Healthcare Workers' Perspectives on Financial Incentives to Increase Pediatric HIV Testing

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Abstract

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Background: Financial incentives (FI) have been used to modify health behavior. The Financial Incentives to Increase Uptake of Pediatric HIV Testing in Kenya (FIT) study is a 5-arm randomized controlled trial (NCT03049917) that showed that FI increased pediatric HIV testing uptake among children of unknown HIV status. Translating evidence-based interventions to scale requires an implementation science approach.

Methods: We conducted six focus group discussions (FGDs) with 52 healthcare workers (HCWs) to assess perspectives on acceptability, feasibility and sustainability of FI scale-up for pediatric HIV testing. Question guides were based on the Consolidated Framework for Implementation Research (CFIR). Participants were recruited from facilities in Kisumu, Kenya where the FIT study was conducted. Purposive sampling was used to enroll a range of HCW cadres. Data was analyzed using descriptive thematic analysis to characterize and map key determinants influencing HCW perceptions of FI.

Results: HCWs found the use of FI interventions to motivate pediatric HIV testing as highly acceptable. HCWs believed FI were advantageous compared to currently employed strategies because they overcame cost barriers associated with testing and provided additional motivation to test beyond health reasons. While HCWs noted the relative advantage of FI, there were concerns about how the intervention would be implemented that influenced HCW perceptions of feasibility and sustainability. HCWs expressed concern that FI for testing may negatively affect further care due to families expecting repeated FI support and wondered if FI would lead to caregivers bringing unrelated children for testing. Other issues discussed included: concerns of inequity given that other

key populations (adults/adolescents) would not receive FI for testing and clinic infrastructure to support FI. HCWs suggested that for future program roll-out success, it was necessary to clearly define the target population, create a database system for tracking index case HIV testing, and provide incentives to HCWs.

Conclusion: HCWs viewed FI as an acceptable testing strategy to increase uptake of pediatric testing. To ensure feasibility and sustainability of FI interventions for pediatric HIV testing, it will be important to clearly define target population, manage expectations of continued financial support, and establish systems to track testing.

Introduction

Many of the world's 1.8 million HIV-infected children are diagnosed only when hospitalized or severely ill, after which they have high mortality [1]. Although early initiation of HIV treatment in children decreases mortality substantially [2], children lag behind adults in HIV treatment [3] and are one third less likely to be on treatment [4]. In the 2012 Kenya AIDS Indicator Survey (KAIS), it was estimated that close to 60% of HIV-positive children in the country were undiagnosed [5]. While infants are systematically tested for HIV in prevention of mother-to-child transmission (PMTCT) programs through early infant diagnosis (EID), there are few strategies to systematically test *older* children before they are ill. Index case testing (ICT)—testing the children of HIV-infected adults already enrolled in HIV care—is efficient for case detection relative to non-targeted testing approaches. Index case testing of children through HIV-infected adults has been shown to identify a relatively high prevalence of HIV infection, and children earlier in disease progression, but has sub-optimal uptake [6].

Financial incentives (FI) have been shown to increase uptake of HIV testing for adults and adolescents in fixed and lottery based FI studies and programs [7-12]. FI have also been efficacious in other HIV settings, including HIV prevention [13] and ART adherence [14-15]. However, it is unclear whether the use of FI could be an effective strategy for improving HIV testing uptake for children. FI may offset costs associated with child HIV testing and may motivate caregivers who are willing to test their children to take action and test today rather than tomorrow [6, 16-17]. The Financial Incentives to Increase Pediatric HIV Testing (FIT) randomized controlled trial (RCT) the effectiveness of FI for pediatric HIV testing. Additionally, consultations with bioethicists about the ethics of using FI to motivate pediatric testing revealed that this intervention does not constitute coercion, undue inducement, or limit voluntariness [18]. The trial found FI to be effective and have high uptake of testing across FI groups that were equivalent to $2.50, $5 and $10 USD [19]. Prior to the FIT RCT, the team conducted a pilot that demonstrated high rates of HCW acceptability and feasibility for FI interventions for pediatric HIV testing. However, the rationale influencing their beliefs about the acceptability and feasibility of FI interventions was not explored.

Even with promising results, evidence-based interventions often face a gap between knowledge of efficacy and implementation into practice. New interventions can take a significant amount of time to be disseminated and successfully integrated into standard of care. It has been estimated to take an average of 17 years for only 14% of original research to reach successful integration into healthcare practice [12]. Implementation science aims to close the gap between evidence and practice by characterizing the determinants and complex issues impacting the scalability of interventions prior to and during intervention scaling.

Better understanding the determinants influencing the acceptability and feasibility of an intervention like the FIT trial could reduce the know-do gap and inform future successful implementation and scalability of FI programs for pediatric HIV testing. The Consolidated Framework for Implementation Research (CFIR) is a meta-theoretical framework with 5 domains and 39 constructs used to assess determinants of implementation outcomes by providing a common language of articulation [21]. The CFIR's comprehensive, standardized list of constructs can guide evaluation and interpretation of the implementation of new interventions or programs and identify factors most likely to influence future large-scale implementation. To better understand factors influencing acceptability, feasibility, and sustainability of FI interventions for pediatric HIV testing, our study characterized the experiences, perceptions and concerns of healthcare workers (HCWs) regarding their involvement in the FIT trial. This information can inform researchers how best to package, adapt and promote this FI intervention to governments as an additional strategy to improve many children's lives.

Methods

Study Design and Population

We conducted a qualitative study characterize determinants influencing the acceptability, feasibility and sustainability of using FI to promote pediatric HIV testing. The study was conducted in 6 HIV clinics in Kisumu county, Kenya where the FIT trial was conducted. Kisumu county has the highest prevalence of HIV infection [20] in the country; Kisumu is primarily an urban environment, although the recruitment clinics attract patients from more outlying, rural regions as well.

Data Collection

We conducted a total of 6 focus group discussions (FGDs) with HCWs. Participants were recruited from HIV clinics that participated in the FIT trial. Study staff met with the facility in-charge at each clinic and identified a list of 7-10 HCWs from the clinic who were eligible to participate. HCWs were eligible if they were ≥18 years of age and had experience with pediatric HIV testing. A broad range of HCW cadres (ex: nurses, counselors, clinical officers, pharmacists, and physicians) were purposively recruited from each facility to obtain diverse views on the topic. To capture experiences in HIV care and training, participants completed brief sociodemographic questionnaires prior to the start of each FGD.

FGDs were conducted by a trained Kenyan social scientist. FGDs were guided by a semi-structured discussion guide that was developed using the CFIR [21-22]. CFIR provides a menu of constructs that have been associated with effective implementation. Based on the team's experience running the trial, the discussion guide was developed to probe a subset of specific constructs from 3 CFIR domains: Inner setting, outer setting, and intervention characteristics [24].

Data Analysis

The goal of analysis was to identify factors that may impede or support the use of FI for large-scale implementation for pediatric HIV testing. Transcripts were analyzed using CFIR as a practical guide for systematically assessing potential barriers and facilitators for scale-up. The codebook was developed based on pre-specified CFIR construct definitions, with detailed information on inclusion and exclusion criteria. Review of debrief reports (short, targeted synopses of each FGD) were used to refine inclusion and exclusion criteria to be specific to the study context and were further refined based on full reviews of complete transcripts. ATLAS.ti version 8 was used to support data management and analysis. All transcripts were independently coded with a final version of the codebook, and all coded transcripts were reviewed by a second member of the research team. Any disagreements in code application were discussed as a group until consensus was achieved. Key constructs related to each CFIR domain were identified and summarized, based on their frequency of appearance within the transcript and HCW identified relative importance to the acceptability, feasibility, and

sustainability of scaling FI programs for pediatric testing. Key constructs were then grouped, based on their perceived positive or negative influence on implementation outcomes.

Ethics Statement

The University of Washington Institutional Review Board and Kenyatta National Hospital (KNH)/University of Nairobi Ethics and Research Committee approved the study. All study participants provided written informed consent.

Results

Participant Characteristics

A total of 52 healthcare workers participated in six FGDs (8-10 HCWs each). The majority of participants were female (71%) with a median age of 31 years (IQR: 27, 35). Almost all HCWs had completed some University level education (83%). As targeted, HCWs represented a range of HCW cadres including counselors (25%), clinical officers (the equivalent to a US physician assistant) (19%), nurses (12%), and peer counselors (12%). Although they had only been at their current clinic for a median of 2 years (IQR: 2, 4), HCWs reported having a median of 4 years of experience providing HIV testing services and caring for children living with HIV.

The CFIR was used to identify the main constructs from each evaluated domain (Inner setting, outer setting and intervention characteristics) influencing HCW beliefs about acceptability, feasibility and sustainability of FI interventions for pediatric HIV testing. An overview of the constructs HCWs describe and their influence on HCW beliefs about future scalability of FI interventions can be found in Table 2. HCW beliefs are summarized to highlight the main key influences on implementation outcomes.

FI provide a relative advantage when compared to current pediatric HIV testing strategies

HCWs believed that FI provided a relative advantage to current testing strategies for children, but also noted how FI could negatively impact engagement in care and didn't equally prioritize all populations in need of

improved rates of testing uptake. All HCWs believed that FI had potential to improve pediatric HIV testing uptake and almost all believed FI would be an acceptable intervention to scale-up. HCWs felt that a FI intervention was advantageous compared to current testing strategies because it would provide additional motivation for caregivers who were reluctant to test or for whom finances were a barrier to getting to the clinic.

> *"Comparing FIT to the existing programs, I think it will be very effective because I have said this over and over again, when money is involved, it's the motivation, it's the reason were all here." – Female data clerk, 33*

A few HCWs also noted how FI for HIV testing could also aid in identification of other health issues and strengthen provision of non-HIV services.

> *"[I]t will also motivate clients to come to the facility so that we identify other diseases apart from HIV because when a client comes to the facility, [we] are not only concentrating on [HIV] testing, we are also seeing the way clients present or any other problem which the clients has…it might also give us that easy way to get treatments [to them]. And we reduce mortality which might have occurred if the clients would have been within the community," – Male clinical officer, 29*

However, HCWs noted that FI would not motivate everyone for testing, because for some caregivers, FI was not the reason why caregivers had refused testing. FI were not seen to overcome barriers to testing related to challenges with HIV disclosure to children and spouses, and occasional concerns with distrust of the healthcare system. There was also concern among HCWs that pediatric populations might not be the priority population to target with a FI testing intervention. HCWs described how adolescents and adult men also have financial challenges with getting to clinic for testing and should be equally prioritized for FI interventions. HCWs also expressed concerns about the negative impact that receiving a financial incentive might have on subsequent linkage to care and prolonged engagement in care among those children found to be HIV positive. HCWs were afraid that caregivers who receive incentives for testing will come to expect incentives for other visits, leading to decreased linkage and increased rates of loss to follow-up.

> *"[A]s much as the incentives may improve the uptake of the services, on the other hand, it also creates dependency…..Such that in a case where a client or a mother comes and doesn't get the incentive, the*

mother will feel disappointed, would feel emotionally disturbed and would be affected in, in many ways." – Female nurse counselor, 35

A few HCWs believed that a further adapted intervention, one that targeted community testing, might be even more acceptable. Other HCWs felt that inclusion of leadership outside the facility could help improve acceptability of FI interventions.

"If the program can support the dialogue days to our facility, I think we can really sell the information to the facility….and if they can also involve the committee members. We normally have facility committee members, including the area chief, so if we can even go to the chief Barazas to sell this information to the community members. I think it will be a very good idea." – Female clinical officer, 38

Overburdened HCWs and lack of testing infrastructure challenged FI implementation feasibility

Although many HCWs believed a FI intervention was acceptable, HCWs noted concerns around the logistics of implementation that negatively impacted the perceived feasibility of implementing a FI intervention for pediatric HIV testing at their clinic. Lack of time to complete already existing clinic activities and limited resources to support HIV testing were the main logistical barriers to FI intervention implementation. HCWs noted that testing was often conducted in tents outside the facility and in places with limited space and privacy. Bringing in additional patients for testing would strain already limited resources available for testing.

"[Y]ou will have your objectives, even targets to meet. It is going to put a lot of pressure on the existing personnel, healthcare workers, who are also employed under other programs with other objectives to meet." – Female nurse, 36

To counteract limited resources available, HCWs strongly emphasized the necessity for organizational incentives for HCWs and community healthcare volunteers (CHVs) to improve feasibility.

"We should be expecting many people to come. Hence this will be a bigger task to the healthcare workers. So, my view is you need to support the healthcare workers for giving out these services. It might be maybe some glucose boost or incentive for them. A morale, you need to boost them." – Male clinical officer, 31

Participants also identified challenges with tracking and identifying children eligible to be tested. HCWs frequently voiced concerns around potential manipulation of the system. Between facilities, HCWs described situations where caregivers might cycle through visiting multiple facilities, testing and retesting their children of known status, in order to collect the financial incentive. Within individual facilities, HCWs described challenges in identifying true caregiver-child relationships, describing how some caregivers might be motivated to bring children other than their own to the clinic for testing in order to profit financially.

> *"I have something that is very worrying…we need to put measures that will enable not to bring other fake kids.…I mean it even happens during elections, and they aren't even being reimbursed anything! You know? Somebody would go and pick a kid, not even his own kid." – Male clinical officer, 31*

HCWs felt that these barriers could be overcome by using electronic databases to avoid repeat testing between clinics or using tracking systems that allowed pre-FI intervention verification of caregiver-child relationships.

> *"[W]hen you are doing enrollment, there is a place for the family table, which there are holes for the children…Only if she gives birth, the child will be added there. So, when somebody comes, it would be difficult to come with excess kids. – Female counselor, 34*

High perceived costs of FI programs limited HCW beliefs about sustainability

HCWs believed that a FI program met the needs of caregivers living with HIV by addressing monetary barriers caregivers may be facing. However, HCWs were concerned about the costs of sustaining the program longer term and were uncertain about where money and support would come from after the research study ended.

> *"How long is this study going to stay within our facility? Because let's say you are going to roll it out for a period of two years. Then it means that when 2 years comes to an end, then there is going to be a decline in pediatric testing. Yet we need these pediatric cases to be tested; whether that's a FIT study or not." – Female nurse, 36*

HCWs were divided on the need for providing a standard compensation rate or allowing rates to vary based on distance from the clinic. Some HCWs felt that a varied compensation rate could cause tension between

neighbors and communities. Other HCWs felt that people would be impacted differently based on distance travelled or how many children they were bringing, making a fixed compensation rate unacceptable. HCWs advocating for variable rates felt that this option was more equitable because it more effectively met the financial burden associated with testing that a FI intervention is designed to address.

> *"[S]upposing I am a client, a caregiver…I come all the way from (name of area). It's way far from this facility and I have come with a whole family, and you are reimbursing me with 125 shillings, getting back home will be a challenge for me. So, I would maybe request or humbly say if you can reconsider a way of rephrasing your reimbursement to according to where they come from." – Male counselor, 26*

Several HCWs emphasized the necessity for community education about the value and health benefit of pediatric HIV testing as a way to move beyond the need to sustain FI interventions long term. Establishing a strong sense of agency for health seeking behaviors in the community could replace the need for FI intervention while still achieving increased rates of pediatric HIV testing.

> *"At the end of the day, knowledge is power. And at the end of the day, incentive is money. Are we able to sustain it? And knowledge, if you give [it] to somebody, it will be shared. It will reach a bigger perspective of the community, and the public at large. So, I think, it is good to give the information because it will be spread; as opposed to incentive for which it will reach one or two [people]." – Female nurse, 31*

Discussion

This qualitative study engaged a broad range of HCWs and elicited their ideas, perceptions, and experiences regarding the use of FI to increase pediatric HIV testing within the western Kenyan context. There was a great deal of enthusiasm for translating FI into a programmatic setting, as well as some concerns about unintended consequences and logistics. HCWs generally believed that FI offered a relative advantage over existing testing programs and would be able to motivate individuals for whom cost was a barrier to testing, but not those for whom interpersonal dynamics were a barrier to testing. HCWs raised concerns about the sustainability of a program from an overall budgetary perspective and were concerned that clients might become dependent on FI

to continue seeking health services. As with many interventions, the suggestion of additional workload being added to an already overburdened system caused concern for some HCWs; incentives, both financial and non-financial, were proposed as a solution to increase HCWs enthusiasm for delivering the new intervention. HCWs were concerned that clients might bring children who were not formally under their care in order to receive an FI, a concern that they felt could be mitigated by using existing data sources that outline family members and relationships. HCWs offered the innovative suggestion that a program that included FI might also include adolescents and male partners, as those populations are also challenging to reach for HIV testing and experience financial barriers to attending clinic. Despite these noted challenges and suggestions for implementation, overall acceptability of a proposed FI program for pediatric HIV testing was high.

Prior studies of FI to promote HIV testing uptake have found FI to be efficacious [25-29] but have not assessed the effect of FI on subsequent health seeking behavior. Although HCWs noted concerns about the impact of receiving a FI on future health seeking behavior among children who test positive, caregivers in the FIT trial reported being more likely to seek care in the future for their newly tested positive and negative children due to no longer fearing an HIV test *(Neary, in preparation)*. Other studies have also failed to show that FI discourage future care seeking behaviors. FI have been scaled up programmatically in non-HIV settings to promote child welfare [30], and support orphans and vulnerable children [31] with no negative impact on health seeking behaviors afterwards. A trial of FI to promote maternal health care in Kenya recently found the full voucher and conditional cash transfers had a strong effect on women delivering in a health facility [32]. These studies have found that engagement in programs that support child health have changed after FI introduction. However, longer-term studies would be needed to determine whether this pattern held true for pediatric services as well.

HCW perceptions that FI would motivate parents to test their children if cost were a barrier, but not if interpersonal dynamics were a barrier, resonates with the Transtheoretical Model [23].This model tracks an individual through the stages of decision-making from pre-contemplation, contemplation, preparation, and action [23]. Based on this model, caregivers who face cost barriers but are otherwise prepared can be motivated to take action with a

financial incentive, but that same incentive would not be sufficient to move a caregiver to action who is facing psychosocial issues or contemplating and unprepared. This model of decision-making has been applied to evaluate other demand creation interventions, including FI interventions, to motivate voluntary medical male circumcision [33] and was the theoretical model on which the FIT trial was based [34].

Long term program cost was perceived as a barrier to programmatic scale-up and sustainability. Analysis of the cost and cost-effectiveness of this intervention is underway; cost-effectiveness analyses of FI interventions are rare, as are analysis of cost-effectiveness of pediatric HIV testing interventions [6, 35]. One recent study that assessed the cost-effectiveness of FI found that an incentive increased identification of new diagnoses by varying financial incentive amounts from 19% to 41% and at a cost of $11,050 to $15, 298 per new diagnosis [36]. It is possible that incentives might lead to cost savings by promoting earlier identification of HIV-infected children prior to symptomatic disease. However, as HCWs in this study noted, it is also possible that incentives might lead to increased volume of patients seeking services, potentially further burdening fixed numbers of HCWs or necessitating additional HCW hires. Motivating fixed numbers of HCWs to take on additional responsibilities may also incur costs. One strategy would be to consider performance-based financing alongside FI for testing, an effective strategy that has been shown to also improve coverage of HIV testing [37].

HCWs suggested that using existing patient data tracking systems was a strategy that could overcome the potential barrier of taking other people's children for testing or retesting their own children for the purpose of financial gain. A study in Western Kenya utilized a family identification card to support index case testing and found an increase in testing of 67% [38], a card which has since been incorporated into HIV care programs nationally in Kenya, suggesting that utilizing programmatic records to confirm caregiver-child relationships would be a feasible and effective approach if FI were scaled to a programmatic setting.

Expanding FI programmatic coverage to include adolescents and adult men is innovative. FI were found to increase uptake of adolescent HIV testing in Zimbabwe [26], and among male partners [27, 39], but have not

been tested within the context of assisted partner notification services, or index case testing, where cost-effectiveness and yield may be maximized [40]. There may be programmatic efficiencies in offering FI to several populations within one program.

A strength of the study was that it elicited perspectives from a wide range of HCW cadres who had experience with pediatric HIV testing and who had been exposed to the FIT trial. It also benefitted from having a strong conceptual model, CFIR, which prospectively informed the creation of the FGD question guides and codebook for analysis. CFIR is a strong framework that identifies determinants of successful implementation and was created specifically for implementation science; it has a strong history of use in domestic implementation science [21, 22], and emerging use in global health [24].

Limitations

This study was limited in that the HCW did not have direct experience delivering FI in a programmatic setting, so their concerns about barriers to successful implementation are hypothesized, rather than experienced. Presence of an American graduate student may have affected the focus group dynamics due to historical and racial positionality. We addressed this issue by hiring a local qualitative interviewer to complete and lead the discussions. In addition, there was some confusion among participants regarding the difference between a study and the proposed hypothetical program which would be implemented by the Kenyan government. The interviewer addressed this confusion through dynamic dialogue and teach-back techniques as the need arose.

Conclusion

The study revealed unique challenges to the implementation of an FI program for pediatric HIV testing. Along with these perceived challenges were innovative facilitators to address them. Such enthusiastic engagement and thoughtful consideration to addressing perceived issues with scale-up alludes to successful buy-in and support from healthcare workers should an FI program to be rolled out in their facilities. For future scale-up, it will be important to clearly discern the priority target population, giving consideration to not just pediatrics, but to

adolescents and men. It will also be crucial to manage expectations of continued financial support to ensure continuity of care in the event of a positive HIV test outcome as well as establish systems to avoid program manipulation whereby caregivers bring children other than their own for testing or visit multiple facilities to retest children of known status.

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Table 1: Healthcare worker demographics

Characteristic (N = 52)	***n (%) or median (IQR)***
Age	*31 (27, 35)*
Female	*37 (71)*
Primary location of work	
HIV testing services	*12 (24)*
HIV care clinic	*26 (51)*
Other	*13 (25)*
Highest level of education	
Secondary	*9 (17)*
University/College	*43 (83)*
Years of education completed	*15 (15, 16)*
*Cadre**	
Peer counselor	*6 (12)*
Nurse counselor	*4 (8)*
Nurse	*6 (12)*
Clinical officer	*10 (19)*
Counselor	*13 (25)*
Social Worker	*4 (8)*
Data Clerk/Manager	*3 (6)*
Pharmacist/Pharmacy Technician	*4 (8)*
Administrator	*1 (2)*
Community Health Extension Worker (CHEW)	*1 (2)*
Mentor Mother	*1 (2)*
Number of years at clinic	*2 (2, 4)*
Number of Years providing HIV testing/care	*4 (2, 6)*
Number of years providing care to children	*4 (2, 6)*

**One participant listed two cadres (nurse and other – administrator)*

Table 2: Illustrative Quotes about Results

CFIR Construct by Domain	Illustrative Quotes
Intervention Characteristics	
Adaptability	"Honestly for the past few times that age group [adolescents] is mostly being enrolled. There was a time I was at the pediatrics but as at now this age adolescent are so many…For me I find that adolescent are the ones who should come [to get the financial incentive]." – Female pharmaceutical technologist, 23 "[B]ecause of PMTCT, we are having very very few children turning positive…[M]y thought is that any intervention that you bring should be targeting adult populations." – Male clinical officer, 29
Complexity	"I see a challenge…the moment you start giving out incentive, this will trigger many other people to come—even from different facilities. And you will not be able to restrict this guideline and say 'no, you are coming from another facility, so I cannot reimburse you'. You see? So that will be a challenge of which we need to come up with mitigations for that." – Male clinical officer, 31
Cost	"To some extent they will get services on time which will be cost effective and lifesaving. Yes and even the abuse of cost but eventually in the long run it's a way of having a healthy community." – Female nurse counselor/in-charge, 46
Design Quality & Packaging	"I think that you can use MPESA the same day yeah. Rather than giving them cash." – Female peer counselor, 20
Evidence Strength & Quality	"Ok, it's a good way of motivating people somehow a good way of motivating people to come to the facility to get tested to their status but it's only a short-term plan." – Male pharmacy technician, 27
Intervention Source	"I think [we should]…be focusing on serving in the community. We should also think about providing the services in the community. Beating the gap where the client is forces to come to the community." – Male clinical officer, 31
Relative Advantage	"I agree it will be positive in comparison to...have someone, an index client tell a person 'I need you to bring your kids for TB screening'. You will have to have tussle with that person or that index client. You will have to tell them every time 'bring those

	kids'…You will have to make a follow-up over and over in comparison to 'bring those kids and I will reimburse you'…They will come the following day." – Male clinical officer, 31
Inner Setting	
Structural Characteristics	"[There are] issues with infrastructure. If we had reorganized infrastructure, a client would be screened with privacy…that program or FIT needs to come with infrastructure and reorganization." – Female nurse counselor/in-charge, 46 "We don't have a proper room for testing so when the program is rolled out, I think we might need maybe a container because right now we have tents, but during rainy seasons we cannot test in… the tents. But if we can have a container with partitions, I think it can really help." – Female clinical officer, 38
Networks & Communications	"The mentor mother will assess to see if the child is eligible for testing, the[n] they are taken to [HIV Testing Services] HTS providers, then the HTS provider will take them to adherence counselors if…need be. There is clinical and that is the process." – Female counselor, 39
Implementation Climate	"I think for example, let's say we have an HIV patient, and there is a nurse who maybe works in another department, so even that relationship within the same facility will start saying, 'Why are they [the HCW] given money?' So that working relationship won't be that good…Remember, we are working here as a team. So, if I am getting something and she is not, they will not come. Maybe they are working at the [Outpatient Department] OPD and the service is being offered at the [Comprehensive Care Unit] CCC, if I need assistance, they will not come." – Female counselor, 39
Tension for Change	"If we talk about pediatric testing, then I think uh, [Assisted Partner Notification Services] APNS is a very good strategy better than even…giving the incentive. Mothers have no problem bringing their children, they have no problem at all." – Male clinical officer, 29
Compatibility	"I think it will be embraced…[A]t the end of the day, the client we serve is going to get holistic care. And that is our achievement. And that is our objective." – Female nurse, 31
Relative Priority	"This program to me is a very positive program. If it is to come, consider Migosi this is my plea." – Female nurse counselor/in-charge 46
Organizational Incentives & Rewards	"What I wanted to say was to make it better…you will have to make it better for the ones who are providing

	services. The people who are seeing these children also need to be motivated. Even the providers should [get an incentive]." – Male clinical officer, 33 "You need to motivate the staff…In the form of airtime, in supporting our tea." – Female clinical officer, 38
Goals & Feedback	"We will meet our [HIV testing] target…it is our objective to meet our target." – Female counselor, 26 "[I]f we introduce the incentives I think it will really improve on our rates of HIV infection…it will lower the rate of HIV infection I think it is a good idea…when they have agreed that after the testing there is something we are giving you, they would really go for it." – Male data clerk, 26
Leadership Engagement	"[M]entorship will be required...on the new tools. Cause if you bring a tool here and you want me to report without mentoring me, I think I will give wrong information." – Female social worker, 26 "I want to propose that there be someone who will take care of the logistics, financial issues in terms of funding to the clients documentations and all that it will make much more easier, they bring someone specifically employed or deployed to handle the financial issues." – Female clinical officer, 33
Available Resources	"In terms of commodities…it will have to go up, because we will have more clients than ever coming for their drugs, so the commodities, the quantities, ordering will have to go up." – Male counselor, 32
Access to Knowledge & Information	"If the government has put this [FI program] and put in all these resources. What is to be done is to be put accountable. Accountability needs to be put in place. For example, I am not saying I am the one, because maybe the FIT is not able to employ. But we have the resources available in Migosi to implement a program. We shall manage, so long as accountability system are put in place. With adequate supervision and auditing, and support, we shall manage. Try us." – Female nurse counselor, 46
Outer Settings	
Patient Needs & Resources	"[N]ow that they have been given money, they are able to bring their children…And if that money will not be there, it means that they will be defaulting. These children will be left home, they will stop care, and eventually…they will die" – Female social worker, 47
Peer Pressure	"[W]e can start it and then we reach somewhere and stop it while another organization coming in with their own intervention, so you see this intervention will not continue. And it will find when the client is already used to this intervention. So, from that point, how will we continue with this people." – Male peer counselor, 55

External Policies & Incentives	“Our target will be increased because now we are serving many children [through the FI program]. When it [the FI program] is withdrawn, the target will not be the same…[the county will say] I was performing and now I am over performing. Why are you now underperforming and yet you are meeting the target sometime back? Why are you not at the same level as before?” - Female nurse counselor, 35