Health Models Qualitative Report

Louisiana Office of Public Health, STD/HIV Program

Addressing Louisiana Inequities in HIV and AIDS Care and Prevention in the United States Demonstration Project

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Introduction

The *Care and Prevention in the United States Demonstration Project* (CAPUS) was a three-year grant (October 2012 - September 2015) funded by the U.S. Health and Human Services Secretary's Minority AIDS Initiative Fund and directed by the Centers for Disease Control and Prevention (CDC). Louisiana was chosen as one of eight states to receive a CAPUS grant. The Office of Public Health STD/HIV Program (OPH SHP) manages the *Addressing Louisiana Inequities in HIV and AIDS* (ALIHA) CAPUS demonstration project in Louisiana and directs program implementation. The goals of the CAPUS grant are twofold: 1) expand and improve HIV testing capacity to increase the proportion of racial and ethnic minorities with HIV who have a diagnosed infection; and 2) optimize linkage to, retention in, and reengagement with care and prevention services for newly diagnosed and previously diagnosed racial and ethnic minorities with HIV.[1]

In 2010, prior to OPH SHP implementing the ALIHA CAPUS program, Louisiana ranked fourth highest in AIDS case rates and 11th in the number of AIDS cases diagnosed in the nation. The same year, the Baton Rouge Metropolitan Statistical Area (MSA) ranked first, and the New Orleans MSA ranked fifth in AIDS case rates (CDC HIV Surveillance, 2012). In 2011, Louisiana ranked first for syphilis, first for gonorrhea, and third for highest chlamydia case rates in the nation. In Louisiana, the majority of cases of sexually transmitted infections (STIs), including HIV, occur in the New Orleans, Baton Rouge, and Shreveport areas of the state, and the majority of individuals affected by STIs and HIV in Louisiana are African American. In 2010, though African Americans accounted for 32% of Louisiana's population (2010 U.S. Census), 90% of syphilis cases, 87% of gonorrhea cases, 81% of chlamydia cases, 74% of new HIV diagnoses, and 78% of new AIDS diagnoses were among African Americans (DHH OPH STD/HIV Annual Report, 2012). In 2010, 67% of people living with HIV (PLWH) in Louisiana were African American, and the HIV diagnosis rate for African Americans was more than seven times that for white persons. Sixty-nine percent of all deaths of PLWH in 2010 were African American. In 2013, Louisiana's rank for AIDS case rates had increased to third in the nation, and it remained 11th in the number of AIDS cases. That same year, African Americans accounted for 68% of PLWH in Louisiana, and the HIV diagnosis rate for African Americans was five times greater than that for white persons, versus seven times greater in 2010. In 2013, 70% of persons newly diagnosed with HIV were African American (OPH SHP, 2013 STD/HIV Surveillance Report).

Because of these HIV-related inequities, the Louisiana Office of Public Health STD/HIV Program (SHP) developed a collection of six strategies (interventions, technology updates, and capacity building activities) to impact health disparities among racial/ethnic minorities, particularly among African Americans, and men who have sex with men (MSM). These six strategies, collectively referred to as OPH SHP's ALIHA demonstration project, include the following: 1) Laboratory Information Management System Strategy (LA LIMS), 2) Louisiana Links Strategy (LA Links), 3) Louisiana Testing Strategy (LA Testing), 4) Louisiana Health Models Strategy, 5) Social Marketing Strategy, and 6) Louisiana Capacity Building Assistance Strategy (LA CBA).

In this report, we focus on the Louisiana Health Models strategy. OPH SHP contracted with The Policy & Research Group (PRG) to conduct a qualitative analysis of interviews with staff who participated in the implementation of this strategy. A qualitative analysis of the implementation was selected for this study because both PRG and OPH SHP believed that an exploratory investigation of staff perceptions of the program would provide OPH SHP with a better understanding of how to encourage viral load reduction and increase HIV-positive individuals' linkage to, reengagement in, and retention in HIV-related medical care. Data described in this report are staff perceptions of whether and why the Health Models program was effective. These perceptions are important because the professionals most involved in carrying out

[1] Retrieved October 1, 2015 from http://www.cdc.gov/hiv/prevention/demonstration/capus/#Funding

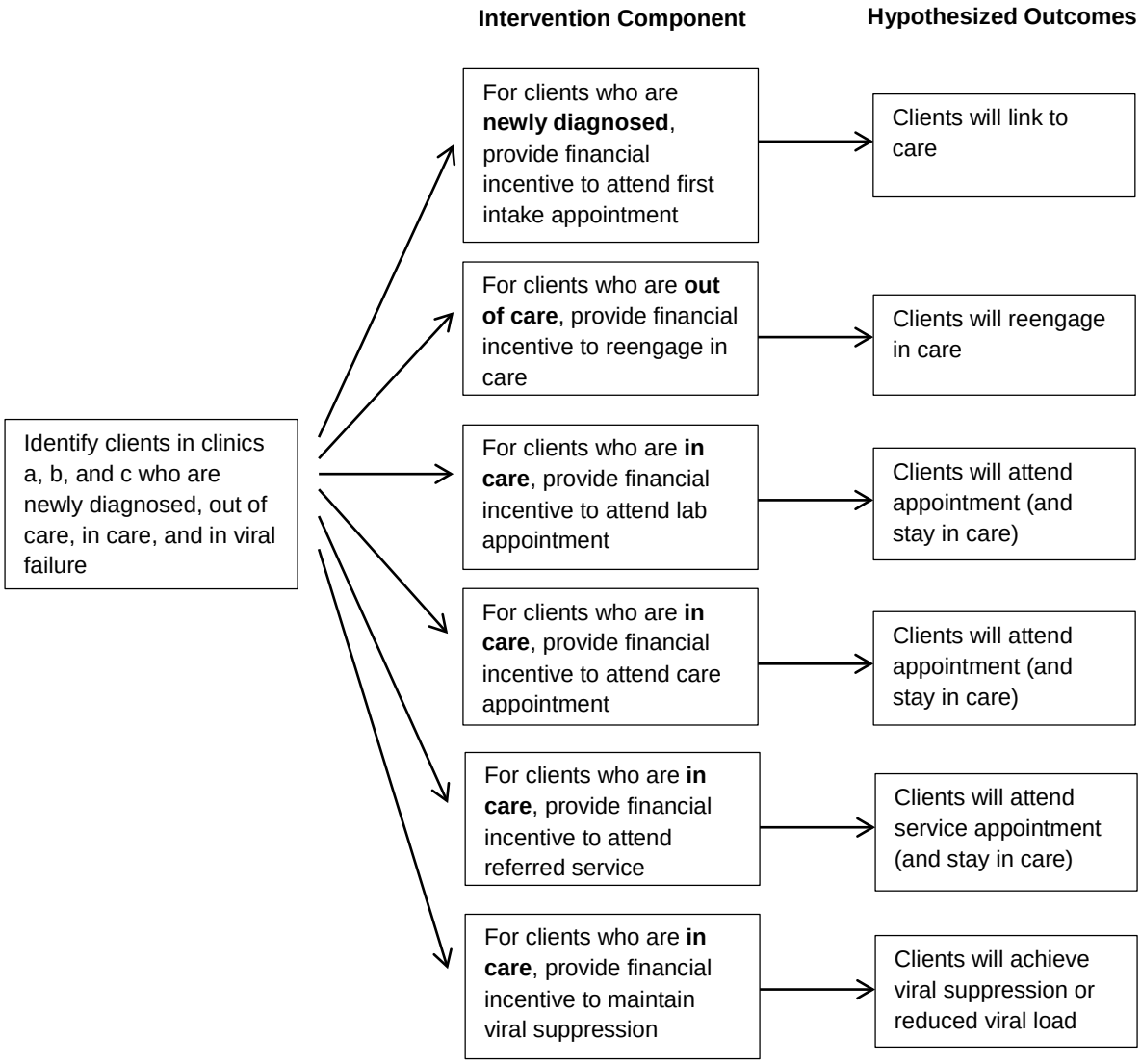
the strategy can provide valuable information regarding its implementation and adoption. Staff interview data for this report were collected and maintained by PRG. This report describes the strategy that was implemented, the methods that were used to measure and evaluate the data used in this report, and a discussion of the findings and limitations of this study.

Program Background

The Health Models strategy is a pay-patients-for-performance intervention that was implemented in three HIV specialty clinics – two in New Orleans (NO/AIDS Task Force and Priority Health) and one in Baton Rouge (HIV/AIDS Alliance for Region Two). Overall, only 60% of PLWH in the New Orleans and Baton Rouge areas were in care prior to Health Models being implemented. The three HIV-specialty clinics that provided the Health Models program collectively serve approximately 1,700 patients, of which 54% are African American. Before Health Models was implemented at these three sites, only 49% of the clinics' combined patients were virally suppressed. Health Models was initiated in September 2013. Enrollment in Health Models is offered to all new and existing patients at the participating three clinics.[2] Health Models Coordinators (HMCs) working at each clinic use brief case management techniques to enhance clients' navigation at all stages of care, engage and retain clients in care, encourage treatment adherence, and refer clients to critical support and prevention services. Clients are also provided with financial incentives for the following: attending first intake or reengagement appointment ($50); attending lab appointments ($10); attending care appointments ($20); attending appointments to a referred service ($10); and achieving or maintaining viral suppression ($75). HMCs purchase, distribute, and monitor all incentives. The goal of Health Models is to increase the proportion of clients in each of the three clinics who are retained in care, who have achieved viral suppression, and who are maintaining viral suppression. The scope of the program is broad in that it intends to incentivize behavior change for those in care as well as those out of care. For those who are in care, Health Models provides incentives to stay in care and to reduce viral loads. For those who are out of care, the Health Models program provides incentives to reengage or link to care. See Figure 1 below for the Health Models Program Logic Model.

[2] Enrollment in Health Models was not offered to all existing patients at NO/AIDS Task Force for the entire duration of the program's implementation because of the larger clinic population relative to the other two clinics. During the program's implementation from September 2014 through July 2015, HMCs at NO/AIDS began prioritizing patients who were: 1) newly diagnosed; 2) returning to care after being out of care; 3) re-engaging in care after having been released from prison or jail.

Figure 1. Health Models Program Logic Model



Methods

Data Collection

Prior to conducting the interviews with staff at each Health Models site, a PRG Research Analyst collaborated with the OPH SHP to determine central themes to explore with staff about the Health Models initiative and its implementation at each site. A PRG Research Analyst and Senior Research Analyst developed an interview protocol that would answer PRG's research questions outlined below. The questions were designed to explore the evolution of staff perceptions of incentivized HIV healthcare, if staff perceived any change in client engagement and client wellness, how the Health Models program's implementation affected clinic operations and relationships between staff and clients, and how its implementation affected relationships between clients. Additionally, PRG included questions that addressed sustainability of the Health Models program. The full interview protocol can be found in Appendix A.

The OPH SHP Health Models Program Monitor collaborated with both Health Models coordinators and clinic directors at each site to develop a list of ten potential interview participants per site. The Health Models Program Monitor ensured that there were staff from different professional disciplines and who had varying levels of interaction with the clients of the Health Models program. All staff who were on these lists were contacted by a PRG Research Analyst and asked to participate in an interview. Three staff failed to respond to multiple requests by email. In total, 27 staff members – nine at each site – were interviewed by either a PRG Research Analyst or Research Assistant.

All interviews were conducted in person in May and June 2015 using the interview protocol developed by PRG. Prior to each interview, participants gave oral consent and were assured of confidentiality. Staff were not financially compensated for participating in an interview. All interviews were audio-recorded and transcribed. Each interview lasted approximately 20-45 minutes. Interview participants represented staff from administrative, medical, nursing, peer support, case management, behavioral health, and reception departments at each site.

Analytic Methods

Research analysts at PRG used transcripts of the 27 staff interviews to analyze the content of the discussions. PRG's analysis was guided by six primary research questions:

1. How have staff perceptions of the Health Models incentive program and its efficacy changed over the course of the implementation, if at all?
2. What do staff believe are client perceptions of the Health Models incentive program and its efficacy? Do they believe client perceptions have changed over the course of implementation, if at all?
3. Do staff believe that the Health Models incentive program has affected the engagement of clients who are receiving the intervention? What about the engagement of clients who are not?
4. What are staff opinions about the effect of the Health Models incentive program on relationships between staff and participating and non-participating clients?
5. What are staff perceptions on the implementation of the Health Models incentive program and whether or not it has affected the culture and operations of the clinic?
6. What are staff opinions about the sustainability of the Health Models program?

Analysts read each transcript to identify patterns in respondents' answers to the six original research questions, as well as emergent themes, or "implicit and explicit sets of ideas within the data."[3] Transcript data were initially coded by relevance to each research question. Analysts then identified themes and findings that emerged in the areas addressed by the research questions. That is, they coded the points of repetition and agreement or disagreement in respondents' answers. Below, we present our findings regarding staff members' perceptions of the impact of the Health Models program. Findings are organized based on the research questions.

In the findings section, direct quotations are used to substantiate our interpretations and express the ideas in the words of the individuals who were interviewed. We also aim to present these ideas in context in terms of the level of agreement, disagreement, or emphasis that surrounds the articulation of these ideas. We do not identify respondents by name, and we do not share any information that might identify a respondent.

[3] Guest, G., MacQueen, K.M, and Namey, E.E. 2012. Applied thematic analysis. Sage Publications: Los Angeles, CA.

Interviews are a means of qualitative exploration; they usually do not provide generalizable findings regarding an entire population, nor do they provide evidence of the causal impacts of the program. Instead, the opinions that form the basis of our analysis provide insight into how the select group of staff with whom we met perceived the Health Models intervention at their clinic. The findings that are presented in this report should therefore be considered with these limitations in mind.

Findings

Overview of Findings

In 27 interviews, staff from three clinics in Baton Rouge and New Orleans shared their experiences with the implementation of the Health Models program. Respondents discussed the impact of the program on clinic operations, relationships between staff and clients, and client engagement with healthcare. The majority of persons interviewed considered the program to have effectively improved client appointment keeping and adherence to treatment. Respondents discussed increased opportunities to build rapport with patients and to provide patients with education due to improvements in appointment keeping.

Some staff members reported initially being skeptical of Health Models and of incentives programs in general, but most stated that seeing its positive effects changed their opinion. While some persons described a period of adjustment when Health Models started, most stated that the clinics adapted quickly and that clinic operations were not disrupted. Some remained concerned about whether or not funding for the program would continue and if its end would negatively impact patients.

Many of the staff we spoke with said that the financial incentive was highly motivating for patients and that it provided needed assistance for other expenses. Several persons reported that patients used the funds for medical expenses, groceries, or transportation to the clinic. Many expressed a desire for Health Models to continue, and several offered suggestions for increasing its efficiency or modifying it for use after the grant's conclusion. Several respondents noted the cost effectiveness of the program in improving appointment keeping and client health while preventing more expensive medical costs in the future.

Initial Perceptions of Heath Models

Though the majority of respondents reported eventually viewing the program positively, initial reactions were mixed. For some respondents, Health Models was a welcome opportunity to provide additional care and resources to their clients. Having previous experience with social service programs tended to improve respondents' initial perception of Health Models. Some other providers considered offering incentives to be an inappropriate use of funding. These respondents questioned the long-term impacts of the program and the potential for the incentive to be used for harmful purposes. Some staff members expressed reservations about the ethics of the program, but believed that it represented a cost-effective opportunity to improve clients' health outcomes. Finally, despite several respondents' initial negative reactions, the majority of respondents reported viewing the program positively after seeing its effects on clients.

Positive Reactions

Several staff members reported an initial positive reaction toward the program's introduction in their clinic. A medical case manager described enthusiasm about Health Models among clinic staff because they would be able to serve additional clients, saying, "Well, we gonna have more people getting into care. And, that's one of the things we would talk about. Everybody was excited."

Some viewed the incentives as an opportunity to provide additional resources for their clients that otherwise would not be available. Others said that they initially believed that Health Models would help

to reduce barriers to care. For example, a client-services staff member said, "I thought it was a way to keep people engaged in care because I know it is challenging to keep certain groups engaged in care for multiple reasons, whether it be barriers or access or just distrust of the system." For staff members who had close contact with patients, they initially believed that the financial incentive would be a strong motivator for a low-income population. One intake nurse said,

> I thought that it was a great – a great program to help the patients…You know, they may need it for groceries . . . It just all depends on the need of that particular client, and all of them can use some extra funding.

Some staff members also said that they believed the program could protect communities from the spread of HIV. A project manager envisioned how the program could improve wellness both for patients and communities: "I think that if we can assist . . . that population in achieving and maintaining viral suppression through things like these incentives, we can also improve their outcomes, and it's also protective for our community."

Initial Skepticism and Concerns

Other respondents said they had concerns with Health Models when it was first introduced. Several said that they originally questioned the ethics, fairness, and practicalities of the program, and some described initial skepticism and "pushback" from other staff. Some people we interviewed worried that the program would be a burden on staff members, that it could lead to a sense of entitlement among clients, about unintended effects and long-term sustainability of the program, and about the potential for the incentive to facilitate harmful behaviors.

However, many initial skeptics reported being convinced early on of the value of certain parts or all of the Health Models strategy. Some said they initially worried that the program would affect staff dynamics, but that it was effectively integrated into clinic operations and culture. Others who believed that incentivizing care compromised their ethical values acknowledged the positive impact of incentives on clients and the resulting increase in engagement. Administrative staff as well as those who worked in client care believed that there was an observable difference in levels of viral suppression since the Health Models strategy began. Although the program was not embraced completely by all staff members, and some said that they believed that the strategy was morally questionable, many of its effects were recognized as positive for both their clients and their communities.

Although many respondents said that the general reaction to Health Models at their workplace was positive, others remembered a more dubious response. One case manager said, "I just remember that . . . especially the medical providers thought it was totally kooky. I just remember them being pretty resistant, and I probably was too." Another staff member described having reservations despite understanding the reasoning for the program, saying, "Knowing the reason why it's being done and making sure that people are virally suppressed, then it makes a lot of sense, but initially . . . I thought, these people are crazy."

Some of the initial concern with the program was that it would overburden already-busy staff members.[4] One CEO said he/she initially wondered if staff members could "handle it" as a team, though ultimately said that "the way it was rolled out did not seem to be as burdensome as other pilot projects have been." Some staff members were described as being suspicious of the introduction of another program as if it would be "one other thing to deal with."

[4] Most staff members who expressed this concern eventually stated that the program did not disrupt clinic operations.

Some of the people we interviewed said they were initially opposed to incentive programs in general. A CEO reported having "a basic, philosophical outlook that [the program] should not be necessary," and another staff member stated that clients should take "personal responsibility" for their care. A nurse practitioner described initially feeling that the program was "a bribe to take your medicine, and so [I] had a few mixed feelings about that." Others expressed disbelief that clients with medical needs required additional incentives to access available medical care. One provider said, "It just bewilders me that someone has to be incentivized to take care of themselves, to be healthy, especially when the care is either free already or, you know, very inexpensive to them."

Others said they worried about clients' use of the incentive money. Some respondents were concerned that clients would spend the money on items that would deteriorate their health further. A staff nurse described how the incentive money was needed and useful for some clients, but how others could use the money for unhealthy behaviors:

> Some of our clients that are definitely in need or are on a fixed income, they really do appreciate it, but, on the other hand too, we still have those clients that we suspect, because of course we haven't seen this, that could be using the money to engage in harmful behavior.

One client care staff member said, "I know that they automatically are going to go down to the convenience store on the corner, and they are going to spend their money getting [alcohol]." Another nurse said, however, that he/she believed the program was helpful regardless of whether or not clients used the incentives for harmful behaviors: "But they made the appointment, and they are doing good. They may have an alcoholic problem, but they made their appointment, and their numbers are going up."

Respondents also differed in how they perceived the sustainability of the program. Some questioned whether or not the program was a long-term solution to improving client compliance, while others reported believing that it was helping clients form new good habits. A staff member who doubted that clients would continue to engage in care without the financial incentives asked,

> Are you really creating those kind of good relationships and good health habits, or are you just throwing money at people, and, the second you stop, they stop coming to their appointments? What are the long-term implications of this?

However, another staff member expressed the opposite opinion, describing Health Models as "a reward system. So, if you do this and be good with this, then this is your reward for doing it, until eventually, when you do remove the reward, it's an automatic response."

Despite some initial negative reactions to Health Models, most respondents who were skeptical of or resistant to the program reported changing their opinion after seeing its effects. For example, a case manager said that perspectives changed at his/her clinic once the program was implemented, saying, "Definitely people were naysayers . . . but that attitude has certainly changed."

Health Models and Clinic Operations

Staff members were asked to describe the process of implementing Health Models at their clinic, including whether or not it affected clinic operations. Opinions were mostly positive. Some individuals noted a brief adjustment period as the clinic adapted to the new program. Others said that it was an easy transition, describing Health Models as a resource that enhanced services available for clients.

Despite some adjustments for clinic staff when the program began, most respondents said that they believed that Health Models fit well into the clinics' daily operations, culture, and overall purpose. One social worker described the clinic environment as relaxed and supportive for clients, saying, "They come in, and they're welcomed. And, like I said, it's a casual, laid back environment, so they really – they leave out smiling. So, that's beneficial too, when you can come somewhere and feel good when you leave."

Initially, staff at some clinics said that implementation was hectic, particularly as many clients learned about the program and became interested in enrolling. An eligibility screener described this busy adjustment period, noting that clients were very interested in the program early on:

> With the transition . . . the population's growing, and the work is increasing, and the phone calls – because those who were already in the program knew that, you know, they were entitled to the incentives. With us trying to play catch up when we first got it, well, we have a hand – a hold on it now, but when we first had it . . . It was kind of like a panic moment – just for a minute.

However, he/she went on to say that the adjustment period was brief, noting, "We got ahold of it and captured it quickly, and I just like doing it." Additionally, when asked if the program was too complicated, the eligibility screener responded, "Not at all."

Clinic-level factors appeared to impact how easily staff members adjusted to implementing Health Models. A CEO described the program as "a complicating factor in the . . . daily operations of the clinic, and we have a very small space." The CEO, who ultimately reported being satisfied with the program, stated that the size of the clinic and the busyness of their staff contributed to their initial difficulty adjusting, saying, "It's been a learning curve for us . . . We were staffed thinly, and I think that that made it more challenging for the CAPUS program."

However, while some described some difficulty in initially adjusting to the program, most said that the transition was smooth. A case manager said that while "the operations had to be slightly modified . . . we did figure them out pretty quickly." Another nurse said, "It's nothing that difficult . . . It goes very smoothly."

Some individuals who were interviewed described Health Models as an enhancement to services that the clinic offered, noting that its objectives aligned well with the purpose of the clinic. When asked about Health Models' impact on clinic operations, one case manager said that it had led to improvements in appointment keeping, noting that it "made [clinic operations] a little bit better because sometimes clients forget to come in." Another supervisor said that Health Models complemented the clinic's other activities and enhanced its capacity to provide a range of services:

> In our clinical setting, there is very much a sense, I think, of the "one-stop-shop" model that we've been trying to promote, which is you come into the clinic, and, if you need to see a case manager, your case manager could come see you at the clinic, and you need a CAPUS visit, so you could sit with [case manager], and she gets a chance to do some great patient education on your adherence, and your medical case manager comes in and backs that up.

People we interviewed described different levels of satisfaction with CAPUS management and with Health Models employees at their clinics. Some reported being happy with Health Models staff, describing them as an asset to the clinic, whereas others felt there were inconsistencies in the program's implementation. Similarly, some staff described management of the program as organized and responsive, whereas others reported becoming frustrated when trying to contact CAPUS administration. A case

manager said, “There are a lot of clients in the CAPUS program here, and so sometimes, it's difficult to get in touch with the folks that are administering the program.” However, one CEO described CAPUS administration as responsive when clinics needed additional support: “I think there was appropriate level of staffing, and . . . when it got to a point where staff seemed to be overburdened, there were additional resources to identify to try to increase the staffing.”

Some staff praised Health Models clinic employees as organized, responsive, and attentive to clients. Others, however, said that some of the Health Models staff inconsistently provided incentives to clients. One CEO described the impact of this inconsistency, saying, “The CAPUS coordinator wasn't catching all the patients when they were coming to their appointments . . . So, we weren't adhering to the way the model was supposed to work . . . So, it just became less effective.” In response, the CEO distributed responsibilities for Health Models among multiple staff members. The CEO said that the clinic “came up with this new model that's spread out among a few more people, but that's good because it provides a backstop and a check on what the others are doing.” Another supervisor echoed this idea, saying that it was important to spread out the responsibility for the program.

Others, however, disagreed. A case manager said that he/she believed that the Health Models employee was “an outstanding resource for all of the other direct service folks” who was missed when Health Models responsibilities were distributed among different staff members.

Health Models and Clinic Culture

When asked about the program’s impact on clinic culture and relationships with clients, some staff members said that Health Models improved their relationships with clients whereas others said that it did not impact them. Most staff described the program as very popular with participating clients and said that it presented an opportunity to build rapport. Though some clients apparently became frustrated if they were ineligible for the program or a particular incentive, staff reported that this did not impact their care.

<u>Improving Clinic Culture</u>

Many of the clinic staff we interviewed said that Health Models was well-received by participating clients. A client care representative described clients as “all enthused about [the program].” Several individuals said that they believed the program provided necessary motivation for clients. For example, a CEO stated, “What I hear is that [clients] like the CAPUS program, and it is helping them to, giving them more motivation to adhere to their regimen.” Similarly, a nurse practitioner said that Health Models “gives the patients motivation and kind of a goal to work toward. I guess something to look forward to. I guess too to let them know that, hey, your health is important to me as well as you.”

We also asked providers if Health Models changed relationships with participating and non-participating clients. Some felt that the program did not impact these relationships, while others said that it had led to better relationships.

Some providers said Health Models improved communication with their clients. Some believed that the extra interactions needed for participation improved their relationships with clients, and some said that the program increased clients’ willingness to discuss their diagnosis. One nurse said that discussing the incentive program helped his/her relationship with clients because it “definitely helps me know my patient better.” Another said the program provided an opportunity to show that the clinic staff cared about the clients, saying, “Sometimes with clients that are HIV-positive, in my experience, it is that they just need to know that someone on the other end cares.”

Challenges to Relationships

We asked clinic staff about whether or not Health Models caused conflicts between patients who were eligible for the program and those who were not, and whether or not it damaged staff relationships with non-participating clients. Some said that some patients became disappointed or upset if they were ineligible for the program, but that this frustration did not damage relationships with either staff or other patients.

Staff members we interviewed reported no problems or conflicts between participating versus non-participating clients. One provider said, "I haven't heard a lot of internal client strife of, 'I heard about this program, and I want to be part of it' and they can't be." Similarly, a CEO said that there were no problems between clients receiving the incentive and those who were not, noting that if a patient tries to transfer from another clinic,

> Staff generally tries to redirect them and help them resolve any issues that they're having at their current facility so that they can stay there because that's the best for our client. So [we] haven't had people looking to switch for the incentive program.

Though the common perception was that most clients responded well to the program, some providers said that clients could be confused by the program's restrictions, and some who could not participate responded negatively. One case manager said that there was "a significant amount of frustration involved in participation in the program" in addition to many clients' positive reactions. Another case worker said, "[Ineligible clients] don't like it. They are either upset or they think it's unfair or they want an explanation of why they can't be enrolled in that program, as well." One physician said that some clients who were already virally suppressed became disappointed that the program had not been available to them: "The patients who don't qualify, they're usually upset that they don't qualify for it."

There were other reported instances where clients attempted to attend more appointments than necessary in order to obtain additional incentive money. A nurse said, "You have some patients that will try to manipulate the system: 'My case manager told me to come in. I need my numbers read so I can get my gift card.'" Another nurse stated that Health Models did not impact relationships with participating clients, but that some clients regularly asked about the incentives: "Except for asking for their money. Where's their money, complaining when they don't get it."

Some patients became frustrated if they were ineligible for a particular incentive, but some providers said that this frustration presented an opportunity for education. A nurse described using a patient's disappointment to educate him/her about working toward a lower viral load, saying, "If their viral load isn't, you know, within the right range to get the gift card . . . they kind of get pissed off about that . . . but it's an education opportunity."

Perceptions of Client and Community Impacts

People whom we interviewed said that they believed clients became more engaged in the clinics' services after the implementation of Health Models. Providers said that clients improved the rate at which they kept appointments and that they appeared more engaged in their healthcare. They said the financial incentive appeared to help clients with limited resources, many of whom used the funds for healthcare costs or other basic needs. Staff also said that the incentives had motivational value as a short-term, achievable goal for clients overwhelmed by their treatment regimens and as a tool to help clients form new preventive care and health maintenance habits.

Financial Assistance

Staff described the clients they served as a high-needs population for whom the financial incentive was a strong motivator for compliance. Several people we interviewed recalled that they had regularly been frustrated by clients who often missed appointments or did not follow their medication schedule. Several providers said that, for these clients, the incentive was often an extra motivational push that helped to make suppression or regular medical care an achievable goal, or as one case manager said, "a nudge to want to be virally suppressed." Another staff member acknowledged concerns he/she had about the ethics of the incentive program, but felt it was successful regardless, saying, "People should want to be healthy, but sometimes I think the incentive is a push for them to just kind of get them involved and get them engaged in their own health."

In addition to the incentives' motivational value, respondents said they helped clients with financial, work, or family obligations that might have otherwise inhibited their ability to obtain medical care. A medical director described Health Models as "a good fit in the sense that most of our clients – patients – are on the lower socioeconomic end of things. So a little bit of cash makes a big difference." According to many of the people we interviewed, the incentives could provide clients with the financial capacity to address these needs along with maintaining their own health. One staff member said that some patients "prioritize other things above their HIV care, just because they have things to take care of at home or other family members to take care of." A nurse said that missing work to attend appointments can be costly for some clients, and that the incentive helped clients stay in care. Many clients used the incentive to pay utility bills, buy groceries, and pay medical bills. Another nurse said, "I had a client the other day saying that she needed to pay her light bill . . . So what good is our meds gonna do you if you don't have a proper way to refrigerate them?" Similarly, a social worker said that clients used the incentive for food or transportation, saying, "This client might need to go and make groceries today, or this client might need gas." Other staff members described clients using the incentive for children's school supplies, transportation to the clinic, toiletries, and clothes for work.

High Cost of HIV Treatment

Staff we interviewed also believed that the incentives helped clients to offset the high costs of HIV-related medical expenses. A project manager said, "HIV treatment is still really expensive, and the burden of HIV is still faced . . . by a population who has extremely limited financial resources." Several staff members reported that clients used the incentive for co-pays for their medications. A CEO said, "It helps because people with HIV have higher – high costs. They generally have a number of health problems, and [client] does too, and so it's not just his HIV medications, but other medications that he takes."

Client Engagement

The majority of staff we interviewed said that they believed that the Health Models incentives improved appointment keeping, adherence to medication, and engagement in healthcare overall. Many said that improved appointment keeping provided an opportunity for education about healthcare and treatment. One nurse said, "Those clients who are definitely harder to reach, they are really, really adamant about making sure that they get here to their appointments, taking their meds because they know that they will get that income, and it really does help them." Another said that the incentive motivated his/her clients to learn about health maintenance, saying, "They are more concerned about their CD4 counts. They are more concerned with their numbers going up because they know the higher their numbers, more incentive . . . 'What can I do, and am I doing this right?'"

One case manager said clients were "more proactive with their questions" after Health Models was implemented. Similarly, a nurse said that patients "ask more questions about what's going on, or what

does this lab mean, that lab mean . . . [The program has] helped them to get more involved in their care." A medical director said that after the program began, "Some of the people that previously didn't care . . . they're caring now. Whatever the reason, their viral loads are better." Several persons said that they believed that clients' knowledge about "their healthcare and what their numbers mean" improved during the program. A nurse said that Health Models increased clients' understanding of the clinic's regularly provided education: "Even though we educate clients, some clients really still don't understand CD4 and viral load, but it seems, with this program, they really get it."

A screener said that, after Health Models was implemented, patients became more willing to see unfamiliar providers, and that "they are asking more about their care because they becoming more engaged, and they wanna understand what's going on with their bodies. Not only that, they're just coming to their appointments, and that was a – always a good thing." Several others said that they saw better adherence to treatment regimens as a result of the program.

Though respondents said that most clients became more engaged as a result of the program, they did not believe that the incentives impacted every client's motivation. A nurse said that Health Models incentives were "not a big deal" for clients with higher incomes. One client care representative reported enrolling clients who then declined to participate, saying, "'Nah, I'm good, I don't need the money.'" Another case worker described a client who valued other forms of support provided by the clinic over the financial incentive. He/she said, "I have one client who feels as if, 'I don't need it. Give it to someone else that really needs it,' you know. 'They can have my share.'"

Appointment Keeping

Many of the staff whom we interviewed said that they believed that the incentives provided through the Health Models program reduced the rate at which clients failed to make appointments, which positively impacted clinic operations. As one nurse said, "People who are on the program show up more for their regular appointments." Other staff echoed this perception. "I think there's definitely been a decrease in no-shows," said one project manager. "I think these clients are definitely coming to their appointments more . . . They just sorta – definitely follow through with something that we were not able to get them to accomplish."

People we interviewed pointed out that missing appointments could not only worsen those clients' health outcomes, but they also disrupted the clinics' schedules and required additional time to follow up with patients, reducing the clinics' efficiency and the providers' time for caring for other patients. According to one CEO,

> I was anxious to participate in the program because . . . we had a certain amount of no-shows that were obviously not good for our clinic operations. You know, that's always troublesome in your clinic, that no-shows create the need to overbook, and then that becomes unpredictable, and that stresses the staff and the providers. So, my main interest was in reducing the no-show rate.

Habit Formation

Some of the providers we interviewed said that they believed that Health Models helped clients form new habits related to health and preventive care. As a director of clinical services said, "The incentive program for this population encourages them to come, maintain a relationship with your primary provider, take your meds, pick your meds up, know the significance of taking them because we're looking to see if they are working."

Others said that, since some clients had limited experience with preventive care, they believed that the incentive helped them to form new habits. A case manager said that "wellness visits are a brand new idea for a bunch of folks that are participating in the program," and that, by increasing clients' likelihood of attending appointments, providers had more opportunities to explain compliance and the importance of regular wellness visits to clients who typically only visited the doctor when very ill. Another case manager said that, over time, some clients' initial interest in the incentive changed their approach to preventive care:

> In the beginning, you had some that was just strictly about the card, about the money. And as time goes, those very clients . . . shift gears . . . After a while, you start to see them – sometimes they don't even get a chance to go get their cards because they forget about it because they have already, "Oh, I'm on my appointments to get my labs. The doctor is saying I'm doing good. I'm virally suppressed." They do the little dances.

According to clinical staff we interviewed, some clients were initially overwhelmed by the requirements of treating HIV infection and did not believe that their health would improve. For these clients, staff we interviewed said that the Health Models program provided an opportunity to build a sense of efficacy associated with healthcare and attending appointments. One case manager said, "Maybe the money got them kick-started on it, but now that they are forming habits and feeling better and feeling like they can do this." A physician elaborated on this process of seeing progress over time:

> I think when a person first comes in, they're really feeling bad, and I think in their minds sometimes they doubt whether they're going to feel better. And then, about six months to a year later when they are feeling better, and they've gained weight, and they look better, I think it finally sinks in to them that, yeah, if I take these pills then I'm going to be better. I'm going to feel better.

Others said that they believed that learning new healthcare habits is easier for persons newly diagnosed with HIV, and that Health Models may be more valuable for these clients. A medical director said, "With the newer patients, you get a chance to teach them from the ground up, and that's a great time to have those kind of programs in place so that they can learn right from the beginning this is important." Similarly, one provider said that he/she believed the incentive was valuable for these clients because "the initial engagement in care is probably the most crucial." However, a physician acknowledged that this utility could vary based on patient characteristics and the value of the incentive, saying, "It's more . . . the person's economic standing how well [the program] helps them."

Unchanged Client Engagement

Though the majority of staff we spoke with reported that they saw improved client engagement because of Health Models, this was not always the case. Some said that some patients remained unchanged by the program. For example, a nurse said, "For some patients, it's worked well; for other patients, they're just getting their $35.00 and are happy." Similarly, a project manager said some patients were not ready to engage in care despite the incentive.

Viral Suppression and Client Health

In addition to the perceived benefits of financial assistance and engaging their clients in care, staff members also said that they believed the program was helping to improve client health. Some staff members specifically described what they saw as improvements in clients' health and higher rates of viral suppression because of the Health Models incentive program. At one clinic, the CEO estimated that the program had produced a fifteen percent increase in viral suppression and a significant increase in clients

retained in care. Other professionals who worked closely with clients also believed that the program was having this positive effect. In particular, nurse practitioners, case workers, and other client care professionals reported seeing differences in the health of clients who were given financial incentives to engage in care. A case manager reported, "I have seen an increase in a lot of clients being virally suppressed."

One nurse practitioner reported improvements in participating clients' wellness since the program's implementation. He/she said, "The majority of the patients that are on the CAPUS program are better controlled – their HIV is better controlled now – non-detectable viral loads, higher CD4 counts because they are taking their medicine correctly – than before the CAPUS program."

Another nurse practitioner said:

> I think it's working. Like I said, it kind of motivates the patients to stay on track and work toward a goal to ultimately stay healthy, stay on their medications, of course viral load undetectable. So I know they're taking their medications. So, I think it's an overall positive thing for the patients.

Some providers said that they believed that Health Models was not only helping to lower clients' viral loads but also improving clients' perceptions of their own health. One staff member described how the program provided the opportunity for clients to become engaged and educated about the importance of adherence, after which they began to see their health improve:

> People want the $75.00 or however much to become undetectable; once they become undetectable, that's like a milestone for them. So, they know that their risk of transmission is reduced, and they are probably feeling a lot better than they were when they were initially diagnosed . . . That by itself is probably the determining factor, knowing that, yes, you still have to live with this, but you don't have to be sick or anything like that, and you can still protect your partners and yourself.

Community Health

Providers we interviewed said that they believed that community health could be improved by increasing viral suppression among their clients and reducing the likelihood of transmission to other community members. A nurse said that, if more clients have undetectable viral loads, they are less likely to transmit the infection to others: "By keeping others virally suppressed we are improving community health and . . . decreasing the healthcare costs because the virus is not being spread." Several staff members said that increased engagement in care impacts clients' health and viral suppression, and that increasing engagement in care leads to more education opportunities, which can decrease high-risk health behaviors. Reducing clients' viral loads, along with improving health-related behaviors, can prevent transmission of HIV to other community members and impact community health more broadly. An administrator said that he/she supported the program because it could improve health outcomes not just for clients but for the community as a whole:

> We're talking about a communicable disease. We're not talking about your diabetes . . . We're talking about a disease that you can give to someone else, and, if we can virally suppress you . . . we can ensure that you don't give it to somebody else.

A nurse, responding to some providers' concerns about the ethics of incentive programs, said, "The fact that we're conceivably, you know, helping slow the spread of HIV, that, to me, is the larger picture, the

more important thing, rather than the fact that we're giving somebody money to actually come to their appointments."

Cost-Effectiveness, Sustainability, and Recommendations for the Future

The majority of interviewees expressed the hope that the program would continue. However, many recognized that the program was temporary and clearly explained that fact to their patients, though several questioned how removal of the incentives would impact their clients. Many offered suggestions for improving the program and making it more efficient, and some clinics were preparing similar programs for use after Health Models ended. Because of the positive impact on clients' lives, their engagement with the clinic services, and the overall cost-effectiveness of the program, a majority of the staff said that the program would and should continue. A case manager said, "I think that it will continue as-is, hopefully with some restructuring and a move towards more efficiency, but it does have an effect on clients in terms of encouraging them to stay in care."

Cost-Effectiveness

Many of the people we interviewed said that they believed Health Models was a cost-effective method for engaging patients in care, improving their health, and reducing risk in the community. Several argued that an investment in incentives to achieve viral suppression could be cost-effective if it prevented more expensive treatment and if it prevented transmitting the infection to others. As one chief financial officer said, "It is much cheaper to spend $259,000 on incentives than hundreds and hundreds of thousand dollars on care after someone becomes ill." Similarly, one provider discussed the program's impact on the patient being treated and their reduced likelihood of transmitting their infection to someone else:

> I try to think of it in a more grand view as in – if someone – if we're keeping someone's viral load low, then they're less likely to pass on, you know, the infection, someone else with an infection of HIV . . . I do think the tradeoff is worth it if truly what we're spending is, like, $200.00 or something small compared to – since I know how much medications cost, thousands that we could be spending.

A chief financial officer said, "I'd like to see it continue. I think it's worth – it's worth it for the feds to put money into this sort of thing. Has a good return, good ROI [return on investment]."

Others, however, remained skeptical that the funding would continue, particularly as more patients began to participate. One nurse said, "I don't have a clear understanding of how it could last for thousands of people over, you know, 5, 10, 15 years." Some acknowledged the sizable initial investment required for an incentive program. A chief financial officer described the program's success, but noted that smaller clinics would not be able to independently fund a similar program. "For us, it works really well," he/she said, "and it is, like I said, cheaper in the long run. But smaller agencies are not gonna have that kind of money." Finally, a case manager worried about the lack of research on incentive programs, asking, "What are the long-term implications of this? . . . Is there something that we are not considering, or are we creating something that isn't sustainable?"

Sustainability

Although several staff members said that they believed that patients understood the program is temporary, others expressed concern that patients would be unprepared and react negatively if they were no longer offered an incentive. Still others believed that the positive effects of Health Models would last after its conclusion.

Several providers said that they expected clients' improvements in health-promoting behaviors to persist even without the incentives. A director of clinical services said that patients would continue to stay in care because of their rapport with doctors and nurses. He/she said, "We should also be doing enough education that, hopefully, it'll become second nature to them." Another staff member expressed a similarly hopeful outlook: "If it stopped, I think the people would still be engaged and still be proactive . . . 95 percent of them would still do what they are supposed to do basically to remain virally suppressed." A case manager acknowledged that, while some patients may fall out of care again, the majority would "attempt to maintain those skills learned."

Others, however, were concerned that ending the program could negatively impact patients. Some said they believed that patients would return to old habits and drop out of care if the incentives stopped, particularly if they needed to miss work for the appointments. A project manager said, "My only concern would be that the funding would stop, and then clients would say, 'Well, I'm not showing up for my medical appointment.'" Similarly, a nurse said that patients would "probably go back to their old pattern of missing more doses." Another staff member expressed concern about new patients diagnosed after the program's end, saying, "If someone was newly diagnosed and said that they knew that this program used to exist or something like that, it may or may not discourage them."

Recommendations

Several people we spoke with offered suggestions for improving Health Models and ensuring its sustainability. A case manager expressed hope that the clinic would "keep the program around whether the incentives increase or decrease, that it gives a lot of people a little hope and a little push." Several respondents discussed options for continuing Health Models without the grant funding. Their ideas include limiting the use of the incentives, limiting eligibility to patients with the greatest needs, or replacing the incentives with a more economical option so that the program could continue.

A common suggestion was to limit the use of incentive funds to food or other daily needs. An eligibility screener suggested "going back to the Walmart gift card or cutting a $10.00 gas check, you know. Paying them for the mileage of coming to the doctor." Similarly, a physician said that limiting the incentive so that it could not be used for unhealthy habits would be helpful. "It would be really good if it could be arranged in such a way that this card cannot be used on cigarettes, cannot be used on alcohol, can only be used on groceries or clothing," he/she said. "I think the majority of our patients do that; they use it on groceries and stuff like that, but it would be good if they couldn't use it on bad things."

Others suggested incentives or vouchers for specific purposes, such as for food or entertainment, in order to reduce the cost of the program. Some respondents suggested movie or concert tickets, and a CEO said that offering vouchers for the clinic's donation center for clothing and household items "could be a replacement incentive over time." Since some patients used the incentive to pay for medications or medical bills, another staff member suggested "waiving co-pays for clients who make ten appointments in a row without a no-show."

While some respondents believed that Health Models should be limited to patients with the greatest needs, others noted that even patients with higher incomes could benefit from the program, particularly if they are not eligible for other forms of assistance. For example, a project manager said,

> Who really suffers are those middle-class folks who don't necessarily qualify for some of the programs or that one single person who might be right at $45,000.00, but still has all those other bills and things and has to meet his deductible on his own.

Future Directions

The majority of people we interviewed said that they were satisfied with the program and expressed hope that it would continue. A nurse suggested broadening its scope to include patients with other communicable diseases. “Now that I had a chance to see it for myself and experience it, I definitely appreciate what the Office of Public Health is doing,” he/she said. “I think it’s a great idea. I would love to see some type of incentive program for gonorrhea, chlamydia, [and] syphilis.” A chief financial officer described Health Models as “working very, very well. We have staff that are handling it beautifully, and clients and staff are happy. So that’s a good program.” Another staff member said, “Is it a well-needed and a welcomed program? Yes, yes. Do I feel like we should sustain such a program? Yes, yes, yes.”

When asked about continuing Health Models in the future, some staff members referred to early skepticism about the program and how some opinions had changed. For example, a nurse said, “Initially, I felt that it’s quite ridiculous, but, after a couple of months and we saw that especially more of our non-compliant clients were really engaged, we really encouraged and appreciated the reward.” A CEO, expressing a change of perspective echoed by others we interviewed, said, “I've learned a lot . . . If we're really serious about making sure people have access to care, get into care, and stay in care, we have to try things that we may not necessarily personally agree with.”

Appendix A

Care and Prevention in the United States Demonstration Project
Health Models Qualitative Study
Interview Protocol

The protocol is organized around the research questions. Interview questions, probes, and follow-up questions are designed to directly and indirectly elicit answers to these questions. The interviewer is encouraged to become as familiar as possible with this protocol before conducting an interview.

The main questions are indicated by solid bullets below. Follow-up questions meant to elicit particular details are listed below the main questions; you do not have to ask these questions if respondents address these details in their original answer. However, you may want to ask these follow-up questions or use probes (i.e., "how?" or "why?") if they do not. Please remember that your task is to facilitate a conversation that provides rich, developed answers to our overall research questions. Also note that comments for the interviewer to consider are included in italics below.

Please remember that question phrasing is suggested. The interviewer should phrase questions in a way that s/he is comfortable speaking.

Once you feel a question is adequately answered, you can move on to the next question.

INTRODUCTORY SCRIPT

Thank you so very much for talking with me today.

My name is ____, and I work with The Policy & Research Group, or PRG, in New Orleans. The Louisiana Office of Public Health has asked me to talk with you today about the Health Models intervention program.

Our conversation today will last about thirty minutes. I will be recording this interview in order to have an accurate representation of what you say. Please note that we may indicate respondents' positions in our report. Because we are talking to a relatively small number of [*insert position – e.g., doctors, receptionists, case managers*] at only three clinics, someone reading the report may be able to identify your comments. Your name, however, will not be used in the report.

Do you have any questions before we begin?

Again, thank you so much for your time. Let's get started.

QUESTIONS

- Please tell me about your position at the clinic and your role in the Health Models intervention program.
    - What kinds of interactions do you have with clients who are part of the program? (*i.e., casual exchanges as they come in, distribution of incentives, physical check-ups, administer medicine, etc.*)

- Think back to when you first heard about the Health Models strategy. How did you feel about it?
    - Did you first hear about it in relation to the current implementation, or had you heard about it before?

    - When you first heard about it, did you think it might help get or keep individuals in HIV care – or re-engage them? Why or why not?

- How did you feel when you learned the strategy would be used at your clinic?
    - How did you feel about the strategy's fit with this clinic? With the populations the clinic serves? Why?
    - How do you feel about the strategy now? Why did your opinion change – if it did?

- What was the general reaction staff at this clinic had when they learned his strategy would be implemented here? (Receptive? Accepting? Resistant?)
    - Why do you think this was the general reaction?
    - Did you observe any variation in the initial reaction by staff members' different roles? In other words, did doctors have a different reaction than case managers? If so, any sense of why?
    - Do you think this general reaction has changed? Why or why not?

- What's your current assessment of whether the Health Models program is working? (*tease out whether they think it's working for all groups – engagement, reengagement, retention – viral load?)*
    - Why do you believe it is/isn't working? (*decreased no-shows, increased involvement of clients)*
    - Does it work better with some goals or aspects of the project than others?

- I'm interested to hear whether you think this program has affected the involvement of participating clients in their treatment in any way?
    - If so, could you describe how their involvement has changed and why you think it has changed?

- What do clients who are receiving the intervention think about it? Do they talk about it with you? What do they say?
    - Do you think clients' perceptions of the program have changed at all since it started? If so, how?

- What about clients who are *not* part of the Health Models intervention – what do they think about the program?
    - Can you tell me about any ways in which their engagement in treatment differs from those who are received the intervention?

- I'm interested in hearing about your relationships with clients and how the Health Models intervention has affected them or not. Have you noticed any ways in which your relationships with participating clients have been affected by their enrollment in the intervention?
    - What about your relationships with clients who are not enrolled? Have those been affected at all by the fact that the Health Models intervention is taking place?

- Could you tell me about whether the program has affected the normal clinic operations at all? If so, in what ways?
    - Has it affected the culture of this clinic at all? (Created friction among clients? Between clients and staff? Among staff?)
    - Was there any disruption in client care or staff dynamics when the intervention started at the clinic?

- How sustainable do you think this program is for HIV care? For this clinic?
    - Why is it not sustainable?
    - What might make it sustainable?
    - What are other ways to get and keep individuals in HIV care? Ideally, what's the best way?

- Those are all of my questions for today. Is there anything else you'd like to share?

Thank you so much for your time.