

Evaluation of a Digital Hybrid Training Course on Hormonal IUD in Nigeria: A Mixed Methods Study

Background

Provider trainings on new family planning (FP) methods in Nigeria, such as the hormonal intra-uterine device (IUD), are typically conducted in-person using a combination of didactic, classroom-based learning & practice on models, followed by a practicum with live clients. Replacing the didactic portion of provider trainings with a digital curriculum has the potential to effectively train providers on new methods at a lower cost than in-person approaches. While digital provider trainings are recommended as an enhancement to FP high impact practices (HIPs), relatively little is known about the feasibility, acceptability, & costs of hybrid digital provider trainings in Nigeria. With support from USAID and the Bill & Melinda Gates Foundation, the Research for Scalable Solutions (R4S) Project & the Learning about Expanded Access & Potential of Hormonal IUD (LEAP) Project conducted a mixed-methods evaluation of a hybrid digital training for FP providers on the hormonal IUD.

Participant Characteristics

We recruited 60 long-acting reversible contraceptive (LARC)-trained providers to participate in the hybrid digital training & evaluation. The majority of participants were female (93%), new to digital training (75%), had worked in their current position for 10+ years, & were nurses or midwives (80%). (Figure 2). Participants provided FP services in both the public, and private sectors (Figures 1-2).

Methods

The training & evaluation were implemented by FHI 360, Population Services International (PSI), Society for Family Health (SFH)/Nigeria, & Evidence for Sustainable Human Development Systems in Africa (EVIHDAF), in partnership with the Federal Ministry of Health (FMOH). The pilot took place in Enugu, Kano, & Oyo states

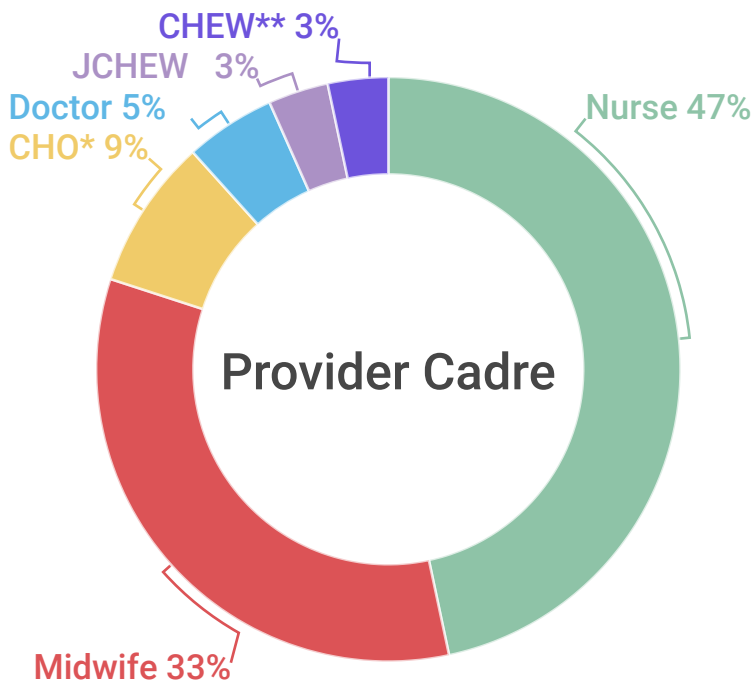


Figure 1: Digital Training Provider Cadres

*Community Health Officer

**Community Health Extension Worker

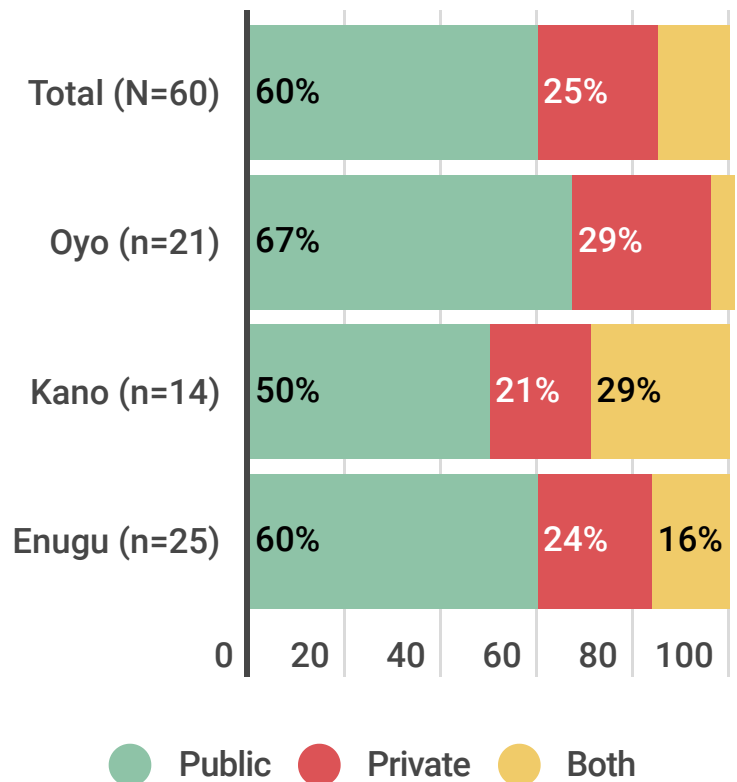
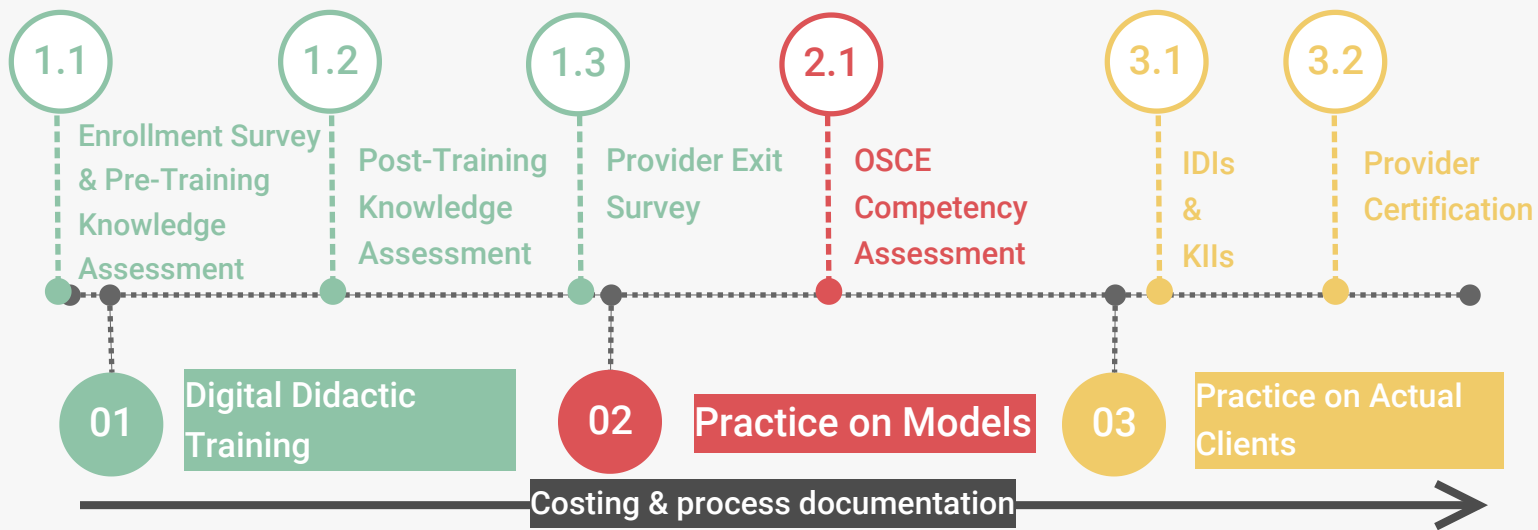


Figure 2: Provider Sector and State

Research & Intervention Components

The hybrid digital training included 3 phases: **Phase 1) digital didactic training**; **Phase 2) hands-on practice on models**; & **Phase 3) hands-on practice on actual clients**. The digital training in Phase 1 was novel, while Phases 2-3 were similar to other traditional in-person trainings.



For the hybrid training evaluation, providers completed an enrollment survey, a pre- & post-training knowledge assessment, an exit interview, & an objective structured clinical examination to assess clinical skills. A subset of providers (n=12) & all clinical supervisors (n=6) participated in in-depth interviews. FMOH and state MOH stakeholders (n=10) completed a key informant interview.

Evaluation Results:

Average knowledge scores increased by 24 points from pre- to post-training

Provider scores increased substantially between the pre- & post-test (Figure 3). The proportion of providers achieved a passing score (defined as 80%+) also increased considerably; None of the providers (0/55) achieved a passing score on the pre-training knowledge exam, compared to 73% on the post-training exam. Scores were similar across sectors (e.g. public sector, private sector, and providers who worked in both).

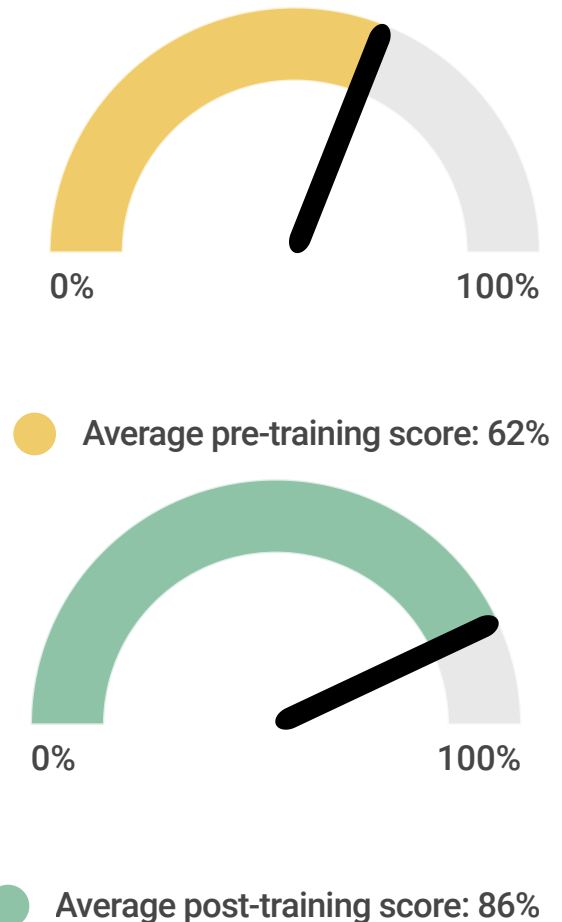


Figure 3: Pre- and Post-Training Knowledge Exam Scores

Overall, providers felt positively about the hybrid digital training

Providers had positive impressions of the hybrid digital training overall. Most strongly agreed (56%) or somewhat agreed (28%) that the digital training was more convenient than an in-person training. Similarly, the majority strongly agreed (52%) or somewhat agreed (26%) that they got the same understanding from the digital training material than they would have an in-person training. Nearly all providers (96%) reported feeling ready for the practicum after completing the digital material.

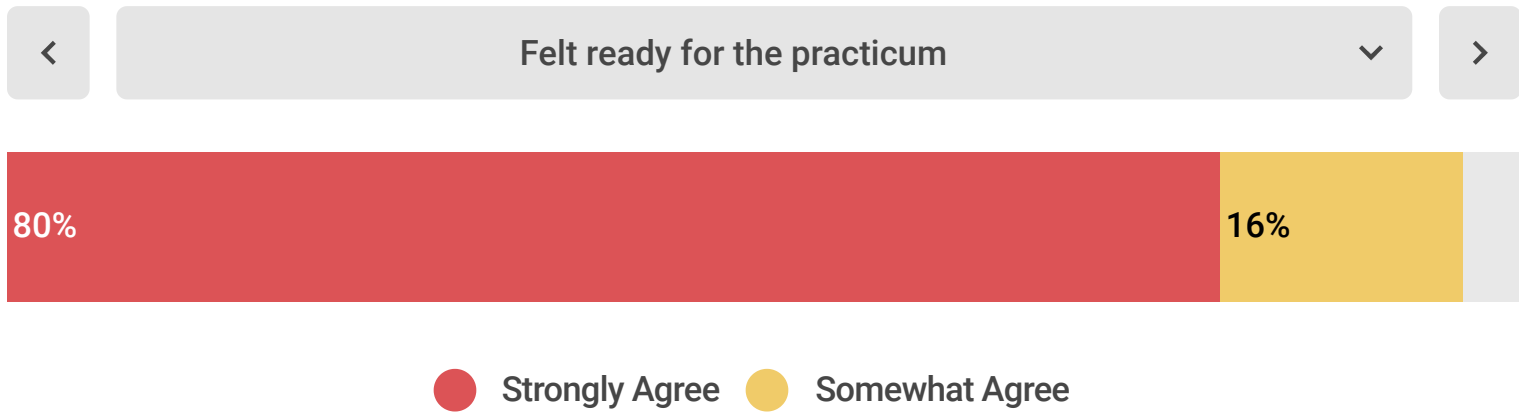
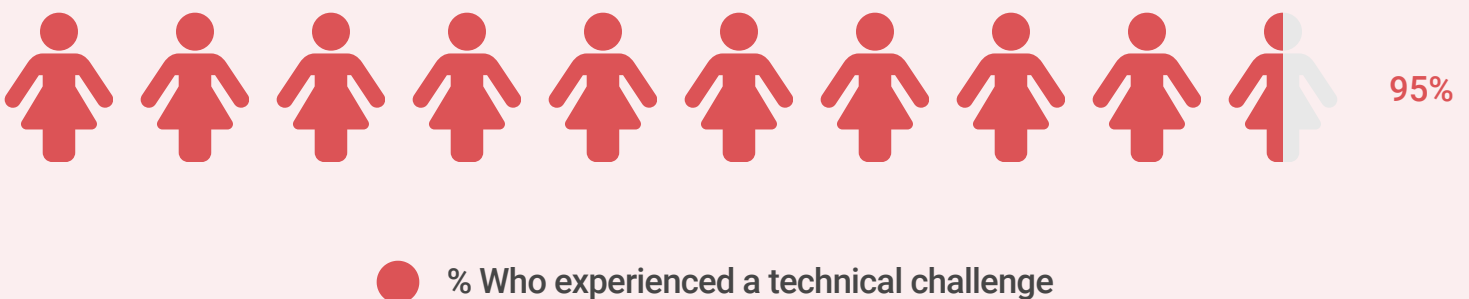


Figure 4: Provider Perceptions of Digital Training

What I enjoyed most was that I was able to have my training at my leisure. You know, any time you are free-1 hour, 2 hours-you just log in & start doing something. There is nothing disturbing you. You have your time for it.

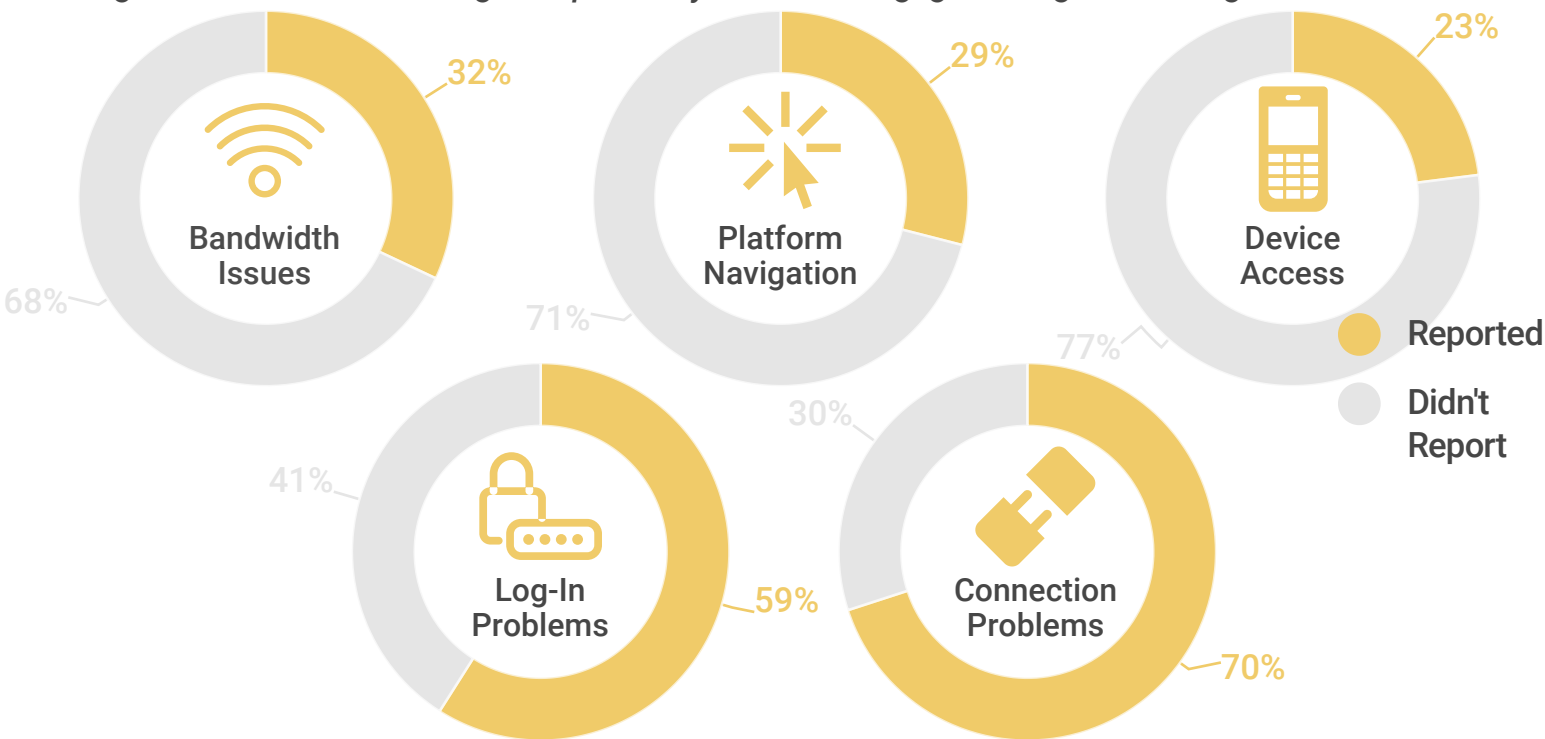
- Public/Private Sector Provider, Kano State

However, challenges with internet connectivity & use of the online platform were common



Nearly all respondents (95%) reported experiencing at least one technical challenge during the digital training, ranging from connection problems (70%) to slow connection speeds/bandwidth issues (32%) and challenges navigating the digital training platform (29%). Challenges were generally more common among older providers & those without prior digital training experience.

Figure 5: Technical Challenges Reported by Providers Engaged in Digital Training



High pass rates on the Objective Structured Clinical Examination

To evaluate clinical competency following the digital training & model-based practicum, providers were observed by trained observers. Competency was assessed using an objective structured clinical examination (OSCE) format with 3 stations (counseling, insertion, & removal).

OSCE pass rates were high (>93%) across all three stations & overall. The three providers who initially failed the OSCE received additional instruction & went on to pass. Providers were later assessed on their performance on live clients, & all were certified to provide the hormonal IUD.

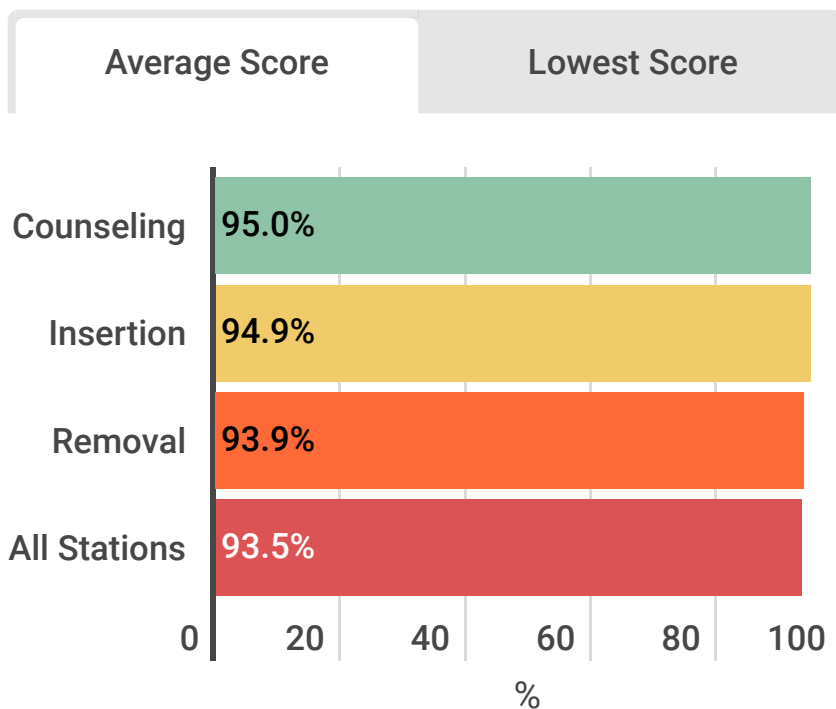
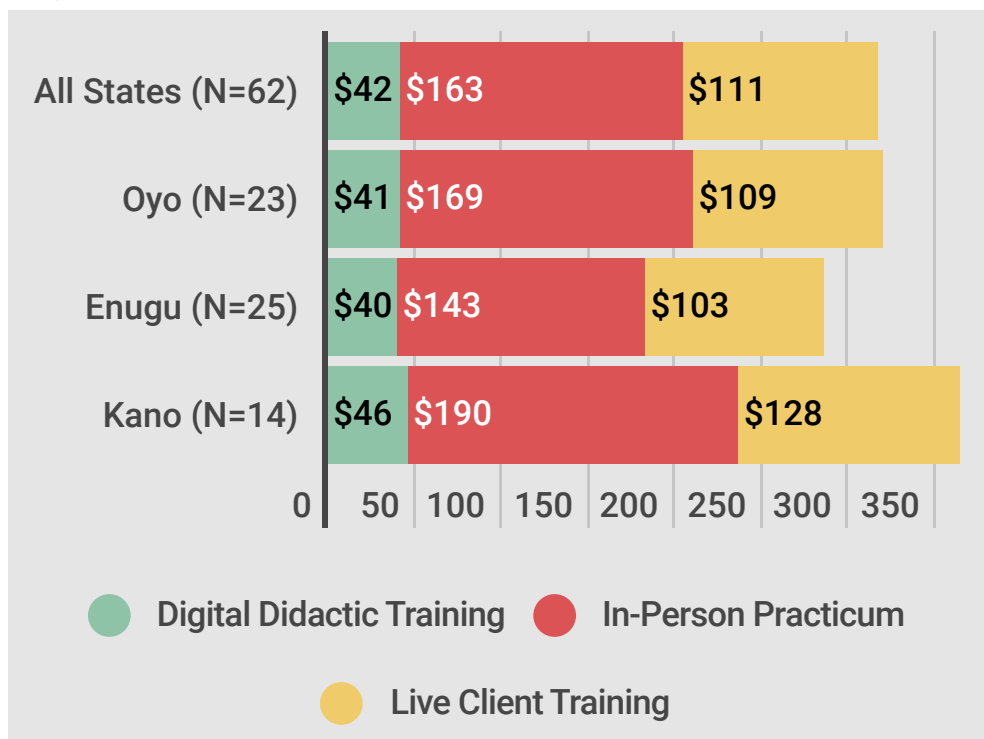


Figure 6: OSCE Scores by Station

Hybrid digital training approaches are likely cost-saving



Compared to a previous hormonal IUD training¹ in Nigeria, which cost \$426 per provider trained, the hybrid approach cost \$316 per provider trained.



Research Utilization & Next Steps

The Nigerian FMoH and state-level governments were closely engaged throughout the design and evaluation of the digital hybrid approach. As a first step, the results of this research were used to adapt and improve the online training content. In addition, based on these findings, the FMoH decided to include the digital training modules in its national FP curriculum moving forward to support scale-up of the hormonal IUD with a broader goal of expanding contraceptive method choice.

These findings can also be used to inform the roll-out of hybrid digital trainings for the hormonal IUD in other countries. Future research can help inform scale-up of this approach and evaluate its appropriateness in other settings and with other cadres of providers.

The training content can be found [here](#) (or at <https://kayaconnect.org/c/hormonal-iud-training>), where it is available for download/use for free.

¹ Brunie A, Rademacher KH, Nwala AA, Danna K, Saleh M, Afolabi K. Provision of the levonorgestrel intrauterine system in Nigeria: Provider perspectives and service delivery costs. *Gates Open Res.* 2020 Aug 6;4:119. doi: 10.12688/gatesopenres.13135.1. PMID: 32908965; PMCID: PMC7463110.



Learning about Expanded Access & Potential (LEAP) of Hormonal IUD



For more information on digital hormonal IUD training in Nigeria you can e-mail Dr. Anthony Nwala at ANwala@sfnigeria.org. For more information or questions about the LEAP Project, please visit their website at <https://www.fhi360.org/projects/learning-about-expanded-access-and-potential-Ing-ius-leap-Ing-ius-initiative>. For more information or questions about the R4S Project, please visit: <https://www.fhi360.org/projects/research-scalable-solutions-r4s>.