Centers for Disease Control and Prevention (CDC)
National Center for HIV, Viral Hepatitis, STD and TB Prevention
Division of HIV/AIDS Prevention
Prevention Program Branch (PPB)

PS12-1201:
Comprehensive Human Immunodeficiency Virus (HIV) Prevention Programs for Health Departments

Category C: Demonstration Projects

Guidance for Preparing the Final Project Report

Reporting Period:
March 1, 2012 – December 31, 2015

The Final Project Report requires the grantee to report on activities conducted for the entire project period, **March 1, 2012 – December 31, 2015**. The report is due to CDC no later than **March 31, 2016.** Please email the report to the **ps12-1201@cdc.gov** mailbox and the assigned PPB Project Officer with a courtesy copy to the assigned Grants Management Specialist (GMS).

HEALTH DEPARTMENT CONTACT INFORMATION					
Award Number:					
Health Department:					
Mailing Address:					
City:		**State:**		**Zip Code:**	
Phone Number:				**Fax:**	

Category C Primary and Secondary Contact Information	**Title/Position**	**Name**	**Phone**	**E-mail Address**
Primary				
Secondary	Assistant Professor/University of Pittsburgh	Mackey R Friedman, PhD, MPH	412-383-2622	Mrf9@pitt.edu

Please check each demonstration project focus area funded under PS12-1201, Category C that is being reported in this Final Project Report:

☒ Structural, Behavioral, and/or Biomedical Interventions

☒ Innovative HIV Testing Activities

☒ Enhanced Linkage to and Retention in Care

☐ Advanced Use of Technology

☐ Programmatic Use of CD4, Viral Load, and Other Surveillance Data

Project Description

Please provide an overall summary for each demonstration project that includes the following:

1. Describe a high level perspective of each project.

   In the United States, young Black men who have sex with men (YBMSM) 13-29 years old experience the most sharply increasing rate of new HIV diagnoses. A recent meta-analysis estimated an annual HIV incidence rate of 4.16% among Black MSM, which if sustained until age 40 would yield a prevalence rate of 60%. Because YBMSM do not report higher levels of HIV behavioral risks (e.g., condomless anal sex) than other MSM populations, other factors have been proposed to explain this population's disproportionate HIV incidence. This disparity has been attributed largely to higher background HIV viral load in Black MSM communities and high racial homophily in their sexual networks. Lowering HIV incidence among YBMSM and young Black trans women will require significantly improved identification of HIV positive individuals, and linkage, re-engagement, and retention in care in order to effectuate viral suppression, along with other combination prevention efforts tailored for YBMSM communities.

   Community Human Services (CHS) and the HIV Prevention and Care Project (HPCP) at the University of Pittsburgh designed and implemented a recreation-based community health space, Project Silk, for young (13-24) year old Black men who have sex with men and transgender women in the Pittsburgh, Pa. Metropolitan Statistical Area (MSA). This encompasses non-Hispanic and Hispanic individuals; gay, bisexual, and other men who have sex with men; and individuals of varying socioeconomic status, though predominately youth and young adults who fit into the federal definition of poverty. CHS and HPCP formed an academic-community partnership, Project Silk, serving this community across the HIV prevention and care continuum.

   Established in 2012 as a CDC demonstration project, Project Silk is an innovative model that pairs recreational programming activities with HIV/STI prevention, testing, linkage to medical care, broad-spectrum social services and mental health care provided onsite, and social support and social capital initiatives. Project Silk provides a replicable, comprehensive intervention model for cities with YBMSM and YBTW populations that suffer substantial HIV prevalence and lack community infrastructure.

2. Describe the process of work for each project and significant activities conducted.

   Beginning upon receipt of funding in July/August 2012, HPCP embarked on a six-month needs assessment and ethnographic mapping process to ensure that service provision was aligned with community needs. This assessment can be characterized as a community-based participatory programming (CBPP) model that encouraged active participation across consumer and service provider networks. Key to this assessment was the convening of monthly community forums, which resulted in the recruitment of a Youth Advisory Board; and the establishment of a Service Provider Advisory Board, which resulted in a working consortium of youth service providers dedicated to the target populations served. Community members were considered equal partners in decisions related to safe space location, open hours, amenities, recreational programming, and intervention design and refinement.

   Project Silk opened 4 evenings per week as a recreation-based community health space providing HIV prevention in February 2013, commenced HIV testing activities in May 2013, and began STI testing activities (gonorrhea, chlamydia, and syphilis) in January 2014. On-site

ancillary social service provision was provided from inception; onsite mental health and crisis intervention services were offered from January 2014. Project Silk designed, implemented, and evaluated preliminary outcomes for a behavioral intervention, Future Selves, in 2013 and 2014. Located in downtown Pittsburgh and open during evenings and weekends, Project Silk quickly developed a following among YBMSM and YBTW, and the larger population of LGBT youth of color with the Pittsburgh MSA.

3. Describe why the project work is innovative and specific strategies that were used.

   Project Silk utilizes a number of innovative strategies and practices in its programming. First, Project Silk serves as a recreation-based community space for young Black MSM and transgender women, while simultaneously offering HIV services across the continuum of care and ancillary services surrounding other living necessities including housing and employment assistance. The idea of a "one stop shop" where youth can go to not only engage with their peers but also take care of their health and well-being contributes to the project's success. Project Silk also uses a sign-in system where individuals can select which services they are looking for that day, and this sign-in system generates an email to the staff. Service providers are available both on- and off-site, and include peer and non-peer staff. This structure allows for individuals to request services discreetly in an environment that best suits their needs.

   Other important innovative strategies include social network strategy and peer navigation. The former allowed for the project to reach individuals who may have neither previously heard of nor visited Project Silk and get them tested for HIV. Project Silk also employed trusted community leaders as peer navigators to provide more meaningful connections to the community, while also including employees from outside the community to allow for choice when it comes to service provision. All of these strategies are relatively new to the HIV prevention realm, particularly for young Black MSM and trans women, and we believe that this demonstration project provided reasonable evidence that they are important strategies in the progression of HIV prevention and care.

4. List project partners.

   The following partnerships were enjoined during the Project Silk demonstration project period (includes working partnership between University of Pittsburgh, Community Human Services, and the Pennsylvania Department of Health):

   - Central Outreach Wellness Clinic
   - Allegheny County Health Department
   - Positive Health Clinic
   - Pittsburgh AIDS Center for Treatment
   - Garden of Peace Project
   - Pittsburgh AIDS Task Force
   - True T
   - Persad Center
   - Planned Parenthood
   - Institutional Law Project
   - Neighborhood Legal Services
   - Allegheny County Department of Human Services

- Andy Warhol Museum Queer Youth Initiative
- National House of Blahnik
- University of Washington, Fred Hutchinson Cancer Center
- National Alliance of State and Territorial AIDS Directors
- City of Pittsburgh Citizens' Police Review Board
- Greater Pittsburgh Literacy Council
- Jewish Healthcare Foundation
- AIDS Free Pittsburgh
- Judah Fellowship
- Transgender Leadership Initiative

Qualitative and Quantitative Findings

Please provide the following information based upon applicable demonstration project focus area. All outcomes should be cumulative for all years the demonstration project was conducted.

A. Structural, Behavioral, and/or Biomedical Interventions ☐ Not applicable

1. Provide a detailed summary of each intervention, including quantitative outcomes and context for the findings.

- Structural intervention: recreation-based safe space dedicated to young (13-29 year old) Black MSM (YBMSM) and young Black transgender women (YBTW). After extensive needs assessment and ethnographic mapping work, Project Silk determined that community needs for a safe space to congregate and recreate would serve two primary purposes. First, it would assist in recruitment into HIV testing, linkage to care, reengagement in care, condom distribution, and ancillary social service uptake. Second, by providing a safe, accepting venue for YBMSM and YBTW to congregate and recreate that did not exist previously for these communities in Pittsburgh, it would facilitate increased social support and peer connectedness, which have been associated with lower violence victimization and perpetration, lower depression, and lower substance use rates; lower levels of these rates have, in turn, been associated with better HIV-related outcomes, including antiretroviral adherence and viral load suppression. Because changes in data collection systems over time make safe space utilization impossible to aggregate cumulatively by unique participant, we are able only to report annual data. Per year, the following number of YBMSM and YBTW utilized the Project Silk space:

    - 2013: 213 (median age=17); 28.4% of estimated total target population in County
    - 2014: 263 (median age=18); 35.1% of estimated total target population in County
    - 2015: 202 (median age=19); 26.9% of estimated total target population in County

    - Each year of the demonstration project, the proportion of Black MSM and Black trans youth reached by Project Silk exceeded 15% of the total estimated target population in the County (750), an established threshold for community-level impact endorsed by CDC.

    - Importantly, youth typically visited Project Silk on a regular basis. For example, in 2015, a total of 3,567 separate daily visits were recorded.

- Condom distribution: A total of 16,020 condoms were distributed during the entire demonstration project period.

- Behavioral intervention 1: Personalized Cognitive Counseling was offered to target population members who received an initial negative HIV test result and returned for at least one more HIV test. A total of 47 individuals received PCC over the demonstration project period.

- Behavioral intervention 2: An innovative behavioral intervention, named Future Selves, was piloted twice by Project Silk over the demonstration project period. This intervention was the result of an extensive academic-community partnership, and was underpinned by Embodiment and Possible Selves theories. The intervention was held over three days, in accordance with standard HBC structures. (Day one: check-in and registration; day two: performance; day three: aftermath and discussion.) Future Selves addresses social determinants of HIV infection and encourages sexual and gender minority youth of color to consider possible futures for themselves. Desired outcomes included feasibility and acceptability of intervention among community members, and stronger connectedness to Project Silk, resulting in higher service uptake. Preliminary data is reported below:

    - A total of 35 people participated in 2013; a total of 32 people participated in 2014 (aggregate numbers not available due to potential duplication of some participants).
    - Feasibility was high: an intervention protocol was developed and refined over the two intervention pilots, and the main logistical issues were related to sound systems and travel for out-of-town DJs and commentators.
    - Acceptability was high: 100% of responding participants rated the intervention "good" or "fabulous".
    - Analysis of process evaluation data revealed themes of goal identification and attainment processes; intensified feelings of social support and social capital; community attachment; and service resources identification.
    - In 2015, given new directions and challenges in biomedical approaches (community delivery of PrEP/PEP), the Future Selves protocol was revised to better reflect biomedical objectives (e.g., PrEP, PEP, TasP). Results from this revision are currently being analyzed.

- HIV prevention and care continuum interventions: Data specific to HIV and STI testing, linkage to care, and reengagement in care can be found below.

- Ancillary social services: Broad-spectrum social services, including onsite counseling with a licensed mental health therapist, were offered at Project Silk throughout the demonstration project period. Due to a change in database systems mid-project at Community Human Services (partner agency), social service uptake data cannot be presented in aggregate/cumulative format. Instead, annual data follows:

    - 2013: 101 youth received direct social services via Community Human Services;
    - 2014: 72 youth received direct social services via Community Human Services;
    - 2015: 132 youth received direct social services via Community Human Services.
    - Throughout, transportation assistance, housing/shelter, and food security (in that order) were the ancillary services most requested by Project Silk participants.

B. HIV Testing ☐ Not applicable

1. Please provide the following quantitative data by setting type:
   Total number of newly-diagnosed HIV-positive test events[1]: 15
   Total number of previously-diagnosed HIV-positive test events[1]: 21
   Total number of HIV test events: 318
   [1]Includes unconfirmed preliminary positive testing events plus confirmed positive testing events.

   Among YBMSM participants who received an initial negative HIV-antibody test result at Project Silk and received at least one additional HIV-antibody test at this site (n=39), HIV incidence was calculated to be 11.8 per 100 person-years between May 2013—December 2015.

C. Linkage and Re-Engagement to Care ☐ Not applicable

1. Provide specific strategies used, e.g., use of HIV surveillance data, use of Ryan White data, co-location of testing and treatment, a modified ARTAS technique.

   Project Silk implemented a modified ARTAS technique supplemented by use of HIV surveillance data to coordinate linkage and re-engagement to care activities. Specifically, Project Silk used a combination of community leaders as peer navigators and social workers as health care and social service navigators, giving HIV positive participants several staff options to choose from when discussing linkage and re-engagement. Significantly, staff social workers reported that several previously positive clients were re-engaged in care only after close working relationships were established as a result of ancillary social service needs (e.g., housing, employment assistance); in many cases, only after trust was established related to confidentiality and service provision, would participants disclose being previously positive to staff social workers and re-engagement could then occur. HIV surveillance data was utilized in a partnership with the Pennsylvania Department of Health to verify new HIV diagnoses.

2. Provide a precise definition of linkage to medical care that is used in the jurisdiction (if applicable).

   The definition of linkage to medical care is attending an appointment with an HIV medical provider within 90 days of initial HIV diagnosis.

3. Provide a precise definition of re-engagement to medical care that is used in the jurisdiction (if applicable).

   The definition of re-engagement to medical care is attending an appointment with an HIV medical provider for a client who has reported being HIV positive and has not seen an HIV medical provider in the previous six months. This includes HIV positive persons who are initially diagnosed and do not see an HIV medical provider within 90 days of diagnosis.

4. Provide the following quantitative data: (Exclude persons who are deceased and out-of-jurisdiction.)
   Total number of newly-diagnosed HIV-positive persons*: 15
   Number of newly-diagnosed HIV-positive persons linked to HIV medical care: 13
   Total number of previously-diagnosed HIV-positive persons that are out of medical care**: 21
   Number of previously-diagnosed HIV-positive persons out of medical care who were re-engaged in HIV medical care: 21
   *Includes unconfirmed preliminary HIV-positive persons plus confirmed HIV-positive persons
   **Only includes confirmed previously-diagnosed HIV-positive persons

D. HIV Partner Services ☐ Not applicable

1. Provide the following quantitative data: (Exclude persons who are deceased and out-of-jurisdiction.)
   Total number of HIV-positive persons* interviewed for Partner Services: --
   Number of partners elicited from these HIV-positive persons: --
   Number of partners elicited that were tested for HIV: --
   Number of newly-diagnosed confirmed HIV-positive test events from these elicited partners: --
   *Includes confirmed newly-diagnosed and previously-diagnosed HIV-positive persons

   Project Silk is unable to verify Partner Services contacts and information. In Allegheny County, Partner Services activities are undertaken by the Allegheny County Health Department for all new HIV positive individuals. Project Silk routinely collects information for Partner Services and conveys this information to Allegheny County Health Department.

E. Advanced Use of Technology ☒ Not applicable

1. Provide a detailed summary of each advanced technology activity, including quantitative outcomes and context for the findings.

F. Programmatic Use of CD4, Viral Load, and Other Surveillance Data ☒ Not applicable

1. Specify and describe what activity was addressed in the demonstration project including definitions (e.g., linkage, re-engagement, retention, viral load monitoring, Partner Services, M&E).
2. Provide context that includes state law, statute, or policy on the reporting of CD4 and viral loads and how well, timely, and accurate this reporting is, for example, from labs and providers.
3. Provide outcomes.
4. If measuring viral load suppression, provide a definition of viral load suppression, quantitative outcomes, and context for the findings.

G. For significant activities not covered above (i.e., STD or hepatitis testing, partner services for partners of STD-infected persons), please provide a detailed summary, including quantitative outcomes and context of findings.

Beginning in January 2014, Project Silk offered STI testing for chlamydia and gonorrhea. Over the course of 2 years, we conducted 97 tests for chlamydia, 95 for gonorrhea, and 22 blood tests for syphilis with the Center for Disease Detection. Of those tests, 9 were positive for chlamydia (9.28%), 3 were positive for gonorrhea (3.16%), and 0 were positive for syphilis (0%). Project Silk also conducted rapid syphilis testing starting in the fall of 2015. Staff conducted 10 rapid syphilis tests and found 0 positive results (0%).

- Chlamydia: 9 positive tests out of 97 tests, positivity rate of 9.28%
- Gonorrhea: 3 positive tests out of 95 tests, positivity rate of 3.16%
- Syphilis: 0 positive tests out of 22 tests, positivity rate of 0%
- Total STI tests: 12 positive tests our of 214 total tests, positivity rate of 5.6%

Interpretation of Findings

Interpretation of Findings (If possible, provide pre/post comparative data)*

1. Structural, Behavioral, and/or Biomedical Interventions

2. Innovative HIV Testing Activities
3. Enhanced Linkage to and Retention in Care
4. Advanced Use of Technology
5. Programmatic Use of CD4, Viral Load, and Other Surveillance Data

- During 2012—2015, 10 newly confirmed HIV positive testing events among 13-29 year old Black MSM and transgender individuals (of 1604 total test events with this population) were documented via Category A testing in Allegheny County, Pennsylvania. In contrast, during this time, 15 newly confirmed HIV positive testing events (of 318 total test events) in these target populations were documented via Category C testing in this County. This represents a 150% increase in newly confirmed HIV positive testing events in this population over this period, in this locale, as a result of Category C. This increase can be attributed to the establishment of a structural intervention (recreation-based community health space dedicated to these communities) that served as an engagement site. This structural concept, combined with Social Network Strategy that was adapted to the House and Ball Community and further modified via social media utilization, constituted an innovative HIV testing activity and provided an environment that promoted and normalized regular HIV testing to populations most at risk of HIV infection.

- Between 2012—2015, the HIV incidence rate among YBMSM accessing HIV testing at Project Silk was calculated to be 11.8 per 100 person-years (95% CI: 4.3, 26.2) among those whose first HIV test onsite was negative and who received at least one additional test. Though this appears to be a very high rate, it is aligned with other estimates from the literature assessing HIV incidence in this population. This calculation shows that even in mid-size cities with low HIV prevalence rates in the general population (0.2%), HIV incidence among YBMSM may be dangerously high. Even the lower-tail 95% confidence interval estimate (4.3%), when projected over the life-course, is consistent with other estimates suggesting that 50%--60% of Black MSM will contract HIV in their lifetimes. Community-based HIV-antibody testing organizations serving YBMSM should be trained and encouraged to track repeated HIV testing and calculate HIV incidence rates. Increased resources should be deployed to develop and encourage regular HIV testing in community health sites serving YBMSM.

- Related to enhanced linkage to and retention in care, 21 Project Silk participants who were previously positive but had fallen out of care were re-engaged in medical care over the duration of the demonstration period. The vast majority of these individuals had first utilized other Project Silk services, for recreation and for ancillary services such as housing, before disclosing to Project Silk staff that they were HIV-positive and interesting in seeking medical care. In these cases, the development of rapport and trust over time with Project Silk staff facilitated comfort in eventual disclosure of HIV status and uptake of HIV-related services. Given that other re-engagement initiatives (e.g., Minority AIDS Initiative funding for those lost-to-care) have been generally sourced through non-CDC funding streams (e.g., HRSA) and use different data collection mechanisms, we are unable to establish a comparison group for this result. Based on the national literature, we can contextualize this result by conservatively estimating that this number constitutes 14% of the total County-level target population number (750) living with HIV infection (20% of 750, or 150). If we assume that 45% of the total County-level target population with HIV infection (45% of 150, or 67.5) were already engaged in care, then we can estimate that Project Silk re-engaged into care 31.1% (21/67.5) of all young Black MSM and trans women in Allegheny County who were living with HIV and lost to care.

Estimated total number of target population in County	HIV+	HIV+ and lost-to-care	HIV+ and lost-to-care who were re-engaged by Project Silk
750	20% (150)	45% (67.5)	21 (31.1%)

Expenditure Assessment

Assessment of Category C Project Expenditure: The project expenditure may account for a portion of the entire Category C project or may account for all of the Category C activities in a demonstration project. The analysis needs to be more than a simple budget review, and must include all Category C project expenditures attributable to the health outcomes reported (e.g., no. of new HIV diagnoses, no. of persons linked to care, no. of person retained in care, etc.), but does not need to be an exhaustive or sophisticated analysis, e.g., micro-costing or cost-effectiveness study.

One intervention, one site, 2014—2015, overlap with other projects:

Project Silk (the Category C project) allocated a total of $188,864.96 for HIV testing and counseling during the two full calendar years (2014—2015) of conducting testing (CLIA waivers were received in May 2013).* During this period, 229 tests were conducted, resulting in 11 new confirmed diagnoses of HIV. $17,169.54 was expended per each new confirmed HIV diagnosis during this time frame.

Year	Expenditure	# of tests	# new HIV diagnoses	Expenditure per new HIV diagnosis
2014	$109,956.00	111	6	$18,326.00
2015	$78,908.96	118	5	$15,781.79
Total	$188,864.96	229	11	$17,169.54

During the same time period (2014-2015), Category A HIV testing in non-healthcare settings in Allegheny County cost $832,179.72 (including supplementary state-generated funding, which constituted 42% of total) and yielded a total of 14 new confirmed HIV diagnoses of 1,681 tests conducted; therefore, the average cost per new HIV diagnosis under Category A testing was $59,441.41.

Year	Expenditure	# of tests	# new HIV diagnoses	Expenditure per new HIV diagnosis
2014	$416,089.86	945	11	$37,826.35
2015	$416,089.86	736	3	$138,696.62
Total	$832,179.72	1681	14	$59,441.41

The difference in expenditure per new HIV diagnosis between Category C and Category A testing in non-healthcare settings between 2014—2015 was $42,271.87. Based on these data, it appears that Project Silk's targeted testing for young Black MSM and trans women under Category C may offer an approach that can find similar numbers of new HIV diagnoses with less funds. For this reason, the Commonwealth of Pennsylvania has initiated a plan to partner with the University of Pittsburgh and local community-based organizations to diffuse the Project Silk model in other urban areas in the Commonwealth with high HIV prevalence and incidence rates among these target populations.

**2012 was not included in analysis as Project Silk used the first six months of funding (received August 1, 2012) to conduct ethnographic mapping and needs assessment. 2013 was not included in this analysis as care continuum-related cost analyses were first required in 2014, and because Project Silk was only able to begin HIV testing after receiving CLIA waivers in May 2013. However, it is likely that with 4 newly confirmed positive tests in 2013, that expenditure per new HIV diagnosis was similar in 2013 to findings for 2014—2015 (e.g., <$20,000.00). As a comparison, Category A testing for 2013 yielded an expenditure of $83,217.97.*

Successes and Best Practices

Describe **successes and best practices** experienced with implementing and conducting the demonstration project over the course of the project period. Provide context for how or why something is considered successful or a best practice.

- The Project Silk model has been recognized by the Pennsylvania Department of Health and by NASTAD as representing a best-practice model for engaging young Black MSM and trans women across the HIV prevention and care continuum. In response to this recognition, Project Silk staff assessed lessons learned and current structures, and refined a set of core components that characterize the Project Silk model. These core components are as follows:

  - Recreation-based safe space, to be open at times convenient for target population members.
  - Community-based participatory process in program planning, staffing, recruitment, and engagement.
  - Demonstrated cultural competency in all staffing and volunteer roles.
  - Strong agency buy-in and support.
  - Harm reduction philosophy.
  - Peer navigation to PrEP/PEP, HIV-related medical care and social services.
  - Social Network Strategy with social media components.
  - Integrated HIV and STI testing, including self-administered STI testing.
  - Co-located mental health and supportive services.
  - Ability to gather and maintain secure data consistent with HIPAA regulations and to use these data to create quarterly reports, HIV seropositivity rates, and HIV prevalence and incidence rate estimates.

- Project Silk has successfully built a network of trusted service providers that exhibit cultural competency working with our target community and demonstrate quality service. The staff has prioritized building relationships with key service providers to facilitate linkage and retention among consumers at Project Silk; actively establishing collaborations with other agencies to ensure continuum of care, and; attending social service meetings to ensure maximum resources are obtained, including those youth exiting the foster care system. It is best practice to incorporate community wide interventions that elevate the service options across a service locale while providing competency-related education to service providers that highlights the lived experiences of the target population.

- Project Silk has successfully utilized peer navigation systems to ensure service uptake and retention. With an innovative approach inclusive of social media (Twitter, Facebook, and YouTube), Project Silk has introduced service access and uptake to youth through a forum of engagement privileging their agency in the process. The Youth Advisory Board, in particular, has been a success not only for its important role in shaping structured programming initiatives, recruitment, and planning, but for its provision of an opportunity for continuous civil engagement/citizenship among its members. In many cases, the YAB functions as the first civic engagement activity that its members have ever taken part in. Additionally, a multi-model approach to community involvement has been created to accommodate various thresholds for

engagement: quarterly forums with community leaders, peer co-facilitation in life skills groups, and formalized peer volunteer structures within space operations.

- The safe space has served as a widespread form of communication for events and resources related to social services. Project Silk has achieved softer outcomes with youth related to life-skills building through activities such as opening a bank account, creating professional voicemail accounts for employment searches, and nutritional cooking classes for supplement food, etc. The client-centered approach to requests basic need service provision has enhance rapport building and ensure sustainability with adherence to HIV-related medical services. Further, many participants have realized their own resiliency or become empowered to autonomously address their own problems with these strengths-based risk reduction goal plans.

- Access to safe, affordable, quality mental health services external to the Project Silk space has been particularly difficult for our targeted community with the primary barrier reported as general mistrust of the social service system. To that end, staff restructured to include a Therapeutic Intervention Specialist to begin short-term treatment onsite with the intention to bridge participants to services in the behavioral health continuum. Counseling services has been an integral best practice for HIV prevention and care management, facilitating linkage-to-care, adherence counseling, sexual health risk reduction, and retention in medical care.

- Project Silk continuously promoted efforts to maintain House and Ball Community buy-in and successfully generated interest ongoing in partnering and collaborating with Project Silk. On the national level, Project Silk continues to experience support from the National Leaders House Ball Coalition and the Legacy Project. On a local level, Project Silk has begun successful collaborations with Pittsburgh Leaders Alliance, True "T" Entertainment, and by Vogue Pittsburgh (PVK Productions) to help host, recruit for, and promote local Ballroom-based initiatives.

- With the assistance of its Medical Director, Dr. Ken Ho, Project Silk has incorporated education and information about PreP and PEP uptake as part of its intervention and to better link participants to PreP and PEP therapies off-site as a standard service delivery activity during open hours. Project Silk staff onsite provide linkages to Gilead assistance programs to ensure access to PreP programs for low-income young MSM and transgender individuals. Needs assessments conducted in 2015 with YBMSM at Project Silk indicate high perceived need and acceptability for onsite PrEP delivery and PrEP support groups. Project Silk is currently in the process of establishing a bimonthly PrEP clinic in our recreation-based community health space. The initiative will use lessons learned to develop a biobehavioral intervention optimizing the effective translation of PrEP therapy in real-world settings.

Challenges

Describe the most significant **challenges** experienced with implementing the demonstration project over the course of the entire project.

Describe how these challenges were addressed and if they were overcome.

- Data management for a multitude of services is difficult when each component corresponds to a different data collection mechanism. The use of 6 different data systems (Centers for Disease Detection; EvaluationWeb; the Community Human Services database; electronic intake data for safe space utilization; cost analysis data algorithms and inputs; and electronic intake data for Future Selves intervention) has presented major challenges for data integration. This necessitated planning for a secure, centralized, electronic tablet-based intake system upon each safe space entry, using a user name and password unique to each client. These challenges arise chiefly in continuum-of-care outcomes, as they require large amounts of staff resources to ensure clients are effectively accounted for across service domains. More seamless data integration is important to help facilitate higher levels of programmatic efficiency, accountability, and evaluation. University of Pittsburgh staff enhanced the data tracking capacity of safe space utilization with a new electronic intake system in 2014. This system consolidates data that can be extracted into various platforms for analysis based on programmatic or evaluation needs. While a step forward for integrating client-level data, it remains impossible to integrate other data systems (e.g., EvaluationWeb, Centers for Disease Detection) into this larger site-specific database.

- The Project Silk site, chosen for its ability to house recreational activities, poses challenges for perceptions of privacy and confidentiality and respectful, quality service. Project Silk has no solely dedicated clinical space and no within-suite bathrooms, and each office space is shared or serves dual functions. This limits the number of consumers who can access a private meeting with a staff provider at any given time. A newly purchased location will be immersed within our larger social service agency which will allow for streamlining access to other basic needs programs, ample private meeting space, and cost-shared facilities such as laundry services, community kitchens, a food pantry, and interview clothing donation closets. Additionally, the proposed architectural layout will include a medical room equipped for lab diagnostics to facilitate PrEP/PEP physician sessions and to support linkage to care deliverables. With expanded square footage and technological advances, the new space will also support the continuation of our outreach events that have effectively created community buy in from the house ball community in a cost effective manner. An engineering design plan for the new community space has been created to incorporate functions and systems requested through member-driven assessments with the architectural team.

- Dual relationships experienced by peer navigators require extensive staff support and team communication. Adequate support is needed to ensure they maintain an appropriate work/life balance as well as have capacity to establish boundaries within service coordination relationships for both the sake of themselves and the clients. Project Silk has evolved to include a multi-modal peer involvement approach through contracted services. This assists with diversification of house allegiances and community involvement among peer providers. Further, capacity building and professional development trainings offered internally at Community Human Services have been made public to Project Silk community members for additional support surrounding topics such as Mental Health First AID, Trauma Informed Care, First AID, Intimate Partner Violence, Motivational Interviewing, and Overdose Prevention.

- The Project Silk community space, in a mixed-use office/design building, has presented challenges. The presence of young Black MSM and transgender individuals in high attendance has not been welcomed by other building tenants and thus, directly resists our mission to create a safer space for services. Project Silk staff have invested ample time to forge relationships with other building tenants and address concerns from building management. However, the challenge presented an opportunity to educate Project Silk participants on appropriate behavior in professional building settings. In addition, the mixed-use building has the benefit of reducing perceived stigma among the target population, who are not "marked" upon entry by passersby as attending an HIV-specific program.

- Overall systemic issues related to structural racism and discrimination toward the LGBT community have emerged as the primary challenge for the program. As a primary example, single sex residential facilities in clinical institutions and emergency shelters are often divided by sex assigned at birth and are not equipped to safely house clients with gender fluidity. As a structural example, the myriad health disparities faced by young Black MSM and young Black trans women necessitate highly comprehensive HIV prevention and care programs that can address HIV risk behavior, HIV/STI testing, substance use, mental health, housing/shelter, education, medical care access and navigation, and employment, among other factors. Unless and until HIV prevention programming can meet these varied health disparity domains, or until the existing structure of Health and Human Services funding is not constrained into silos by disparity area, populations at highest risk of HIV infection will face significant gaps in program reach that will likely compound poor HIV-related outcomes.

Lessons Learned

Describe **lessons learned** with implementing the demonstration project over the course of the entire project. Provide relevant context for each lesson learned.

- The project has been highly successful in reaching a hard-to-reach, high risk population and providing an array of health services in a non-traditional space.

- Realizing that some of the target population would only come to the safe space with women or older companions, services are also offered to persons who are not part of the target population to maximize the number of young persons from the target population served.

- Tracking repeated HIV-antibody testing as part of a regular testing program in a community-based setting can offer a way to calculate real-time, real-world HIV incidence rates among populations most at risk, in the absence of state or local data.

- A recreation-based community health space that is designed to engage young MSM and transwomen of color with activities such as dancing, movies, and social support can effectively recruit these target populations into HIV/STI testing, mental health, medical linkage, and broad-spectrum social support in a holistic health model for these highly vulnerable communities.

- Pervasive HIV stigma and intra- and extra-community violence may pose significant programmatic challenges for HIV prevention and care agencies working with MSM and trans youth with limited socioeconomic resources.

- Project Silk staff has been required to perform outreach, education, and advocacy with medical and social service institutions to ensure they employ best practice approaches and exhibit cultural competency while working with the communities we serve. These systems-level interventions are also necessary to destigmatize HIV testing and care in a service continuum that continues to define people by their HIV status and risk behaviors. This requires additional work hours beyond direct service to build relationships with service providers and train for cultural competency. Project Silk strategized to increase service uptake with community organizations through workshops held onsite by external partners. This has been successful in normalizing a set of formalized processes within service provision and diversifying experiences our participants have with medical providers in order to strengthen medical advocacy skills and increase likelihood of linkages to care through enhanced accessibility.

- One of the most important lessons learned is the need for increasing communication and utilization of client-level releases of information between HIV testing sites and Partner Services. At times over the project period, and especially during the 2015 transition of direct services to a community-based partner, miscommunication about the Partner Services process occurred. There was also longstanding and significant distrust of Partner Services within the target populations. Chiefly for these reasons, Partner Services were likely underutilized in the demonstration project, and site-specific PS data is not verifiable. As a result, Project Silk has arranged meetings with Allegheny County Health Department in order to better engender trust of PS among the target population and better facilitate referrals and develop information-sharing protocols so that this information can be released.

- Project Silk staff acknowledged that ancillary services/social service coordination were initially a small portion of this project with the focus being on identification of newly HIV positive individuals; linkage to medical care for newly HIV positive individuals; and linkage/reengagement in medical care for previously diagnoses HIV positive individuals who were not in medical care. However, participants expressed that prioritization of basic needs service provision such as safe shelter and food were necessary to be able to consider their overall health and wellness (including HIV-related health). Unlike standard HIV clinics, these services were offered to all regardless of HIV status leading to service uptake through the lack of associated stigma (e.g., implicit outing as being HIV positive was minimized). This led to successful outcomes as many previously diagnosed HIV positive individuals disclosed their status to staff after building rapport while seeking lower threshold, destigmatized services. Further, this patient-centered, strengths-based approach has been a demonstrated best practice in a service continuum that often enforces the pathologization of social problems on the individual by focusing on their personal choices or risk behaviors as opposed to a lens that views overall poverty as a public health problem.

Project Utility for HIV Program

Describe major ways project methods or outcomes helped program activities in the jurisdiction (e.g., infrastructure changes, increased coordination of prevention and care/treatment, bringing together program and surveillance, changed how program does its routine work, documented value of Partner Service-related HIV testing enhancing the ability to find persons who are newly diagnosed with HIV, etc.).

- Project Silk has helped the HIV program at PA DOH in myriad ways. Most importantly, Project Silk provides an innovative, integrative model for effectively providing HIV testing, linkage-to-care, reengagement in care, HIV prevention services, and integrated STI testing in a non-traditional space. This model, which can be summarized as a recreation-based community health space, relies on extensive community involvement in planning set-up, programming, and staffing, in order to provide target population members with multiple loci for accessing HIV/STI testing, linkage, and prevention in a safe space that is organized for both their engagement in services as well as their social enjoyment and entertainment. This model has so far achieved success in engaging a target population that has disproportionately high HIV incidence and prevalence rates, but that has been typically hard-to-reach and difficult to engage using traditional service modalities.
- In addition, this model provides an opportunity for programs to confer services, such as employment assistance, education assistance, and housing/shelter, which may remediate disparities that have been consistently associated with poor HIV-related health outcomes.
- Finally, by promoting opportunities for sexuality-related social support; social capital; civic engagement; and asset-based youth development, this model may boost protective factors associated with better HIV-related health outcomes.
- PA DOH is interested in exploring variations on this model that can be adapted by HIV prevention and care organizations serving young MSM communities facing similarly high HIV incidence and prevalence in other locales as indicated.

Replicability

Provide information relevant as to how Category C activities could be replicated locally and in other jurisdictions.

Plans are currently underway to replicate Project Silk on state, national, and international levels.

- State-level: Related to replicability, the University of Pittsburgh and Pennsylvania Department of Health have completed an initial planning phase for diffusion of Project Silk to other areas in Pennsylvania where HIV incidence and prevalence are highest among young MSM of color and transgender women of color. In partnership with Pennsylvania Department of Health, HPCP has written a Request for Applications, and will fund the first diffusion project in July 2016. As part of this plan, the University of Pittsburgh will provide continuing capacity-building assistance and technical assistance to the original Project Silk and to newly implemented programs at other sites based on the original Project Silk model.

- National-level: The University of Pittsburgh HIV Prevention and Care Project is partnering with the National Alliance of State and Territorial AIDS Directors, who in 2016 will list Project Silk as one of five nationally spotlighted programs on its HisHealth.org website. The materials developed in this partnership include extensive qualitative and quantitative data collection; webinar development; and videography, in

the hope that community-based organization across the country will be able to learn from Project Silk's successes and challenges, and be able to adapt and replicate this demonstration project.

- International-level: Project Silk is currently assisting community-based HIV researchers to adapt the Project Silk model for transgender women in Ho Chi Minh City, Vietnam and for young MSM and transgender women in Sao Paolo, Brazil.

Successful replication will involve adhering to a community-generated structural framework (including a Youth Advisory Board and a recreation-based community health space) to maximize community engagement (see Successes and Best Practices, above). This framework should be optimally paired with broad-spectrum social service provision, social support and social capital initiatives, and HIV/STI prevention, testing, and linkage to medical care and re-engagement in medical care. Ideally, community delivery mechanisms for onsite PrEP and PEP should be refined and included in this model.

Sustainability

Describe how some, all, or none of the specified Category C activities will be continued after Category C funding ends. If unsure, please explain.

If applicable, specify which focus area or activity (e.g., use of HIV surveillance data) and which funding source will be supported as routine work under Category A.

PA DOH has continued to collaborate with the University of Pittsburgh to explore plans and opportunities for continued sustainability for Project Silk, including using CDC Category A and other funds in 2016 to sustain programming efforts. In this regard, plans for 2016 include:

- Completion of shift of direct service responsibilities (HIV/STI testing, linkage, reengagement, and social service provision) to a community-based organization (Community Human Services).
- Redirection of University of Pittsburgh responsibilities to center on evaluation, dissemination, and diffusion. These activities include capacity-building and technical assistance.
- Because of limited funding availability from CDC to support HIV prevention activities using Category A, the original Project Silk collaborative team (including PA DOH, University of Pittsburgh, and Community Human Services) continues to look for diverse continuation funding mechanisms, which include:
    - PPA agreements for HIV CTR;
    - PPA agreements for STI testing;
    - HRSA (Ryan White/Minority AIDS Initiative) funding for linkage-to-care and reengagement;
    - State 106 funding for continuum-of-care programming (includes HIV prevention and care);

- Direct billing to health insurance companies (primarily via Obamacare and Medicaid expansion) for PrEP/PEP-related services, mental health services, and HIV support services;
- Funding from public agencies (e.g., SAMSHA);
- Funding from private foundations.

Publications

List published or soon to be published articles with citations that have resulted from the Category C demonstration project.

- Friedman MR, Feliz N, Netto J, Adams B, Matthews D, Stall R, Krier S, Ho K, & Silvestre AJ. "Estimating HIV Incidence in a Naturally-Occurring Cohort of Young Black MSM and Transwomen." *Journal of Acquired Immune Deficiency Syndromes* (under review).

List presented abstracts with citations.

1. Friedman MR, Feliz N, Brookins M, McGeorge T. "Project Silk: A demonstration project for young MSM and transgender people of color." National African American MSM Leadership Conference on HIV/AIDS and other Health Disparities, 2013 (Los Angeles). Poster presentation.
2. Friedman MR, Herrick AL, Krier S, Silvestre AJ. "Project Silk: A Multilevel HIV Prevention Intervention for African-American YMSM and YTG." The Future of HIV Prevention and Treatment: Integrating Innovative Methods with Intervention Science Meeting, 2013 (Bethesda).
3. Friedman MR, Herrick AL, Krier S, Silvestre AJ. "Project Silk: A Multilevel HIV Prevention Intervention for African-American YMSM and YTG." HealthHIV Prevention Webinar, 2013.
4. Friedman, MR. "Recruiting hard-to-reach populations for HIV CTR, linkage to care, and re-engagement in care: lessons from Project Silk." Capacity-Building Workshop for Pennsylvania Ryan White Coalitions and Health Departments. State College, Pennsylvania, 2014.
5. Feliz N, Brookins M, Krier S, Adams B, Wallace SE, Friedman MR. "Project Silk: Findings from a Demonstration Project for young MSM and Transgender Youth of Color." National African American MSM Leadership Conference on HIV/AIDS and other Health Disparities, 2014 (Orlando). Oral presentation.
6. Friedman MR, Krier S, Feliz N, Adams B, Brookins M, Kinsky S, Silvestre AJ. "'Is Silk open tonight?': Lessons learned from Project Silk, an HIV prevention demonstration project for young African American MSM and transgender people." American Public Health Association Conference, 2014 (New Orleans). Oral presentation.
7. Matthews DD, Netto J, Adams BJ, Friedman MR. "Holistic health models for young gay Black men." National Alliance of State and Territorial AIDS Directors Conference, 2015 (Washington, D.C.). Plenary.
8. Netto J. "Project Silk: A Model for Community-Based Service Provision." Homeless Children's Education Fund's National Summit: Paving the Way: Real Solutions to Confront Youth Homelessness in Allegheny County, 2015 (Pittsburgh). Oral presentation.
9. Riley N, Friedman MR. "'We already been purged': violence against black transgender women in Allegheny County." University of Pittsburgh Center for LGBT Health Research, 2015 (Pittsburgh). Oral presentation.

Additional Information

Please also provide other information or data for the demonstration project that would be important for CDC to receive (e.g., presentations, project materials, etc.).