Targeting Structural Change for HIV Prevention: A Process and Tool for Community Application

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Abstract

To address the persistent HIV epidemic in the United States, prevention efforts are focusing on social determinants related to HIV risk by targeting systems and structures, such as organizational and institutional policies, practices and programs, and legislative and regulatory approaches to modify features of the environment that influence HIV risk. With limited evidenced-based examples, communities can benefit from strategic planning resources that help them consider developing structural-level changes that target root causes of HIV risk. In this article, we present the Connect to Protect® project that outlines a process and a tool to move from general ideas to specific structural changes. Examples from 14 coalitions are also provided. Using the process and tools presented here can provide a launching pad for other coalitions seeking to build an HIV prevention agenda and for practitioners seeking to incorporate structural changes for community health promotion.

Keywords

structural change and HIV; strategic planning; HIV prevention; coalition capacity building

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INTRODUCTION

There is a growing emphasis by researchers and public health practitioners to employ structural-level changes to address the HIV epidemic (Gupta, Parkhurst, Ogden, Aggleton, & Mahal, 2008; Millett et al., 2010). This approach includes changes to organizational and institutional policies, practices, and programs, as well as legislative and regulatory approaches to modify features of the environment that influence HIV risk (Blankenship, Bray, & Merson, 2000). An important aspect to this approach is using the social-ecologic theory that considers both the proximal risk elements including peers, community, family, and sexual and dating relationships and distal influences such as economics, traditions, norms, and laws, among others. Applying an ecological approach to sexual risk behavior requires an examination of sexual behavior in the context of the surrounding social and physical environment with interventions designed to target multiple levels (DiClemente, Salazar, & Crosby, 2007). Unlike other areas of public health where an ecological approach has been used and structural change has been tested, such as obesity and smoking, there are relatively few examples of structural change interventions for HIV prevention beyond condom distribution and needle exchange programs (Kilgore et al., 2014; Sacks, Swinburn, & Lawrence, 2009). Yet risk for HIV has been inextricably linked to complex and integrated social and structural determinants of health related to poverty, poor housing options, food insecurity, living in unsafe communities, and lack of access to health care and preventive services (Auerbach, Parkhurst, & Caceres, 2011; Buffardi, Thomas, Holmes, & Manhart, 2008; Padian et al., 2011). The need to address HIV among adolescents is acute, with youth aged 13 to 24 years accounting for 26% of all new infections and 87% of all new youth infections occurring among young men who have sex with men (Centers for Disease Control and Prevention, 2012). Furthermore, among homeless youth, HIV prevalence is estimated to be between 2% and 11% (Young & Rice, 2011). Untangling these challenging issues requires community investment to plan for and pursue locally defined structural-level interventions.

In response, Willard, Chutuape, Stines, & Ellen (2012), describes a root cause analysis planning process that was used by 14 community coalitions charged with identifying and achieving structural changes (i.e., new or modified programs, practices, and policies) related to attenuating HIV risk for youth (12-24 years old) in their communities. To date, the coalitions have developed more than 500 structural changes. In this article, we present examples of the structural changes, organized by social/structural determinants (e.g., access to health care, improvements to education and training, access to mental health services, youth development initiatives, and improvements to housing), and target strategies to illustrate the range and diversity of structural change interventions that are feasible within these areas. To assist other communities interested in this planning and intervention approach, we created a “Structural Change Development Tool” that outlines a series of steps and prompting questions to encourage development of an HIV prevention agenda that is inclusive of locally relevant structural changes. We are not aware of any other resource of this nature and believe the tool can help others replicate our process.

BACKGROUND

While there is general consensus that structural interventions are an important strategy to develop with regard to HIV prevention, evidence-based examples are limited. The prevention field has interventions that target behaviors that are proximal to HIV risk (e.g., clean needle and condom policies) and that reach a narrow population (e.g., substance users and commercial sex workers; Golden, Collins, Cunningham, Newman, & Card, 2013). There are a few examples of structural factors distally related to HIV risk, such as efforts to improve housing security associated with improved health outcomes (Kidder et al., 2007) or microloans for young women to stabilize employment and income and reduce risk behaviors such as survival sex (Hardee, Gay, Croce-Galis, & Peltz, 2014). In addition, one study demonstrated that cash payments to Malawian schools girls for school attendance reduced rates of HIV infection (Baird, Garfein, McIntosh, & Ozler, 2012). Prevention in care examples demonstrate the value of improving linkage, engagement, and retention through investment in infrastructure and resources, such as case management services, transportation assistance, and support for mental health and substance abuse (Conviser & Pounds, 2002; Gardner, McLees, Steiner, Del Rio, & Burman, 2011). Expanding large-scale community-based testing and clinic opt-out testing policies is important in identifying new HIV cases and those at risk who may benefit from prevention efforts (Padian et al., 2011). Consistency in insurance coverage affects care retention and adherence to antiretroviral therapy (Riley et al., 2011). School curriculum and prevention education programming have been successful in reducing risk as part of classroom instruction and when targeted for a specific high-risk subpopulation (<http://www.thecommunityguide.org/hiv/riskreduction.html>).

While this work is promising, it may take years to fully understand the impact that structural interventions have on health and behavioral outcomes related to HIV risk; currently condom distribution is the only structural intervention meeting the efficacy criteria for the Centers for Disease Control and Prevention's "High Impact Prevention" list (<http://www.effectiveinterventions.org/en/Home.aspx>). In the short term, strengthening the strategic planning resources that communities use to address social and structural determinants contributing to HIV risk is necessary (Ginter, Duncan, & Capper, 1991). In particular, communities may not currently have a systematic method in place to translate HIV-related problems, such as barriers to medical services, into achievable long-term solutions. Systematic planning and problem solving may be particularly important for racial and ethnic communities that experience disproportionate levels of HIV risk due in part to social, political, and financial inequalities (e.g., high crime rates, limited access to comprehensive health care, low-wage jobs). Adolescents face unique challenges, such as age limitations for self-consent for HIV testing and treatment and parental notification policies (Guttmacher Institute, 2015). Uncovering the underlying drivers of the HIV epidemic is critical to responding effectively. Furthermore, in the absence of an evidence-based menu of structural change interventions to draw on, coalitions operating today can benefit from planning tools that help them assess features of a structural change intervention, such as its scope and sustainability.

Intervention Background: Connect to Protect®

Connect to Protect® (C2P) is a community mobilization study of the Adolescent Medicine Trials Network for HIV/AIDS Interventions (ATN), a National Institutes of Health research network. C2P focuses on local collaboration to identify and bring about structural changes that reduce risk or promote protective factors related to HIV for youth in their local communities. Nine coalitions were launched throughout 2006 and 2007 and are currently operating in the Bronx; Washington, D.C.; Miami; Tampa; Chicago; Los Angeles; Philadelphia; Memphis; and New Orleans. Five coalitions were launched in 2011 and are located in Denver, Houston, Detroit, Boston, and Baltimore. Each site is funded with one staff member to manage the coalition.

C2P was founded on the best practices in the field of community mobilization (Watson-Thompson, Fawcett, & Schultz, 2008) and, to our knowledge, is the only initiative of its kind in focus, scope, and longevity addressing HIV prevention among youth. Various phases of C2P, including theory, coalition formation, structural and organization functioning, and process measures, have been described in detail elsewhere (Chutuaue et al., 2010; Deeds et al., 2008; Geanuracos et al., 2007; Willard et al., 2012; Ziff et al., 2006). Each ATN site's local institutional review board approved or exempted this research.

To initiate their work, coalitions coalesced around a specific geographic region of their city (e.g., zip code or neighborhood) and prioritized a specific subpopulation of focus (e.g., young women who have sex with men) for planning, intervention, and evaluation. Technical assistance, training, and support were provided by a National Coordinating Center, a team with expertise in community development, population-level health, and applied research.

STRATEGIES

Structural Change Development

For C2P, structural changes are defined as new or modified programs, practices, and policies that are logically linkable to HIV and may directly or indirectly affect the individual. Using VMOSA (vision, mission, objectives, strategies, and action steps), each coalition developed its own strategic plan that included structural change objectives written using the "SMART" (specific, measureable, achievable, relevant, and timely) format (Kansas University Work Group, 2003). Emphasis was on local, data-driven problem identification and solutions that encouraged diverse perspectives, relationship building, and collaboration. Structural changes also needed to be self-sustained without support of the coalition; that is, no funding was provided for implementation of structural changes through the C2P project. Project materials, such as a logic model, root cause analysis template, and a sector diversity diagram, were used by all coalitions to facilitate their strategic planning, which was an iterative process revisited at least two times per year (Willard et al., 2012).

Structural change development included the following steps (see Figure 1):

1. Determine who is at risk (i.e., prioritize subpopulation[s]). Examine the context of risks and resources, use local data to describe the landscape.

2. Define the problem: using information and data compiled regarding who is at risk, write a problem statement.
3. Dissect *why* the specific problem is occurring: Using local data, coalition partner knowledge, and a root cause analysis approach, examine issues related to partner concurrency, number of partners, sexual risk network, coinfection incidence, viral load, and condom/clean needle use.
4. Determine *where* intervention(s) can occur (i.e., sectors, structures, and systems to target).
5. Identify *who* can contribute to identifying specific solutions within the structures and systems and has the ability to facilitate change or maneuver resources.
6. Determine *what* specifically can be done (i.e., create a SMART structural change objective).

Technical Assistance

C2P coordinators shared structural changes developed by the coalitions with the National Coordinating Center for verbal and written feedback related to whether the objective (1) met the study's structural change definition and (2) was written using the SMART format. The feedback process developed over time to help shape the coalitions' ideas. Coalitions were asked to consider the role (active or passive) that the population of focus had to assume for the change to be activated. Passive changes require no extraordinary action on the part of the population of focus to receive benefit from the change; in other words, simply passing through the changed environment results in personal benefit (e.g., fluoridated water; immunizations; Williams, 1982). Active changes require engagement in elements of the change by the population to receive benefit (e.g., participating in a workshop; Williams, 1982). Coalitions were asked to consider the duration of the change—that is, was it designed as a periodic event (e.g., workshop) or was the objective ongoing and always in existence once implemented (e.g., changes to insurance eligibility criteria). Scope of the change (i.e., the entity targeted to bring about the new policy or practice) was also a consideration. For example, coalitions were encouraged to target funding agencies (e.g., the Department of Health [DOH], United Way) to require grant stipulations (e.g., staff training, cultural competency requirements, best practice standards) rather than targeting individual organizations. The assessment variables (i.e., reach, scope, duration, role of the population of focus, and potential for sustainability) became a complement to the planning steps by providing a series of prompting questions to assess structural changes (see Figure 2).

Early ideas generated by the coalitions often focused on targeting youth to develop skills, knowledge, behaviors, and attitudes regarding sexual health and HIV risk (e.g., offering workshops, promoting condom distribution, and distributing brochures). Feedback was conveyed to the coalitions through reports, slide presentations, and capacity-building exercises to assist the coalitions in shaping their ideas to promote targeting systems and structures that change the environment rather than relying on the youth to make behavior changes. Furthermore, the coalitions were encouraged to consider structural changes that could be “packaged” to create a complement of practice or policy changes targeting a

particular root cause, a strategy that may ultimately increase the likelihood of having an impact on health outcomes (Frieden, 2010)

Structural Change Objective Examples

Table 1 presents examples of coalitions' structural changes organized by social/structural determinant targeted, strategy employed, and the youth population the change was intended to ultimately influence. To further organize the examples, we used the Institutes of Medicine risk categories of *universal* (i.e., all youth), *selective* (i.e., the subpopulation of youth prioritized by the coalitions), and *indicated* (i.e., in this case, individuals that make up a subpopulation that possess a specific risk factor; Springer & Phillips, 2007).

Overarching techniques employed by coalitions to maximize the potential impact of objectives included packaging related objectives, such as curriculum reform with training and technical assistance for teachers, evaluating new curriculum, and requiring sexual health education as a graduation requirement. While some objectives required intensive advocacy or development investment, such as curriculum reform, coalitions also found success in identifying low-cost opportunities to strengthen the public health infrastructure through, for example, implementing transition care protocols for youth moving to adult care, registering churches as HIV testing sites with the DOH to ensure follow-up and linkage to care (LTC), and altering financial eligibility criteria to address barriers for youth seeking HIV-related medical care.

Key to coalition success was building relationships and formal connections with systems and agencies that had not collaborated on HIV prevention in the past. For example, one coalition engaged Walgreens to partner with the DOH to provide HIV testing and LTC in communities with high HIV and sexually transmitted infection prevalence rates. Engaging faith-based leaders resulted in the formation of consortiums and diocese-level investment with formal partnerships established between the DOH or other HIV-related service providers to formalize testing and LTC procedures in churches. These changes often led to broader church congregation engagement and expansion of efforts related to HIV prevention, such as establishing mental health referral protocols. The following examples demonstrate the strategies coalitions employed to identify relevant root causes and the package of structural changes that met all four criteria: broad scope (e.g., citywide change), ongoing duration (e.g., nested within current function of public services), passive focus (i.e., youth benefited from change without modifying their behavior), and sustainable (i.e., changes were institutionalized or enforceable through city audits).

Connect to Protect Miami—The Miami C2P coalition has developed 30 structural changes with 18 changes focused on improving access to HIV testing and care. Once the coalition determined that men discharged from prison resided in a couple of city zip codes that had high rates of HIV, they held a coalition meeting at the local prison. They worked with prison staff and later with Department of Juvenile Justice officials to establish HIV testing in detention facilities, register the detention facilities as a testing site with the DOH, and ensure transfer of medical records and LTC on discharge. The coalition then expanded their efforts to the foster care system and changed policies to ensure that youth in foster care

had access to confidential HIV testing. This was coupled with collection of data on risk factors and services provided to youth in the foster care system to help identify future intervention opportunities. The coalition expanded their efforts to schools to establish HIV testing in school-based health centers. The coalition also worked with the DOH to require that agencies funded to conduct HIV testing have a formal LTC protocol in place for newly diagnosed individuals. Efforts to improve LTC resulted in elimination of proof of income eligibility requirements for individuals up to 25 years of age.

Connect to Protect Tampa—The Tampa C2P coalition has developed 66 structural changes. During the assessment phase, the coalition determined that age-discordant relationships between school-aged girls and older men were pervasive and resulted in sexual abuse and the exchange of sex for money. As part of the root cause analysis process, the coalition determined that the older men were often providing family financial support and that reporting the abuse often resulted in loss of rent and money and in eventual eviction. The coalition contacted the Director of Safety at the Tampa Housing Authority, property managers, and residents to further dissect the problem and develop a strategic approach. The primary strategy was to link two systems that ordinarily would not work together, the Tampa Housing Authority and the Tampa Police Department, to create infrastructure within residential communities. The plan involved establishing a Neighborhood Watch program at community housing sites to train members to recognize signs of potential sexual abuse and how to seek help for the girls and their families. Developing a culture of no tolerance for sexual abuse was a key element of their plan.

A secondary strategy was to strengthen the infrastructure and resources in the broader community to help support the changes occurring within the residential communities. The coalition did this by engaging the City of Tampa and several social service agencies. Changes included requiring all City of Tampa-funded youth-serving programs to train staff and volunteers to prevent, identify, and link child sexual abuse cases to appropriate services. They also worked with a local service agency to create workshops for young women around dating, domestic violence, and risks associated with age discordant relationships. In total, four government agencies and several social service agencies were engaged to achieve a package of five structural changes to address this issue.

Connect to Protect Washington, D.C.—The Washington, D.C., C2P coalition has developed 30 structural changes with five changes focused on addressing homelessness and youth in their city by creating new or modified policies embedded within the ongoing procedures of the city infrastructure. The coalition determined that there was a high rate of homelessness among sexual minority youth and low levels of cultural competency among homeless service providers to effectively support the youth. In response, the coalition worked closely with city agencies that provide funding for homeless shelters and group homes serving youth to require that all grantees adhere to a list of cultural competency best practices prior to receiving funding. In addition, a companion objective required that all Department of Human Service site monitors be trained in cultural competency standards and that the Department include in its grantee site visits a competency check list component. Moreover, new practices were put in place at shelters serving youth to ensure that youth

leaving a shelter were linked with agencies in the community that provided case management services, including job training.

DISCUSSION

This article outlines strategies and a process for communities to undergo when considering identifying appropriate structural changes to combat the HIV epidemic at a local, community level. It also presents a tool for strategic planning and examples of structural changes based on the C2P model. This tool enhances the systems and strategic thinking, shared vision, and data-driven decision making of other strategic planning models such as VMOSA and Mobilizing for Action Through Planning and Partnership (Kansas University Work Group, 2003; Lenihan, 2005). Specifically, the tool offers detailed steps and questions that promote dissecting individual-level risk through root cause analysis followed by steps to develop structural-level problem solving emphasizing four key characteristics of changes: reach, active versus passive engagement of the population of focus, duration, and scope. Using the steps outlined in the tool encourages diverse perspectives and innovative, broad-based problem solving that can assist communities in shaping ideas that may not initially rise to the level of a structural change. In many cases, the C2P coalitions' dissection of a local problem and using VMOSA led first to changes that targeted individual-level skills and behavior. Through prompting and reflection on underlying circumstances and issues, and using the questions, coalitions were able to shape their ideas to target providers, teachers, parents, structures, and systems (e.g., clinics, school systems, churches, and government agencies) to enact practice and policy changes ultimately changing the environment.

As the coalitions' capacities developed to consider structures and systems to target, they developed many structural changes that targeted improving access to health care and education/training. This is likely because there are many structures, systems, routinized operations, procedures, and policies in which to intervene, creating a rich environment for opportunity and improvement (Gardner et al., 2011; Padian et al., 2011). In contrast, there were fewer changes addressing issues such as mental health and economics. This may be due in part to coalitions not having clear targets (i.e., systems and structures). Strategic planning tools in these areas may need to develop more in order to highlight relevant distal factors and causal links that can lead to opportunities for intervention. Additionally, the coalition makeup may have influenced focus on improving access to health care because members knew where and how to intervene. Expanding coalition makeup to include expertise related to mental health and economics along with information and data to support strategic planning in these areas may further enhance these efforts. There are other structural factors notably absent from the coalitions' strategic plans, such as addressing substance abuse. This is likely due to the issue not rising as a priority given other structural factors affecting the populations of focus.

Changes that resulted in new or modified protocols and procedures (e.g., formal, written policies, and plans to transition youth to adult care) that align with best practices are low-/no-cost, are reasonably quick to accomplish, and have potential for great impact. Tying these changes to local data and needs enhances acceptability and increases chances for quality implementation. Evaluation of structural changes is essential to realizing their full

potential. Strategic planning that hinges on examining fundamental causes of risk and helps communities deeply analyze problems to develop targeted, effective, and meaningful solutions is needed (Auerbach et al., 2011; Phelan, Link, & Tehranifar, 2010; Willard et al., 2012). Furthermore, the strategic planning process requires a diversity of individuals to move the group from proximal to distal factors, such as housing, economic security, access to mental health, and addressing substance use, that contribute to HIV risk.

CONCLUSION

No single structural change will make the difference in communities' HIV prevention efforts; however, by developing a complementary package of structural changes, planners can begin to penetrate social and structural factors contributing to their local HIV risk. Using the process and tools presented here can provide a launching pad for other coalitions seeking to build an HIV prevention agenda and for practitioners seeking to incorporate structural change as a community health strategy. In addition, the tool can assist with the adaptation of structural change ideas by encouraging communities to consider their focus, priorities, reach, and best chances for a sustainable intervention. While the premise for this work has been youth focused, the process and tools presented here are adaptable to other populations and communities.

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Community Assessment and Planning Steps	Goals	Examples of outcomes
Determining the risks	<ul style="list-style-type: none"> Assess who is at risk by examining the context of risk and resource availability Utilize existing data such as Department of Health (DOH) surveillance data, reports, and white papers to describe the landscape of risk and prioritized populations. 	<ul style="list-style-type: none"> Testing availability Linkage to care (LTC) rates Housing/shelter access for youth Comprehensive sexual health education
Determining the problem	<ul style="list-style-type: none"> Write a problem statement 	<ul style="list-style-type: none"> 45% of youth with new HIV diagnosis are not in care
Determining the root cause	<ul style="list-style-type: none"> Conduct a root cause analysis to uncover fundamental contextual factors, asking why a problem exists 3 – 5 layers deep 	<ul style="list-style-type: none"> Youth are referred for care upon diagnosis but encounter several barriers Ryan White identification and proof of financial eligibility are prohibitive for youth
Determining the influence or place of change	<ul style="list-style-type: none"> Identify appropriate structures, systems, and organizations that have influence or are related to the root causes 	<ul style="list-style-type: none"> Ryan White Admin. Local legislature Department of Health Care networks
Determining who will have influence	<ul style="list-style-type: none"> Identify and engage key stakeholders that have influence within target systems 	<ul style="list-style-type: none"> Health care providers Local legislators Administrators
Determining changes	<ul style="list-style-type: none"> Develop structural changes that meet definition Consider opportunities for a package of changes 	<ul style="list-style-type: none"> Changes in referral protocols for LTC Changes in identification and eligibility requirements

FIGURE 1.
Structural Change Development Tool

Assessment Variable	Description/Prompting Questions
Reach	Which population is ultimately the focus of the structural change (i.e., universal, selected, or indicated)?
Scope	What type of entity is making the change? <ol style="list-style-type: none"> 1. Organization, such as a CBO or a charter school resulting in change(s) that impact only those who come in contact with that organization; or 2. System, such as government agencies (e.g., DOH or Department of Education), the insurance industry, local legislation that, when the change is enacted, has broad ramification with implications for all.
Duration	Is the change ongoing; that is, once enacted is always in existence (e.g., insurance eligibility requirements; new streetlights). Or is the change occurring intermittent or one time (e.g., workshops; health fair)?
Passive versus active engagement of the population of focus	Does the population of focus have to take action to receive benefit from the change (e.g., increase availability of condoms and clean needles)? Or, does the change result in a change to the environment that the population of focus benefits from simply by passing through that environment? For example, elimination of financial eligibility criteria for minors accessing confidential health care; cultural competency requirements and audits for DOH funded service providers.
Sustainability	Is the change enforceable; that is, is there a law, monitoring board, or governing body that provides a system of checks and balances to see that the change is implemented? For example, the United Way or the DOH require cultural competency best practices for funding to serve sexual minority youth. Annual audits are instituted to ensure standards are met.

FIGURE 2.
Structural Change Assessment

Table 1

Strategies and Structural Change Examples

Strategy	Examples
Access to health care	
Indicated population	
Improve linkage to care (LTC) for individuals with positive HIV test	<i>New care protocols:</i> University health clinics, private physicians, emergency departments formalize protocols with Department of Health (DOH) for LTC; county-/citywide standards enacted for case management; formalized referral procedures using youth specialist; DOH requires grantees to adopt best practices for LTC; juvenile services establish formal LTC procedures; new protocols for cases identified through blood bank donation <i>Testing site registration with DOH:</i> Foster care agency, churches, prisons, and juvenile justice agencies registered as testing site with DOH resulting in notification and follow-up support for positive test results
Transition care protocols	Protocols linking HIV+ persons to medical care at prison/juvenile justice discharge; policy transferring medical records to new provider at discharge; case management requirements for transitioning to adult care
Change eligibility criteria for care	Exempt dependent youth and young adults from providing income eligibility documentation for HIV-related care; establish screening protocols to assess eligibility for health care coverage at intake; DOH policy allowing youth/adult service providers to verify Ryan White CARE eligibility
Transportation barriers	City transit authority provides free bus tokens for return visits for youth engaged in HIV-related health care
Selected population	
New/expanded health services	Hospital extends adolescent clinic hours; hospital establishes new clinic for sexual minority youth; new outreach center providing HIV testing and basic needs for sexual minority youth
Increase HIV testing opportunities	Testing offered at foster care intake; prison and juvenile justice systems offering testing at intake/discharge; testing offered in public housing communities; mobile testing at schools; schools and hospital clinics offering testing as standard of care; web/mobile application notifications for testing locations; multiagency coordinated mobile testing; church-sponsored testing; coordinated testing and LTC at festivals/events
Modify testing and notification protocols	Accepting various forms of identification to receive test results; alter consent process to allow youth in foster care to consent to confidential testing; city schools offer routine HIV testing with opt-out option, electronic medical records testing prompts; acceptance of oral consent
Improve cultural competency of agencies	Agencies adopt best practices for serving sexual minority youth; agencies implement self-assessments on cultural competency for serving sexual minority youth
Universal population	
Multiagency coordination	Alliance established to coordinate citywide outreach; Youth Risk Behavior Survey data on HIV testing used to inform distribution of testing resources; Borough President's office creates referral network for sexual minority youth services; lottery proceeds directed to HIV services
Youth participation in coordination of prevention/care	City school establishes youth advisory council to plan districtwide prevention; city services council add an ad hoc youth feeder committee to inform on allocation of funding for prevention, care, housing services, Mayor's office adds youth representation to HIV commission, Ryan White Planning Council adds youth representation
Education and training	
Universal population	

Strategy	Examples
School curriculum reform	Citywide system mandates sexual/health education in 9th grade; public school for pregnant teens adds HIV education; citywide system change to offer ageappropriate sexual/health education starting in 5th grade; state-level repeal of abstinence-only legislation and implementation of comprehensive sexual/health education curriculum; unified school district mandates pilot and partnership schools must follow same sexual health education curriculum as other schools; completion of sexual/health education is a requirement for graduation
School curriculum evaluation	Citywide mandate requiring high school principals report deliverables related to comprehensive sex/health education curriculum; school system partnering with local research center to evaluate effectiveness of new sex/health education curriculum
School-based, non-curriculum programming and education	DOH provides sexual health education to charter schools; a community college partners with the DOH to provide HIV education lectures to sports teams; school district and Gay Straight Alliance partner to distribute support packs to students that include relevant laws and resources; after-school/summer programs add HIV prevention to programming; speakers bureau provides adolescent health expert lectures in schools
Parents offered education	Provide health/sexual educational opportunities to parents through schools, Head Start, and community programs; parent teacher association provides HIV counseling and testing information to parents; mandate foster care parents receive sexual health education
Engage faith-based leaders	Prevention agency provides training on risk and preventive factors to church leaders, faith-based consortium establishes network of 100 churches each with 2 designees tasked with coordination and promotion of testing, resource allocation, and education for HIV; diocese, consortiums, and alliances establish HIV prevention programming at churches in their jurisdiction
Church-based education	Distribute HIV resources guide; training and educational materials provided on a regular basis to congregations by DOH or prevention agency; health column in newsletter; participation in national prayer week; routine, expert lectures related to HIV risk, mental health, domestic violence
School staff training	Technical assistance for sexual health teachers; annual HIV/STI/pregnancy prevention training to all teachers; sexual diversity training required for all teachers and administrators; training health education teachers on issues of sexual violence, coercion, and age-discordant relationships
Communitywide education	Workshops for community; resource information distribution; website links for further information; town hall meetings; Neighborhood Watch Programs as educational platform for community members
Selected population	
Education programming reaching at-risk youth	Sexual health education offered to youth in foster care and juvenile justice and county-level prison systems; community recreation centers; agencies serving homeless youth; healthy relationships education as part of girls empowerment program
Provider, allied health, program staff training	Certificate requirements for HIV counseling and training course includes a youth module and LTC strategies; hospital-wide policies and values statements outline standards of care for high-risk youth; city departments of parks and recreations and mental health require cultural competency training on sexual diversity
Youth development	
Mentoring and skill building	Juvenile circuit court partnership contracting with churches to provide youth diversionary programs; public housing offers after-school tutoring to residents; community provider offers mentorship program to sexual minority youth; mentorship for juveniles released from detention
Gay-straight alliance	Public high schools, charter schools develop alliances; linkage of schools with existing alliances to schools without to support development
Safe spaces	Libraries provide venues for social activities for sexual minority youth; family services organization offers safe space and activities; Safe Spot program expanded to include partnership with businesses; churches in high-risk neighborhoods offer space and programs for youth
Mental health care	
Referral and crisis management protocols	Churches, urgent care, emergency departments add mental health assessment/referral protocols
New mental health services	Department of Mental Health adds satellite offices to existing core service agencies

Strategy	Examples
	in target neighborhoods
Evaluation of mental health services	Evaluate mental health providers to determine how accessibility services are for youth and for sexual minority youth
Consent for care	State-level amendment allowing minors living with HIV to self-consent for mental health services
Housing and economics	
Economic support	Exchange volunteer time for groceries; financial transition plans required for youth aging out of foster care; provide basic needs to homeless
Improve access to housing	Transition support for youth aging out of foster care; Mayor's office has new advisory group focusing on youth homelessness; Department of Human Services requires grantee funding tied to adherence to cultural competency best practices; funding is tied to annual audits
Expand shelter beds	Interagency council increases allotment of shelter beds for sexual minority youth; Department of Human Services expands shelter beds for youth by 20%