Supporting public sector providers in Mozambique to offer a wide range of voluntary family planning methods through a mobile, high-volume, on-the-job training model

**SUMMARY**

Training clinical providers is an essential component of voluntary family planning (FP) programs. However, training approaches must be tailored to the settings in which FP providers operate. In Mozambique, Population Services International (PSI), alongside the Ministry of Health (MOH), identified a gap in the clinical skills development of public maternal and child health (MCH) nurses: while most were trained in voluntary FP provision, they did not have sufficient practice with counselling for, nor insertion and removal of, voluntary long-acting reversible contraceptive (LARC) methods. To address this gap, the USAID-funded Support for International Family Planning and Health Organizations 2 (SIFPO2) project piloted an approach that leveraged the high volume of clients at mobile outreach days to facilitate supervised, on-the-job refresher trainings for MCH nurses, while also meeting clients’ need for voluntary FP. This brief outlines experiences with the training model, including lessons learned and future directions.
**BACKGROUND**

Dedicated training of clinical providers in the provision of voluntary FP, including voluntary LARC methods, has contributed to successful outcomes of voluntary FP programs, including diversified method mix among users. Availability of a wide range of methods is a critical component of voluntary FP programs, and has been shown to increase overall use of modern contraceptive methods when extended to large portions of a population.

In Mozambique, public-sector MCH nurses receive approximately 100 hours of pre-professional training on voluntary fertility-based, short-acting, and long-acting FP method provision (including LARC removal). However, despite the integration of LARC training into the MCH nurse curriculum, and the introduction of contraceptive implants to the method mix in 2012, the method mix in the country remains dominated by short-acting methods, which comprise 84% of methods used. Provision of voluntary LARC methods in rural areas of Mozambique has been shown to lack quality and consistency, with clients demonstrating low awareness about and uptake of voluntary LARC methods even after FP consultations at public facilities.

Professional skills building of FP providers during mobile outreach services has been explored through initiatives by PSI and partner organizations. Further, *FP High Impact Practices* notes that regular visits by mobile providers can reinforce the clinical, counseling, and referral skills of providers at under-resourced health facilities. This evidence suggests that Mozambican MCH nurses who are based in low-level facilities (the same facilities that often host mobile outreach events) would benefit from an on-the-job training model. Specifically, by building their capacity and competency in voluntary LARC provision, they could ensure continuity of care and continued service provision even when the mobile teams were not present. The training model should overcome two common barriers to voluntary LARC provision: a lack of hands-on training and a lack of opportunities for practice. The model should further ensure that a wide range of voluntary FP methods are available within the context of informed choice and that voluntary permanent methods (PMs), while outside the scope of the MCH nurse cadre, are available through referral.
METHODOLOGY

DESIGN

Prior to designing the training approach, PSI identified deficits in voluntary FP service provision in Gaza Province through reviewing the routine service delivery data at primary-level rural health centers. Similar to the national-level method mix, voluntary LARC provision at these sites was low, despite all methods being offered free of charge in alignment with Mozambique’s FP2020 commitment. Based on these findings, PSI and the District Health Authority (the district-level representation of the MOH) identified 32 health centers with high potential for voluntary FP adopters that could benefit from improved provider competency in voluntary LARC provision as part of a wide range of voluntary FP method offerings. Each selected site staffed at least one full-time MCH nurse. Facilities were generally within communities that served as natural hubs or gathering places for individuals from smaller or adjacent villages (e.g. within market towns, or towns close to major roads).

Following the selection of sites and MCH nurses to be trained in voluntary LARC provision, PSI designed the training approach to directly respond to provider needs. Because all MCH nurses received pre-professional training on voluntary FP service provision, and all had some prior experience administering methods (either through a pre-professional practicum or in their current position), they didn’t necessarily need to relearn the specifics of every available method. Rather, the needs-based training would focus on appropriate counseling for a wide range of voluntary FP methods as well as on the clinical quality of voluntary LARC insertions and removals, where there was a clear gap. The intervention did not create a new training curriculum; rather, trainers used the Ministry of Health Standards for Performance Measurement of Family Planning Services as the primary resource with which to train providers.

The key components of the training would be to ensure that MCH nurses had multiple opportunities to observe skilled PSI clinical staff providing voluntary LARC services and multiple opportunities to administer and remove LARCs themselves while under the supervision of the PSI staff. Published literature suggests that mid-level providers may be deemed fully competent in contraceptive implant insertion following four or five high-quality insertions and deemed fully competent in intrauterine device (IUD) insertion following seven high-quality insertions. In order to ensure that this threshold of insertions could be met in the context of informed choice and voluntarism, PSI and the MOH elected to leverage mobile outreach days (when large numbers of clients come to primary-level health facilities to receive voluntary FP services) as the settings for the on-the-job trainings. Mobile outreach services are already common practice in Mozambique, and many clients use them as opportunities to initiate, switch, or remove their method. As such, the events would simultaneously build provider capacity and respond to unmet need for voluntary FP.
PRE-EVENT DEMAND GENERATION

In advance of the mobile outreach/training events, PSI staff collaborated with the District Health Authority, community leaders, and traditional leaders to hold three days of awareness-raising and demand generation activities in and around the communities served by the health facilities. These activities included meetings with neighborhood and community leadership as well as women’s groups, religious groups, schoolteachers, and traditional birth attendants. The purpose of the demand generation activities was to inform community members of the upcoming mobile outreach event and dispel common myths and misconceptions around the use of voluntary FP.

ROLLOUT OF EVENTS

Mobile outreach/training events lasted for three days at each facility. Starting on the first day of the event, the PSI staff (the trainer) and the MCH nurse trainee were joined by at least one MCH nurse from the District Health Authority; this additional MCH nurse became responsible for the non-FP duties of the nurse trainee for the duration of the event. Providing additional human resources to cover the workload enabled MCH nurse trainees to fully focus on the provision of voluntary FP services. In some locations, tents were erected outside of the health facilities to provide additional space for client intake and service provision.

Methodologically, the training process for each MCH nurse varied depending on individual need and skill/comfort level. In most cases, MCH nurses demonstrated their clinical skills of voluntary LARC insertion and removal to the trainer prior to the arrival of clients; this was done using anatomic pelvic and upper-arm models. This assessment enabled the trainer to identify current gaps in the nurse’s clinical skills and subsequently focus on those gaps throughout the day.

An MCH nurse practices an IUD insertion on an anatomic model
When FP clients arrived at the facility for services, the MCH nurse then ‘shadowed’ the trainer during the intake, counseling, and service of these clients. In addition to watching and learning from the trainers on the provision and removal of voluntary LARC methods, the MCH nurses also had an opportunity to refresh their skills on counseling and provision of short-acting methods, including oral contraceptive pills and injectable contraceptives, as all services were offered in the context of informed choice and from a wide range of available methods. In most cases, provision of voluntary FP services transitioned from the trainer to the trainee part-way through the first day of the event, with the trainer remaining in the room to supervise and coach the trainee as they provided services.

If, according to PSI’s Health Network Quality Improvement System (HNQIS)\textsuperscript{21} competency checklist (see Figure 1), the trainee was deemed proficient in counseling, short-acting method provision, voluntary LARC provision, and referral for PMs by the end of the second day, they would progress to independently offering services for the third day of the event. Typically, fewer clients came to the third and final days of the outreach events, meaning the MCH nurses were able to work at a slightly slower pace, and the trainer was still on-site should they have any questions or further concerns.

\textbf{Figure 1: Health Network Quality Improvement System (HNQIS)}

The tablet-based HNQIS application includes a series of method-specific provider competency checklists that align with national-level protocols for voluntary FP provision. These checklists provide a standardized approach to evaluating the counseling and clinical skills of a provider, to determine if they are fully competent, or if further on-the-job training is required. As part of SIFPO2 in Mozambique, PSI trained district-level supervisors in use of HNQIS and provided them with tablets to enable use of the application when PSI is not present.

For the duration of the events, trainers were equipped with job aids and training equipment, including the aforementioned anatomic models, as well as clinical skill-building videos (viewable on the trainers’ phones and tablets) and visual diagrams on topics including client-centered counseling, management of side effects, and infection prevention. By having these materials on hand, trainers were able to elect which resources were most appropriate for the needs of a given trainee. Notably, because not all mobile outreach events received clients seeking removals of LARCs, the anatomic models became particularly important for MCH nurses who needed supervised training on removals, providing them with a simulated removal experience. Following the training, MCH nurses who require further skills building on LARC removals (or other clinical skills) will continue to be supervised by and obtain coaching from the district-level supervisors who PSI trained in the use of HNQIS.
RESULTS

Of the 32 facilities supported through this training approach between April 2019 and April 2020, all concluded the three-day event with at least one MCH nurse trainee proficient in the provision of voluntary short-acting and long-acting FP methods. Service delivery data collection took place at each health facility before, during, and after its respective mobile training event, in order to examine changes in the method mix.

The aggregate method mix of this service delivery data over time suggests that the mobile training events increased access to voluntary LARC methods as part of a wide range of voluntary FP options. As shown in the bar chart at right, the proportion of voluntary LARC services within the method mix increased from approximately 7% prior to the events to approximately 27% during the events. In the three months following the training event at a facility, this proportion remained steady, on average, at 12%.

Because the mobile events include significant demand generation activities, especially for underutilized voluntary LARC methods, it is largely expected that voluntary LARC provision will increase during the month that the event takes place. Therefore, measuring the sustained provision of voluntary LARCs at a facility after its respective training event is a more appropriate way to assess the impact of the intervention. In this case, the method mix demonstrates that providers successfully continued to offer these voluntary LARC services as part of a wide range of methods across the 32 health facilities following the events, which in turn demonstrates the potential of this training method for medium and long-term impact. Overall service delivery numbers increased during the month when the mobile outreach and training event took place at a facility, but otherwise did not show a substantial change during the three-month period following the event.

Figure 2
In addition to tracking service delivery data, the project team also sought to understand acceptability by the MCH nurses of this training approach. When asked to describe their impressions of the on-the-job training model, MCH nurses highlighted that it enabled them to improve skills that were not adequately practiced during pre-professional training. Specifically, nurses noted that they were more confident in their counseling skills following on-the-job training, and that they were more aware of clinical practices for voluntary LARC provision, such as the use of lidocaine as a local anesthetic for implant insertions, and proper sterilization of equipment for IUD insertions. Lidocaine is integrated into the Mozambican public health supply chain, and not dependent on PSI’s mobile teams for availability.

When asked to describe challenges around the rollout of the model, MCH nurses cited a continued lack of confidence on IUD insertions and removals, due to low rates of IUD use in general, as compared to other methods. Further, they were concerned that demand generated by the events would cause an increase in FP client load at their health facilities in the future and, subsequently, impact the ability of the public sector supply chain to provide sufficient materials and supplies for any increase in voluntary FP use. Possible strategies to address these concerns include ensuring that district-level supervisors continue to work with providers on IUD insertion/removal techniques during their routine supervision visits, as feasible, and also to support MCH nurses and facility-level pharmacists to accurately project and request sufficient quantities of FP supplies from the Health District, which is often a cause of stock-outs at the health facilities.

The results suggest that on-the-job training coupled with mobile services and demand generation may be an effective way to make voluntary LARC methods available as part of a wide range of voluntary FP options in rural Mozambique, and that this may contribute to greater diversity in the method mix. However, it is not yet clear if this approach implemented at this scale can create an overall increase in users without subsequent mobile outreach events to generate demand for voluntary FP services. Continued monitoring of service delivery data and provider clinical skills will be essential to understand long-term impact of the approach.

**LESSONS LEARNED AND FUTURE DIRECTIONS**

In the design and rollout of the on-the-job training approach, PSI and the District Health Authority identified several key factors that enabled successful rollout of the model. These factors include: (1) Supplemental human resources (in this case, a district-level MCH nurse) were essential to the implementation of the training model. In order for the MCH nurse trainee to fully dedicate their time to the on-the-job training and voluntary FP mobile outreach events, it was critical to ensure that the other routine activities (such as prenatal care, deliveries, and post-natal check-ups) were covered by another provider. (2) In addition to support to clinical skills, MCH nurses also required support in understanding which materials (e.g. lidocaine,
infection prevention materials, and contraceptive methods) they should be requesting from the District Health Authorities in order to ensure high-quality voluntary LARC insertion and removals. And finally, (3) while the on-the-job training model aimed to address supply-side challenges relating to provision of voluntary FP in rural Mozambique, the approach was rolled out in the context of strong demand generation and with the support of community mobilizers offering education and information on the benefits voluntary FP. As such, on-the-job training can be considered necessary, but not sufficient, to improve the quality of voluntary FP services in rural Mozambique.

As the intervention concludes and the District Health Authorities continue to monitor voluntary FP service delivery numbers as well as clinical skill retention by MCH staff, supportive supervision visits by the public sector must assess if further on-the-job training is needed to address lingering challenges around provider capacity and confidence, especially regarding the insertion and removal of IUDs among a wide range of method offerings.

**CONCLUSION**

By identifying a competency gap in voluntary FP provision among MCH nurses in Gaza Province, PSI and the MOH in Mozambique were able to design and implement a training model that responds to the realities of that setting. The on-the-job trainings used direct observation of the MCH nurses' clinical skills to address issues in real time, which provided additional capacity-building to their pre-professional training. The demand generation linked to the mobile outreach events facilitated high-volume client load at the trainee facilities, meaning that MCH nurses could administer a high number of voluntary FP services, including voluntary LARCs, under the close supervision of a trainer.

Further, this approach exposed significant demand for voluntary LARCs in the intervention zones, suggesting that the skew towards short-acting methods in Mozambique may be in part attributed to low provider confidence and capacity on voluntary LARC provision. Additional opportunities to refresh skills, especially on voluntary LARC insertion as part of a wide range of method options, could bring more and diverse voluntary FP options to those with unmet need in Mozambique. To this end, routine supportive supervision visits by the District Level to health facilities should leverage demand-side activities to enable further skills building and confidence among MCH providers. This approach also demonstrates that implementing partners who support mobile outreach events for voluntary FP alongside the MOH can play an active role in the training of MCH nurses, and that these trainings have the potential for sustained impact for the both Mozambiquan public health workforce and individual voluntary FP users.
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SUGGESTED CITATION

REFERENCES


