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THE DEVELOPMENT AND IMPLEMENTATION OF THE NATIONAL EVALUATION STRATEGY OF ACCESS TO CARE, A MULTI-SITE LINKAGE TO CARE INITIATIVE IN THE UNITED STATES

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The Access to Care (A2C) is a multi-site initiative that seeks to increase the access to and retention in effective HIV healthcare and support services by people living with HIV across the United States. As the initiative implemented evidence-based programs in new settings with diverse populations, it was important to document these innovative efforts to contribute to the evidence base for best practices. In a partnership between Johns Hopkins University, AIDS United, and the A2C sites, a national evaluation strategy was developed and implemented to build knowledge about how linkage to care interventions could be most effectively implemented within the context of local, real-world settings. This article provides an overview of the efforts to develop and implement a national monitoring and evaluation strategy for a multi-site initiative. The findings may be of utility for other HIV interventions that are seeking to incorporate a monitoring and evaluation component into their efforts.

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HIV IN THE UNITED STATES

The Centers for Disease Control and Prevention ([CDC], 2011) estimates that there are more than one million people living with HIV (PLWH) in the United States. The epidemic has had varying impact on the different populations. At the end of 2004, those living with a diagnosis of HIV were primarily between ages of 40 and 49 (37%), Blacks/African Americans (48%), and male (72%). However, nearly 21% of these individuals are estimated to be unaware of their infection and among those who are aware, many are not adequately engaged in "HIV care" (Gardner, McLees, Steiner, Del Rio, & Burman, 2011).

There are also disparities in access to HIV care, treatment and services by gender, race, and sexual orientation. Women enter care with higher CD4 cell counts compared to men and men who have sex with men (MSM) enter HIV care with higher CD4 cell counts when compared to other HIV risk groups (heterosexual, IDU, and other; Althoff et al., 2010). Furthermore, when compared to MSM of other race/ethnicities, African American MSM who were HIV positive were less likely to be on antiretroviral therapy (ART) and more likely to express distrust of the U.S. medical system (Halkitis, Parsons, Wolitski, & Remien, 2003). Hall and colleagues (2013) also describe significant age disparities at each step of the continuum of care; those younger than 45 years of age were less likely to know their status or to have a suppressed viral load.

In order for individuals with HIV infection to benefit from ART, they have to be aware of their infection, "be engaged in regular HIV care, and receive and adhere to an effective antiretroviral therapy" (p. 793). Gardner and colleagues (2011) describe this continuous nature of care as a continuum of engagement in HIV care. Nearly 60% of PLWH in the U.S. are not receiving regular HIV care because of shortfalls at each stage of the continuum, including diagnosis of HIV infection, linkage to care and retention in care and only 19% to 25% of PLWH in the U.S. are virally suppressed (CDC, 2012; Gardner et al., 2011).

There have been a variety of intervention strategies that seek to link and retain PLWH in care. Some examples include motivational or strengths-based counseling, patient navigation, and use of peers as part of the health care team. However, little is known about such interventions' effectiveness in promoting retention in care. With this gap in mind, Higa, Marks, Crepaz, Liau, and Lyles (2012) and Liau et al. (2013) sought to systematically review published studies and conference presentations to identify evidence-informed strategies. Despite the multi-dimensional nature of access to HIV care, the reviews found that most available strategies focused at the individual-level. The authors noted the need to cast a wider focus—moving beyond the individual-level strategies to also include the interpersonal, environmental, and structural barriers to engagement in HIV care (Higa et al., 2012; Liau et al., 2013).

OVERVIEW OF ACCESS TO CARE

AIDS United (AU) developed its multi-sponsored, public-private partnership Access to Care (A2C) initiative to increase the access to and retention in effective HIV healthcare and support services for PLWH. In particular, A2C sought to reach those living in poverty who know their HIV status but are not receiving HIV-specific care or support. The initiative casted its focus on the hard-to-reach populations and had a mandate to: identify the systemic and/or personal barriers to care PLWH may experience; and support the development of systems and interventions to alleviate those barriers and implement innovative approaches to ensuring access to and consistent engagement in care. The initiative was designed to reach the most difficult populations with refined outreach strategies and with appropriate resources that otherwise would not be available.

A2C is a multi-site initiative. Sites were selected by an external review committee consisting of experts in the fields of HIV/AIDS, public health, program evaluation and strategic philanthropy. Selection criteria included factors such as burden of need, geographic location, strength of program design, and rigor of proposed evaluation activities. Based on individual community and local needs, A2C was intended to allow for varied program models and as a result, the structure, model, and employed strategies of each site's program differ according to the identified needs of its community's systems of care. However, all sites were required to base their program designs based on strategies that had at least preliminary levels of evidence. The mostly commonly used approaches across the cohort include: peer/patient navigation, community health workers, care coordination, and motivational interviewing. Appendix 1 includes a table which briefly outlines these approaches and their relevant references.

All funded projects within the A2C also developed organizational networks that are collaborating to reduce barriers to care, provide innovative solutions to long-standing access problems, and to change the way that systems operate in their community. It was one of the goals of the A2C that projects not only focus on individual level solutions to barriers to care, but also systemic change which can be sustained following the termination of AU support.

The work of A2C cuts across all three of the goals outlined in the National HIV/AIDS Strategy (NHAS): to reduce the number of people who become infected with HIV; to increase access to HIV Care and to improve health outcomes for PLWH; and to reduce HIV-related health disparities (White House Office of National AIDS Policy, 2010). It is the second goal that is particularly applicable to the A2C efforts. Echoing the policy recommendations outlined in the NHAS, A2C projects work with PLWH at various points along the continuum of care; they help to secure linkages to care by strengthening linkages to HIV care for individuals who are newly diagnosed with HIV, engaging PLWH in HIV care who have previously never received care, and re-engaging those who have dropped out of care.

This article discusses the collaborative effort between Johns Hopkins University (JHU), AU, and the A2C sites to develop and implement a national evaluation plan for the A2C initiative. It first describes the iterative process of developing the three-pronged national evaluation strategy and discusses these mixed methods in more detail. The article then outlines the challenges and limitations of undergoing such a process and elaborates on why it is important to establish the national evaluation strategy in a collaborative and iterative manner. In conclusion, the article shares some lessons learned and discusses the potential applicability of the national evaluation strategy to other programs. The findings of the national evaluation plan are expected to follow in future publications.

METHODS

THE NATIONAL EVALUATION STRATEGY

As the A2C initiative is implementing evidence-based programs in new settings with diverse populations, it was important to document these innovative efforts to build best practices and to also demonstrate program effectiveness. Each A2C program site conducted a local-level evaluation to answer evaluation questions pertinent to the local context. In addition, AU contracted JHU to develop an across-site national evaluation strategy. The national evaluation was not designed to stand-alone; rather, it was developed to complement local-level evaluations at each grantee site by capturing cross-cutting progress made by the A2C cohort. It is this national evaluation strategy that will be outlined in detail throughout this manuscript.

The development of the national evaluation research questions was a three-step process that was guided by a set of overarching evaluation questions that were developed collaboratively by AU, JHU, and the program sites. First, JHU and AU developed a list of potential research questions. Second, research questions listed in grantee proposals were abstracted, grouped by theme, and merged with the list of research questions created by AU and JHU. This expanded list of potential research questions was narrowed down and refined based on further feedback from the sites, donors, and experts. This process resulted in a list of guiding research questions for the A2C evaluation; some of the overarching questions are listed below:

1. How many participants were served by this initiative?
2. What do we know about the participants and their service delivery needs?
3. In detail, what types of services were provided, and at what cost?
4. What is the trend in suppressed viral load from baseline to 12 months among A2C participants?
6. What barriers are participants encountering in accessing medical care?
7. (How) does the collaborative design of grantee projects strengthen the community networks of HIV/AIDS providers? What organizational and network changes take place as a function of A2C?
8. What is the continuum of care for A2C participants?
9. Can an argument be made that the investment in services provided has resulted in sufficient health gains that the services could be labeled as “cost-saving” or “cost-effective” either to clinical providers or to society at large?

With these questions on hand, the national evaluation used a three-pronged mixed-methods approach to answer these evaluation questions. The approach includes, (1) monitoring of participant-level data, (2) case studies, and (3) cost analysis. Table 1 outlines the relationship between the questions and the three-pronged approach.

(1) Monitoring of Participant-Level Data. In collaboration, JHU, AU, and the A2C sites selected a set of twelve core indicators that are collected across all sites. These indicators are used to quantitatively monitor and evaluate the national evaluation. The national evaluation constructs include measures of: demographics, linkage to care, case management, participant needs and barriers, perceived stigma, general health, retention in care, viral load, CD4, and HAART. National indicators are col-

TABLE 1. Overview of the National Evaluation Strategy

Strategy	**Overarching national research question addressed (listed above)**	**Method**	**Deliverable/Product**
Monitoring of participant-level data	Question 1: No. of participants served	*At each site:*	*For each site:*
	Question 2: Participant needs	Longitudinal submission of aggregated and de-identified data to JHU at baseline, 6, 12, and 18 months on all A2C participants	A site-level report outlining participant enrollment and participant-level outcomes
	Question 4: Health outcomes		*Across A2C initiative:*
	Question 5: Barriers to care		A report outlining initiative enrollment and participant-level outcomes across the A2C initiative
	Question 7: Continuum of care		Across-initiative HIV care and treatment cascade
Case Studies	Question 6: Strengthening of community network of HIV/AIDS providers	*At each site:*	*For each site:*
	Question 6: Organizational and network changes	1-on-1 semistructured in-depth interview with administrative and service-delivery staff members at collaborating agencies	A case study report outlining findings from in-depth interviews, network diagram, and sociogram
		Online survey detailing the change in and nature of relationship between collaborating agencies	
Cost Analysis	Question 3: Type and cost of services provided	*At each site:*	*For each site:*
	Question 4: Health outcomes	Submission of program-related costs to JHU using cost analysis spreadsheet (optional second round of submission if program/costs change)	Cost analysis: cost per participant and cost per contact of delivering the A2C program
	Question 8: Investment in services cost saving or cost effective		Threshold analysis: economic threshold for cost per HIV infection averted compared to current standard of care, economic threshold for cost of Quality-Adjusted Life Years (QALY) averted
			Cost-effectiveness and utility analyses: cost per QALY-saved by A2C program services

lected at baseline, six months, 12 months, and 18 months with differences over time assessed using paired *t*-test, ANOVA for repeat measures and McNemar test.

The development of the twelve national constructs was a lengthy process. JHU first proposed twenty-one potential constructs and two to three measures for each construct based on the scientific literature and discussions experts. The list of twenty-one potential constructs was also guided by lessons learned from PEPFAR, Ulett's blueprint for HIV treatment, and clinical guidelines (Ulett et al., 2009). For these constructs, sites were each asked to rate (1) how feasible it was that they could collect data on the construct over time and (2) the importance of the construct to their initiative. Based on this feasibility assessment, JHU reduced the list of twenty-one constructs down to twelve. The final list of constructs and measures represented evaluation constructs that each site felt they could collect and which each site felt were relevant to their program as part of a larger overall national effort. Where possible, efforts were made to select constructs that were already being collected by the site or that could easily be adapted into existing data collection mechanisms. It was important to ensure that sites and participants, many of whom represent vulnerable and marginalized populations, were not over burdened with data collection but also ensure that the initiative collected the necessary data to monitor the program and contribute to the evidence-base.

To facilitate systematic and accurate reporting across sites, a set of tables was developed that sites populate locally to send aggregated data to JHU (Appendix 2). The tables were developed in Excel and include embedded formulas to minimize site-level burden. They also include instructions for each cell, conditional formatting, and built-in data checks to reduce data errors. Grantees were trained in how to use the tables, and were asked to provide feedback on how to further improve and refine the tables. Based on site suggestions, the tables were revised and the final draft of the tables represents a collaborative and iterative design that was a comprehensive and easy to use tool.

(2) Case Studies. The case study exercise is a mixed-method approach to capture each site's network of community collaborators and any organizational and network changes that may have taken place under the purview of the A2C initiative. The exercise also gathers data on implementation issues, barriers and facilitators to program implementation, and lessons learned from both administrative and service-delivery perspectives. The case studies include three components: in-depth interviews, an on-line survey, and graphical outputs. Approximately, one year from the start of program implementation, JHU conducts semistructured in-depth interviews at each A2C location. Under the guidance of the lead agency, JHU seeks to interview at least two staff members at each collaborating agency—one staff member at a managerial or supervisory position and another staff member who works in a more direct service-delivery capacity (Appendix 3). After verbatim transcription of each interview, the data is analyzed using Atlas.ti and a codebook developed from the list of research questions.

After completing the interviews, each respondent is also asked to complete an on-line survey to gather data on the characteristics of the organizations involved in the network, the linkages between the organizations, and the strength and nature of those linkages. JHU, in collaboration with the individual sites, then produces a case study report. The report includes the findings from the qualitative interviews as well as two major graphical outputs: a network diagram and sociograms. The network diagram provides a graphic overview of how service organizations identify, recruit, link, and retain participants. Sociograms depict connectivity between partner organizations before and after program implementation.

(3) Cost Analysis. In order to determine what the cost of program delivery was at each site and whether or not the program could be deemed cost-effective or cost-saving, JHU developed an evaluation instrument to conduct the cost analysis employing standard methods of cost, threshold, and cost-effectiveness analyses as recommended by the U.S. Panel on Cost-effectiveness in Health and Medicine, and as adapted to HIV/AIDS programs by Holtgrave (1998). All sites were oriented to the use of the cost analysis spreadsheet during the national evaluation meeting. Beyond the initial overview session, JHU continued to work with each site to provide site-specific technical assistance and to help establish the data collection systems necessary at the local level to conduct the cost analysis. The cost analysis spreadsheet is color coded and easy to use. It includes detailed instructions and embedded formulas. The spreadsheet is broken into five sections or steps: the time frame for the analysis; a description of the A2C services for each site; the cost to the participant; the cost to the organization; and overhead costs. A copy of the cost analysis spreadsheet can be made available upon request to the corresponding author.

DISCUSSION

There are several lessons learned from the development and implementation of the A2C evaluation strategy; there are lessons learned at the national level by JHU as well as lessons learned at the site level by the A2C lead agencies. These lessons learned are based on observations made by the national evaluation team, input from AU, and presentations made by A2C sites. The authors believe that these lessons could be informative for other evaluation efforts that involve diverse stakeholders such as research staff, funders, community groups, and marginalized populations.

A. NATIONAL LEVEL

(1) Importance of collaboration. The development of the evaluation questions, the selection of constructs, and the development of data collection tools for the national evaluation involved a high degree of collaboration between AU, JHU, and A2C sites. This level of collaboration was essential to ensure that the evaluation met the needs of all stakeholders.

(2) Conduct feasibility assessments of potential indicators. Asking the sites to complete a quick feasibility assessment for the national evaluation constructs allowed JHU to gauge the initial capacity of the sites to participate in the national evaluation. This step also allowed JHU to understand and address potential barriers to national data collection at the on-set during the planning phase for A2C. It also ensured that sites were asked to collect measures for which they had the capacity to collect and that the data being collected complemented the objectives site-specific evaluation activities that were not part of the national evaluation.

(3) Strike a balance between evaluation and program efforts. As A2C is first and foremost an initiative to link PLWH in care, the projects' first primary focus is at

the service-level. Evaluation, while an important endeavor to build best practices and monitor the projects, could not take priority over the service-delivery aspect of the A2C initiative. JHU originally proposed a list of twenty-one different outcome measures for the national evaluation. However, initial feedback from sites, and AU indicated that collecting that many constructs would be challenging due to a variety of constraints, including availability of data, budget issues, site burden and programmatic relevance. With this in mind and in an effort to maintain the prioritization of service delivery over evaluation, the sites, AU, and JHU selected a smaller set of twelve core measures that were both feasible and rigorous.

(4) Develop spreadsheets for aggregate data collection. Initial feedback from the sites indicated that the tables for the national evaluation constructs and the cost analysis spreadsheet will be extremely helpful in promoting data consistency and accuracy, as well as timely reporting.

(5) Consider triangulation. The overall national evaluation strategy is a three-pronged approach. This approach will allow us to measure the success of the national evaluation using the national evaluation constructs, case studies, and cost analysis. Taken together, these three approaches will give us a better understanding of the challenges and successes of A2C and will provide a more complete picture of A2C than any one strategy could on its own.

(6) Consider mixed methods. While the national evaluation constructs and the cost analysis are quantitative, the case studies are primarily qualitative. Research methods have different limitations, and using a mixed methods approach helps to ensure an even balance of the strengths and challenges inherent in these different methodologies. Additionally, using a mix of methods should result in a richer understanding and interpretation of our research findings.

B. SITE LEVEL

(1) Allow sufficient time for IRB submission and approval. The distinction between public health practice and public health research is not always clear. Public health practice includes activities where data are collected to assess a program, service, or the health of participants; knowledge gained is often not generalizable beyond the scope of the project being assessed and only standard methodologies or proven interventions are used. As many A2C programs are implementing evidence-based interventions in new settings with diverse populations and are collecting sensitive participant-level data with an intention to share their findings through peer reviewed literature, it was recommended that sites submit to their local institutional review board (IRB). It was suspected that some sites' projects would be determined to be nonhuman subjects research, but it was prudent to have this determination made by the IRB rather than by the sites. Each site submitted an IRB application and some experienced significant delays in IRB approval, which in turn delayed program implementation. With this in mind, it is strongly recommend that sites begin the IRB process early, reviewing a draft of proposal with the IRB prior to submission to help ensure a smooth submission, and draw clear distinctions between evaluation activities and research activities.

(2) Importance of regular dialogue between sites. At the local level, lead agencies stressed the importance of having regular dialogue with their collaborating agencies about the national evaluation, whether through regular conference calls, meetings, or frequent site visits. Regular contact with the sites about the national evaluation helped to ensure site-level buy-in and that the sites understood the expectations of the national level evaluation; it also facilitated cross-site learning and coordination.

(3) Train data collectors early and often. Lead agencies stressed the importance of providing continual training of data collectors on the national evaluation data collection tools. In particular, they noted the need to train data collectors on the goals of the national evaluation, survey administration (specifically how to prompt and how to improve recall for dates), and on the use of handheld devices.

(4) Know your collaborating agencies. Lead agencies shared the importance of having detailed knowledge of partner organizations, in particular their organizational structure and patient tracking systems. Collaborating agencies play a key role in the national evaluation because many lead agencies depend on the collaborating agencies for data collection. Some collaborating agencies have existing data systems and are tracking routinely-gathered data for A2C. Other agencies are adding additional data elements to their existing systems or are introducing entirely new systems for data collection for A2C. Therefore, having a good understanding of the capabilities of partner agencies and an open collaborative relationship with partner agencies is essential for navigating potential challenges and harnessing strengths.

(5) Use established data collection systems and handheld devices. Lead agencies indicated the importance of utilizing established data collection systems to reduce site burden. Sites that are using electronic handheld devices for outreach data collection have found them to be extremely successful. One A2C site has had great success in using the iTouch to collect interviewer-administered survey data and has found that the automatic sync functions negate the need for data entry and facilitate data monitoring.

The national evaluation faces several limitations. It was not designed to include a control or comparison group so we will not be able to attribute changes in outcomes to A2C. The sites were not expected to implement identical interventions and while each program has similar overarching goals, there is considerable variability between sites in the settings, target populations, and interventions being implemented. For example, the A2C cohort included grantees working in urban as well as rural settings and in locations along the East Coast, Midwest, South, and West Coast. Target populations' needs varied according to program location and thus varied considerably across grantees. For example, the Chicago program served MSM while portions of the San Francisco/Bay Area program served day laborers. The interventions themselves were designed to serve the community and context and therefore were not uniform. For example, while all programs had a patient navigation component some programs utilized a peer navigation model while others did not. This has implications for the design and implementation of the national evaluation. The design of the national evaluation needed to be broad enough to be relevant for each site while the implementation of the nation evaluation had to be flexible enough to accommodate the differences across sites. For example, one site's program is an outreach-only model that is primarily street-based. As a result, national evaluation is comprised of self-report data collected at enrollment and follow-up data that is limited to health outcome measures captured by the health department as part of routine surveillance. In contrast, another site's program is working with medical claims data and has comprehensive data on patient visit histories for the duration of the project.

There are many limitations to evaluation programs in 'real life' settings. They include but are not limited to competing priorities of staff, limits on time allotted for planning and start up activities, reliance on partner agencies for data elements, and working with highly marginalized and stigmatized populations. One of the challenges of evaluating programs in a real-world setting is striking an appropriate balance between the primary goal of serving participants and conducting an evaluation to make meaningful statements about program effectiveness. The development of the final list of twelve constructs is an example of researchers and communities working together to strike this balance. While at times arduous, this process was vital for site buy-in, data quality, and sustainability of on-going evaluation efforts.

CONCLUSION

Monitoring and evaluation is essential for public health practice and is a critical component of the A2C initiative. In implementing evidence-based programs in new settings with diverse populations, it was important to document these innovative efforts to contribute to the evidence base for best practices. In this article, the authors discussed the process of developing and implementing a three-pronged national evaluation strategy: monitoring participant-level data, case studies, and cost analysis. Following health outcomes over time will demonstrate if program participants experience expected trends in health outcomes while enrolled in the A2C initiative. Case studies will assess the strength of ties between organizations and will answer important implementation research questions. Cost analyses will allow programs to track the cost of services per participant and to calculate if A2C participants have sufficient health gains that these interventions are cost-saving or cost-effective.

Sites have shared that they are using the data and experience from the national evaluation efforts to leverage other funds and program support. They also noted the utility of sharing the findings of national evaluation findings with collaborating agencies and other funders, bringing together the traditionally separated program implementation and program monitoring and evaluation efforts.

The A2C initiative's evaluation activities seek to build knowledge about how linkage to care interventions can be most effectively implemented within the context of local, real world settings. Internally, findings of the evaluation can be used for program management and improvement. Externally, the information can foster accountability to funders, participants, and other stakeholders. With the efforts of the initiative cutting across all three goals of the NHAS, these findings may also shed light on current and future recommendations and efforts. In sharing the experience of developing and implementing the national evaluation strategy may be useful for those seeking to do similar scope of work.

APPENDIX 1: COMMON EVIDENCE-BASED ENGAGEMENT STRATEGIES OF A2C INITIATIVE

Strategy	Brief Description	References
Peer/Patient Navigation	This strategy was originally designed and implemented to reduce disparities in breast cancer care for low-income women in the largely African American and Latino community of Harlem. The peer/patient navigation systems were shown to increase the women's engagement in care and medication adherence.	Altice, Motashari, & Friedland (2001), Mostashari, Riley, Selwyn, & Altice (1998), Vargas, Ryan, Jackson, Rodriguez, & Freeman (2008)
Community Health Workers	Similar to peers/patient navigators, community health workers (CHWs) are lay professionals who work in conjunction with medical and care community. Research has shown that they are a cost-effective strategy to increase health care utilization and improving health outcomes. However, more rigorous research is required for the impact of CHWs in HIV/AIDS care.	Deering et al. (2009), American Public Health Association (2009), Health Resources and Services Administration (2007), Massachusetts Department of Public Health Community Health Worker Advisory Council (2010), Viswanathan et al. (2009)
Care Coordination	The White House Office on National AIDS Policy suggests a medical home to provide integrated, patient-centered medical care, case management, and treatment. Research additionally supports ancillary services such as case management, transportation, and drug treatment, to improve retention in HIV care. It is reported that short-term case management services can increase the likelihood of a patient seeing a medical provider.	Anthony et al. (2007), Messeri, Abramson, Aidala, Lee, & Lee (2002), White House Office of National AIDS Policy (2010)
Motivational Interviewing	Motivational Interviewing was originally developed for addictions treatment and is a technique now used to empower individuals to manage a variety of health issues, including HIV/AIDS.	Hill & Kavookjian (2012)

APPENDIX 2: THE LIST OF NATIONAL EVALUATION CONSTRUCTS

Construct	Indicator	When collected
Linked to Care	Percentage of participants for whom there is verification of one medical visit with a provider who has prescribing privileges within 30 days of enrollment (in a medical care setting with the purpose of receiving HIV-related care)	Baseline + 30 days
Case Management	Percentage of participants for whom a case management strategy was developed within 45 days of enrollment	Baseline + 45 days
General health	Percentage of participants who report that their health is excellent, very good, or good	Baseline, 6, 12, and 18 months
Participant Needs	Percentage of participants reporting the following needs: drug or alcohol abuse treatment, housing or shelter, food or other subsistence need, dental services, HIV-related medical services, non-HIV-related medical services, pharmacy or other medication services, mental health services, other	Baseline, 6, 12, and 18 months
Barriers	Percentage of participants that reporting the following barriers: lack of money, homelessness, immigration, incarceration, drug use, fear, stigma, denial, distrust of the medical system, lack of perceived need, competing priorities, transportation, location of care, structure of testing, lack of ancillary services, insurance, other	Baseline, 6, 12, and 18 months
Stigma	Percentage of participants who report that they have avoided treatment because someone might learn about their HIV	Baseline, 6, 12, and 18 months
Retained in Care	Percentage of participants with HIV-infection who had two or more medical visits with a provider with prescribing privileges in a HIV care setting at least 60 days apart during the prior year	Baseline, 6, 12, and 18 months
Viral load	Mean/median viral load; percentage of participants with a suppressed viral load	Baseline, 6, 12, and 18 months
CD4 count	Mean/median CD4 cell count	Baseline, 6, 12, and 18 months
HAART	Percentage of participants with a current HAART prescription	Baseline, 6, 12, and 18 months

APPENDIX 3: SEMISTRUCTURED CASE STUDY INTERVIEW GUIDE

1. Describe your organization and the type of services you provide to PLWH (ice breaker).
2. Please tell me about [your organization].
3. How is your organization involved with [your project]?

Work with clients:

4. How does your organization identify PLWH who are out of care? Probe on strategies (e.g., peer navigators or CHWs).
5. Could you take me through how your project links out-of-care individuals to care? Probe on strategies.
6. Once an individual is linked to care, how does your organization ensure these individuals stay in care? Probe on strategies (e.g., motivational interviewing).
7. How did your organization determine ways of finding, linking, and retaining individuals in care?
8. (If peer navigators are mentioned) From your work, can you tell me what makes a successful peer/health navigator?

Within organization:

9. What has changed since [your project] began at your organization?
10. Are there changes that you wish had been implemented, but were not? Can you tell me about those? (If changes are mentioned, probe: how would such a change have helped you?)
11. How did your organization identify clients out of care before [your project]? Probe for changes.
12. How did your organization link clients into care before [your project]? Probe for changes.
13. How did your organization retain clients into care before [your project]? Probe for changes.
14. Overall, is [your project] going as it was planned? How so? [If no] Why not? Probe for changes and reasons why.

Partner organizations:

15. What outside organizations or agencies do you work with most for [your project]?
16. What does each organization do for [the project]?
17. Could you tell me about your experience working with each organization? Probe for formal contracts vs. informal connections; sharing of client information.

Project facilitators and barriers:

18. What have been your biggest barriers to doing this work? *Probe for program or strategy-specific barriers.*
19. What successful strategies has [your organization] used to overcome these barriers?
20. Can you describe any unsuccessful strategies [your organization] tried?
21. Could you describe factors that have helped [your organization] in doing this work?
22. (If applicable) As your program works with [specific hard-to-reach population], what has been [your organization]'s experience been in reaching these individuals?

Project context:

23. In your opinion, how has [your project] affected your organization? Probe for internal structural changes.
24. Have there been any unexpected or unintended outcomes of [your project]?
25. Could you tell us about services you would like to offer or refer PLWH to that are not easily available, if any?
26. Could you tell us about anything you'd like to have that could help you do your job better?
27. How do you feel that specific policies in your organization have affected your work? If respondent is knowledgeable about policy, probe on provider, local, and national policies.
28. If you could change three policies to enhance your work, what changes would you make?

Recent legislation:

29. How do you foresee the new healthcare law affecting your work? Probe on services offered.
30. Do you see new LGBT-friendly policies affecting your work? Probe: If yes, please describe how.

Closing:

31. Is there anything else you would like to share with me about your experiences with [your project]?

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