U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Health Resources and Services Administration

HIV/AIDS Bureau

Special Projects of National Significance (SPNS) Program
Outreach, Engagement and Retention of Young Men of Color Who Have Sex with Men in HIV Care Initiative (Demonstration Sites)

Grant Information

Grantee Name:	University of North Carolina at Chapel Hill, Division of Infectious Diseases
Project Title:	HIV Outreach, Prevention and Linkage to Care for Young Black Men Who Have Sex with Men
Grant Number:	H97HA03789-01-00
Project Director/ Principle Investigator:	Lisa B Hightow-Weidman, MD, MPH
Project Period:	September 1, 2005 – August 29, 2009
Project Officer:	Melinda Tinsley

I. Project Narrative

Although the southeastern US is experiencing disproportionate HIV infection rates, has higher numbers of AIDS cases, has higher proportions of Blacks, and is experiencing the most rapid growth rate of Latinos in the country1,2, there have been limited HIV interventions in this part of the US.3A previously unrecognized outbreak of HIV infection among Black young men who have sex with men (YMSM) college students in NC was discovered.4 Through December of 2006, 191 HIV-infected college students of whom 84% were Black and 92% MSM or men who have sex with men and women were identified.4,5 To address these findings, The University of North Carolina School of Medicine, Division of Infectious Diseases (UNC-ID) developed STYLE (**S**trength **T**hrough **Y**outh **L**ivin' **E**mpowered). Utilizing a social marketing campaign targeting youth and members of their sexual and social networks we sought to diagnose, engage and retain HIV-positive Black and Latino YMSM in HIV primary care services.

The main elements of STYLE included: 1) a social marketing campaign developed with the input of a youth advisory board and focus groups (see Figure 1); 2) intensified outreach to Black and Latino MSM youth-serving venues and increased provision of HIV testing services on college campuses, and within the broader community utilizing both venue-based and social and sexual network testing approaches;6 and 3) a tightly linked medical-social support network for HIV-infected youth newly diagnosed or re-engaging in care which included an infectious disease board certified physician who oversaw the provision of care to all patients; the majority being seen at one of two clinical sites (one tied to a local academic medical center and the other located within a local health department). While both Black and Latino HIV-infected YMSM were recruited into the study, printed outreach materials bearing the STYLE logo were targeted specifically for Black MSM; a similar campaign was not designed for Latino MSM. However, other HIV/STD related information distributed at STYLE events and at STYLE clinical sites were made available in Spanish. In addition to HIV medical care services, STYLE provided clients with ancillary social support services, including case management and support groups, through a partnership with a local AIDS Service Organization (ASO). STYLE was able to leverage the resources of an academic medical center, an ASO and a local Historically Black University (HBU) as part of an overall strategy to identify, test, and link HIV+ YMSM of color into medical care.

Procedures.
STYLE- specific data collected between the start of our site's client enrollment in June 2006 and the end of the grant cycle in August 2009 were analyzed for this paper. Eligible participants were (a) biologically born male, (b) HIV+, (c) diagnosed HIV+ within the past 6 months or reengaged in care after being out of care for at least 6 months, (d) a male who had sex with males, (e) self-identified as non-white, (f) between 17 and 24 years at the time of the first interview, and (g) able to provide written informed consent.

Eligible participants were administered a standardized face-to-face interview by experienced interviewers at baseline and every 3 months thereafter. Baseline interviews lasted approximately one hour and also included a qualitative interview component that was not conducted during the follow-up interviews, which averaged 30 minutes in duration. Potential participants were referred to the STYLE study through being identified as HIV+ through STYLE-sponsored outreach HIV testing events, the NC Screening and Tracing Active Transmission Acute HIV testing program (STAT)7 and through referrals from HIV testing conducted at local health departments and ASOs. Potential participants were also identified and referred to STYLE by the NC Disease Intervention Specialists (DIS). Over the course of the 3 years of participant recruitment, only two individuals who were approached about participating in the

STYLE cohort study refused to participate. These two individuals stated that their discomfort with discussing issues related to HIV as the primary reason for refusing to participate in the study.

Interviews were generally administered immediately following scheduled HIV clinic appointments. However, if a participant was unable to stay beyond the time allotted for his clinical appointment, study staff would make a separate appointment to meet with the participant to complete the interview, within a two-week time period. Interviews were conducted in either English or Spanish based on participant preference. Participants were compensated $50.00 for completion of the baseline interview and $25.00 for each follow-up. All participants provided written informed consent to participate in the study.

As the majority of eligible YMSM of color at UNC-ID during the study period consented to enroll in STYLE, and thus there was no comparison group. Data was abstracted from a clinical cohort preceding the implementation of STYLE to serve as a control group. Abstracted data was restricted to the thirty Black or Latino YMSM (age 17-24) who had their first visit in the UNC-ID HIV clinic between January 1, 2003 and December 31, 2005, as they were most similar to STYLE participants based on available demographic data. Clinical recommendations about attending regularly scheduled visits were similar during this time period as during the implementation of STYLE.

A significant innovation of the STYLE model was the simplification of the linkage to care process for newly diagnosed for HIV+ clients. Having a dedicated infectious disease physician who was able to see all patients identified through our outreach testing efforts and from referrals from community partners as the principal investigator eliminated many logistical and administrative barriers to getting patients into care. Having direct access to schedule patients on this physician's schedule within 72 hours of their initial diagnosis or referral allowed STYLE program staff to rapidly link newly diagnosed HIV+ MSM to care. Additionally, STYLE staff worked closely with coordinators of other HIV clinical trials based as the study site in which STYLE participants were also enrolled. The sharing of updated contact information for participants across studies helped study staff from STYLE and the other research studies keep track of an often transient population who frequently change residences and phone numbers. STYLE participants in other clinical trials were able to access additional incentives above and beyond those offered by STYLE, including free medications and labwork, which may have also helped to improve their overall retention in care. HIV programs based at academic medical centers should seek to leverage clinical research study visits as additional opportunities to further engage HIV+ clients who may be at risk of falling out of HIV care.

Findings and Results.
Eighty-one HIV-infected YMSM of color were enrolled in STYLE. The mean age of the sample was 21 years; 83% identified as Black and 11% as Latino. Sixty-two percent described themselves as gay, 22% as bisexual, 1% as heterosexual and 15% as other. Two-thirds of the men reported a history of vaginal sex with a woman over the course of their lifetime. Almost half of the sample was enrolled in school at study entry. Participants lived a mean of 47 miles from the HIV clinic where they are receiving care.

Two-thirds of the cohort was newly diagnosed. The mean time from diagnosis to enrollment for those newly diagnosed was 56 days; the mean time from last clinic visit to enrollment for those re-engaging in care was 509 days (or approximately 17 months). The majority (75%) of newly diagnosed persons had been diagnosed less than three-months prior to enrollment. One-third of the STYLE cohort was diagnosed during the acute stage of HIV infection, defined as having a negative HIV antibody test in the presence of positive HIV nucleic acid testing.7,8 Twelve percent of the sample had transmitted drug resistance, defined as having a baseline genotype that demonstrated the presence of at least one mutation in the 2009 World Health Organization revised listing of surveillance drug resistance mutations.9 As shown in Table 1, there were no differences in ethnicity or education when comparing newly diagnosed to those re-engaged in care. However, compared to those participants who were re-engaged in care, newly diagnosed persons were on average younger and had less depressive symptomatology. Health status data indicate that compared to those newly diagnosed, those re-engaging in care had similar CD4 counts but slightly lower viral loads at baseline.

Consistent with other studies10,11 we found high overall levels of depression in these young men; with 50% having CES-D scores falling within ranges considered to be indicative for clinical depression and 15% having a history of attempting suicide. This is similar to rates seen in other large population-based studies in which 12-19% of their sample of MSM (including a rate of 8% in MSM <25 years) had attempted suicide compared with rates of 1.5-4% among men in the general population.12-14 Higher rates of depression were observed in those re-engaging in care clearly indicating the need to incorporate mental health evaluations and treatment early into the provision of HIV primary care. Because CES-D scores were only assessed at baseline, we cannot establish causality, though we hypothesize that early engagement in care through STYLE for the newly-diagnosed persons may have served as a buffer to lessen symptoms of depression perhaps through increasing their network of social support.10,15-17 Future research using qualitative methods should explore the relationship between early engagement and retention in care, depression and other ongoing risk behaviors in HIV-infected youth.

Program Management.
Prior to the enrollment of the first study participant in June 2006, study staff engaged in a variety of activities to build partnerships with other key stakeholder groups in the area and to heighten the project's visibility among the local Black MSM community. These included coordinating meetings with a key community stakeholders, including the owner of Black MSM-serving nightclubs and bars

to facilitate STYLE staff distributing study material at these venues; meeting with staff members from the state and county health departments and other local AIDS Service organizations to solicit their support in organizing HIV testing events in the community and referring clients to the STYLE program; and meeting with administrative staff at the local colleges and universities to garner support for organizing HIV testing events on their campuses. The relationships that emerged from these initial meetings were developed over the course of the project and were critical to achieving the project goal of scaling up HIV outreach activities among BMSM in the community.

Organizing HIV Testing Events

While only 13 of the 81 STYLE participants came into the study through testing events organized by STYLE, these events were a critical part of the visibility of STYLE in the community. There were several important lessons learned in the process of organizing these events that will be instructive for other program sites seeking to replicate this part of the intervention.

- *Balancing between targeted and general audience testing events*

  Although our intervention aimed to reach HIV+ Black MSM specifically, many of our testing events targeted a more general audience. This was done strategically and intentionally, taking into account concerns from administrators at the HBCU campuses that conducting HIV testing events would signal to community members that their campuses had a specific problem with HIV or homosexuality and would potentially hamper student recruitment efforts. To address these concerns, we made sure to host testing events targeting a general audience (while also conducting targeted outreach to MSM groups on campus where possible) on a mix of college campuses (public, private, HBCU, majority white).

- *Build backwards from the perspective of someone who may test positive at an event*

  In doing outreach HIV testing events in non-traditional settings it is critical that the event be organized to maximize confidentiality for those who may receive a reactive test result during the event. Organizing the physical space of the event to allow for private exit from the event location to protect confidentiality, ensuring that other event participants are not aware of the location of the "positive room" (i.e. not using a specific location solely for the delivery of positive results, so that other event participants will not be aware/suspicious if specific persons are directed to a given location) are necessary steps to take when planning outreach testing event. If event organizers cannote adequate assure confidential delivery of reactive rapid test results within the physical space proposed for an HIV testing event, organizers should investigate other ways of delivering test results (e.g. the next day) or reconsider doing the event altogether.

People who did not meet our strict definition of regular care still attended the majority of their scheduled clinic appointments and maintained consistent contact with program staff through email, SMS texting or attendance at weekly support group meetings. Text messaging and other innovative technologies have were used successfully to increase clinic attendance,18,19 However challenges arose with STYLE participants when participants' prepaid cell phone services lapsed or phone numbers changed. Special consideration should be given to employing new technologies and social networking programs to maintain YMSM engaged in medical care and maintain a peer based support network.

Consistent with other studies10,11 we found high overall levels of depression in these young men; with 50% having CES-D scores falling within ranges considered to be indicative for clinical depression and 15% having a history of attempting suicide. Higher rates of depression were observed in those re-engaging in care clearly indicating the need to incorporate mental health evaluations and treatment early into the provision of HIV primary care. During the course of the study we sought to partner with culturally competent and affordable mental health services to attend STYLE participants, however such services did not exist in area. Those choosing to replicate this program are advised to consider staffing mental health providers with the capacity to work Black and Latino YMSM. Special consideration should be given to employing services for YMSM seeking relief from violent or otherwise abusive situations.

Long distances to care and lack of provision of transportation services are associated with less access to and retention in care.20,21 Patients in this study traveled a substantial distance for their HIV medical care (see Table 1), which is not uncommon for those living in rural settings accessing services associated with a stigmatizing diseases like HIV, substance abuse or mental health. This problem was likely accentuated by the low availability of public transportation systems and record high gas prices seen in our state during the course of the study. Programs should consider provisions to reimburse for travel through taxi vouchers or gas cards. A cost benefit analysis is suggested to asses if such provision would result in an overall cost-savings through improved long term health outcomes and decreased utilization of emergency rooms and a reduction in hospitalizations.22

In our study, youth achieved viral suppression rates greater than 75%, which compares favorably to levels of virologic success ranging from 51-79% for currently utilized NNRTI, or boosted PI regimens in adult cohorts.23 While we tried to ensure that prior to initiating therapy, youth enrolled in our cohort were deeply committed to the process of attending regular clinic visits and comfortable with both the notion and the process of taking medications on a daily basis, there is still significant room for improvement. Having the youth as active and willing participants in making decisions regarding their health care- an act which requires a multidisciplinary team model

of HIV care that addresses in a comprehensive and culturally sensitive manner all of the developmental, physical and mental health issues relevant to this population.

As one of the main goals of the overall SPNS initiative was to increase diagnoses within our target population. We found it useful to partner with local health departments, ASOs, and HBCUs to deliver HIV testing services to youth in our area. Social marketing campaigns helped galvanize support for increased testing and may have had an effect on reducing stigma associated with having HIV. Future research should investigate the effectiveness of social marketing campaigns for HIV testing toward reducing the effects of HIV stigmatization among adolescents and young adults.

Overall, STYLE was an effective intervention that provided efficient and timely engagement in care for both those newly diagnosed and those who had fallen out of care and improved overall retention. We believe that the results of our study demonstrate that successful interventions that promote HIV counseling, testing, and referral either take these services to venues that youth frequent or use outreach to make testing easily accessible and seamless linkage to care.

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II. Dissemination Activities

Our dissemination strategies focused on reaching several key audiences: 1) State and local health department staff and other local public health workers 2) National level- academic/professional audiences 3) community audiences. This strategy reflects the broad variety of stakeholders involved in the STYLE project and the project team's desire to reach a broad audience. Methods of dissemination included peer-reviewed journal articles, oral and poster presentations at professional conferences, and workshops and presentations area colleges and state and local health departments. STYLE staff also discussed project findings on local radio.

University of North Carolina at Chapel Hill Dissemination Activities				
1. Presentation	Project STYLE: Engaging, linking & retaining young HIV+ MSM of color in Medical Care	Smith JC, Valera E, Hightow-Weidman LB	2010 Michigan Health Disparities & STD/HIV Conference	November 4, 2010
2. Journal Article (multisite)	Transmitted HIV-1 Drug Resistance Among Young Men of Color Who Have Sex With Men: A Multicenter Cohort Analysis	Hightow-Weidman, LB.. Hurt, CB, Phillips, G Jones, K, Magnus, M Giordano TP, Outlaw A, Ramos D, Enriquez-Bruce E, Cobbs W, Wohl A, Tinsle M	Journal of Adolescent Health	In Press (accepted May 2010)
3. Journal Article	Keeping them in STYLE: Finding, Linking and Retaining Young HIV+ Black and Latino Men who Have Sex with Men in Care	Hightow-Weidman LB, Smith JC, Valera E, Mathews DD, Lyons P	AIDS Patient Care and STDs	In Press (Accepted Nov 2011)
4. Journal Article (multisite)	Characteristics Associated With Retention Among African American and Latino Adolescent HIV-Positive Men: Results From the Outreach, Care, and Prevention to Engage HIV-Seropositive Young MSM of Color Special Project of National Significance Initiative	Magnus M, Jones K, Phillips G, Binson D, Hightow-Weidman LB, Richards-Clarke C, Wohl AR, Outlaw A, Giordano T, Quamina a, Cobbs W, Fields, SD, Tinsley M, Cajina A, Hidalgo J	Journal of Acquired Immune Deficiency Syndromes	April 2010
5. Presentation	Understanding pathways to resilience among young HIV+ Black MSM	Smith JC, Valera E, Hightow-Weidman LB	Black Gay Research Conference, Atlanta, GA	January 10, 2010
6. Presentation	STYLE: Community Testing Initiatives for Youth	Valera E, Smith JC, Hightow-Weidman LB	North Carolina Children's and Adolescent AIDS Network meeting	Nov 2009
7. Presentation	Sexual Partner Age Mixing, Acute or Recent HIV Infection, and Young MSM in North Carolina	Hurt CB, Matthews DD, Stapleton MM, Adimora AA, Golin CE, Hightow-Weidman LB	National HIV Prevention Conference, Atlanta GA	Aug. 2009
8. Presentation	Differential Network Patterns Among MSM and the Black-White Disparity in HIV Infection	Matthews DD, Traud AL, Stapleton MM, Adimora AA, Golin CE, Hightow-Weidman LB	2009 National HIV Prevention Conference, Atlanta GA	Aug. 2009

9. Poster	Impact of HIV Status and Geographic Location on Recruitment of MSM Social and Sexual Networks	Demers M, Stapleton MM, Golin CE, Matthews DD, Adimora AA, Hightow-Weidman LB	2009 National HIV Prevention Conference, Atlanta GA	Aug. 2009
10. Presentation	Focusing Community Based HIV Interventions on Caregivers of Young MSM of Color	Valera ER, Smith JC, Hightow-Weidman LB	2009 National HIV Prevention Conference, Atlanta GA	Aug. 2009
11. Presentation	Sexual orientation, racial identity, and resilience among Young HIV+ Black MSM	Smith JC, Valera ER, Hightow-Weidman LB	2009 National HIV Prevention Conference, Atlanta GA	Aug 2009
12. Poster	Research collaboratives as a tool for retention in care for HIV+ MSM of color	Smith JC, Sugarbaker AJ, Valera ER, Kuruc J, Hightow-Weidman LB	2009 National HIV Prevention Conference, Atlanta GA	Aug. 2009
13. Poster	Prevalence of Transmitted HIV-1 Drug Resistance Among Young Men of Color who Have Sex with Men: A multicenter cohort analysis	Hightow-Weidman LB, Phillips II G, Smith J, Jones K, Magnus M, Outlaw A, Giordano T, Enriquez-Bruce E, Ramos D, Tinsley M, Hidalgo J	CROI, Montreal Canada	Feb 2009
14. Poster	Characteristics Associated with Retention for Hard-to-Reach Young Men of Color Who Have Sex with Men	Magnus M, Jones K, Phillips II G, Binson D, Hightow-Weidman L, Richards-Clarke C, Wohl A, Outlaw A, Giordano T, Nyathi B	CROI, Montreal Canada	Feb. 2009
15. Presentation	Voices from the frontlines: Outreach Worker Experiences in Engaging Young HIV+ MSM of Color in Services and Care	De La Cruz M, Ramos AD, Smith JC	Ryan White All Titles Meeting, Washington DC	Aug. 2008
16. Poster	Project STYLE: Understanding and Empowering HIV-Infected Men in North Carolina	Hightow-Weidman, LB, Smith JC, Valera E	Ryan White/HRSA All Titles Meeting, Washington DC	Aug. 2008
17. Journal Article	Late diagnosis of HIV among young men in North Carolina	Torrone EA, Thomas JC, Leone PA, Hightow-Weidman LB	Sexually Transmitted Diseases	March2008
18. Poster Presentation	At the Intersections: Insight into young HIV-positive MSM of color experiences of faith, sexuality, and race	Stapleton M, Valera, E, Fisher-Borne M, Smith J, Hightow-Weidman	Minority Health Conference University of North Carolina Chapel Hill, NC	Feb. 2008

19. Presentation	Emerging Perspectives on the "Down Low" from Young Black Men who Have Sex with Men in the South	Smith JC, Fisher-Borne M, Brown, AL, Leone, PA; Hightow-Weidman, LB	National HIV Prevention Conference, Atlanta GA	Dec. 2007
20. Presentation (Roundtable)	Bringing the Message: College Black Men on Sex, Sexuality, and how to Spin HIV Prevention	Smith JC, Brown AL, Fisher-Borne M, Leone PA, Hightow-Weidman LB	APHA, Washington DC	Nov. 2007
21. Presentation (Roundtable)	From Copout to Complexity: Emerging Perspectives on the "Down Low" from Young Black Men who Have Sex with Men in the South	Smith JC, Brown AL, Fisher-Borne M, Leone PA, Hightow-Weidman LB	APHA, Washington DC	Nov. 2007
22. Presentation	Emerging Perspectives on the "Down Low"	Smith JC, Fisher-Borne M, Hightow-Weidman LB	Council on Social Work Education Annual Program Meeting, San Francisco CA	Oct. 2007
23. Poster	Moving Beyond the Myths: Perspectives on the "Down Low" from Young Black Men in the American South	Smith JC, Brown AL, Fisher-Borne M, Leone PA, Hightow-Weidman, LB	International Society for Sexually Transmitted Diseases Research, Seattle WA	July 2007
24. Poster	Rapid HIV Testing on the College Campus: Comparing Traditional and Outreach Models	Przybyla SM, Smith JC, Boos K, Turner BM, Hightow-Weidman, LB	American College Health Association Meeting, San Antonio TX	June 2007
25. Presentation	Black Men and the "Down Low:" Moving Beyond the Myths to Solutions in HIV Prevention and Care	Smith JC, Brown AL, Fisher-Borne M, Love J, Hightow-Weidman LB	University of North Carolina Minority Health Conference, Chapel Hill, NC	Feb. 2007
26. Journal Article	The Mythology of the "Down Low:" A Critical Exploration of Black Men Who Have Sex with Men and HIV Transmission	Hightow-Weidman LB, Smith JC	Infectious Diseases and Corrections Report	Jan 2007
27. Journal Article	Men who have sex with men and women: a unique risk group for HIV transmission on North Carolina college campuses	Hightow LB, Leone PA, Macdonald PD, McCoy SI, Sampson LA, Kaplan AH	Sexually Transmitted Diseases	Oct 2006
28. Institute	From Outreach to Clinic: Connecting Young HIV+ MSM of Color to Clinical Services	Hightow LB, Smith JC	Ryan White/HRSA All Titles Meeting, Washington DC	Aug. 2006

Future research considerations:
A trial of social marketing campaigns for HIV testing toward reducing the effects of HIV stigmatization among adolescents and young adults.

A cost- benefit analysis to asses if provision for taxi vouchers and gas cards would result in an overall cost-savings through improved long term health outcomes and decreased utilization of emergency rooms and a reduction in hospitalizations.

III. Sustainability

The Principle Investigator continues to provide HIV medical care to many of the study participants and their HIV positive peers. We were additionally encouraged by the role of clinical trial study coordinators in aiding with overall retention. Young MSM patients continue to be afforded access to clinical trials and other research that in turn may offer; incentives, transportation, free medications and lab work, and individualized attention that coincides with their HIV medical care. The attention given to those in cohort studies with frequent follow ups go beyond the efforts of conventional care. Further, access to research provides young MSM the opportunity to altruistically contribute to the HIV affected community through scientific advancement.

Our team continues to create and test new intervention for young black MSM. HealthMpowerment is designed as an HIV and STI intervention website that provides tailored feedback for healthy behaviors and decision-making within the context of same-sex relationships for young black MSM. We recruited 50 participants for the pilot study and had a retention rate of 90% through our three month follow up. Looking ahead, HealthMpowerment will expand its sphere of influence by offering the website through web-enabled smart phones (ex. iPhone, Andriod, Blackberry, etc.). With this new feature, we will potentially reach far more young men who increasingly eschew traditional methods of accessing the internet for the convenience and ease of personal mobile devices.

While project activities under this grant have ceased, project staff are currently preparing journal articles based on the qualitative survey component of the study, which yielded rich insights into the lived experiences of young HIV+ MSM that may be instructive in guiding future intervention efforts with this community.

Also, the support groups for HIV+ Black MSM that were started as part of STYLE are still ongoing, although their frequency has been reduced to monthly from twice each week during the grant period. This service is currently unfunded

How has SPNS Program funding and/or the results of your evaluation helped the program continue project activities and/or leverage other funds? What role, if any, did dissemination activities play in securing continued funding?

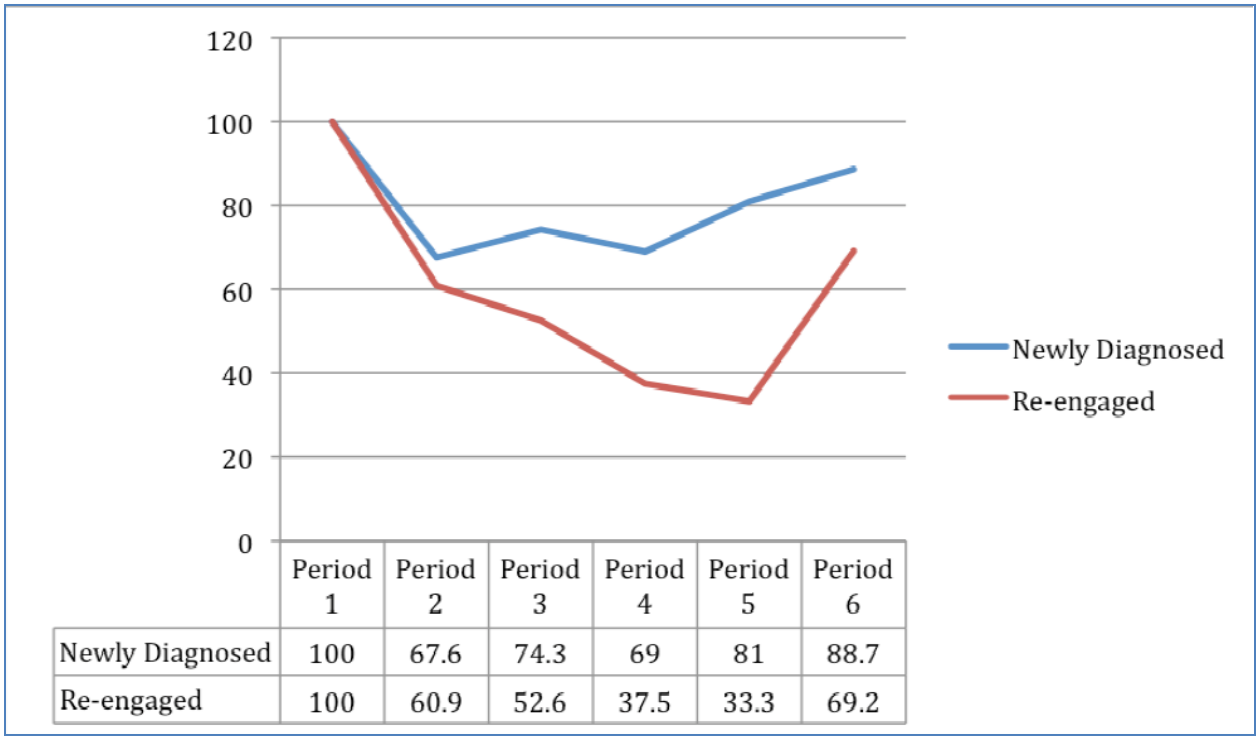
In 2006, preliminary data from our intervention were used to secure additional funding from the Gilead Foundation to support the scale-up of our HIV testing activities across the state. This $50,000 one-time grant allowed STYLE to fund HIV outreach HIV testing activities for the duration of the HRSA grant period.

V. Appendices

Empirical and Analytic support (Appendix A)

Table 1. Characteristics of Newly Diagnosed and Recently Re-engaged Persons in STYLE			
Cohort	**Newly Diagnosed**	**Re-engaged in care**	**p value**
	n = 52	**n = 29**	
Age	20.7	21.9	.006
Race			.73
Black, %	80.8	86.2	
Latino, %	11.5	10.3	
Multiracial/Other, %	7.7	3.5	
Sexual Identity			
Homosexual/Gay	63.4	58.6	.67
Bisexual	26.9	13.8	.17
Heterosexual	1.9	0	.45
Other *	7.7	27.6	.02
Comfort with sexual identity			
Very Comfortable	58.8	46.4	.68
Comfortable	37.3	46.4	.52
Uncomfortable	3.9	7.2	.53

< high school			.09
High School or GED	19.2	24.1	
>high school	26.9	6.9	
Distance to clinic, miles (mean)	53.9	69.0	
Had health insurance	51.3	38.7	.35
Baseline CD4 count (mean)	59.6%	44.8%	.20
Baseline CD4, %			
<200	11.8	10.7	
200-350	15.7	21.4	
351-500	27.4	10.7	
>500	45.1	57.1	
Baseline viral load (log10)	4.4	3.7	.02
Substance use in last 30-days			
Alcohol	55.8	55.6	.99
Marijuana	46.2	35.7	.37
Any other recreational drug use	19.2	14.3	.58
CES-D (mean)	15.4	20.4	.05
Suicide, %			
Ever made a plan	13.5	31.0	.06
Ever attempted	7.7	27.6	.02
Ran out of money (last 3 months), %	71.2	82.8	.02
Study enrollment days (mean)	357.5	389.4	.70
*Other includes: DL, confused/deciding(2), me(4), a man with a diverse sexual preference, I do what I do, I don't label/identify myself(2), open-minded			



	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
Newly Diagnosed	100	67.6	74.3	69	81	88.7
Re-engaged	100	60.9	52.6	37.5	33.3	69.2

Figure 2: Retention over two years of newly diagnosed or recently re-engaged young MSM of color in STYLE cohort

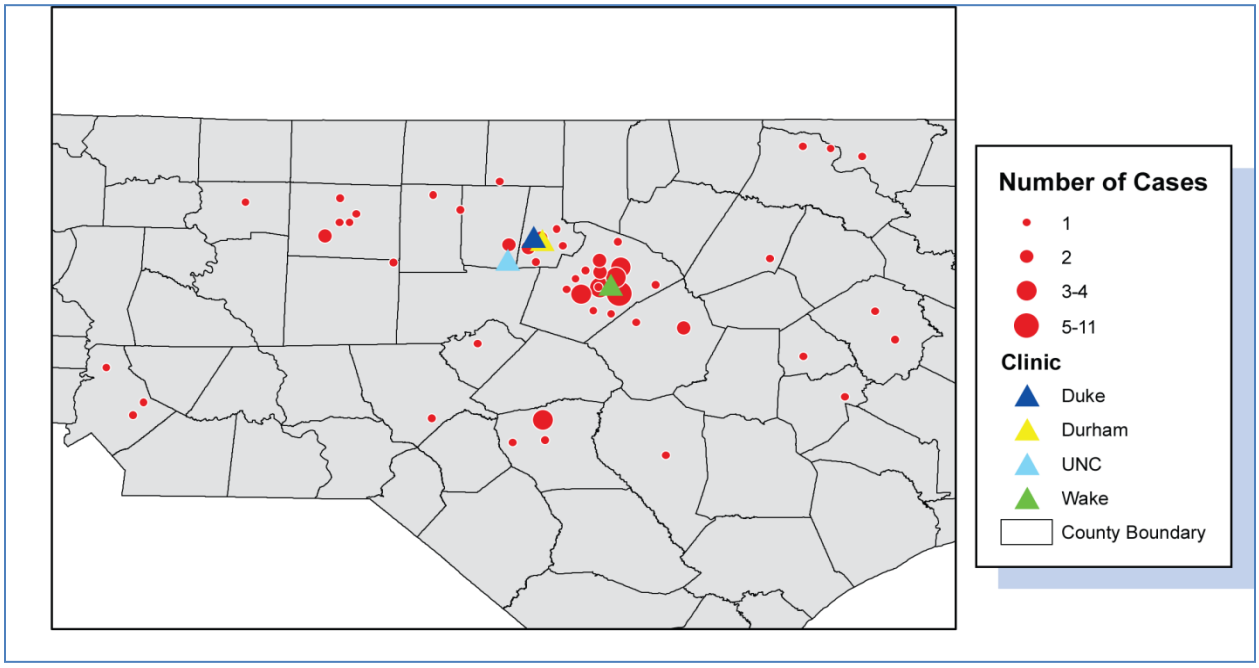


Figure 3: STYLE Cohort Proximity to Medical Clinics from Zip Code

Data Collection Instruments (Appendix B):
Qualitative Questions- Baseline Survey:
These questions are to be administered after the multi-site client level evaluation baseline has been completed:
1. When did you first realize you were attracted to other men?

2. Could you tell me about your first sexual experience with another man?

3. When choosing a male partner, what are your racial/cultural preferences?

4. What sexual roles do you play with different men? (explain: "top", "bottom", "versatile", "other"…)
    a. Does the race of male sexual partners determine what role you play? How?
5. How and where do you usually meet other men? (probe: internet, school, church, through friends, clubs, "balls", circuit parties ect.)
    a. Are these places different if you're looking for just sex or to date someone? How?

    b. Why do you choose these places?
6. If answers Internet to 5- What are some of the reasons you like to go online?
    a. What specific websites or Internet Service Providers do you use for meeting sex partners online? Do you use…
    i. America Online

    ii. Gay.com

    iii. BlackPlanet.com

    iv. EbonyMale.com

    v. Adam4Adam.com

    vi. M4M4sex.com

    vii. Manhunt.net

    viii. Other Place? (specify)
7. Who are the most important influences in your life?

8. What are the primary support networks in your life?

9. What are the things that those people (that person) gives you that makes you feel supported?

10. What role, if any, does faith or spirituality play in your life now?

Now I would like to ask you a few questions about your experience around race, masculinity, and sexual identity.

1. If you had to explain to your son/younger relative what it meant to be an (insert ethnicity of participant [African American/ Black man in America, Hispanic]) what would you tell him?
2. How much do you feel like you're a part of the [black/Hispanic/ect..] community?

3. What are the positive things about being [African American/Black/Hispanic/ect..]? Negative?

4. What is the gay community to you? (probe: if respondent doesn't answer cue with "gay lifestyle") How involved are you?

5. How much do you feel like you're a part of the gay community?

6. How comfortable are you talking to people who are the most important in your life about the same sex attraction?

7. What things make it easy or difficult to talk about being attracted to other men?

8. What messages about homosexuality did you receive growing up from your family and community?

9. How comfortable are you talking to your doctor or health care provider about issues relating to sexuality or sexual health?

10. If you woke up tomorrow and it was equally acceptable for men to be attracted to men as to women, how would your life be different (if at all)?

11. What are some things that make it hard to get tested for HIV?

12. What are some things that can be done to make you feel more comfortable in a doctor's office, medical clinic?

13. What would encourage you to return and come back continually for more clinic visits?

Attachment 1: Product List format

University of North Carolina at chapel Hill, Division of Infectious Diseases
Project Title: HIV Outreach, Prevention and Linkage to Care for Young Black Men Who Have Sex with Men
Grant Number: H97HA03789-01-00
Project director: Adan Cajina
Project Period: September 1, 2005 – August 29, 2009

Brochures and Promotional Materials (including newspaper articles)

- STYLE Brochure Trifold (.pdf)
- 2 Clippings from Campus Echo (NCCU) paper (.pdf)
- STYLE advertisement from Indy Weekly (.jpg)
- Key Chain (.jpg)
- Lanyard (.jpg)
- 400% Promotional Poster (.pdf)
- Testing event promotion and related press (.pdf)

Internet/Web Sites

- Ncstyle.org –screenshots (.pdf) (website no longer live)

Curricula & Other Training Materials
Working with LGBT: Workshop training (2007)
North Carolina LGBTQ resource guide (2007)

Publications (Peer reviewed journal articles, monographs, books, and published reports; provide full citations, if available)

- Hightow-Weidman LB, Smith JC, Valera E, Mathews DD, Lyons P. Keeping them in STYLE: Finding, Linking and Retaining Young HIV+ Black and Latino Men who Have Sex with Men in Care. Journal of Acquired Immune Deficiency Syndrom 2010 (in Press)
- Hightow-Weidman L, Hurt C, Phillips I. Transmitted HIV-1 Drug Resistance Among Young Men of Color Who Have Sex With Men: A Multicenter Cohort Analysis. Journal of Adolescent Health 2010. (in press)
- Torrone E, Thomas J, Leone P, Hightow-Weidman L. Late diagnosis of HIV in young men in North Carolina. Sexually transmitted diseases 2007;34:846.
- Hightow-Weidman LB, Smith JC. The Mythology of the Down Low: A Critical Exploration of Black Men Who have Sex with Men and HIV Transmission. Infectious Diseases in Corrections Report 2007; 9:3
- Hightow LB, Leone PA, Macdonald PD, McCoy SI. Men who have sex with men and women: a unique risk group for HIV transmission on North Carolina college campuses. Sexually Transmitted Diseases 2006; 33:585

Conference Presentations & Posters

- Valera E, Smith JC, Hightow-Weidman LB. STYLE: Community Testing Initiatives for Youth. North Carolina Children's and Adolescent AIDS Network meeting, November 2009. Oral Presentation
- Matthews DD, Traud AL, Stapleton MM, Adimora AA, Golin CE, Hightow-Weidman LB. Differential Network Patterns Among MSM and the Black-White Disparity in HIV Infection. National HIV Prevention Conference, Atlanta GA. August 2009, Oral Presentation
- Valera ER, Smith JC, Hightow-Weidman LB. Focusing Community Based HIV Interventions on Caregivers of Young MSM of Color. National HIV Prevention Conference, Atlanta GA, Aug 2009, Oral Presentation

- Smith JC, Valera ER, Hightow-Weidman LB, Sexual orientation, racial identity, and resilience among Young HIV+ Black MSM. National HIV Prevention Conference, Atlanta GA, Aug 2009, Oral Presentation

- Hightow-Weidman, LB, Smith JC, Valera E. Project STYLE: Understanding and Empowering HIV-Infected Men in North Carolina. Ryan White/HRSA All Titles Meeting, Washington DC Aug 2008. Poster Presentation.

- Stapleton M, Valera, E, Fisher-Borne M, Smith J, Hightow-Weidman. At the Intersections: Insight into young HIV-positive MSM of color experiences of faith, sexuality, and race. Minority Health Conference University of North Carolina, Chapel Hill, NC. February 2008, Poster presentation

- Smith JC, Sugarbaker AJ, Valera ER, Kuruc J, Hightow-Weidman LB. Research collaborative as a tool for retention in care for HIV+ MSM of color. 2009 National HIV Prevention Conference, Atlanta GA, Aug 2009, Poster Presenation