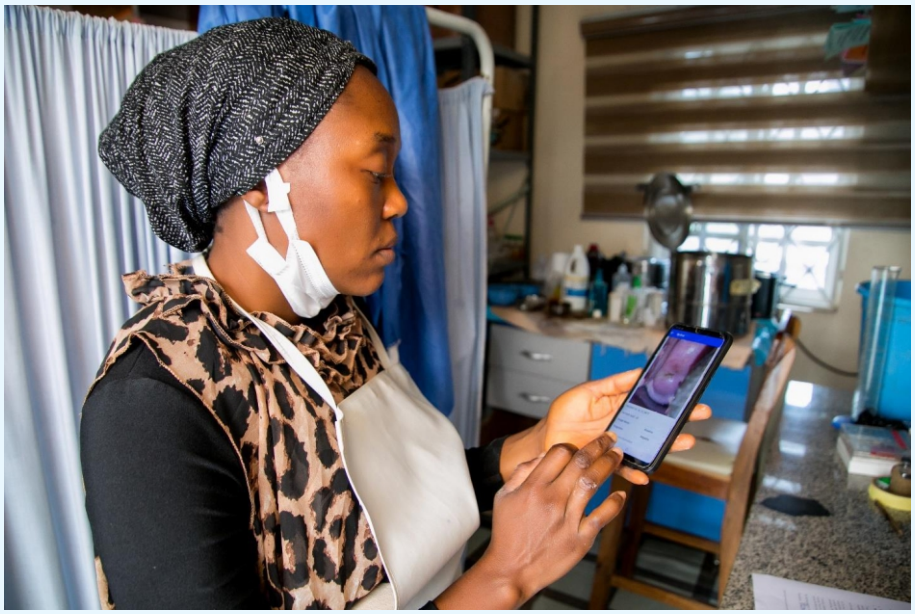
APIN VIA Innovative Visual Application (AVIVA)

Cervical cancer is the most common cancer among Women Living with HIV (WLHIV). WLHIV have a significantly increased risk for cervical cancer compared with women who are not infected with HIV. As part of the U.S. Centers for Disease Control and Prevention (CDC)-funded iCARES project, APIN Public Health Initiatives implemented a cervical cancer screening programme in 86 health facilities across seven states — Benue, Plateau, Oyo, Ogun, Ondo, Osun and Ekiti — using the "screen and treat" approach adopted in Nigeria.

The "screen and treat" approach involves the visualization of the cervix with acetic acid (VIA) or Lugol iodine (VILI) in a single 'point-of-care' visit, followed by "same-day" treatment of identified precancerous lesions with cryotherapy or thermal ablation at no cost. The program was initially launched in two facilities — Benue State University Teaching Hospital (BSUTH) and Jos University Teaching Hospital (JUTH) facilities. However, following the expansion to lower levels of health facilities with lower cadre health care workers providing screening services, misdiagnoses of cases became a major concern.

To forestall such misdiagnoses, APIN Public Health Initiatives developed the APIN VIA Innovative Visual Application (AVIVA), a mobile application which allows for multiple levels of reviews of VIA-stained cervix images in real-time.

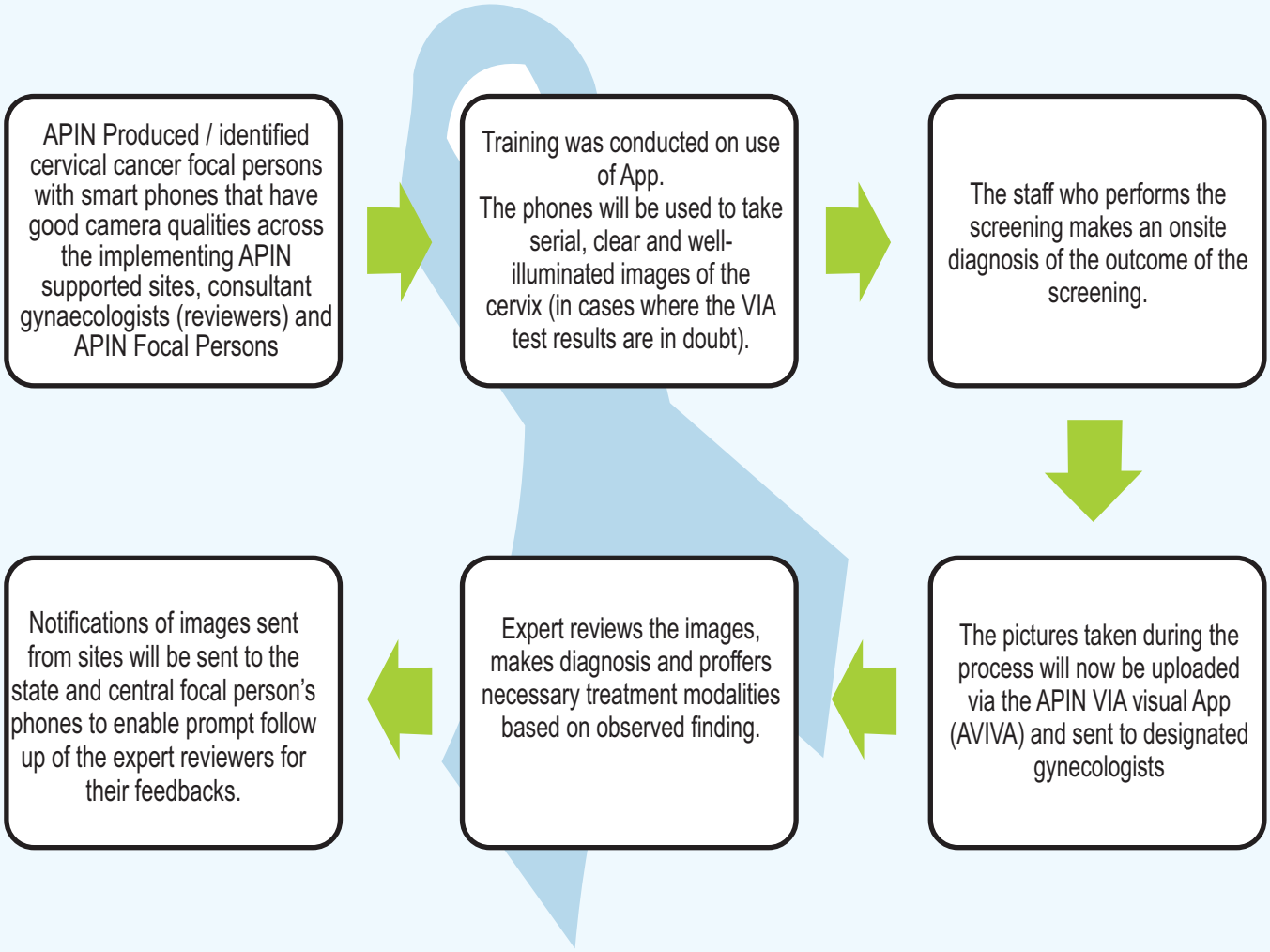
At the point of screening, a health worker (known as a case finder) uses AVIVA to take photos of a VIA-stained cervix, add relevant patient information, and upload them to the online server. The application can automatically switch to an offline mode if no network is detected. A successful upload triggers a notification within the application and through SMS to a medical professional (known as the reviewer) prompting them to open the app, download the images, provide a diagnosis, and recommend a treatment option. Once this is done, the case finder gets a notification on the reviewer's diagnosis and makes appropriate documentation.



In this way, AVIVA enhances rapid and accurate diagnosis of precancerous cervical lesions. Since the inception of this initiative in October 2020, a total of 1,613 cases have been uploaded on AVIVA by case finders. Some 1,388 cases (86%) of these cases were reviewed by expert reviewers with 1,062 (76.5%) having concurrent results between case finders and reviewers. In all, 139 VIA positive WLHIV have been confirmed positive for precancerous cervical lesions using AVIVA and have been treated using thermal ablation.

APIN
Public Health Initiatives

Implementation Approach



Public Health Initiatives