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EVALUATION OF
THE COMMUNITY HEALTH ACTION OF STATEN ISLAND
STATUS CHECK PROJECT

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An abstract of
A Thesis submitted to the Faculty of the
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Abstract

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Introduction: Community Health Action of Staten of Staten Island created the Status Check Project, a community-intervention designed to impact low testing rates, low individual awareness of serostatus and low awareness of community HIV risk in Staten Island. This thesis describes community-level surveying done to assess the reach of the program and to gather information regarding testing behaviors and attitudes towards HIV in their target neighborhoods after 1 year of program implementation. These data will inform future programmatic activities and further refine the larger evaluation of the program.

Methods: Street-intercept surveys were conducted in areas where the Status Check Project was implemented. Surveys assessed the following domains: 1) demographics, 2) awareness of HIV status, 3) awareness of testing services and 4) awareness of the Status Check Project. Eligible respondents were Staten Island residents, ages 18-64. Quantitative data analysis provided frequencies and percentages of demographics, HIV testing, awareness of the Status Check Project, engagement of the community by the Status Check Project peers, and awareness of testing locations in the community

Results: A total of 192 residents of areas where the Status Check Project was implemented were surveyed. A majority (85%) reported previously being tested for HIV and of those 63% reported being tested within the last year. A majority (76%) reported that it was not difficult to get tested for HIV. In regards to concern for personal risk of infection and for community risk of infection, 71% reported being concerned for their own risk and 86% reported that they were concerned for their community. When asked if respondents were aware of Status Check or if they have been engaged but project staff in an intensive conversation regarding HIV, 16% were not aware of the project and 12% had engaged in a conversation with project staff.

Recommendation: Based on the results of this year one community-level survey recommendations were developed to both improve Status Check Project activities and inform the development of evaluation measures.

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CHAPTER 1: INTRODUCTION

The National and Local HIV Picture

The Centers for Disease Control and Prevention (CDC) estimated that in 2011, more than 1.2 million people were living with HIV in the United States (U.S.) (Centers for Disease Control and Prevention, 2014a). There were an estimated 47,352 persons newly diagnosed HIV infection, with an estimated 26,688 persons diagnosed with AIDS (CDC, 2015). The CDC reported that although the incidence rate of HIV infection in the U.S. has remained stable, disparities in the rates of infection still persisted (CDC, 2012, 2013, & 2014a). African Americans and Hispanics/Latinos continue to experience the greatest burden of HIV when compared with other races and ethnicities. African-American men and women accounted for an estimated 46% of new HIV infections in 2013 and Hispanic/Latinos accounted for 23% of all new diagnoses of HIV in the U.S., where 86% of those new diagnosed cases were men (CDC, 2014). Of the diagnosed male cases 81% were attributed to male-to-male sexual contact.

New York was ranked 4th among the 50 states in the number of HIV diagnoses in 2011 (CDC, 2011). New York City (NYC) persists as one of the epicenters of the epidemic. The NYC Department of Health and Mental Hygiene (NYCDOHMH) reported that in 2013, there were 2,832 new diagnoses of HIV and 1,784 persons diagnosed with AIDS in NYC (NYCDOHMH, HIV Epidemiology and Field Services Program [HIV EPISFSU], 2014). Of those newly diagnosed with HIV, 574 (20.3%) were diagnosed concurrently with AIDS. By year end, there were 117,618 reported persons living with HIV/AIDS in NYC.

NYC reflects the national picture regarding the unequal burden of HIV infection among racial and ethnic groups. Although incidence of HIV infection rate and deaths among people living with HIV has steadily decreased in NYC, disparities persist in HIV infection by race/ethnicity and transmission risk/category (HIV EPISFSU, 2014). In 2013, persons newly diagnosed with HIV were predominantly young, male, black or Hispanic and were men who reported having had sex with men (MSM) (HIV EPISFSU, 2014). The disparities in diagnosis rates were striking. For example, black males were diagnosed at a rate 1.5 times higher than Hispanic males and over two times higher than white males. The diagnosis rates for black females were also striking. Black females were diagnosed at a rate two times higher than that of Hispanic females, and 12 times higher than white females (HIV EPISFSU, 2014).

Staten Island. Staten Island has the smallest population of the five NYC boroughs with a population of 468,730 residents (The City of New York Department of Planning, 2011). The disparities of HIV infection in Staten Island mirror the national epidemiological trends of disproportionate burden carried among those of minority races and ethnic groups. In 2011 Staten Island reported the few number of HIV diagnoses but the highest proportion of concurrent HIV/AIDS diagnoses (34.9%) when compared to the other NYC boroughs (NYCDOHMH, 2012). In 2013, Staten Island reported the lowest number of new HIV diagnoses compared to the other four boroughs of the city (HIV EPISFSU, 2014). A total of 56 new HIV diagnoses were reported; 44 (78.6%) were male and 12 (21.4%) female.

Staten Island had markedly lower HIV testing when compared to the rest of NYC (NYCDOHM, 2013b). Although, Staten Island reported the fewest number of new cases and had the lowest number of new diagnosis when compared to other boroughs, it has the highest percentage of residents that had never been tested, 55.6% compared with 38.1% in NYC overall, and only 18.9% reported being tested in the past 12 months.

Barriers and Facilitators to HIV Testing

Frequent HIV testing, especially among high-risk populations, is crucial to fighting the spread of the virus as it paves a way towards faster detection of HIV infection and results in primary and secondary prevention (Heffelfinger et al., 2008). Frequent testing can also serve as a net to diagnose those that may have tested within the window period, resumed high-risk behavior, but never tested again. The “window period” is defined as the time after infection that it takes for the virus to become detectible by HIV diagnostic tests (New York State Department of Health AIDS Institute, 2013). Although, the length of the period depends on the test and the person, testing someone who is considered high-risk could facilitate early diagnosis. Early diagnosis then facilitates linkage to care and treatment for improved health outcomes among those infected with HIV, and, when viral suppression is achieved, can prevent ongoing transmission to uninfected sexual partners (Heffelfinger et al., 2008). Moreover, the prevalence of high-risk sexual behavior has been shown to be lower in HIV-positive persons with knowledge of their seropositive status when compared to those HIV-positive

persons who are unaware of their status (Marks, Crepaz, Senterfitt, & Janssen, 2005).

An understanding of the barriers and facilitators to HIV testing is important in guiding efforts to increase the number of individuals being counseled and tested. Factors that have been found to consistently increase acceptance of testing include acknowledgement of risk behavior, protection of confidentiality, and routine counseling endorsing the benefits of testing (Irwin, Valdiserri, & Holmberg, 1996). Facilitators of voluntary HIV testing have been found to be associated with differences in attitudes towards testing, perception of risk of HIV infection, and risk behavior.

When considering barriers to testing, fear was cited as the most common reason for delay of HIV testing (Mukolo, Villegas, Aliyu, Wallston, 2013; Schwartz et al., 2011; Spielberg et al., 2003). Fear associated with HIV testing included fear of finding out the result, fear of stigma, and fear of treatment cost (Spielberg et al., 2003; Schwartz et al., 2011). Lack of perceived risk was also cited as an important barrier to testing (Schwartz et al., 2011 & Kellerman et al., 2002). Individuals who had never received an HIV test commonly cited reasons that focused on denial of risk factors. They were also less likely to trust in the ability of medical care to maintain the health of those who have tested HIV positive, had a heightened fear of infection, greater level of risk denial and less knowledge of risk factors associated with HIV infection.

These barriers pose a formidable challenge to health promotion professionals charged with developing HIV prevention and testing programs that are aimed at addressing the needs of specific populations. Key contributors to

low testing rates including stigma, underestimating personal risk, and lack of knowledge of HIV, are important to address in developing programs to prevent the further spread of the epidemic and to protect high risk members of the community.

The Status Check Project, implemented by the Community Health Action of Staten Island (CHASI), sought to impact low testing rates, low individual awareness of serostatus, and low awareness of community HIV risk in Staten Island through the utilization of an adaptation of the Blocks Model Project. The purpose of this thesis is to describe the Status Check Project following its first year of implementation. This thesis will provide an overview of Status Check Project components, a theoretical basis that describes how the project may impact behavior change, Status Check Project implementation, a description of study results, and a discussion of the implications of these results.

CHAPTER 2: Review

Overview of the STATUS CHECK PROJECT

The Status Check Project is a multifaceted intervention designed to affect change on two major levels: the community and the individual level. At the community level, CHASI hosted Community Awareness Events (CAE) resembling health fairs to educate the community at large regarding risk of HIV infection and low proportion of HIV testing on Staten Island. Awareness events brought together community members and stakeholder, highlighted resources regarding sexually transmitted infections (STI) and HIV prevention, and offered and testing services. At the individual level, the Status Check Project engaged community members via one-on-one conversations regarding awareness of personal risk for HIV infection, mode of transmission, and the importance of testing. In addition to the one-on-one conversations, the Status Check Project staff also handed out informational flyers containing topics previously mentioned. CHASI did not propose a theory driven model; however, what follows is a discussion of a theoretical framework that may be applied to the Status Check Project.

Defining Community-Based Interventions

Community-based interventions are multicomponent interventions that typically combine individual and environmental behavior change strategies to impact a health goal. They provide a broad contextual perspective which recognizes the interplay of social, environmental, and relational influences that can affect the decision making process of individuals, impacting their attitudes, behaviors, and knowledge (King et al., 2008). Utilization of a broad based

intervention such as a community-level intervention or mobilization approach increases the likelihood of reaching a greater number of individuals and exposure to the intervention, thereby, increasing adoption of protective behaviors (Waldo & Coates, 2000).

Community-based interventions have been found to be effective in encouraging risk reduction, improving HIV knowledge, and changing attitudes regarding underestimating personal risk and HIV testing (Salam, Harron, Ahmed, & Bhutta, 2014). In their review Salam et al. found that interventions aimed at increasing knowledge and risk awareness through counseling significantly improved respondents' HIV/AIDS knowledge scores. Behavioral interventions utilizing street outreach and peer groups have been found to be especially influential in adoption of safer sex practices, sexual decision-making, and risk reduction behaviors (Salam et. al., 2014). For instance, a community-level intervention, Popular Opinion Leader (POL), deploys individuals or groups who are already popular leaders within the targeted network, to directly engage in risk-reduction conversations with their primary contacts. The POL intervention has been shown to increase the odds that the MSM target population would utilize condoms (Herbst et al., 2007).

Harlem United implemented the Blocks Project, a community based intervention aimed at decreasing HIV testing stigma and increasing the number of residents aware of their serostatus (Harlem United, 2009 & 2010). The Blocks Project utilized a zone-based testing approach, which included health education forums, peer training and street and community-based outreach (Harlem United, 2009).

The Blocks Project had three major components: 1) messaging which involved diffusion of HIV prevention messages aimed at decreasing HIV and testing stigma; 2) zone-based outreach approach which involved intensive door-to-door and block by block outreach; and 3) increased access to testing and care (Harlem United, 2009). Harlem United's zone-based outreach allowed them to test a large number of individuals who had a low perception of person risk of HIV infection, including some who were had undiagnosed HIV. More detail information regarding the Blocks Project can be found in a later section.

Program Theory

Many effective interventions ground their program in multiple theories in order to create a multilevel approach to the behavioral problem. CHASI's comprehensive intervention included peer-based outreach, community education, tailored services, and targeted dissemination of information. A detailed description of all program activities is discussed in later sections. A theoretical framework that describes the way in which Status Check Project activities may influence attitudes and bring about behavioral changes follows in this section.

Social Cognitive Theory. Social Cognitive Theory (SCT) emphasizes the interaction between individuals and their environment (McAlister, Perry, & Parcel, 2008). Critical personal factors include a person's capacity to symbolize behavior, foresee the outcome of behavior, self-efficacy in performing a behavior, and the ability to self-regulate and analyze a behavior. SCT is relevant to health behavior programs because it integrates previously unconnected emotional,

cognitive, and understandings of behavior change (Baranowski, Perry, & Parcel, 2002).

The foundational constructs of SCT can be grouped into five categories: psychological determinants of behavior, observational learning, and environmental determinants of behavior, self-regulation, and moral disengagement (McAlister et al., 2008). Three of the five constructs appear to apply specifically to the Status Check Project: psychological determinants of behavior, observational learning, and environmental determinants of behavior.

Foundational Constructs of SCT

Psychological determinants of behavior. Of the many psychological determinants of behavior that have been identified in SCT, outcome expectations and self-evaluative outcome expectations stand out. Outcomes expectations dictate that human values and expectations are subjective where individual's actions are based on both objective reality and their perceptions of it (Baranowski et al., 2002). For behavior that is relatively new and infrequent, an individual develops expectations for outcomes prior to encountering the behavior. For example, the Status Check Project seeks to increase awareness of HIV serostatus in their target population. An outcome expectation of a negative test result, with or without prior knowledge of their serostatus, could result in reduced desire to test. The Status Check Project may change this expectation by educating Staten Island residents regarding the benefits of awareness and frequent testing. In most cases, this process can lead to a reduction in anxiety related to a behavior. There are four ways expectations can be learned: 1) through past experience in

similar situations; 2) observing others in similar situations; 3) hearing about other's situations; and 4) from emotional responses to the behaviors.

Self-evaluative outcomes. A closely related concept of outcome expectations is self-evaluative outcomes (McAlister et al., 2008). This is an important concept stating that how individuals feel about themselves and whether they do or do not participate in a certain activity can govern behaviors. For example, the Status Check Project seeks to increase the number of Staten Island community members being tested for HIV. The individuals may be first-time testers that through negative social persuasion from stories of others testing or a negative emotional response to the expected outcome of the test may have developed an unfavorable anticipatory expectation of the testing outcome. This could be seen as a possible reason for the low testing numbers of that community. CHASI's Status Check Project then would attempt to alter these negative outcome expectations by providing positive information regarding testing thereby positively impacting that individual's reformation of their outcome expectations and self-evaluative outcomes.

Observational learning. Observational learning is the process of learning through the observations of experiences and the reinforcements that another person received rather than through one's own experience (Baranowski et al., 2002 & National Cancer Institute, 2005). For example, the Status Check Project hosts a Community Awareness Event (CAE) prior to commencing outreach. CAEs are essentially health fairs in that they are structured to educate the community on HIV awareness and prevention. It also hosts a HIV and STI testing at the CAEs to encourage community members to test while at the event. It is possible

that observational learning could occur if the project staff are successful in having community members test while at the event. Community members who observed the behavior of those who accepted to test could result in a positive reinforcement of the testing behavior. Therefore, the observing member may be more inclined to test upon watching others perform the behavior.

Environmental determinants of behavior. The construct of environmental determinants of behavior postulates that no amount of observational learning will lead to a change in health or risk behavior unless the person's environment can support that change (McAlister et al., 2008). As such, there needs to be an environmental change in order to alter an individual's behavior. One method to shift behavior through an environmental modification is to utilize the concept of facilitation, or empowerment via the provision of resources that assist the behavior adaptation. In the case of CHASI's Status Check Project, the provision of resources may come in the form of dissemination of educational material regarding HIV testing, increasing the number of HIV/STI testing locations such as through the use of a mobile health unit (MHU), and incentives that may be provided for testing.

Previous Zone Based Community Intervention: The Blocks Project

As previously mentioned, community based interventions have been found to be effective at positively impacting a number of HIV protective factors such as increasing HIV awareness, risk reduction, and changes in attitudes regarding perceived risk (Salam et al., 2014). For instance, the Blocks Project was successful at increasing HIV testing in a high proportion of African American and Hispanic NYC residents over 40 years age who had a low self-perception of HIV

risk. Additionally, the project was successful at increasing HIV & STI, increasing testing awareness, and promoting annual HIV & STI testing (Harlem United, 2010).

The Blocks Project was community-based HIV prevention program implemented in Central and East Harlem, NYC by Harlem United (Harlem United, 2009 & 2010). The Blocks Project began in 2007 with an overarching goal to reduce HIV testing stigma, increase the number of residents who are aware of their HIV status, and break the cycle of disease transmission.

The project employed a zone-based approach to health education, peer training, targeted street and community-based outreach. A second component of the project was the risk-based approach to prevention, which utilized social network recruiting, and HIV testing using MHUs, in targeted New York City Housing projects in Harlem. A principal element of the zone-based strategy was to increase access to testing by delivering testing services to the community through the MHUs.

The Blocks Project had three major components: messaging, zone-based outreach approach, and increased access to testing and care. The first component, messaging, involved community saturation with targeted HIV prevention messages aimed at removing stigma to HIV testing. The second component, zone-based outreach approach involved a block-by-block, door-to-door canvassing plan aimed at increasing testing by providing a comprehensive personal risk assessment. The final component increased access to HIV/STI testing and linkage to care if found positive for HIV or an STI (Elton John AIDS Foundation, 2008 & Harlem United, 2009 & 2010). This intervention allowed

Harlem United to diagnose persons they termed late testers; individuals who underestimate their risk and would not otherwise test until they become symptomatic and are forced to seek medical help.

Harlem United (2009) reported performing over 8,000 HIV tests between 2008 and 2009. They attributed the success of their high testing numbers to identifying risk perception as a key factor influencing HIV testing in the population they were targeting in addition to the provision of testing services via their mobile health unit (MHU). The zone-based testing approach targeted African American men and women 40 years and older; a segment of the population Harlem United identified as least likely to be targeted by traditional risk-based interventions. Harlem United also reported that other factors including HIV transmission knowledge, fear and denial, competing concerns, and current relationship status, all had a negative impact on HIV risk perception of their target population.

Recognizing that numerous factors impact a person's self-perception of HIV risk, Harlem United implemented an HIV risk perception assessment as part of their testing protocol. The assessments were implemented prior to performing the HIV test. The aim of the risk assessment was to gain a better understanding of how their target population internalized risk and how it impacted their behavior. Harlem United found that of those who completed the assessment and subsequently tested positive for HIV, 47% reported low self-perceived risk or being unsure of their level of risk of infection (Harlem United, 2009).

Status Check Project: Project Description

The Community Health Action of Staten Island (CHASI) began in 1998 as the Staten Island AIDS Task Force providing HIV services to the local community including, prevention, case management, and advocacy (CHASI, 2013). Since its inception, CHASI has expanded its services to include outpatient drug treatment, linkage to care, health-related outreach and education, and health services for Staten Island's most vulnerable populations. At the time of this writing, CHASI estimated that the organization manages 23 government contracts, 16 grants, and 2 licensed Medicaid Programs.

CHASI has been implementing funded programs for community-based HIV counseling, testing and referral (CTR) and for prevention services for young MSM of color, prior to the Status Check Project. The Status Check Project was proposed to increase the agency's outreach capacity to the neighborhoods of Staten Island with the highest HIV risk and infection.

The Status Check Project is a demonstration project, modeled off of the Blocks Project that seeks to engage a specific high-risk community in order to increase awareness of serostatus, increase HIV testing, and increase awareness of risk of HIV infection. It utilized the Blocks Project zone-based outreach approach that included the provision of HIV education, targeted street and community-based outreach, training of peers to provide outreach services, and provision of testing services on an MHU. The Status Check Project target population included black and Hispanic women, intravenous drug users (IDUs) and MSM in neighborhoods with high HIV seroprevalence. The project has been in operation since 2013 and is scheduled to continue through 2016.

Status Check Project Goals

The overarching goal of the Status Check Project is to identify Staten Island residents who have never been tested for HIV and those considered high-risk individuals, who have not tested in the past 12 months. The CDC recommends that routine HIV testing for all adults aged 13-64 and repeat testing at least annually for those considered to be high-risk individuals (CDC, 2006). The CDC (2006) defines persons likely to be high-risk to include IDU and their partners, HIV infected persons, MSM, or heterosexual persons who have had more than one sex partner since their last HIV test. The SCT provides the theoretical basis that defines how the Status Check Project may influence attitudes and bring about behavioral change. SCT provides three constructs that may be utilized to inform the project's proposed impacts.

Presented through the lens of the SCT, the Status Check Project seeks do to the following:

- 1) *Increase awareness of personal and community-based HIV risk among Black and Latina women, injection drug users (IDU) and MSM residents in Staten Island.* According to SCT construct psychological determinants of behavior, the behavior change the Status Check Project seeks to impact would occur as a result of a change in outcome and self-evaluative outcome expectations. Awareness of risk through education and informative interactions with Status Check Staff could provide positive information regarding testing thereby positively impacting that individual's reformation of their outcome expectations of testing and self-evaluative outcomes of how they would feel about testing.

2) *Increase the number of HIV tests among high-risk persons living in the high seroprevalence neighborhoods of Staten Island.* Barriers to testing that have been previously cited include fear associated with HIV testing, fear of finding out the result, fear of stigma, and lack of perceived risk (Spielberg et al., 2003; Schwartz et al., 2011 & Kellerman et al., 2002). SCT states that behaviors such as testing behavior can be positively impacted through observational learning. The Status Check Project offers opportunities for observational learning through its testing events whereby a person may learn to test for HIV through the experiences of others. The vicarious experience could result in the decreased fear of HIV testing

3) *Increase awareness of testing services available to Staten Island residents.*

Knowledge of where a person can get help could ease the burden that lack of resources can cause. The SCT construct environmental determinants of behavior states that there needs to be an environmental change in order to alter an individual's behavior. One method to shift behavior through an environmental modification is to utilize the concept of facilitation, or empowerment via the provision of resources that assist the behavior adaptation. The Status Check Project facilitates testing through its provision of HIV testing services via a mobile health unit.

Logic Model

The logic model depicted in figure 1 is a proposed conceptual framework for the Status Check Project. Although a logic model was not provided by CHASI for the project, this model is postulated as the theoretical groundwork for the project and to illustrate the multilayer approach to addressing the problem of low

testing and low perception of self- and community-risk for HIV infection. The Status Check Project logic model builds on three assumptions that inform the project's goals for change:

1) *Risk for HIV infection is as much about one's environment as individual behaviors.* A person's behavior is a result of the interaction between individual, behavioral, and environmental determinants (McAlister et al., 2008). SCT refers to this as reciprocal determinism. The complex interplay these various factors have to be addressed in order to help communities affected by HIV. For example, high rates of undiagnosed STDs can increase the risk of both acquiring and transmitting HIV (CDC, 2015b).

2) *Awareness of one's serostatus can also lead to a reduction in the risk of HIV transmission.* In those who are seronegative, awareness of one's HIV status may lead to a reduction in high-risk sexual behavior such as condomless sex. The prevalence of high-risk sexual behavior has been shown to be lower in HIV-positive persons with knowledge of their seropositive status when compared to those HIV-positive persons who are unaware of their status (Marks, Crepaz, Senterfitt, & Janssen, 2005).

3) *Late HIV diagnosis and delayed linkage to care lead to poor health outcomes.* Early testing, diagnosis, and linkage to care among high-risk populations result in improved health outcomes among those infected with HIV (Heffelfinger et al., 2008). A number of factors play a role in one's likelihood of testing for HIV including access to testing and care, expectations of the outcomes of testing, and support networks in the community.

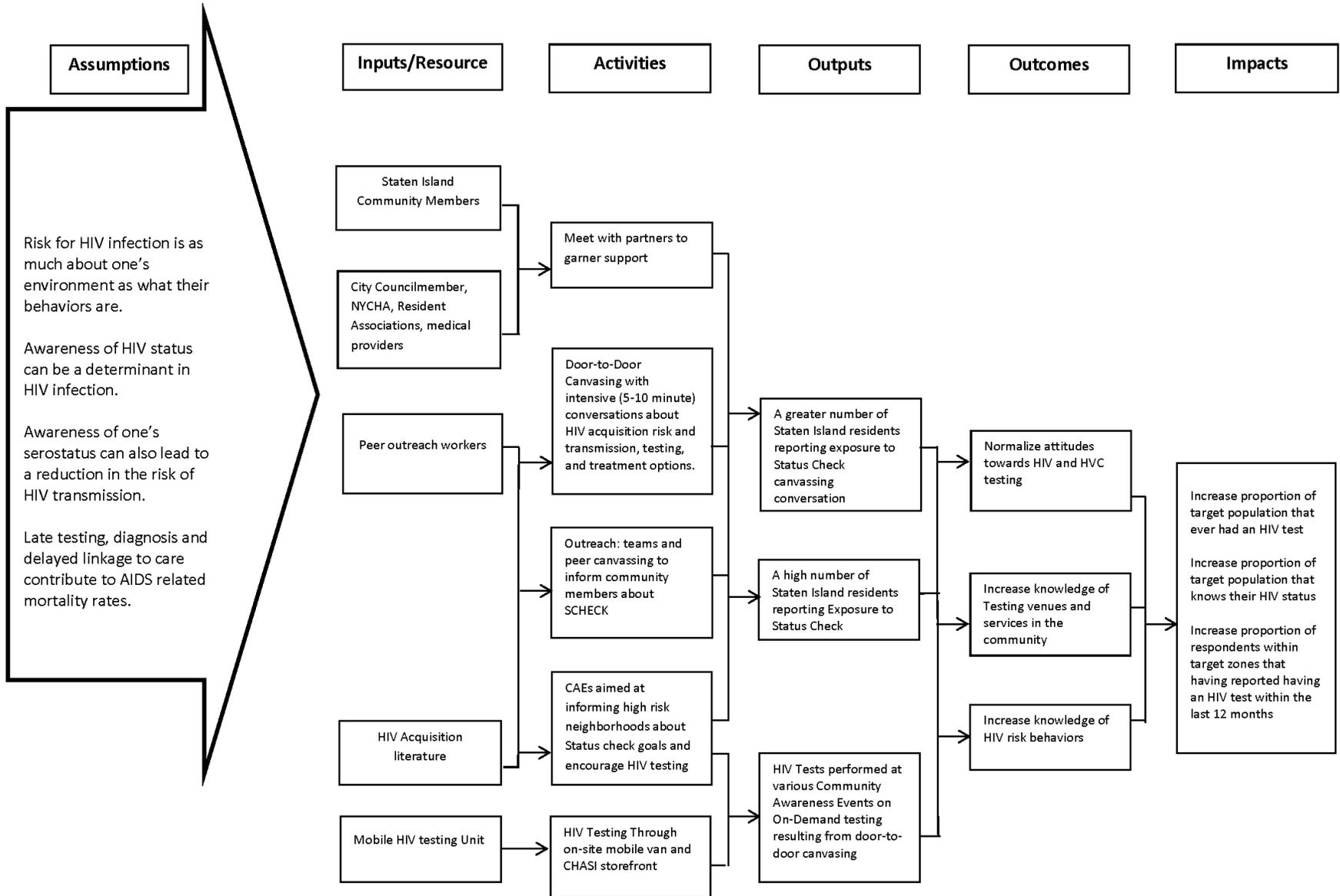


Figure 2. Suggested theoretical model of the Status Check Project.

Target Population

The Status Check Project targeted the population of the Priority Area 1 communities of Staten Island ages 18 to 64. A Priority 1 Area community is defined as a community having a high prevalence of HIV, a high frequency or proportion of concurrent HIV/AIDS diagnosis, and a high frequency and population-based rate of new HIV diagnosis, or a high age-adjusted death rate among people living with HIV from 2006-2010 (Public Health Solutions, 2012). As reported earlier, Staten Island the Priority 1 Area communities of Staten Island include St. George, Stapleton, and Port Richmond. Port Richmond encompasses West Brighton and Mariners Harbor, all of which are low income and high HIV seroprevalence communities. CHASI directed its outreach at 10 specific zones within those Priority 1 areas that included four New York City Housing Authority (NYCHA) developments, one Section 8 complex, and five residential and business areas surrounding the residential complexes.

The proposed theoretical framework and implementation of Status Check Project activities are grounded in the SCT. SCT states that a person's behavior is a product of the interaction between the individual and their environment (McAlister, Perry, & Parcel, 2008). The following table (Table 6.) maps the SCT constructs informing the project that were covered previously, major Status Check Project activities, desired outcomes, and behavioral impacts (see Figure 1.). What follows is description of the Status Check Project activities.

Mapping of SCT Constructs and Implementation Activities

| SCT Construct | Status Check Project Major Activity | Desired Output | Desired Outcome | Behavior (Impacts) |
|--|--|--|--|---|
| Psychological determinants of behavior & Observational Learning | Community Awareness Events | Increase awareness of the Status | Increase awareness of HIV risk behaviors. Increase awareness of testing venues. | Increase proportion of target population that: 1) Had an HIV test 2) Knows their HIV status 3) Had an HIV test within the last 12 months |
| Psychological determinants of behavior | Street-level and Residence level outreach intensive one-on-one conversations | Awareness of Status Check Project | Normalize attitudes towards HIV testing. Increase awareness of testing venues. Increase awareness of HIV risk behaviors. | |
| Environmental determinants of behavior | HIV testing on MHUs | On-demand HIV testing in neighborhood, during CAEs, and HIV testing events | Normalize attitudes towards HIV testing. | |

Figure 3. Mapping of Status Check Project implementation and its behavior change theory and its corresponding SCT construct.

Program Implementation: Activities

Community buy-in. The first phase of this project was to gain buy-in from stakeholders in order to garner support and participation in program events and assist in developing the program's outreach plan. CHASI gathered local leaders including New York City Council member Debi Rose, presidents and members of local resident associations, and religious leaders (CHASI, 2013). The Status Check Project implementation strategy includes two main components: Community Awareness Events (CAEs) and Canvassing. The following describes each component in greater detail.

Community awareness events. CAEs are intended to announce the commencement of Status Check Project activities in a particular area. Each event is preceded by a marketing campaign, which includes meetings with community leaders and flyer distribution at community meeting places. The Status Check Project begins their work in each targeted neighborhood at that neighborhood's NYCHA housing building. Building presidents are approached and asked to support program activities in their housing complex. A block party is held in the common area of the building complex on a weekend day. Status Check engages with other community partners to host this event and announces to attendees the goals of the project. HIV testing is provided on site and community residents are encouraged to find out their status. CAEs occur every two-to-three months and are followed up by two-month long periods of intensive street outreach targeted at saturating the neighborhood with materials and testing information.

Outreach and engagement strategies.

Implementation. Status Check implemented two types of outreach immediately following the CAEs. The first type was street-level and consisted of staff and trained peers disseminating Status Check Project literature in both English and Spanish, distributing condoms and attempting to engage community members in intensive conversations regarding HIV, risk reduction, and testing. This work was scheduled to occur twice per week for a total of ten hours. The second type of outreach was residence-level outreach. This type of outreach was a door-to-door strategy that began within the NYCHA residences and then moved outwards to other homes in the targeted neighborhoods. The outreach teams utilized by CHASI typically consisted of four female peers led by a Status Check

Project coordinator. A mobile health unit (MHU) accompanied the outreach teams and was utilized as the testing and services venue.

The Status Check Project initiated their street outreach by stationing the MHU in the neighborhood where the most recent CAE occurred. That location served as the starting point from which the staff and peers began their outreach process. The process consisted of the outreach team canvassing street-by-street (street level outreach) and door-to-door (residence-level outreach) within a three-block radius of the MHU. The streets were mapped and sectioned off into the three-block units, which comprised their canvassing radius. The outreach team moved along these routes providing education and services. If an outreach team member during street level outreach encountered a community member that appeared interested in a discussion that went beyond the immediate availability of services on the MHU, or if they encountered someone that demonstrated openness to a deeper discussion during the residence-level outreach, then the outreach staff were instructed to engage the community member in an intensive conversation regarding HIV education. Further information regarding the intensive conversations is described in the following section. The MHU was moved to a different location within the neighborhood once the three-block radius had been completely canvassed. The outreach team then repeated this process until they covered the targeted neighborhood. The MHU could be moved daily from one three-block radius but it took two to three months to completely leave a neighborhood.

CHASI staff and peers attempted to engage community members in a 5-10 minute intensive conversation regarding a number of topics including the low

rate of HIV and STI testing in Staten Island, the high rate and impact of late diagnosis, the benefits of early testing and diagnosis, HIV transmission, and risk reduction. Additionally, they diffused de-stigmatizing messages expressing that HIV is a community phenomenon and not unique to gay men or drug users and that getting tested annually for HIV is as normal as receiving a blood pressure checkup.

MHU and community-based CHASI site testing. CHASI anticipated that a subset of community members that were engaged in an intensive conversation with an outreach team member either in their home or the street would be candidates for on-demand HIV testing on the MHU. Those who wanted to be tested but exhibited hesitation due to concerns with confidentiality, felt stigmatized for testing on the MHU or who reported not having time, were scheduled for a test at one of CHASI's community-based sites. In order to encourage testing, CHASI offered a \$10 voucher to a major supermarket in the Staten Island area to those testing for the first time.

CHAPTER 3: COMMUNITY-LEVEL SURVEY METHODOLOGY

This thesis was community-level surveying done to assess the reach of the program and to gather information regarding testing behaviors and attitudes towards HIV in their target neighborhoods after 1 year of program implementation. For the purposes of this thesis, the calendar year began in June 2013 and ended in June 2014. The CAEs for canvassed areas described in this document occurred in 2013, specifically to the two CAEs occurred on December 2013 at the Stapleton NYCHA and March 2014 in Port Richmond at the Richmond Terrace NYCHA.

The data collected will inform future programmatic activities and further refine the larger evaluation of the program. What follows is a discussion of the survey methodology utilized to describe the Status Check Project. The section defines the methods of data collection, the procedure utilized to collect the data, and a description of the analysis process.

Data Collection Instrument and Procedures

The community-level surveying utilized a cross-sectional design with no comparison group. The study recruited respondents via street-intercepts in targeted neighborhoods. Time-space sampling methodology was utilized for systematic respondent recruitment (Muhib, Lin, Stueve, Miller, Wesley, et al., 2001). Time-space sampling techniques seek to recruit respondents in locations and times where they would be reasonably expected to gather. At year one, data were collected to assess reach of the program, awareness of HIV testing services and HIV testing behavior in the target neighborhoods.

Engaging the stakeholders. Stakeholder engagement in the planning and implementation of this community-level survey was important because it ensured that the right questions are identified and it could make it more likely that they implement any recommendation that have been made. CHASI was engaged during the planning of the community-level survey, during the instrument development phase, and the implementation of the survey. During the planning and instrument development phase, the NYCDOHMH held multiple meetings with senior-level staff and peers to identify programmatic elements that could be measured. Peers are the ground level staff that perform the outreach of Status Check Project. Additionally, both levels of staff were asked to describe the program and what core features were key to the implementation of Status Check. For example, one of the central components that was identified was the intensive one-on-one conversations with community members that occurred during outreach. Results of these discussions informed the development of the programmatic questions specific to the Status Check Project. The discussions also provided insight into the level of understanding held by the different staff regarding the project's inputs, activities, and outputs.

Instrument. A structured survey instrument (see Appendix) consisting of 30 questions was developed and included a standard set of questions that are utilized to evaluate across programs that are part of the portfolio of HIV prevention programs funded by the NYCDOHMH. The development of the instrument was an iterative process. Although the instrument included a standardized set of questions, CHASI was engaged during its development to identify what programmatic elements could be measured to describe the Status

Check Project. They were also utilized as expert reviewers of the instrument and were asked to determine the feasibility of implementing the study, clarity of the questions, and if the programmatic measures as written would capture the information they desired.

The final survey instrument was programmed into computer tablet device utilizing Pendragon survey software (2007) and later Survey Monkey software (2015). The instrument was tested utilizing the electronic collection method to ensure its clarity and brevity. The follow section describes the major measures included in the instrument and will identify the specific items related to each measure.

Measures. The measures in this instrument were utilized to describe the major activities and outputs of the Status Check Project as defined in the theoretical framework. Measures included in the survey were: 1) demographics; 2) HIV status; 3) awareness of HIV testing services; and 4) awareness of the Status Check Project.

Demographics. This domain sought information regarding age (item #4); ZIP code (item #6); neighborhood (item # 8); gender (item# 9); race or ethnic group (item #10); country of origin (items #11 & #12); relationship status (item #32); and highest level of education completed (item #33).

HIV testing behavior. SCT Construct: Psychological determinants of behavior (Self-Evaluative Outcomes) and Observational learning. SCT states that behaviors such as testing behavior can be positively impacted through observational learning resulting in an increase in HIV testing by decreasing the fear and stigma related it. Therefore, this domain seeks to describe the HIV

testing behaviors of the respondents. Respondents were asked if they ever had an HIV test (item #13); if they had been tested, they were asked when their most recent test was (item #15); and if they had not been tested, they were asked what where the reasons were (item #14).

Attitudes towards HIV. SCT Construct: Self-Evaluative Outcomes.

Respondents were asked how important an issue they felt HIV is in their community (item #18); their own personal level of concern for risk of infection (item #19); and importance of HIV testing in their community (item #20).

Awareness of HIV testing services. SCT Construct: Environmental Determinants. This domain looked at the respondent's awareness of HIV testing services. The SCT construct environmental determinants states that method to shift behavior through an environmental modification is to utilize the concept of facilitation, or empowerment via the provision of resources that assist the behavior adaptation. Therefore, this domain sought to describe the level of effort in finding a location for HIV testing (item #16) and the ability to name a testing location in the neighborhood where they are being surveyed (item #17).

Awareness of Status Check Project. This domain sought to measure the extent of engagement Status Check may have had during the implementation of the Status Check Project. It asks if anyone has ever engaged the respondent in their homes in a conversation or has the respondent every received materials around HIV prevention (item #21 & #22); has the respondent been engaged on the street (item #22) and the location of the street conversation (item #23); does the respondent believe that they made any changes in behavior as a result of the

interactions (item# 24 & 28); has the respondent ever seen the Status Check logo (item#25), and the location of where the logo was seen (item #26 & 27).

Procedure. The survey team consisted of one-field supervisor and three to four surveyors. The field supervisor was a CHASI senior staff member. Both the surveyors and the field supervisors received training from the NYCDOHMH. Training for the surveyors comprised of an in-person PowerPoint presentation covering background on the purpose of the survey, basic survey methodology, strategies for successful intercept surveying, and safety while surveying. Training for the field supervisors also occurred in person and comprised of background on the purpose for the interview, and responsibilities and expectations as it pertains to the following: appropriate respondent recruitment, respondent's confidentiality, and safety concerns of intercept surveying, and strategies for interacting with community members. A NYCDOHMH staff member was the field supervisor during outings that could not be staffed by CHASI.

The survey was interviewer administered and took 3-5 minutes to complete. No incentives were offered to participate in the survey. Surveyors were paired at the busiest entrances to the New York City Housing Association development (NYCHA). A NYCHA development is a cluster of multi-floor apartment buildings (New York City Department of Housing, 2015). An intercept line was designated for each interviewer by the field supervisor prior to beginning data collection. All individuals who crossed the interviewer's intercept line had an equal probability of being recruited. When possible, the surveyor approached every person who crossed the line. If the number of individuals crossing the intercept line exceeded surveyor capacity, the site-supervisor was directed to

instruct the surveyors to approach systematically in order to reduce sampling bias. For instance, if the surveyor was posted in a high-foot traffic location that resulted in multiple individuals crossing their intercept line in rapid succession, a possible approach was to intercept every third person, or every person coming in one direction. Once a respondent was approached, they were given a brief synopsis of the survey and asked if they wanted to participate. All respondents were provided informed consent prior to participation.

A challenge of street intercept surveys is the level of pedestrian foot traffic, which may facilitate or impede the success of implementing the survey. In order to ensure a high intercept frequency, field supervisors were instructed to move the surveyors to a different location if there was not enough foot traffic to support the surveying. Each survey outing was scheduled to occur weekday afternoons as a four-hour collection block.

Recruitment

Eligibility criteria. Respondents were eligible to participate in the survey if they were residents of Staten Island and between 18 and 64 years of age. Residency was determined by a self-reported ZIP code or name of neighborhood residence in Staten Island, NY. Staten Island neighborhoods and ZIP codes can be found in the figure 2.

| | | |
|----------------------|----------------------------|-------------------------------------|
| Staten Island | • Port Richmond | • 10302, 10303, 10310 |
| | • South Shore | • 10306, 10307, 10308, 10309, 10312 |
| | • Stapleton and St. George | • 10301, 10304, 10305 |
| | • Mid-Island | • 10314 |

Figure 3. Staten Island Zip codes. Adapted from NYCDOHM United Hospital Codes (2015).

Site selection. Canvassed areas were defined as locations where Status Check performed canvassing activities. Once the areas were identified, Status Check staff were engaged to assist in determining optimal days and times and specific locations for data collection. There are currently 328 developments containing 2,553 residential buildings throughout NYC (New York City Department of Housing, 2015). Staten Island currently has 10 developments with a total of 4,502 apartments.

Two NYCHA developments were identified as locations where CHASI had implemented the Status Check Project, Stapleton NYCHA located in the 10304 Zip code and Richmond Terrace NYCHA located in 10301 Zip code in 2013-14. The community-level survey was implemented from July through September 2014. The Stapleton NYCHA development is an eight-story building housing a population of 1817 residents in 693 apartments (New York City Department of Housing, 2010). The Richmond Terrace development is slightly smaller, housing 1296 residents in 488 apartments.

A challenge of street-intercept surveying is that the volume of pedestrian traffic needed to support implementing this type of survey cannot be controlled for. In anticipation of this challenge, a mapping strategy was used to identify specific posting positions for data collection. The purpose of mapping prior to the data collection outings was to determine posting locations that would ensure the highest numbers of respondent contacts. Indicators for contact included entrance locations to the housing structure, proximity to major public transportation stops, proximity to major shopping areas, streets most likely to feed into the NYCHA buildings from the shopping and transit stops. An

alternative list of surveying sites was also created utilizing this same mapping strategy. Once the sites were selected, the list was shared with CHASI to determine their feasibility for surveying and capturing their target population.

Analysis

Descriptive statistics were calculated based on the sample of 192 respondents of areas where the Status Check Project was implemented. The data was visually inspected and cleaned. Quantitative data analysis provided frequencies and percentages of demographics, HIV testing, attitudes towards HIV, awareness of testing locations in the community, and awareness of the Status Check Project. Data analysis was performed utilizing SAS Enterprise Guide (2009). In addition to reporting the frequencies and percentages of the previously mentioned measure, a summary of specific canvassing data will also be provided. The canvassing data is reported by CHASI to the NYCDOHMH on a monthly basis. The outreach data reported included HIV testing events, number tested CAEs, number of contacts. The variable *number of contacts* was defined as number of persons that were approached by Status Check Project staff during outreach, testing events, and CAEs. Number Tested is Number of persons tested for HIV. The calendar year for implementation and reporting began in June 2013 and ended in June 2014.

Chapter 4: Community-Level Survey Results

As described in the Methods section, respondents were recruited using street-intercept survey methodology in Stapleton NYCHA and Richmond Terrace NYCHA, two neighborhoods canvassed by the Status Check Project in 2013-14.

Demographics

As can be seen in Table 1, there were a total of 192 respondents. Forty-four percent of respondents in canvassed areas identified as female and 56% identified as male. The majority of respondents (63%) were Black followed by Hispanic (33%). According the U.S. Census Bureau (2010) 49% of residents in Richmond Terrace were male, 24% were Black and 25% Hispanic. The demographics were similar in the Stapleton Area where males comprise 48% of the population and Black and Hispanics made up 29% and 24%, respectively. Staten Island's overall racial/ethnic make-up is 72.9% white, 10.6% Black, and 17.3% Hispanic (U.S. Census Bureau, 2010).

HIV status

Results for the HIV status domain can be found in Table 2. Overall, 85% of respondents had ever been tested for HIV and 63% reported had been tested within the last 12 months. The majority of respondents (86%) reported that they felt HIV is a Very Important issue in their community and also reporting being concerned about their own risk of HIV infection (71%). Sixty-four percent of respondents reported that it was Extremely Important for people in their neighborhood to get tested for HIV.

Awareness of HIV testing services

Result of awareness of testing services can be found in Table 3. Overall, most (76%) responded that it was not difficult to get tested and reported being able to name a location to get tested for HIV (83%).

Awareness of Status Check Project

Sixteen percent of respondents reporting having seen the Status Check logo. Twelve percent of respondents reported being approached at their place of residence or on the street and engaged in a conversation regarding HIV (Table 4).

Status Check Project Canvassing. During 2013-14, the Status Check Project reported hosting five CAEs and 172 testing events. The project reported that a total of 874 residents tested for HIV at these events. Status Check Project staff approached over 10,000 community members during outreach, testing events, and CAEs. In 2013, the Status Check Project hosted one CAE at the Stapleton NYHCA and the second CAE at the Richmond Terrace NYCHA. They also conducted 12 HIV testing events with a total of 96 residents tested for HIV. Status Check Project staff approached over 2800 community members during outreach, testing events and CAEs in these two canvassed areas.

Table 1. Characteristics of Status Check Project canvassed area respondents.

| Characteristics | n | % | | | |
|---|----------|-------------|------------|------------|-----------|
| GENDER | | | | | |
| Female | 85 | 44.3 | | | |
| Male | 107 | 55.7 | | | |
| Age Group | | | | | |
| 18 to 24 | 71 | 36.6 | | | |
| 25 to 29 | 27 | 13.9 | | | |
| 30 to 34 | 22 | 11.3 | | | |
| 35 to 39 | 21 | 10.8 | | | |
| 40 to 44 | 17 | 8.8 | | | |
| 45 to 49 | 12 | 6.2 | | | |
| 50 to 64 | 19 | 9.8 | | | |
| Age | n | Mean | Min | Max | SD |
| | 192 | 32.2 | 18 | 63 | 11.7 |
| Race/Ethnicity | | | | | |
| Black | 120 | 62.8 | | | |
| Hispanic | 62 | 32.5 | | | |
| Other | 5 | 2.6 | | | |
| White | 4 | 2.1 | | | |
| Highest Level of Education | | | | | |
| Less than a high school diploma | 20 | 10.6 | | | |
| High School diploma or GED | 66 | 35.1 | | | |
| Some college or technical school | 29 | 15.4 | | | |
| College or greater | 73 | 38.8 | | | |
| Marital Status | | | | | |
| Married/partnered | 57 | 30.2 | | | |
| Separated | 9 | 4.8 | | | |
| Single, never married | 123 | 65.1 | | | |
| Notes. Min= Minimum age in years. Max= Maximum age in years. SD= Standard Deviation in years. Age group and Age are in years. | | | | | |

Table 2. Awareness of HIV status and personal and community-level concern of HIV risk of infection

| | n | % |
|---|----------|----------|
| Sex within the last 12 months | | |
| No | 39 | 20.6 |
| Yes | 150 | 79.4 |
| Ever tested for HIV | | |
| No | 23 | 11.9 |
| Yes | 165 | 85.1 |
| Most recent HIV test | | |
| Never been tested | 23 | 12.2 |
| Tested more than one year ago | 46 | 24.5 |
| Tested within the last 12 months | 119 | 63.3 |
| Is HIV infection an concern in community | | |
| Do not know/Refuse to Answer | 10 | 5.1 |
| Neither Important/Unimportant | 13 | 6.9 |
| Very Important | 162 | 85.7 |
| Very Unimportant | 4 | 2.12 |
| Concern of personal risk of HIV infection | | |
| Concerned | 133 | 70.7 |
| Not concerned | 55 | 29.3 |
| Importance of HIV testing in the community | | |
| Extremely Important | 121 | 64.0 |
| Very important | 60 | 31.8 |
| Somewhat important | 4 | 2.1 |
| Somewhat unimportant | 1 | 0.5 |
| Not important at all | 3 | 1.6 |

Table 3. Awareness of HIV testing services in the respondent's neighborhood.

| | n | % |
|--|----------|----------|
| Ease of being tested for HIV | | |
| Difficult | 25 | 13.2 |
| I don't know | 21 | 11.1 |
| Not difficult | 143 | 75.7 |
| Ability to name HIV testing locations | | |
| No | 6 | 1.6 |
| Yes | 168 | 83.3 |

Table 4. Awareness of CHASI and the Status Check Project.

| | n | % |
|---|----------|----------|
| Conversations with Status Check Project Peers* | | |
| No | 167 | 88.4 |
| Yes | 22 | 11.6 |
| Exposure to CHASI Logo | | |
| No | 158 | 83.6 |
| Yes | 31 | 16.4 |
| Physical Location of CHASI Logo * | | |
| CHASI mobile health unit | 2 | 6.5 |
| Community-based Organization | 5 | 16.1 |
| NYCHA Housing Building | 1 | 3.2 |
| Outreach worker approached me on the street | 0 | 0 |
| Somewhere else | 22 | 71.0 |
| Store front window | 1 | 3.2 |

*Notes. *Conversations with Status Check* peers includes both street-level conversations and conversations with Status Check Project peers in the residences of respondents. *Physical Location of CHASI logo* was a question asked to those respondents that answered 'Yes' to having seen the CHASI logo.

Chapter 5 Discussion

The aim of this thesis is to describe the Status Check Project following its first year of implementation in the Priority Area 1 communities of Staten Island. This community-level survey used a cross-sectional design, recruiting survey respondents through street-intercepts within two neighborhoods canvassed by the Status Check Project. The data, collected between July and September 2014, represent data that was utilized to describe the Status Check Project, inform recommendations for improvement and suggest a framework for future evaluations. The results of the community survey will be used to inform evaluation and to compare back to in years 2 and 3 to look at change over time in their target areas. What follows is a discussion of the project as it pertains the suggested theoretical framework, limitations of the data collection, implications of the results, and recommendations.

Awareness of HIV status and testing services

The primary aim of the Status Check Project is to increase the number of Staten Island residents who are aware of their HIV status through increased testing and increased awareness of testing services. HIV testing and knowledge of one's status is critical to stopping the spread of the HIV. Frequent HIV testing, especially among high-risk populations, leads to faster detection of HIV infection and results in primary and secondary prevention (Heffelfinger et al., 2008). It can also serve as a net to diagnose those that may have tested within the window period for when and HIV test may not be able to detect infection and they may have resumed high-risk behavior such as condomless sex, but never tested

again. Psychological determinants of behavior states that behaviors such as testing behavior can be positively impacted through a change in the individual's outcome and self-evaluative expectation of the desired behavior. The environment determinants of behavior states that a change in the person's environment is also required in order change an individual's behavior. This can be done through facilitation and empowerment. The Status Check Project attempts to facilitate these changes by provisioning testing resource through the use of an MHU, hosting testing events, and CAEs to educate the public at large.

In July through September 2014, community-level surveying was done to examine the reach of Status Check after its first year of implementation and to provide insight about testing behavior and attitudes towards HIV specifically in the communities in which Status Check is focusing its efforts. These data speak to the current status of program and provide a description of reach their target population within the first year of implementation. Additionally, these data provide feedback that can be used to refine evaluation methods and measures used to monitor program weaknesses and successes.

The results of the measures awareness HIV status and testing locations revealed that 63% of residents from canvassed areas had a previous HIV test that occurred within the past 12 months, and that they reported strong concern for both personal risk of infection and for their community. Respondents also reported that it not difficult to get tested and had to ability to identify locations in their neighborhood.

Awareness of CHASI and the Status Check Project

Central to the Status Check Project was the use of one-on-one conversations regarding HIV awareness and testing. The effect of this activity can be explained by the SCT construct psychological determinants of behavior where the one-on-one conversations regarding HIV awareness and testing should change a person's outcome expectations and self-evaluative outcome expectations of testing and the desire to become aware of the HIV status. Behavioral changes like the ones previously mentioned also work to reduce the other barriers such as stigma and fears associated with awareness of serostatus. These domains sought to measure the extent of engagement Status Check may have had during the implementation of the Status Check Project. Although a larger proportion of residents surveyed reported having been tested for HIV within the last year 63% and a heightened awareness and concern for both their own risk of infection (71%) and that of their community (86%), the survey appeared to reveal low exposure to the project. The majority of respondents reported not being engaged in a conversation with Status Check Project staff (88%) and not being exposed to the logo (84%). It was expected that there would be a greater proportion of respondents reporting having been engaged by CHASI in an intense but short HIV risk conversation considering that the majority of the project implementation revolves around outreach and engaging residents in intensive conversations regarding HIV, risk reduction, and HIV testing.

Limitations

Although street intercept surveys offer a number of advantages including reduced complexity of administration and direct interviewer involvement there

are also a number of disadvantages (Rea & Parker, 2005). Non-sampling bias, which includes interviewer bias, lack of anonymity, and possible surveyor error, can be a major limitation of implementing intercept surveys. Interviewer bias caused by body language, facial expressions or hand gestures could result in responses that are less than objective. Surveyor error could occur when they fail to follow procedures for randomization of intercepting respondents. Social desirability bias, or the tendency of respondents to respond in a manner that is viewed as favorable to the surveyor, may have also been a source of limitation as it can occur when answering questions dealing with personally or socially sensitive content (Lewis-Beck, Bryman, & Liao, 2004). Considering that the survey ask questions regarding HIV testing, respondents may have stated that they had recently tested in order to appear more favorable to the surveyor.

A number of measures were taken in order to mitigate the occurrences of these types of error including 1) training both the surveyors and the field supervisors in techniques for proper face-to-face survey administration; 2) programming the instrument to not allow the surveyor to continue without first responding to the previous question; and 3) piloting the instrument to ensure that the questions are easily understood.

Sampling bias was also another concern when implementing street intercept surveys. Sampling bias may occur when participants in the sample differ from the larger population (Blair, Czaja, & Blair, 2013). Coverage bias, a type of sample bias, can occur if a segment of the target population is not available through the current method of research or if they were excluded from the sample. In this case, it is possible that although the survey captured the

target population as represented by the sample demographics the survey design may not have captured a true representation of individuals impacted by the intervention. Reason for the could include, the time of day the data was collected and surveying relative to implementation of the Status Check Project.

Additionally, there was also a possibility that respondents may have been exposed to other prevention programs in the area resulting in contamination of the sample. The high percentage of respondents reporting an awareness of their HIV serostatus and awareness of HIV testing facilities but the low exposure to the intervention could be attributed to this limitation. Furthermore, not having disaggregated data (by neighborhood, by race, age, and risk group) is another limitation. The survey analysis compared surveillance data on Staten Island's overall testing numbers. The survey data are among a very specific population, therefore, these numbers aren't comparable.

Implications and Recommendations

Although incidence of HIV infection and deaths among persons living with HIV has been decreasing, disparities among those infected continue to persist (NYCDOHMH, 2013a). In order to continue the trend of declining new HIV infections and death related to late diagnosis, we must continue to strive to increase testing and speedy linkage to care. This entails continuous efforts to educate and encourage people to get tested.

Early testing and diagnosis is crucial as it improves health outcomes of individuals living with HIV Staten Island continues to see markedly lower testing rates when compared to the rest of NYC. In 2011, Staten Island reported the fewest number of HIV diagnoses but the highest proportion of concurrent

HIV/AIDS diagnoses (34.9%) when compared to the other NYC boroughs (NYCDOHMH, 2012). It the highest percentage of residents of the five NYC boroughs that have never been tested (55.6%) and low provision of testing as only 18.9% reported being tested in the past 12 months (NYCDOHM, 2013b).

The survey measured HIV testing two ways. The first was by asking if the respondent has ever been tested. The second asked when the most recent test was if they had responded that they had been tested previously. According to the results of this community-level survey, 85% reported having received an HIV at least once. Of those who reported having tested, 63% reported testing within the last 12 months. There are a number of reasons that could account for the differences between Staten Island's borough wide testing data and that of the Status Check Project. As stated previously in the limitations, there was a possibility that respondents may have been exposed to other prevention programs in the area in an apparently higher prevalence of testing in the survey sample. Considering that the target population the survey sample that was drawn is considered high-risk for HIV infection, it is possible that they may have already been exposed to different other programs serving the area and of prevention messaging recommendation for testing. Another possible reason is that the borough wide data is not comparable to the specific population that was surveyed. Borough estimates may also play a role. The borough estimate regarding testing may be incorrect and testing is actually higher than reported for Staten Island. The implication of this possibility is that CHASI's prevention work is not necessary as the testing prevalence is already high. The borough estimate and the estimate from the community-level survey may both be correct. CHASI

may have been effective at reaching community members in their target populations and neighborhoods and engaging them in informative conversations to encouraging testing. Testing could have occurred at any venue. Although one of the activities of the Status Check Project is to facilitate testing by providing resources, their primary aim is to increase testing.

Considering CHASI's goals of increased awareness of HIV infection among priority populations on Staten Island and normalization of attitudes towards HIV testing, it is essential that they increase exposure to the Status Check Project. Currently, exposure to the intervention occurs by way of the CAEs and intensive outreach. Although the CAEs served primarily as one-time announcement of the project in the targeted neighborhoods, they also began exposing residents to the intervention and facilitated peer led outreach.

An integral component of CHASI's Status Check project was their proposed use of brief but intensive conversations that served as the main method of engagement of the target population. The intent of the conversations is to increase awareness of HIV transmission and of reduction methods. CHASI stated that their Status Check engagement conversations were approximately five to ten minutes in length (CHASI, 2013). Considering CHASI's plan to saturate the community with health education and interact with community members through intensive conversations, very few of those surveyed could identify the CHASI logo or report being engaged by Status Check Project staff in an intensive conversation either in their homes or on the street. This could be a due to how the Status Check Project defined saturation of outreach or due to low respondent recall of the logo and conversation.

Recommendations for project enhancement. The following recommendations to enhance Status Check Project activities were identified through analysis the results of this descriptive study.

Adapt the suggested logic model and behavior change theory in order to inform the development of the Status Check Project program theory. The program logic model defines the theory and assumptions of an intervention (W.K. Kellogg Foundation, 2004). It would link the outcomes with Status Check Project activities, providing a roadmap for planning, implementation, and evaluation.

Increased visibility of the Status Check Project via enhanced marketing. Taking a strategic approach to their marketing plan could result in increased visibility of the project. Employing the “four Ps” of marketing is one such approach. The four Ps of marketing are: product, price, place, and promotion (CDC, 2011 & Dickinson, 1995). Product is the good or service that is being provided. In the case of the Status Check Project, the services being provided include: HIV information, HIV testing, and linkage to care. Price refers to the monetary on non-monetary cost the target population. The price to the target population may include the following: time out of their day to attend a CAE or testing event, the time it may take to stop and listen to an intensive conversation, possible stress the may be felt as a result of having an intensive conversation or getting testing. Place refers to the where the service may be obtained. For testing services, this could include CHASI’s MHUs or their stand-alone site. Education services could be rendered at the CAE sites, on the street with a peer. Lastly, promotion refers to any advertising or publicity CHASI may use. Considering the

low awareness of the Status Check logo increased emphasis on promotion is recommended. Utilizing channels like social media to not only advertise upcoming CAEs but also to also continue marketing the project after the CAE has ended could increase awareness of the project. Additionally, it is recommended that attention to branding in regards to making the logo and the messaging more memorable. This could result better retention and facilitate the evaluation process.

Create program metrics for saturation of outreach. Metrics measure what the project is doing and how well it's doing it. The ability to measure saturation is important because it is currently being used as the indicator for moving the project out of the current neighborhood into the next.

Increase the number of conversations and training staff to have them.
Define metric for intensity of the conversation. According to the program description, residents are engaged on the street or at their homes with the intent of having an intense but brief conversation regarding topics related HIV. They are “met” at their level of understanding on the topic. What if the individual is only engaged momentarily (less than two minutes) or for longer than 10 minutes? How do the peers chose what to cover and how to cover it? Conversations with agency staff regarding the content of the intensive conversations, how conversations were delivered, and the length of the conversations revealed that there was a need for defining what an intensive conversation was and how deliver it. Therefore, it is recommended that CHASI create a conversation-training curriculum that will ensure consistent training of peers on the HIV education topics integral to the core goals of the Status Check Project. The curriculum will

also ensure consistent dissemination of specific information across peers and promote increased peer confidence in engaging Staten Island Community member in HIV risk discussions, which may result in a greater number of intensive conversations.

Include an assessment of risk perception prior to HIV testing.

Assessment of perceived risk may be helpful in understanding the effect of these perceptions on a person's self-evaluative outcome expectation of HIV testing. Harlem United (2009), utilized an assessment of perceived risk as part of their testing protocol and found that those who tested positive had indicated the lowest perception of personal risk of HIV infection. Additionally, it may help determine if in-fact, the project is reaching out to the correct population. Therefore, it is recommended that the Status Check Project implement a risk assessment as part of the testing protocol. Specifically, the project would implement it immediately prior to testing. Inclusion of a risk assessment could also inform the development of effective messaging aimed at reducing HIV and HIV testing stigma.

Recommendation for Program Evaluation. The results of this community-level survey have also helped identify recommendations to change the evaluation design.

The recommended development of program theory could be utilized to inform the design of a theory-based evaluation. Theory based evaluation is an approach that requires considerable detail of the program model which is utilized to test the model's theoretical underpinnings (Birckmayer & Weiss, 2000).

Utilizing the proposed Status Check Project logic model could help inform the development of and evaluation plan based on all components of the model.

Create an instrument that can capture risk. Because the Status Check Project sought to change testing behaviors, it was suggested that the Status Check Project create and implement a risk assessment tool as part of its outreach. These risk assessments could be utilized to evaluate program outcomes of HIV testing and test results relative to personal risk acknowledgement.

Conclusion

The purpose of this thesis was to describe the Status Check Project following its first year of implementation in the Priority Area 1 communities of Staten Island. This community-level survey utilized a cross-sectional design, recruiting survey respondents through street-intercepts within two neighborhoods canvassed by the Status Check Project. Data collection commenced in July 2014 and ended September 2014.

In order better describe the project, a theoretical framework grounded in SCT was proposed. In a construct known as reciprocal determinism, SCT posits that a person's behavior is a result between the interplay of their environment, the individual and the behavior (McAlister, Perry, & Parcel, 2008). Three foundational constructs were chosen to frame the activities and the desired behavior changes expected as a result of the Status Check Project activities. Although they are three separate constructs being used to describe how the activities could encourage a change in behavior, they actually complement each other just as the project activities do.

The results of this survey yielded data that was utilized to describe the project after one full year of implementation through the lens of its proposed theoretical framework. The results informed the development of recommendations for programmatic improvement and suggested changes for future evaluations. They will also be used as data to compare back to in years 2 and 3 to look at change over time in the Status Check Project target areas.

Implementation of the suggested recommendations could result in increased exposure to the project, improved project monitoring, and attainment of the project outcomes. Additionally, it will result in better evaluation planning as the planning process will be better informed due to the integration of the suggested logic model. The program should look to update its model to compensate for any changes that the target population may undergo, or changes that the project may undergo. This fluid process of internal monitoring guided by the theoretical framework will ensure that the project can course correct as needed. This ensures that there isn't a gap in implementation and their population is constantly being moved towards the desired outcomes.

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APPENDIX: CHASI Evaluation Survey Instrument

1. Interviewer

- a.
- b.
- c.
- d.
- e.
- f.
- g.

2. Date

3. Hello, my name is ___ and I'm conducting a survey on behalf of the the NYC Dept of Health & Mental Hygiene to understand people's opinions and attitudes about HIV and HIV testing services in this neighborhood. The survey is completely anonymous. I won't ask your name or any other identifying information. The survey should take less than 5 minutes

Are you interested in participating?

- a. Yes
- b. No

4. Great! First a few questions about your background:

How old are you? (Refuse: enter 999; Ineligible:enter 77777)

a. 14-65+

5. (If no answer to previous AGE question)

We are just asking this information to make sure we have talked to enough people in each age group. Can you tell if you are? (ROUS)

- a. <18
- b. 13-24
- c. 25-34
- d. 35-44
- e. 45-54
- f. 55-64
- g. 65+
- h. Refuse to answer

6. What zip code do you live in?

- a. 10301
- b. 10302
- c. 10303

- d. 10304
- e. 10305
- f. 10306
- g. 10307
- h. 10308
- i. 10309
- j. 10310
- k. 10312
- l. 10314
- m. 99999

7. What borough you live in?

- a. Staten Island
- b. NOT Staten Island

8. Can you tell me what neighborhood you live in?

- a. Annadale
- b. Arlington
- c. Bay Terrace
- d. Bulls Head
- e. Chelsea
- f. Clifton
- g. Eltingville
- h. Fox Hills
- i. Grant City
- j. Grashmere
- k. Great Kills
- l. Grymes Hill
- m. Huguenot
- n. Lighthouse Hill
- o. Mariners Harbor
- p. Midland Beach
- q. New Brighton
- r. New Dorp
- s. Oakwood Beach
- t. Oakwood Heights
- u. Port Richmond
- v. Rosebank
- w. Rossville
- x. Shore Acres
- y. Silver Lake
- z. South Beach
- aa. St George
- bb. Stapleton
- cc. Sunnyside
- dd. Todt Hill

- ee. Tottenville
- ff. West Brighton
- gg. Westerleigh
- hh. Other
- ii. 77777

9. What is your sex? Do you consider yourself to be...(ROUS)
- a. Male
 - b. Female
 - c. Transgender (F-M)
 - d. Transgender (M-F)
 - e. Refuse to answer
10. What racial or ethnic group or groups do you consider yourself to be a member of? You can pick more than one. (READ UNTIL STOPPED)
- a. Black/African-American
 - b. Hispanic/ Latino
 - c. White
 - d. Asian /Pacific Islander
 - e. Native Am/Alaskan native
 - f. None/Refuse to answer (something else, please specify)
11. Were you born in the United States? (For the surveyor-this only includes the 50 United States)
- a. Yes
 - b. No
 - c. Not sure/Don't know
 - d. Refuse to answer
12. What country or territory were you born in?
13. Okay great! The first series of questions ask about HIV testing.
Have you ever had an HIV test? (DRRO)
- a. Yes
 - b. No
 - c. Not sure/Refused
14. May I ask why you haven't been tested? (DRRO; CHECK ALL THAT APPLY)
- a. Never offered a test
 - b. Don't know where to go to get tested
 - c. Not convenient/not enough time
 - d. Don't think I am at risk for HIV
 - e. Don't have money/can't afford
 - f. I am not currently having sex
 - g. Always use a condom
 - h. Only have 1 sex partner

- i. Monogamous Relationship
 - j. My partner(s) is HIV-negative
 - k. Afraid of finding out that I'm positive
 - l. My partner wouldn't like it / would be suspicious
 - m. I don't share needles/use drugs
 - n. Don't care/not interested in knowing
 - o. Refuse to answer
 - p. Other
15. When did you get your last HIV test? (DRRO)
- a. Within the last 6 months (0-6 months)
 - b. More than 6 months to a year ago (7-12 months)
 - c. More than 1 year to 2 years ago (13-24 months)
 - d. More than 2 years to 5 years ago (25-60 months)
 - e. More than 5 years ago
 - f. I can't remember
 - g. Refuse to answer
16. If you wanted to get an HIV test in your neighborhood, how easy would it be to find a location to get tested? Would you say... (ROUS)
- a. Very Easy
 - b. Somewhat Easy
 - c. Somewhat Difficult
 - d. Very Difficult
 - e. I Don't Know
 - f. Refuse to answer
17. Can you name a place in this neighborhood where you could go for an HIV test?
18. How important of an issue do you think HIV is in your neighborhood?
- a. Extremely Important
 - b. Very Important
 - c. Somewhat important
 - d. Somewhat unimportant
 - e. Very unimportant
 - f. Not important at all
 - g. I Don't Know
 - h. Refuse to Answer
19. How concerned are you personally about getting HIV? Are you: (READ ALL)
- a. Very concerned
 - b. Somewhat concerned
 - c. Not too concerned
 - d. Not at all concerned
 - e. Already have HIV/AIDS [VOLUNTEERED ONLY]
 - f. Not sure

- g. Refused
20. How important do you think it is for people in your neighborhood to get tested for HIV? Would you say?
- a. Extremely Important
 - b. Very Important
 - c. Somewhat important
 - d. Somewhat unimportant
 - e. Very unimportant
 - f. Not important at all
 - g. I Don't Know
 - h. Refuse to Answer
21. Thank you! The next few questions about conversations you may or may not have engaged in, or material you may or may not have received in the past year. In the past 12 months, has anyone visited your home or apartment to discuss HIV testing or prevention?
- a. Yes
 - b. No
 - c. Not sure/Refused
22. In the past 12 months has anyone stopped you on the street to engage you in a discussion about HIV testing or prevention?
- a. Yes
 - b. No
 - c. Not sure/Refused
23. Do you remember in what neighborhood this discussion took place?
24. We would like to know if you made any changes after conversation or receiving this information. I am going to read you a list of responses. Please let me know if you would say the information led you to do any of the following things. Did you..(Read1-9)
- a. Get tested or HIV
 - b. Talk to friends/family or healthcare provider about HIV services
 - c. Look up HIV Prevention resources
 - d. Visit a local community-based organization
 - e. Ask a partner's HIV status before sex
 - f. Use a condom more often when having sex
 - g. Reduce number of sexual partners
 - h. Abstain from sex
 - i. No, I haven't changed my behavior in any way
 - j. I'm not sure/ I don't remember
 - k. I refuse to answer (Something else, please specify)

25. Have you seen this logo or received any information with this logo in the past 12 months? (Show StatusCheck logo to respondent).
- Yes
 - No
 - Refused
26. Do you remember where you saw it? (DRRO)
- NYCHA Housing Building
 - Outreach worker came to my home
 - CHASI mobile health unit (MHU)
 - Outreach worker approached me on the street
 - Store front window
 - Community-based organization (CBO)
 - Doctors office
 - Somewhere else
27. Do you remember what neighborhood you were in when you received or saw it? (Open text).
28. We would like to know if you made any changes after seeing this logo or receiving this information. I am going to read you a list of responses. Please let me know if you would say the information led you to do any of the following things. Did you.(Read1-9)
- Get tested or HIV
 - Talk to friends/family or healthcare provider about HIV services
 - Look up HIV Prevention resources
 - Visit a local community-based organization
 - Ask a partner's HIV status before sex
 - Use a condom more often when having sex
 - Reduce number of sexual partners
 - Abstain from sex
 - No, I haven't changed my behavior in any way
 - I'm not sure/ I don't remember
 - I refuse to answer (Something else, please specify)
29. Ok now I'm going to ask a few questions about sex, and your sexual behavior in the past year.
Have you had sex in the past 12 months?
- Yes
 - No
 - Refused
30. In the last 12 months, how many sexual partners have you had?
- 1
 - 2
 - 3

- d. 4
- e. 5
- f. 6
- g. 7
- h. 8
- i. 9
- j. 10
- k. >10
- l. Refused/DK

31. The last time you had vaginal or anal sex, did you use a condom? (DRRO)

- a. Yes
- b. No
- c. Not sure
- d. Refused

32. Ok Great! And finally a few questions about your background:

What is your current relationship status? Are you... (ROUS)

- a. Single, never married
- b. Married/partnered
- c. Married, separated
- d. Divorced
- e. Widowed
- f. Refuse to answer

33. And what is the highest level of education you've completed? (DRRO)

- a. Less than a High School diploma
- b. High School diploma or GED
- c. Graduated from technical school/uniformed service academy
- d. Some college or a 2 year degree
- e. 4 year degree (like a Bachelor's)
- f. Graduate degree
- g. Refuse to answer

34. Thank you so much for your time!