



# Improving Health Outcomes

Moving Patients Along the  
HIV Care Continuum

INTERVENTION GUIDE  
SPNS Demonstration Model on State Bridge  
Counseling Re-engagement Intervention

SEPTEMBER 2018



**HRSA**  
Health Resources & Services Administration

U.S. Department of Health and Human Services  
Health Resources and Services Administration  
HIV/AIDS Bureau

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# Improving Health Outcomes

## Moving Patients Along the HIV Care Continuum

### INTERVENTION OVERVIEW & REPLICATION TIPS

#### State Bridge Counseling Re-engagement Intervention

##### North Carolina

This intervention guide examines an intervention focused on client re-engagement that employed intensive state/regional field outreach to clients who previously were in care but are not currently consistent users of care and/or have been out of care for six to nine months, and could not be re-engaged via local clinic outreach methods. The intervention seeks to identify and subsequently engage (or re-engage) clients into HIV primary care. This guide provides information on key components of the intervention and the capacity required to conduct this work.

This intervention guide is part of a training series entitled, "Improving Health Outcomes: Moving Patients Along the HIV Care Continuum," and is published by the Special Projects of National Significance (SPNS), under the HIV/AIDS Bureau (HAB) of the Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS). The purpose of this intervention guide and others featured as part of the *Translation of SPNS Findings and Technical Assistance Support to Implement New Models of Care* project is to highlight interventions along the HIV care continuum and support replication of these evidence-informed innovative models of care. The HIV care continuum refers to the fluid nature of HIV health care delivery and client experiences, and research has demonstrated the importance of moving clients along the continuum with the goals of being fully linked, engaged, retained, and virally suppressed. This framework has received attention as research has demonstrated the importance of these activities. Therefore, finding programs that help clients move along the stages of the continuum are particularly important.



#### Diagnosing HIV



#### Linkage to Care



#### Retention in Care



#### Prescription of ART & Medication Access

#### About SPNS

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary federal agency for improving health care to people who are geographically isolated, economically, or medically vulnerable. The Special Projects of National Significance (SPNS) Program is a part of the HRSA HIV/AIDS Bureau (HAB). The SPNS Program supports the development of innovative models of HIV care and treatment in order to quickly respond to emerging needs of clients served by HAB. SPNS advances knowledge and skills in the delivery of healthcare and support services to underserved populations living with HIV. Through its demonstration projects, SPNS evaluates the design, implementation, utilization, cost, and health-related outcomes of treatment models while promoting the dissemination and replication of successful interventions.



#### About the System Linkages and Access to Care Initiative

The featured evidence-informed intervention was part of the SPNS "System Linkages and Access to Care Initiative." For this initiative, SPNS supported six demonstration sites for four years to design, implement, and evaluate innovative strategies to integrate different components of the public health system such as surveillance, counseling and testing, and treatment to create new and effective systems of linkages and retention in care for hard-to-reach populations who have never been in care, have fallen out of care, or are at-risk for falling out of care. Populations of interest included: those persons who are at high risk for and/or infected with HIV but are unaware of their HIV status, are aware of their HIV infection but have never been referred to care, or are aware but have refused referral to care. The demonstration sites also participated in a robust multi-site evaluation and received programmatic technical assistance. To learn more about this initiative, visit: <https://hab.hrsa.gov/about-ryan-white-hiv-aids-program/spns-systems-linkages-and-access>.

# State Bridge Counseling Re-engagement Intervention

North Carolina

Diagnosing HIV

Linkage to Care

Retention in Care

Prescription of ART &amp; Medication Access



## Why This Intervention?

This statewide intervention engages newly diagnosed people living with HIV (PLWH) and re-engages out-of-care PLWH into continuous HIV primary care. This is a critical first step in helping PLWH initiate antiretroviral therapy (ART), which is associated with better health outcomes and decreased risk of transmitting HIV to others. The intervention served 905 clients and saw 69 percent of newly diagnosed and 51 percent of previously out-of-care clients achieve viral load suppression within a year of referral.<sup>1</sup>

## At-a-Glance

The table below provides a general overview of the State Bridge Counseling Re-engagement intervention so readers can assess the necessary steps required for replication.

Model at-a-Glance	
<b>Step 1</b> 	<b>Client Referred to State Bridge Counselor (SBC)</b> Lost-to-care PLWH are referred by clinic or region-based retention staff to State Bridge Counselors (SBC) or Dedicated Special Populations SBCs.
<b>Step 2</b> 	<b>SBC Surveys Previous Efforts to Engage Client</b> The SBC works hand-in-hand with the retention staff to determine what attempts have been made to locate or engage the client.
<b>Step 3</b> 	<b>SBC Locates Client</b> The SBC performs a comprehensive record search, including accessing state surveillance data, to locate the client. The SBC also calls any available phone numbers or visits the client's last known address.
<b>Step 4</b> 	<b>SBC Re-engages Client in Care</b> The SBC uses strengths-based counseling and Motivational Interviewing techniques to increase self-efficacy, eliminate barriers, and facilitate patient efforts to re-establish medical care and to facilitate client re-engagement, including for special populations (e.g., pregnant women, clients who are post-incarceration). SBC schedules medical appointment for clients.

<sup>1</sup>Sena AC, Donovan J, Swygard H, et al. The North Carolina HIV State Bridge Counselor Program: Outcomes from a Statewide Level Intervention to Link and Re-engage HIV-infected Persons in Care in the South. *J Acquir Immune Defic Syndr*. 2017;76(1):e7-14.

## Model at-a-Glance

### Step 5



#### SBC Confirms Attendance at Medical Appointment

The SBC contacts the client to determine if a follow-up appointment has been made and to address barriers to remaining in care. If the SBC is unable to contact the client, the SBC will confirm, using electronic health system or lab data, that the client kept the medical appointment and scheduled a follow-up appointment.

### Step 6



#### Case Closed

The SBC documents when the client attended the medical appointment with an ART-prescribing provider. The case is also closed in the electronic health system.

*Source:* Institute for Global Health and Infectious Diseases, University of North Carolina at Chapel Hill Communicable Disease Branch; North Carolina Department of Health and Human Services; Center for Health Policy and Inequities Research, Duke University; Section on Infectious Diseases, Wake Forest University, Division of Infectious Diseases and International Travel Health; East Carolina University. "North Carolina Systems Linkage and Access to Care Initiative (NC-LINK)." Intervention Manual Instructions for Replication. 2015.

## Resource Assessment Checklist

This intervention is best suited for state health departments. Health departments should walk through a Resource Assessment (or Readiness) Checklist to assess their ability to conduct this work. If organizations do not have these components in place, they are encouraged to develop their capacity so that they can successfully conduct the State Bridge Counselors intervention. Questions to consider include:

- Is there a retention program in place or do you have the capacity to establish one?
- Does your health department have a comprehensive list of available community resources as well as relationships with organizations who help address myriad client needs? If not, is your health department able to develop such a list and nurture relationships and put referrals in place?
- Is there a referral tracking system in place and, if not, is there the capacity to develop one? A referral tracking system is a critical component of this intervention so if your health department does not have one in place and your IT department is unable to establish one, this intervention will be difficult to replicate. The State Bridge Counseling Re-engagement intervention relied primarily on CAREWare; however, other electronic health systems could be used. CAREWare is a free, electronic health and social support information system for Ryan White HIV/AIDS Program grant recipients and their providers.\*
- Do you offer HIV primary care services or have a strong formal relationship in place with organizations that do?
- Do existing staff have expertise in outreach, linkage, and retention services?
- Do existing staff know how to conduct online searches, including searching surveillance and other databases as well as public records?
- Does your staff or organization have any experience with Motivational Interviewing or strengths-based counseling? If not, are they able to be trained in these techniques? Strengths-based counseling helps clients build on positive qualities and the counselor and client work together to find past and present successes to leverage to help address challenges. Motivational Interviewing is similarly aligned and is a goal-oriented, client-centered counseling approach that facilitates behavior change.\*\*
- Is your staff and organization familiar with or trained in social determinants of health? If not, are you able to provide or arrange for this training?

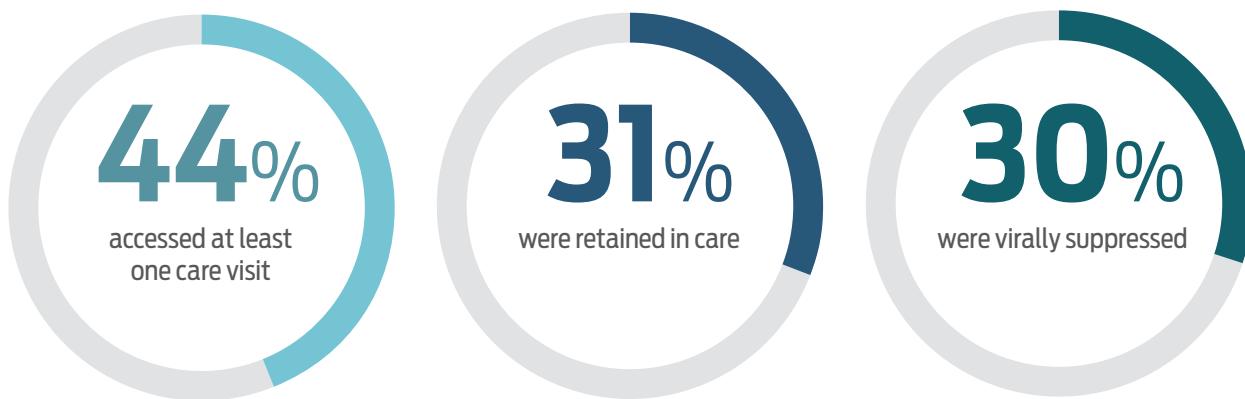
\*To learn more about CAREWare, visit: <https://hab.hrsa.gov/program-grants-management/careware>.

\*\*To learn more about Motivational Interviewing, visit the Motivational Interviewing Network of Trainers at: <http://www.motivationalinterviewing.org>.

## Setting the Stage

Similar to national trends, data from North Carolina highlighted that many PLWH were not engaged in all stages of the HIV care continuum, the sequential steps, or stages of HIV medical care. In 2011, prior to this North Carolina-based intervention, only 44 percent (11,006) of the 26,168 PLWH with a known diagnosis accessed at least one care visit.<sup>2</sup> Additionally, only 31 percent of diagnosed PLWH (7,686) were retained in care—defined as at least two care visits per year at least three months apart. As a result, only 30 percent (7,528) of PLWH were virally suppressed.<sup>3</sup>

In 2011, prior to the North Carolina-based intervention, there were 26,168 PLWH with a known diagnosis.<sup>1-2</sup> Of these individuals:



Improving these rates requires addressing barriers to retention in medical care, such as competing personal life needs, and co-morbid illnesses, particularly mental health and substance use disorders.<sup>4,5,6,7,8,9,10,11</sup> In addition, social and environmental factors, such as stigma, poverty, and limited health literacy impact retention in medical care, particularly in the South.<sup>12,13,14,15,16,17</sup>

<sup>2</sup> North Carolina Department of Health and Human Services. *EpiNotes*. Raleigh, NC: North Carolina Division of Public Health Epidemiology Section; 2011.

<sup>3</sup> North Carolina Department of Health and Human Services. *EpiNotes*. Raleigh, NC: North Carolina Division of Public Health Epidemiology Section; 2011.

<sup>4</sup> Kempf MC, McLeod J, Boehme AK, et al. A qualitative study of the barriers and facilitators to retention-in-care among HIV-positive women in the rural southeastern United States: implications for targeted interventions. *AIDS Patient Care STDS*. 2010;24:515–20.

<sup>5</sup> Rajabiun S, Mallinson RK, McCoy K, et al. "Getting me back on track": the role of outreach interventions in engaging and retaining people living with HIV/AIDS in medical care. *AIDS Patient Care STDS*. 2007;21:S20–9.

<sup>6</sup> Tobias CR, Cunningham W, Cabral HD, et al. Living with HIV but without medical care: barriers to engagement. *AIDS Patient Care STDS*. 2007;21:426–34.

<sup>7</sup> Tobias C, Cunningham WE, Cunningham CO, Pounds MB. Making the connection: the importance of engagement and retention in HIV medical care. *AIDS Patient Care STDS*. 2007;21:S3–8.

<sup>8</sup> Dombrowski JC, Simoni JM, Katz DA, Golden MR. Barriers to HIV Care and Treatment Among Participants in a Public Health HIV Care Relinkage Program. *AIDS Patient Care STDS*. 2015;29:279–87.

<sup>9</sup> Wawrzyniak AJ, Rodriguez AE, Falcon AE, et al. Association of individual and systemic barriers to optimal medical care in people living with HIV/AIDS in Miami-Dade County. *J AIDS*. 2015;69:S63–72.

<sup>10</sup> Olson KM, Godwin NC, Wilkins SA, et al. A qualitative study of underutilization of the AIDS drug assistance program. *JANAC*. 2014;25:392–404.

<sup>11</sup> Toth M, Messer LC, Quinlivan EB. Barriers to HIV care for women of color living in the Southeastern US are associated with physical symptoms, social environment, and self-determination. *AIDS Patient Care STDS*. 2013 Nov;27(11):613–20.

<sup>12</sup> Kempf MC, McLeod J, Boehme AK, et al. A qualitative study of the barriers and facilitators to retention-in-care among HIV-positive women in the rural southeastern United States: implications for targeted interventions. *AIDS Patient Care STDS*. 2010;24:515–20.

<sup>13</sup> Rajabiun S, Mallinson RK, McCoy K, et al. "Getting me back on track": the role of outreach interventions in engaging and retaining people living with HIV/AIDS in medical care. *AIDS Patient Care STDS*. 2007;21:S20–9.

<sup>14</sup> Tobias C, Cunningham WE, Cunningham CO, Pounds MB. Making the connection: the importance of engagement and retention in HIV medical care. *AIDS Patient Care STDS*. 2007;21:S3–8.

<sup>15</sup> Wawrzyniak AJ, Rodriguez AE, Falcon AE, et al. Association of individual and systemic barriers to optimal medical care in people living with HIV/AIDS in Miami-Dade County. *J AIDS*. 2015;69:S63–72.

<sup>16</sup> Pellowski JA. Barriers to care for rural people living with HIV: a review of domestic research and health care models. *JANAC*. 2013;24:422–37.

<sup>17</sup> Sullivan KA, Berger MB, Quinlivan EB, et al. Perspectives from the Field: HIV Testing and Linkage to Care in North Carolina. *J Int Assoc Provid AIDS Care*. 2015.

Barriers (–) and Facilitators (+) to Client Engagement in NC	
<b>Interpersonal</b>	<ul style="list-style-type: none"> <li>Transportation (–)</li> <li>Socioeconomic status (–)</li> <li>Psychological factors (–)</li> <li>Commitment to self care (+)</li> <li>Insurance coverage (+/-)</li> </ul>
<b>Intrapersonal</b>	<ul style="list-style-type: none"> <li>Client-provider relationships (+)</li> <li>Client education (+)</li> </ul>
<b>Institutional</b>	<ul style="list-style-type: none"> <li>Clinic retention policies (+/-)</li> <li>Clinic re-engagement protocols (+/-)</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>Collaboration between medical and supportive services (+)</li> <li>Statewide case management resources (+/-)</li> <li>Transportation (–)</li> </ul>
<b>Public Policy</b>	<ul style="list-style-type: none"> <li>Emphasis on HIV care retention in NC (+)</li> <li>State Bridge Counselor Program Inception (+/-)</li> <li>Impacts of ACA (–)</li> <li>NC data sharing (+/-)</li> </ul>

Source: Berger MB, Sullivan KA, Parnell HE, et al. Barriers and Facilitators to Retaining and Reengaging HIV Clients in Care: A Case Study of North Carolina. *J Int Assoc Provid AIDS Care.* 2016;15(6):486-493.

In response, North Carolina applied for funding through the Special Projects of National Significance (SPNS) Program's Systems Linkages and Access to Care for Populations at High Risk of HIV Infection initiative, a multi-state demonstration project and evaluation of innovative models of linkage to and retention in HIV care. North Carolina created NC-LINK, comprised of four programs to address care gaps and ensure that newly diagnosed PLWH actively progress along the HIV care continuum and out-of-care PLWH are actively linked back to care. The State Bridge Counseling Re-engagement intervention sought to re-engage PLWH into care. It focused on PLWH who at one point were linked to care but subsequently fell out of care and PLWH who do not consistently use care.

**Retention in care is particularly critical because PLWH who are actively engaged and retained in care are more likely to:**

-  **be prescribed antiretroviral medication**
-  **achieve an undetectable viral load**
-  **improve life expectancy.**

Retention in care is particularly critical because PLWH who are actively engaged and retained in care are more likely to be prescribed antiretroviral medication,<sup>18</sup> achieve an undetectable viral load,<sup>19</sup> and ultimately improve life expectancy.<sup>20</sup> In addition, data increasingly demonstrate that antiretroviral therapy for PLWH reduces the risk for HIV transmission.<sup>21,22,23,24</sup> In fact, recent data show that PLWH who are aware of their status but not retained in medical care are responsible for an estimated 61.3 percent of HIV transmissions.<sup>25</sup> Thus, increased emphasis has been placed on improving client engagement in care.

## Description of Intervention Model

### CHALLENGE ACCEPTED



**THE CHALLENGE:** Re-engaging PLWH in care who had previously entered into HIV care but dropped out or who are inconsistent users of HIV care.

## Intervention Model: The State Bridge Counseling Re-engagement Intervention

NC-LINK was a collaborative effort between the:

- Institute for Global Health and Infectious Diseases, University of North Carolina at Chapel Hill
- Communicable Disease Branch, North Carolina Department of Health and Human Services
- Center for Health Policy and Inequities Research, Duke University
- Section on Infectious Diseases, Wake Forest University
- Division of Infectious Diseases and International Travel Health, East Carolina University

NC-Link included several components: clinic-based HIV testing, linkage services, initial “retention” work to find and re-connect clients to care, and lastly the re-engagement intervention work. ([See “Overview of NC-Link Program Services” box.](#))

The re-engagement intervention (featured here) employs dedicated state employees, State Bridge Counselors (SBC), to actively search for lost-to-care PLWH and help them engage in care. Previous research has demonstrated that provision of strengths-based counseling is key to addressing engagement in HIV care for PLWH.

<sup>18</sup> Rebollo P, Kourbatova E, Rothenberg R, del Rio C. Factors associated with utilization of HAART amongst hard-to-reach HIV-infected individuals in Atlanta, Georgia. *J AIDS HIV Res.* 2011;3:63–70.

<sup>19</sup> Tripathi A, Youmans E, Gibson JJ, Duffus WA. The impact of retention in early HIV medical care on viro-immunological parameters and survival: a Statewide study. *AIDS Res Hum Retroviruses.* 2011;27:751–758.

<sup>20</sup> Giordano TP, Gifford AL, White AC Jr, et al. Retention in care: a challenge to survival with HIV infection. *Clin Infect Dis.* 2007;44:1493–1499.

<sup>21</sup> Das M, Chu PL, Santos GM, et al. Decreases in community viral load are accompanied by reductions in new HIV infections in San Francisco. *PLoS One.* 2010;5:e11068.

<sup>22</sup> Montaner JS, Wood E, Kerr T, et al. Expanded highly active antiretroviral therapy coverage among HIV-positive drug users to improve individual and public health outcomes. *JAIDS.* 2010;55(Suppl 1):S5–S9.

<sup>23</sup> Cohen MS, Chen YQ, McCauley M, et al. Prevention of HIV-1 infection with early antiretroviral therapy. *N Engl J Med.* 2011;365:493–505.

<sup>24</sup> Jia Z, Ruan Y, Li Q, et al. Antiretroviral therapy to prevent HIV transmission in serodiscordant couples in China (2003–11): a national observational cohort study. *Lancet.* 2012 Nov 30.

<sup>25</sup> Grimes RM, Hallmark CJ, Watkins KL, et al. Re-engagement in HIV Care: A Clinical and Public Health Priority. *J AIDS Clin Res.* 2016;7(2): 543.

## Overview of NC-Link Program Services

North Carolina's System Linkages project included four total interventions. This table provides an overview of all four and where the featured "Re-engagement" intervention is situated.

### 1. Clinic-Based HIV Testing

This intervention offers any individual (friend, family, partner) who accompanies an HIV-infected patient to a clinic appointment with the opportunity to receive free and confidential rapid HIV testing at the clinic. A negative result is conveyed by staff to the visitor along with brief individualized prevention counseling. If the test is positive, the visitor is then offered immediate entry to care through registration into the clinic for confirmatory testing.

### 2. Linkage Services

Newly diagnosed and new-to-care clients are linked to their first medical appointment and this appointment is confirmed.

### 3. "Retention" Protocol

This strategy focuses on developing the capacity of clinic or region-wide patient navigators and medical clinic staff, collectively referred to as "retention staff" (as they seek to re-engage and subsequently retain them into care). Retention

staff run monthly CAREWare\* reports of HIV clients who have not attended medical appointments in the previous six to nine months and check their clinic's electronic medical records (EMR) to confirm whether a client has an upcoming scheduled appointment. Retention staff follow-up is specific to work that can be done within the clinic. After a 30-day period of attempted follow-up, these clients are referred to the SBC for state-level follow-up and field work.



### 4. State Bridge Counseling "Re-engagement" Services

The SBCs are assigned to regions of the state. When clients are deemed "located, not re-engaged in care to date" or "unknown—not located" by retention staff, the SBCs receive a referral, confirm the work that's been done to date, and conduct field outreach. They use strengths-based counseling techniques to increase self-efficacy, eliminate barriers, and facilitate client efforts to re-establish medical care.

Prior to clients being referred to SBCs, retention staff follow a specific protocol and attempt to reach clients. The protocol<sup>26</sup> that retention staff follows entails the following: On the same day each month (e.g., first day of the month), the clinic generates a list of out-of-care clients through either clinic EMR or CAREWare. The staff member responsible for running the list then checks the list to remove clients who are not truly out-of-care due to special circumstances or who have upcoming appointments. **The primary difference between the retention staff and the SBCs is that the retention staff's work is primarily conducted from their respective clinic or agency and the SBCs work is primarily fieldwork and conducted across respective regions of the state.**

<sup>26</sup> University of North Carolina at Chapel Hill School of Medicine, North Carolina Department of Health and Human Services, Center for Health Policy and Inequities Research, Wake Forest Baptist Health, East Carolina University. "North Carolina Systems Linkage and Access to Care Initiative (NC-LINK)." Intervention Manual Instructions for Replication. 2015.

The retention staff work on locating out-of-care clients for approximately 30 days before referring clients to the SBCs. Retention staff search for clients through the following activities, all of which should be documented in CAREWare:

- Check EMR/local CAREWare for any contact since the last medical visit.
- Call clients; both numbers in chart and any old numbers in case they have been reactivated. Three phone calls on three separate days is the standard, using all available numbers and contacts.
- Use a script and leave generic messages for callback.
- Conduct online searches of local jails, state prisons, and federal prison system.
- Check the Social Security Death Index and perform a Google search for potential obituaries and other information about the client.
- Check the NC Medicaid Provider Portal (if client has Medicaid) to see if they have been in care elsewhere, accessed ERs or had an inpatient stay, and if there is different contact information in the record.
- Call their last pharmacy, including ADAP and see if any prescriptions have been refilled since their last medical visit. Obtain contact information if available, or information on the prescribing providers.
- Call any home health agency, dialysis center, or other provider (including dental) identified to obtain current contact information or get a message through to the client.
- Send out a generic letter to last known address encouraging the client to contact the clinic if phone calls have been unsuccessful. (Conversely, letters may be sent initially and then calls are placed for those who do not respond to the letter.)

After a 30-day period of attempts to locate the client, the retention staff member documents the efforts and enters service and outcome information into CAREWare. The retention staff then closes out clients who have been located or a definitive outcome has been determined.

**“Located, not re-engaged in care to-date” and “Unknown-not located”** clients are referred to the SBC for state-level follow-up and fieldwork. Referrals are placed through monthly CAREWare referrals or face-to-face meetings between the retention staff and SBCs.

Most SBCs are former Disease Intervention Specialists (DIS)—public health outreach workers responsible for finding and counseling people with sexually transmitted infections and their contacts—and, thus, possess the fieldwork capability to find lost-to-care PLWH for re-engagement in care. Lost-to-care PLWH include PLWH who have not attended an HIV medical visit during the previous six to nine months; PLWH for whom a future appointment is not scheduled; PLWH whom retention staff at the local clinics/agencies have not been able to reach; and PLWH for whom the reason for being out of care is unknown or beyond the capacity for local clinics/agencies to address. Lost-to-care pregnant women and newly released HIV clients are designated as “special populations” and, upon referral, are designated a Special Populations SBC.

The primary difference between the retention staff and the SBCs is that the retention staff’s work is primarily conducted from their respective clinic or agency and the SBCs work is primarily fieldwork and conducted across respective regions of the State.

Upon referral, the SBC initiates his or her efforts to re-engage the client by searching the North Carolina Electronic Disease Surveillance System (NC EDSS)—a system to which they have access, since SBCs are State employees—and CAREWare, to determine his or her care status. If the SBC finds evidence of recent testing or medical visits, he or she then confirms that the client is in care with that provider if the provider is located within the SBC’s assigned geographic region. If the provider is not in the SBC’s geographic region, the SBC contacts the SBC who covers the area to confirm the person’s care status; the SBC then updates the referring agency of the change by documenting this in CAREWare. The SBC also confirms that the client is in care with an HIV provider, not an urgent care or emergency department provider before considering the client back in care.

If the client is found to be in another geographic region of the State, the current SBC will assign the case to the appropriate SBC whose jurisdiction the client now resides and the second SBC will receive the referral in the NC EDSS and in CAREWare systems. The referring SBC will update the referring provider of the status and submit to their supervisor for approval.

If there is no evidence that the person is in care anywhere else, the SBC attempts to locate the client through record searching following internal policies and procedures. The SBC may search a number of state and federal databases (CAREWare, NC EDSS, ADAP, Medicaid, NC Voter Registration, NC Department of Corrections) as well as conduct Internet searches (e.g., 411.com, voter registration, Facebook). Within one day of receiving the referral the SBC calls any available phone numbers, or visits the last known address following standard DIS field follow-up protocol (i.e., three field visits at different times of day, phone calls at different times of day). The three visits at different times of the day may prove difficult due to the size of the geographic area being covered; however, it can help support the likelihood of connecting with out-of-care clients.

Once the SBC locates and makes contact with the client, the SBC engages the client in a dialogue to determine what events or difficulties led to the client falling out of care. The SBC uses strengths-based counseling techniques.<sup>27</sup>

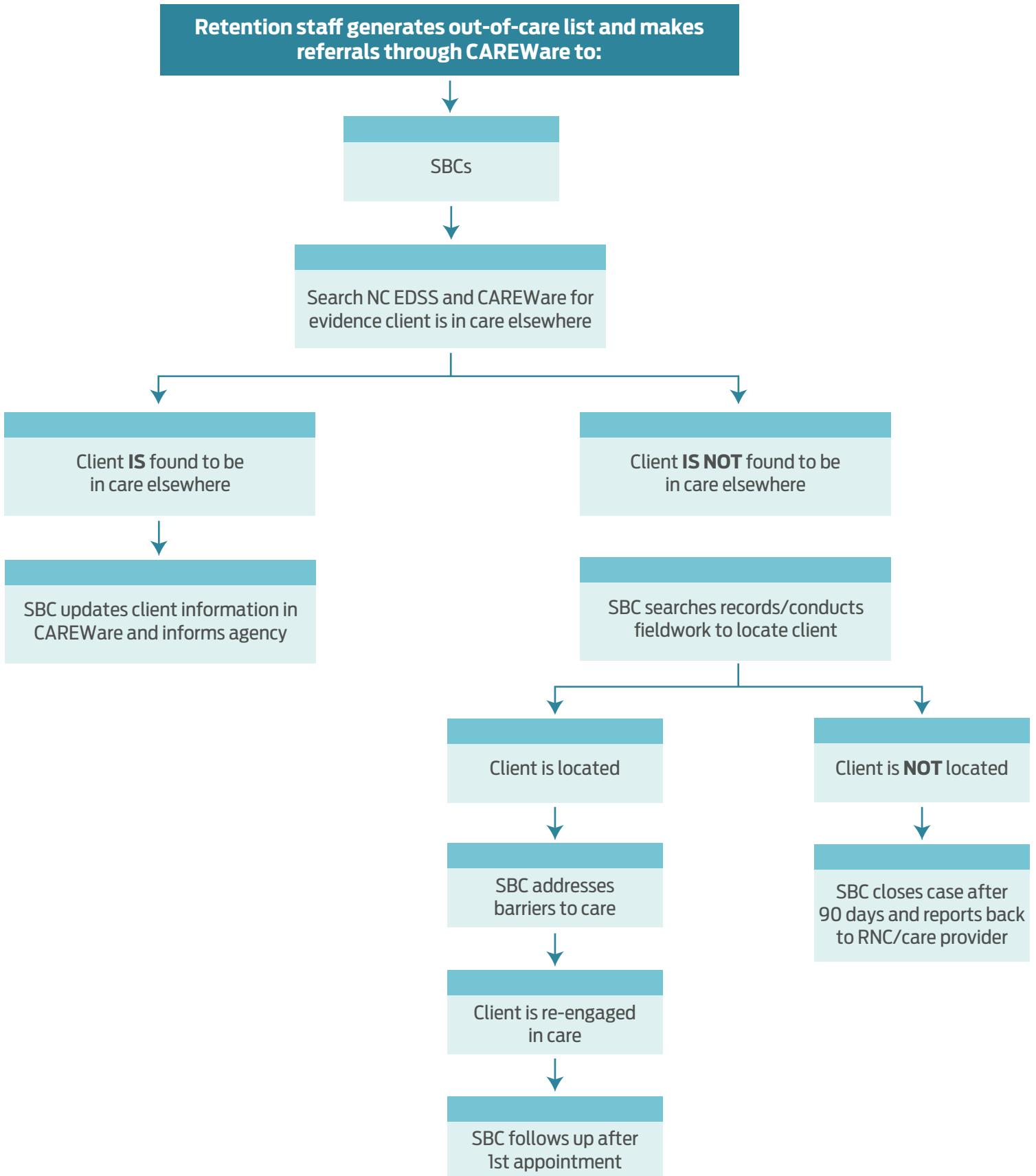
If the PLWH is willing to re-engage in care, the SBC makes him or her an appointment with an ART-prescribing provider; the SBC then provides detailed information about the upcoming appointment. If the client declines to re-engage in care, the SBC discusses the reasons for this choice and attempts to address those issues, including referrals for assistance in meeting competing needs. If the client is still resistant, the SBC informs the referral source of the client’s refusal and updates all attempts made in NC EDSS.

Once the SBC locates and makes contact with the client, the SBC engages the client in a dialogue to determine what events or difficulties led to the client falling out of care. The SBC uses strengths-based counseling techniques.

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<sup>27</sup> University of North Carolina at Chapel Hill School of Medicine, North Carolina Department of Health and Human Services, Center for Health Policy and Inequities Research, Wake Forest Baptist Health, East Carolina University. “North Carolina Systems Linkage and Access to Care Initiative (NC-LINK).” Intervention Manual Instructions for Replication. 2015.

## Out of Care



After the client attends his or her scheduled medical visit, as validated in CAREWare, the SBC makes a phone call to the client to determine if a follow-up appointment has been made and to support access to social support services to address any barriers to remaining in care. If the SBC is unable to contact the client, the SBC confirms using CAREWare or lab data that the client kept the medical appointment and scheduled a follow-up appointment. The SBC then documents the client's attendance of the follow-up appointment in the Referrals Package. The SBC closes a case when the client is re-engaged with a prescribing HIV provider or determines that the client will not be returning to care (i.e., is deceased or has relocated out of the service).



## Staffing Requirements & Considerations



### Staffing Capacity

Based on the NC-LINK work, here are the types of staff capacity and characteristics that health departments would need to replicate this intervention.

#### State Bridge Counselors

This is a state health department position. Case load and service area of the state should be used to inform how many dedicated SBCs are needed. This person will need to be able to access the state surveillance data system.

#### Bridge Counselor Supervisor

Bridge Counselor Supervisor oversees SBC performance through both formal and informal meetings.

#### Electronic Health System Expert

This is not a dedicated position, per se, but it is beneficial to have someone on staff who is proficient in CAREWare or a similar electronic health system and can help others learn to use the program effectively. This person may be an SBC.

Note: Retention staff should also be in place to do the activities that precede this intervention. ([See pages 8 and 9 for more information.](#))



### Staff Characteristics

- Current HIV disease knowledge
- Experienced in HIV consultation
- Familiarity with and competence in addressing social determinants of health
- Familiarity with HIV medical provider care networks
- Ability to establish and maintain effective working relationships with clients and their partners, the medical community, the public, and community-based social support organizations
- Communication skills
- Ability to remain non-judgmental while discussing personally and socially sensitive issues with clients
- Training in Motivational Interviewing and strengths-based counseling
- Willingness and ability to work independently



### Minimum Requirements

College degree and two years of experience in public health or an equivalent combination of training and experience in HIV disease intervention, case management, and/or adherence counseling.

# Replication Tips for Intervention Procedures and Client Engagement

This section provides tips for readers interested in replicating the State Bridge Counseling Re-engagement intervention and, where applicable, includes grantee examples for further context.

The State Bridge Counseling Re-engagement intervention is best replicated across a large service area. Some recommendations for getting started include:

- *Upfront planning and a quality improvement process are key to the intervention's success over the long-term.* There is no one right or wrong approach to this essential step.
  - ▶ A *Steering Committee* or other group comprised of intervention leadership should be created. This can include individuals from the state communicable disease branch as well as any partnering HIV prevention and care organizations. Intervention leadership can help provide assistance to intervention sites, host learning sessions, and track intervention progress.
  - ▶ *Learning sessions* or other in-person or virtual meetings are an important way to conduct logistical planning. For NC-Link, they conducted three, two-day face-to-face meetings. The first focused on developing and launching the interventions; the second focused on reporting on the success of the interventions' Plan-Do-Study-Act (PDSA) cycles; and the third and final focused on sharing results of the interventions and planning for expansion to additional sites.
  - ▶ *Plan Do Study Act (PDSA) cycles*, if possible, enable examination of the intervention in a systematic way. A PDSA is an iterative, four-stage, problem-solving model to examine a process and carryout change. PDSAs, if conducted, should include both internal and external reviewers to provide feedback on what does or doesn't work. Questions to consider include: What are we trying to accomplish? How will we know that a change is an improvement? What change can we make that will result in improvement?
- *Develop a protocol.* This helps define the roles of the retention staff versus that of the SBCs and the different activities each will be doing to help locate and re-engage clients. The SBC protocol also outlines that each SBC should meet with retention staff to review the clinic's internal policies and procedures for record searches and locating clients who are out of care; this improves relationships between the clinics and the SBCs and helps avoid duplication of work.
- *Prioritize training.* SBCs should receive ongoing training in fieldwork, substance use disorder and mental health, as well as overcoming resistance/barriers to care. For example, SBCs in the NC State Bridge Counseling Re-engagement intervention have completed, at a minimum, the following trainings:
  - ▶ CDC's Introduction to Sexually Transmitted Disease Intervention
  - ▶ HIV Prevention Counseling
  - ▶ NC HIV Interviewing Partner Notification
  - ▶ Sexually Transmitted Disease Management Information System (STDMIS 3.1)

- *Prioritize data tracking.* Access to an electronic disease surveillance system is critical to the success of the SBC intervention. Participating sites should agree on a defined timeframe for out-of-care status, so there is consistency regarding which clients the SBC should target. (The HRSA/HAB measure for out-of-care is defined as six months without an appointment with a medical provider.) Retention staff make out-of-care referrals through CAREWare, which also allows the SBCs to track their efforts and communicate with retention staff. The SBCs also document re-engagement activities and close cases. In addition, CAREWare and electronic disease surveillance systems, along with other State or Federal databases, are used to help locate clients who are lost-to-care.

## Tips for Using Data Systems

An electronic data system is required to generate the out-of-care list. CAREWare allows the creation of a custom field for retention activity documentation that may be subsequently shared with SBCs if the retention efforts are unsuccessful. This helps reduce both the caseload for the SBCs and helps avoid duplication of efforts between retention staff and SBCs. However, the clinic's primary EMR will have information about the client's upcoming appointments. This will help eliminate individuals with future appointments being placed on the out-of-care list unnecessarily.

## Logic Model

NC-LINK State Bridge Counseling Re-engagement Intervention				
Resources	Activities	Outputs	Outcomes	Impact
<ul style="list-style-type: none"> <li>• Clinic or region-based retention staff</li> <li>• State Bridge Counselors</li> <li>• Leadership/SBC Supervisor</li> <li>• Experience/expertise</li> <li>• Funding</li> <li>• Technology (e.g. CAREWare)</li> <li>• Community partners</li> </ul>	<ul style="list-style-type: none"> <li>• Locate lost-to-care PLWH</li> <li>• Provide lost-to-care PLWH with strength-based counseling</li> </ul>	<ul style="list-style-type: none"> <li>• Re-engage lost-to-care PLWH in care</li> </ul>	<ul style="list-style-type: none"> <li>• Achieve viral suppression</li> <li>• Better health outcomes</li> <li>• Decreased risk of transmitting HIV to others</li> </ul>	<ul style="list-style-type: none"> <li>• Improve client engagement in care</li> <li>• Increase the proportion of Ryan White HIV/AIDS Program (RWHAP) clients who are engaged at each step of the HIV care continuum</li> </ul>

## Securing Buy-In

Stakeholders from the first region to pilot the State Bridge Counseling Re-engagement intervention were initially skeptical of the intervention. Prior to this intervention, clinic staff and public health field services staff, including SBCs, had not worked together or, even worse, had worked together with negative outcomes. The clinic staff, in particular, was doubtful that the field staff could be a partner. The SBCs were frustrated that incomplete information was provided when referrals were made and the difficulty in getting follow-up appointments scheduled after a client was found. In response, the intervention leadership brought together the clinic staff and SBCs to talk. Several people voiced their concerns given previous experiences. Addressing stakeholders' frustrations with one another was a challenging but necessary process that allowed for a fresh start.

## Overcoming Implementation Challenges

No intervention is without challenges, and the State Bridge Counseling Re-engagement intervention is no exception. These included:

- *Lack of Collaboration:* Collaboration between the SBC and other HIV service providers, including medical providers, case managers and retention staff, is imperative to re-engage the client in care and avoid duplication of efforts. Prior to the intervention, SBCs had few interactions with other service providers, particularly clinic staff. In some cases, they did not know how to contact one another. The Learning Collaborative Model and related activities, such as calls, meetings, and trainings, provided a structure through which collaborations could be built and nurtured. The benefits of this collaboration provided a critical service to both clinic staff and SBCs. For example, the initial search for lost-to-care PLWH for one clinic generated 350 names. As SBCs worked with clinic staff demonstrating search methods to locate individuals, the skillsets of clinic-based case managers increased. This allowed clinic staff to more easily engage clients when they were out of care. It also allowed SBCs to focus on the truly lost-to-care and use their time more efficiently to find clients in the field.
- *Communication Challenges:* Communication between clinic staff and SBCs is critical to the success of the State Bridge Counseling Re-engagement intervention. It became clear early on that the best communication method for referring clients to the SBCs was CAREWare—not paper, faxes, or in-person communication. Clinic staff was often unable to set aside time to meet or speak on the phone about their clients. CAREWare allowed clinics to make referrals confidentially and receive feedback without the delay of requiring simultaneous presence of both parties. The transition to using CAREWare created the potential for more long-term sustainability as it was a system already in place and being used by the clinics and agencies across the State. It also reduced the time and paperwork burden in tracking clients for the SBCs by increasing data sharing and communication among providers around the State. The transition period also highlighted the importance of having a consistent data system throughout the intervention, as well as the importance of providing quality training to those using CAREWare in order to capture data consistently and correctly. Finally, although this strategy sometimes required the SBC to enter data twice (into NC EDSS and CAREWare), it was important to ensure clinics knew about upcoming appointments and when to close out clients in their records. SBCs

report their workload decreasing, even with having to duplicate data input, as their communication with clinic staff was much less labor intensive and always retrievable.

- *Role Confusion Between SBCs and DIS:* It became apparent early on in the pilot intervention that the role of the DIS and the role of the SBC served different purposes and that this difference needed to be delineated and emphasized. Initially, the SBCs were viewed as DIS officers and the clinics didn't trust that the SBCs would be able to do anything different than the clinics were already doing to locate clients. The DIS were viewed as serving a more punitive role in identifying partners and issuing control violations, whereas the SBC needed to be a more supportive role, building a relationship of trust with the client to get them re-engaged in care. Differentiating between the two roles required many discussions and a great deal of stakeholder input. Overall job training on the differences between DIS and SBC, creating job descriptions specifically for SBCs, and creating standardized policies and procedures for SBCs were identified as helping to distinguish the two roles from one other. Because the primary goal of the SBC program was client care—rather than partner services—addressing HIV control measures and public health law violations were specifically excluded from the responsibilities of SBCs. This point was important during communications with healthcare providers, some of whom were concerned that referrals might result in negative consequences for their client.

It became apparent early on in the pilot intervention that the role of the DIS and the role of the SBC served different purposes and that this difference needed to be delineated and emphasized.

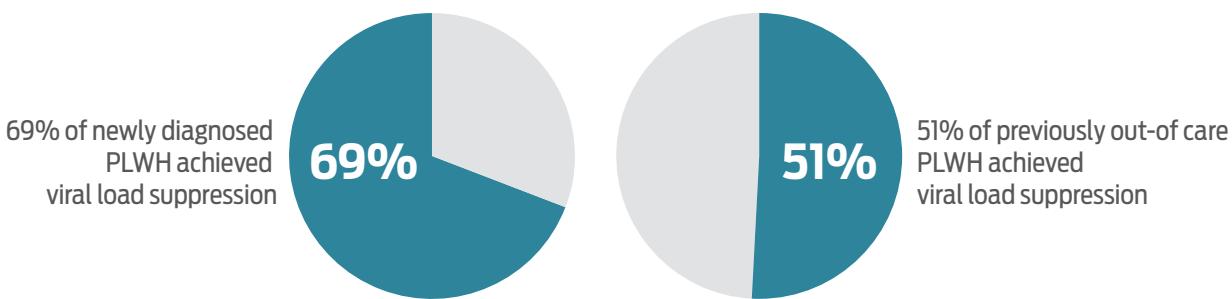
## Promoting Sustainability

SBC position turnover was common, necessitating refreshers and data systems training to keep everyone up-to-date. Complicating this were state budgetary shortfalls and resulting hiring freezes, which increased the time required to create and staff the SBC positions. Budgetary shortfall also affected the ability to meet client transportation needs, which emerged as an important need. However, despite these challenges, the State Bridge Counseling Re-engagement intervention has continued to grow and establish itself as more clinics develop their own retention activities largely by working with the resources that were available. At times this meant prioritizing or reprioritizing needs. Other organizations seeking to replicate the State Bridge Counseling Re-engagement intervention are encouraged to similarly make the most of available resources. Start small and expand as needed rather than trying to go big from the start.

## State Bridge Counseling Re-engagement Intervention: By the Numbers

The intervention served **905** clients (**299** newly diagnosed and **606** re-engaged PLWH).

Within a year of referral,



*Source:* Sena AC, Donovan J, Swygard H, et al. The North Carolina HIV State Bridge Counselor Program: Outcomes from a Statewide Level Intervention to Link and Re-engage HIV-infected Persons in Care in the South. *J Acquir Immune Defic Syndr.* 2017;76(1):e7–14.]

## Conclusion

The State Bridge Counseling Re-engagement intervention is an effective intervention to address the care gaps and health disparities. The use of CAREWare emerged as a novel approach for retention staff and SBCs to track and communicate about clients.

The Re-engagement intervention demonstrates that a Statewide SBC program is possible. Other states or cities willing to leverage existing infrastructures, electronic medical records, HIV care networks, and fieldwork capabilities may be interested in replicating this work.

## Tested and Proven HIV Strategies

The Integrating HIV Innovative Practices (IHIP) project is an outgrowth of SPNS. HAB created IHIP to share knowledge gained from SPNS interventions, and to promote their replication. IHIP takes tested innovations and turns them into practice. IHIP is where training meets implementation, with the intended results being more informed providers, better care delivery and, ultimately, healthier clients and communities.

This intervention guide is part of a larger series of resources and capacity building assistance activities including webinars about the interventions, a dedicated IHIP listserv, and a help desk.

## Tell Us Your Replication Story!

Are you planning to implement this intervention? Have you already started or know someone who has? We want to hear from you. Please reach out to **SPNS@hrsa.gov** and let us know about your replication story.

## Other Available Resources

### Featured Publications

- Swygard H, Clymore J, Heine A, et al. Connections to HIV Care Using a Modified ARTAS Program and a Statewide Team. International Association of Physicians in AIDS Care (IAPAC) 10th International Conference on HIV Treatment and Prevention Adherence, Miami, FL. #162. Poster Presentation. 2015.
- Sena AC, Donovan J, Leviere AF, et al. Outcomes from the “NC LINK” Program: A Statewide Approach to HIV Linkage and Re-engagement to Care in North Carolina. IAPAC 11th International Conference on HIV Treatment and Prevention Adherence. Fort Lauderdale, FL. Abstract #96. 2016.
- Sullivan KA, Berger MB, Quinlivan EB, et al. Perspectives from the Field: HIV Testing and Linkage to Care in North Carolina. *J Int Assoc Provid AIDS Care.* 2016;15(6):477–485.
- Berger MB, Sullivan KA, Parnell HE, et al. Barriers and Facilitators to Retaining and Reengaging HIV Clients in Care: A Case Study of North Carolina. *J Int Assoc Provid AIDS Care.* 2016;15(6):486–493.
- Keller JA, Heine A, Finestone L, et al. HIV patient Retention: The Implementation of a North Carolina Clinic-based Protocol. *AIDS Care.* 2016;29(5):627–31.
- Sullivan KA, Schafer K, Cox MB, Heine A, Clymore J, Seña-Soberano A, Wilkin A (2014, June). Bridging the gaps: The use of health information technology and bridge counseling to improve retention in care in North Carolina. Paper presented at the 9th International Conference on HIV Treatment and Prevention Adherence, Miami, FL.
- Parnell H, Cox MB, Sullivan K, Quinlivan EB, Jensen R, Berger M, Thomas J, Dayananda A. (2014, November). Building a Statewide HIV surveillance and care data warehouse in North Carolina: A collaborative approach. Poster presented at the 142nd annual meeting of the American Public Health Association, New Orleans, LA.

### Other Resources

- SPNS Initiative: Systems Linkages and Access to Care, 2011–2016: <https://hab.hrsa.gov/about-ryan-white-hiv aids-program/spns-systems-linkages-and-access>

## Appendix: SWOT Analysis

SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. A SWOT analysis is a structured planning method that can be used to assess the viability of a project or intervention. By conducting a SWOT analysis in advance of an intervention, organizations can proactively identify challenges before they occur and think through how best to leverage their organizational strengths and opportunities to improve future performance.

North Carolina State Bridge Counselor Re-engagement Intervention	
 <b>Internal</b>	<b>Strengths:</b> evidenced-based approach (e.g. strength-based counseling) with strong data component, upfront planning via a Learning Collaborative, SBCs (usually former DIS) already have strong field work capacity, clearly defined intervention protocol
 <b>External</b>	<b>Weaknesses:</b> securing buy-in of staff, lack of collaboration/history of ineffective working relationship between SBCs and clinical staff, communication challenges, role confusion between SBCs and DIS
	<b>Opportunities:</b> many facilitators to engagement in care, strong community partnerships/potential for additional collaborations, potential for funding through new RFPs
	<b>Threats:</b> many barriers to engagements in care, high rate of staff turnover, state budgetary shortfalls and resulting hiring freezes

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