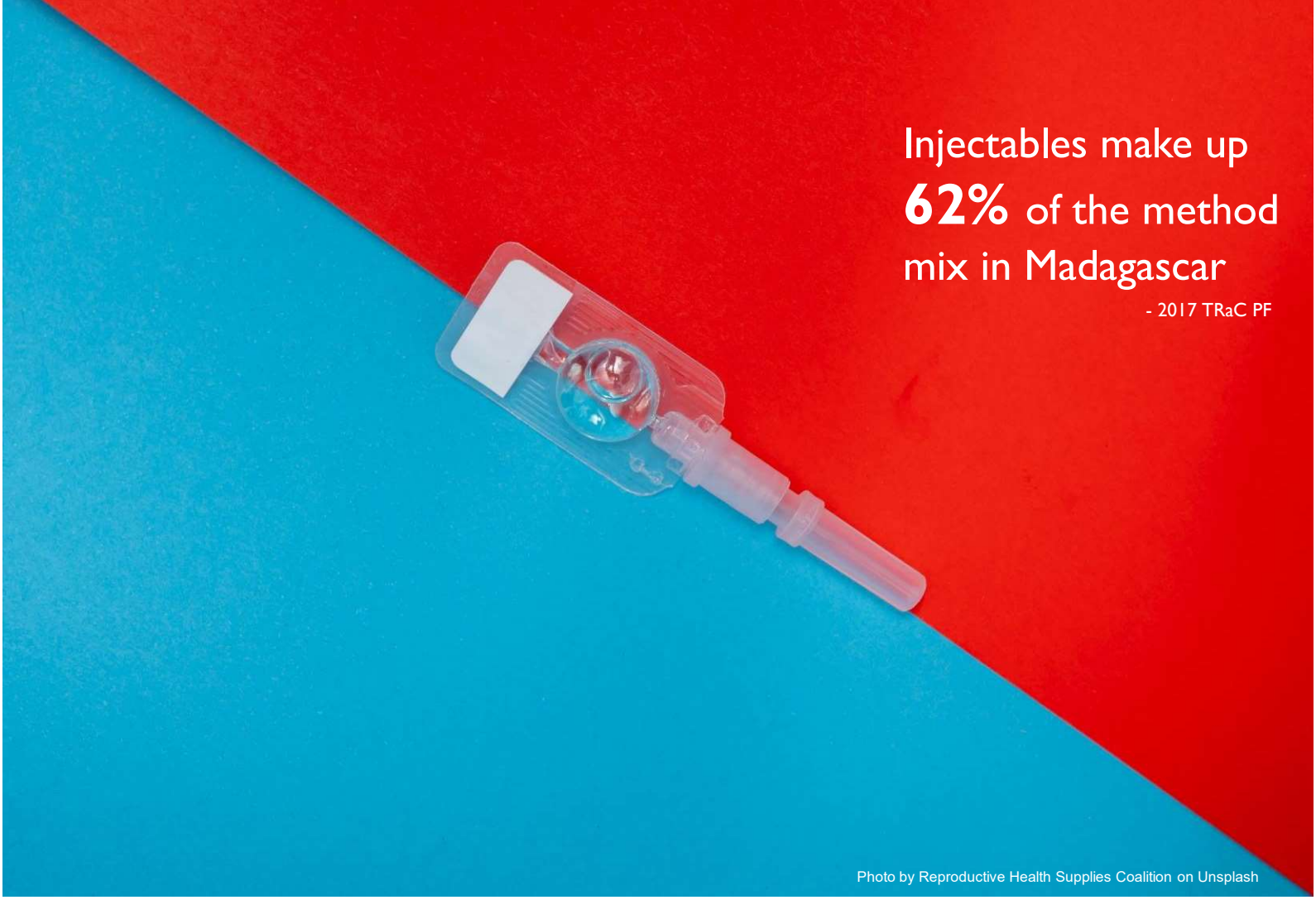
JSI RESEARCH & TRAINING INSTITUTE, INC.

DMPA-SC Job Aid Pilot & Evaluation

MADAGASCAR



Background

In 2018, Madagascar adopted an ambitious scale up plan to make DMPA-SC available at all levels of the health system. The Ministry of Health (MOH) has traditionally been reliant on significant investments from Implementing Partners (IP) to carry out the current 6-day integrated family planning (FP) training, now inclusive of DMPA-SC. However, approximately 35 of 114 districts did not have an IP supporting family planning training.

At the same time, the county was experiencing chronic stock outs of DMPA-IM. During this time, DMPA-SC was widely available and the MOH chose to order additional DMPA-SC, in order to avoid a public sector stock out of contraceptive injectables. Understanding that only a portion of providers in basic health facilities had received formal DMPA-SC training, the MOH distributed a 2-page DMPA-SC job aid developed by PATH, which uses pictures and words to describe the administration of DMPA-SC.

In April 2019, the Access Collaborative conducted a short phone survey with 13 district focal points and found that most districts did not recall receiving the job aid in 2018. They did find that some FP providers were administering DMPA-SC to clients, citing alternative training methods, such as on the job training by district level supervisors, peers and medical student interns.

Given this experience, the Department of Family Health (DSFa) within the MOH viewed DMPA-SC as a relatively simple alternative to DMPA-IM, and hypothesized that injection experienced providers could learn DMPA-SC administration through non-traditional training mechanisms. JSI, in collaboration with the MOH, applied for and received a grant under the Catalytic Opportunity Fund to explore a lower cost training mechanism for DMPA-SC that could be integrated into existing MOH structures.

The Pilot

Four pilot districts, covering 76 basic health facilities, were selected to participate - Antananarivo Avaradrano, Andramasina, Mahajanga 1 and Marovoay. Selection was based on the following criteria:

1. FP providers had not received formal DMPA-SC training
2. No current IP was providing DMPA-SC training to FP providers
3. The district has relatively high rates of injectable contraceptive use, based on the data used for the 2018 quantification, to ensure a potential user base for a new injectable
4. Districts were easily accessible, located on the same geographic axis in order to facilitate the pilot in a very limited time
5. District had adequate stock of DMPA-SC

Based on a design process with DSFa and district FP stakeholders, the pilot intervention became know as OAS – Orientation, Aide par Fiche Technique (job aid), Supervision.

Orientation: Facility-in-charges were given a 3-hour orientation during a routine monthly review meeting. Orientation included:

- Key aspects of DMPA-SC (critical steps, information about the product, side effects)
- A "How to" session on the administration of DMPA-SC using the job aid as a guide
- Clinical practice using a condom filled with salt
- Methods and practice for "teaching back" the information to FP providers at CSBs

All FP providers were given a similar orientation by facility-in-charges upon return to the facility.

Aide par Fiche Technique (Job Aid): The training, along with follow up activities, were guided by the DMPA-SC job aid, which was widely distributed in pilot sites.


PATH-Gabe Bienczycki

Supervision: 8 weeks following the orientation, the district management team conducted supervision visits to all facilities included in the pilot. Among other things, supervision visits included an observation of providers administering DMPA-SC and was an opportunity for supervisors to discuss and correct knowledge and behavior.

The Evaluation

OBJECTIVES

JSI led an evaluation of the pilot to accomplish the following objectives:

1. Document how the OAS process was carried out at both the district and health facility level
2. Evaluate providers' knowledge of and competence in DMPA-SC administration after receiving OAS
3. Examine perceptions of the OAS strategy at various levels
4. Determine the scalability of the OAS strategy

METHODS

Quantitative data were collected during the supervision component of this intervention as described in Table 1. Supervisors were trained to use a standardized tool that collected the following information:

- DMPA-SC and general FP knowledge using a multiple choice assessment
- Provider competency in administering DMPA-SC through a clinical observation (either with a client or on condoms filled with salt) using the DMPA-SC checklist
- Provider confidence in administering DMPA-SC using a series of questions and a Likert scale

Table 1. Data collected

District	# of quant surveys	# of IDIs		
		District FP focal point	Facility in Charge	FP provider
Antananarivo Avaradrano	22	1	5	5
Andramasina	24	1	5	3
Mahajanga I	10	1	5	5
Marovoay	20	1	5	4

Data was collected and entered into a database by JSI and analyzed using excel.

Qualitative data were collected through in-depth interviews as described in Table 1. Interviews were guided by a semi-structured interview guide based on the evaluation objectives, with problems to elicit further explanation. Interviews were audio recorded, translated and transcribed into French and analyzed by a local team of qualitative consultants. Results were presented back to DSFa for validation and contextualization.

Results

STUDY POPULATION

The study population is described below. When examining differences with regard to knowledge, competency and confidence, no noteworthy differences were found between different cadres or years of experience. Differences were found, however, when looking at districts.

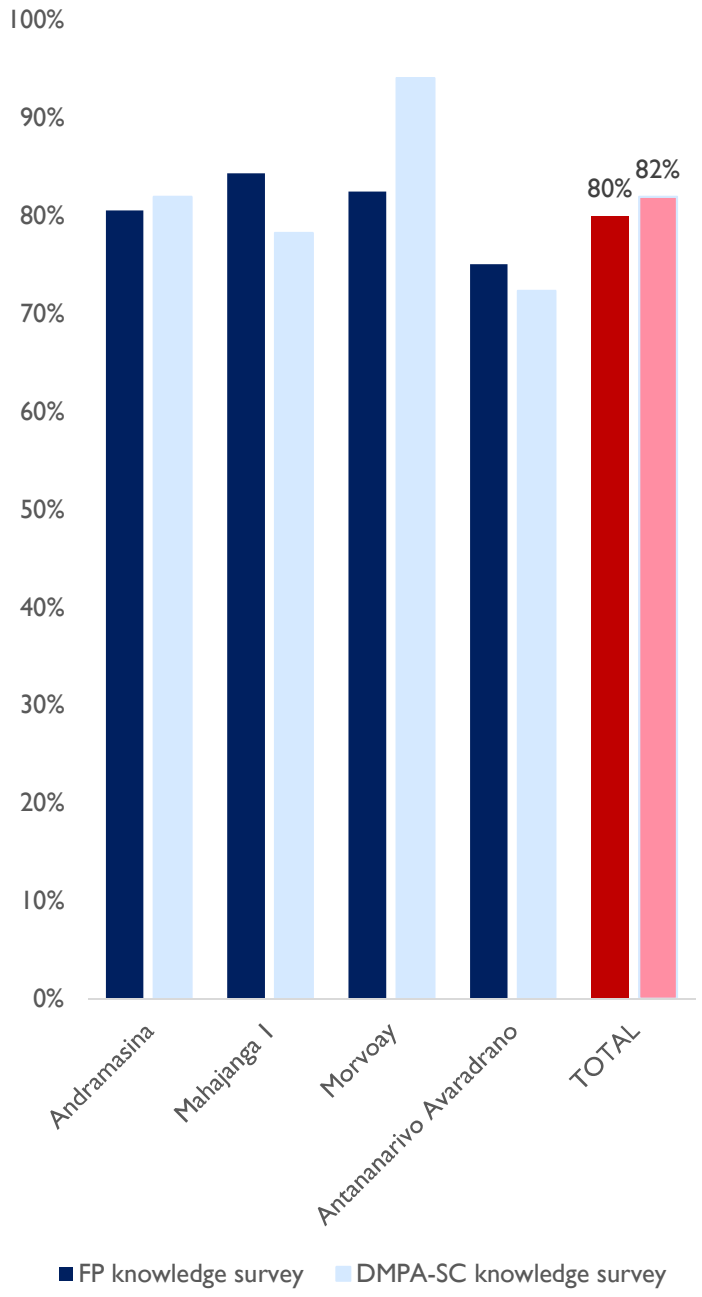
Table 2. Characteristics of respondents

	Percent	# of respondents
District		
Andramasina	32%	24
Mahajanga I	13%	10
Morvoay	26%	20
Antananarivo Avaradrano	29%	22
Cadre		
Midwife	57%	43
Nurse	32%	24
Doctor (generalist)	12%	9
Year of Experience in FP		
5 years or less	71%	54
6-10 years	21%	16
More than 10 years	8%	6

Overall, providers had adequate knowledge of DMPA-SC and family planning concepts.

General FP concepts included in the assessment were around basic knowledge of commonly used FP products and side effects, key components of an FP visit, informed choice procedures, confidentiality of client information, and youth services. Scores were generally high, ranging from 75-84%. The most commonly missed FP questions were those around informed choice and service delivery to adolescents.

The DMPA-SC assessment included questions on the key steps to DMPA-SC administration, side effects, and reinjection procedures and timelines. Scores for DMPA-SC knowledge were equally high, ranging from 72-94%. Of note, Antananarivo Avardrano scored the lowest on both assessments.



Results

Overall, 81% of providers satisfactorily completed the four critical steps of DMPA-SC administration.

Competency was measured using a standard DMPA-SC administration checklist that supervisors completed while observing providers. Thirty two percent of observations were done with a real client; the rest were done using a condom filled with salt. While the checklist observed 10 discrete steps, four are considered critical steps, meaning without completing the four steps correctly, the injection is at risk of failure.

Overall, 81% of providers satisfactorily completed the four critical steps, while 59% satisfactorily completed all 10 steps. Again, providers from Antananarivo Avardrano demonstrated some of the lowest competency scores (73%), along with providers in Andramasina (71%). Of note, these are the districts with the lowest DMPA-SC consumption rates, and therefore providers may not have had as much practice.

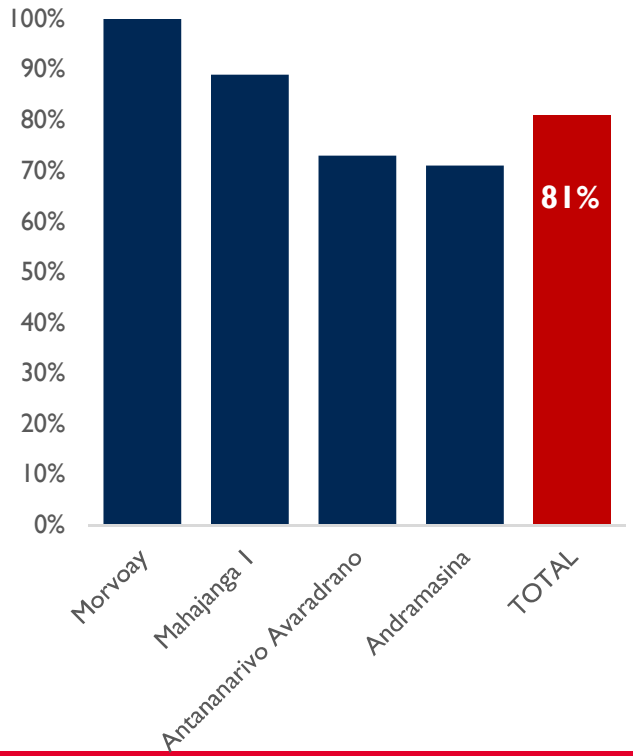


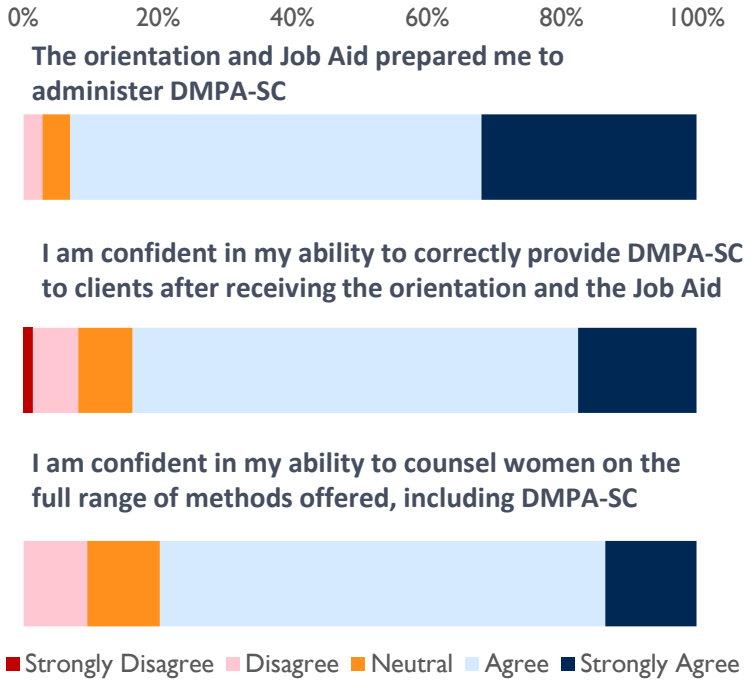
Table 3. Injectable consumption in pilot districts

	AMC (3 months prior to supervision visits)		Current consumption (month of supervision visit)	
	IM	SC	IM	SC
Andramasina	1881	179	354	269
Mahajanga I	297	3889	103	4617
Morvoay	1203	1140	1101	1468
Antananarivo Avaradrano	1280	1020	662	1314

In all four 4 districts, the rate of DMPA-SC consumption increased following OAS, as high as 50% in Andramasina, and 23% overall.

Providers felt confident in their skills following OAS.

Lastly, providers were asked to rate the extent to which they agreed to a statement related to confidence in their ability to provide FP and DMPA-SC services, and overall confidence was quite high.



Results

Respondents had a good understanding of their role in orientation, and for the most part, the orientation rolled out as planned.

District level FP focal points, facility-in-charges and FP providers all understood their roles in the orientation component well. The length of the district orientation session varied. Andramasina and Antananarivo Avaradrano used 3 hours, while Majunga and Marovoay used 1 day. However, in these districts, the DMPA-SC orientation was interspersed with other agenda items for the monthly review. Despite FP focal points stating they gave clear directions on how to "teach back" the material to FP providers, in a few instances, the facility-in-charge did not give FP providers the full orientation, stating that providers already knew what they were doing.

"We did not use a salt-filled condom because the provider is a person who had injected DMPA-SC before. It's not new to her."

-Facility-in-charge, Marovoay

Despite these instances, facility-in-charges and FP providers noted that the heart of the orientation session was the practical demonstration of administration of the DMPA-SC product on a condom filled with salt, followed by practical sessions in groups of 3 people - a provider, a client and an observer. The session were interactive and allowed for question and answer to fill gaps.

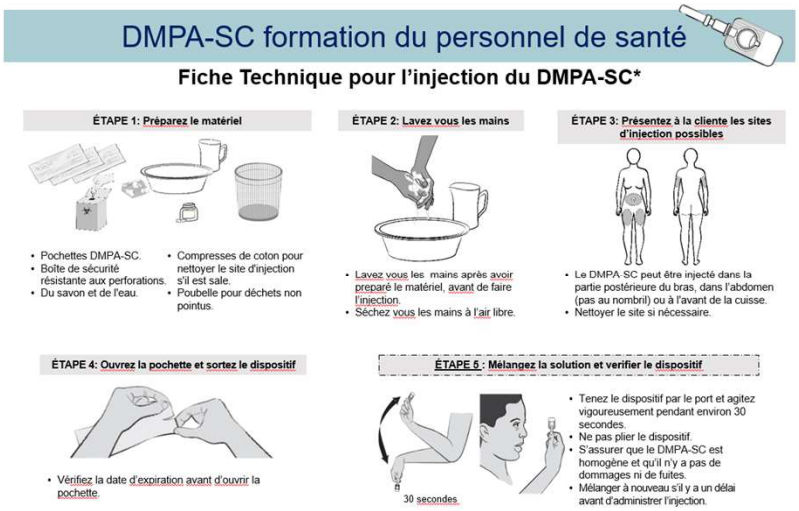
Most of the orientation sessions at the facility level were conducted in groups, with a few facilities doing individual sessions. Orientation at the facility level took between 1-3 hours and was often done between 12:00-2:00, when FP patients were not there. Among FP providers, 96% agreed that the orientation session was useful.

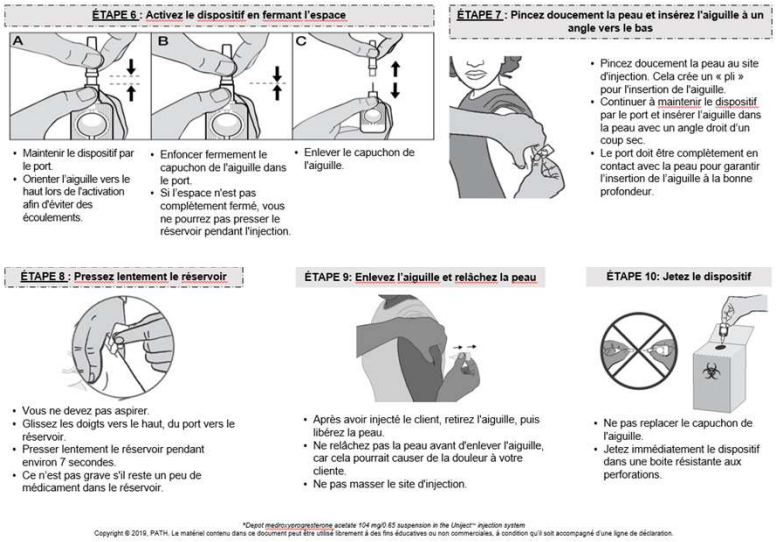
While competency scores were the highest in Morovoay and Mahaja, District FP focal points and the FP providers expressed the desire to train FP providers directly, rather than facility-in-charges.

"It suits me with the fact that there was training, and then she passed the information on to us. But I would prefer that it be me who is trained because it will allow me to increase my knowledge."

- FP provider, Marovoay

There was also some indication that trainees preferred to practice on a real client, and some preferred a more traditional classroom based training. Despite the high competency and knowledge scores, only 26% of FP providers agreed that the orientation and the job aid received provided sufficient information for the administration of DMPA-SC to clients and that no further training was required. However, during qualitative interviews, FP providers expressed fewer reservations related to DMPA-SC administration than facility-in-charges, who are less experienced in service delivery.





Results

The job aid was useful, but not always readily available.

Almost all (96%) of FP providers indicated that the job aid was helpful. Respondents noted that the language was easy to understand, the pictures were very helpful and it made training much easier.

"I could do it (training providers without the job aid) but the job aid is a tool that facilitates understanding and explanations. Because if you explain first before showing the Technical Sheet, it would be more difficult."

- Facility-in-charge, Marovoay

The frequency of use of the job aid varied. Those who had more experience with DMPA-SC cited reading the job aid once or twice. Those with less experience claimed to refer to the job aid more often, sometimes while with a client, but mostly studying it during their own time.

The facility based orientation was guided by the job aid, however in Majunga and Marovoay, some facility-in-charges did not give FP providers their own copy of the job aid. When the research team asked the provider to show them the job aid, the majority of providers could not locate the sheet.

Only minor feedback was given with regard to the color and photocopying of the job aid.

Supervision is a key component and without the funds to support it, the approach risks failure.

FP providers viewed the visit as an opportunity to improve and strengthen their technical capacity and gain valuable knowledge, but also as a way to break their routine and to strengthen their self-confidence.

"I think it is useful, because when there is no supervision, some people are used to the routine and that is why we need supervision for retraining and retraining of knowledge. If there are problems, they can respond and they give solutions to the problems."

- Facility-in-charge, Marovoay

In all cases, supervisors went over the completed supervision tool with respondents. This included going over and correcting answers to the knowledge assessment and giving feedback on the clinical observation. At the end of the visit, FP providers received a brief report outlining their strengths and areas for improvement, along with all correct answers to the knowledge assessments.

There was concern by many respondents that in the absence of IP support, districts lack the funds to consistently carry out supervision, which would significantly alter the OAS strategy. This needs to be considered going forward.


PATH-Will Boase

Results

Respondents had a very positive view of the OAS strategy and agreed it was a good alternative to more traditional training that can be scaled up in areas with injection experienced providers.

The orientation was viewed as well-organized, easy to follow and effective. The content provided was deemed sufficient.

"It's an approach that is already well developed and very thorough, it's impeccable."

- Facility-in-charge, Avaradrano

"This new strategy is more effective. Because for the three or four day training sessions, we get tired and nothing comes into our mind. Contrary to this orientation which was short, clear, and easy to understand."

-Facility-in-charge, Marovoay

Cost per provider comparison	
$368	Traditional 6 day integrated family planning training covering all methods
$271	Modified 4 day training covering DMPA-IM, DMPA-SC, self-injection and NXT
$43	OAS strategy for DMPA-SC and self-injection

The lean approach meant that facility-in-charges and providers were not away from their facilities for extended periods of time.

"In my opinion, the training in the classroom lasts too long and then there is a large absence at the center and the clients always complain."

-Facility-in-charge, Marovoay

Training facility-in-charges in addition to facility staff in DMPA-SC administration has the potential to lead to continuity of FP skills in the event of staff turnover, retirement or re-assignment.

Results

The most significant impact of the OAS strategy has been correcting errors to ensure proper administration of DMPA-SC, thereby eliminating rumors and previous complaints.

Almost all FP providers interviewed had previous experience with DMPA-SC. However, prior to the OAS strategy, providers would relying on the product insert that comes in the packaging from the manufacturer, informal knowledge transfer from others, and/or knowledge of DMPA-IM to administer DMPA-SC.

The majority of providers indicated that they were not administering the product as directed in the job aid. In particular, providers were not pinching the injection site and inserting the needle at a downward angle (Step 7); squeezing the uniject long enough (Step 8); and holding the skin tight before removing the needle (Step 9).

Providers noted that this misuse was likely the cause of client's complains of pain, leading to rumors in communities about DMPA-SC. Providers have noted that since learning the correct administration, they have heard less complaining and rumors.

"Above all, it made it possible to correct the injection angle because providers most often tend to give an intramuscular injection. This is the reason why the clients were in pain. It is from this practice that providers became aware of good practice. We had to give a 30 ° injection of the skin and the needle had to be well inserted into the skin so that it could not move during the injection, when the reservoir was pressed."

-Facility-in-charge, Majunga

"With regard to the drops that remain in the reservoir after the injection, for example, we were so scared about the effectiveness of the product. But thanks to the information in the Technical Sheet, we are now reassured."

-PF provider, Avaradrano

"Previously, I had received a lot of complaints from clients that the injection was painful. But thanks to the training and the injection techniques that we got, we no longer received any negative comments."

-FP provider, Avaradrano

Photo by Reproductive Health Supplies Coalition on Unsplash

Next Steps

Recommendations

- The OAS approach is a good alternative to more traditional training and can be scaled up in areas with injection experienced providers, particularly in areas where there is no partner to support.
- This approach can be used to fill knowledge gaps and correct misuse of the product that stemmed from the mass distribution of DMPA-SC during IM shortages.
- Facilities and FP providers could benefit from additional copies of the job aid, so the information is available when needed. DSFa has suggested printing the job aid as a poster so it is readily available.
- In the absence of partner funding, districts need to fund supervision and ensure DMPA-SC is integrated. If this is not possible, this strategy might not work.
- Given that many providers still felt more training would be necessary, districts should continue to include a time for questions and answers for DMPA-SC during monthly reviews and supervision visits.
- This approach proved the necessary skills were acquired for administering DMPA-SC, but there is a general need to reinforce broader FP concepts, such as informed choice, counseling, and adolescents, as part of the FP programs.

Using OAS for Self-Injection Phase 1

The OAS training methodology has been adopted for Phase 1 of self injection scale up and will be used to train 23 districts. The orientation will cover self-injection and provider administered DMPA-SC in areas not previously trained. The Access Collaborative will support a smaller scale evaluation at the end of Phase 1 to inform national scale-up.