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Evolution of the Special Projects of National Significance Prevention with HIV-Infected Persons Seen in Primary Care Settings Initiative

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Introduction

The Centers for Disease Control and Prevention (CDC) estimates that 1,039,000–1,185,000 persons in the USA were living with HIV/AIDS at the end of 2003. Further, 40,000 persons become infected with HIV each year (Glynn & Rhodes, 2005); continued growth in the number of people living with HIV/AIDS means there is an on-going need for a multi-focused approach to the challenge of preventing HIV transmission. Such an approach includes directing prevention efforts toward HIV-uninfected individuals, both those at high risk of infection and the general population, as well as individuals already infected with HIV.

For many years, HIV prevention efforts focused primarily on reducing the risk of infection among HIV-uninfected individuals, concentrating on individuals who engage in high-risk sexual behavior and drug use. Considerably less attention was given to the needs of individuals already infected with HIV and to providing assistance in not transmitting to others. A 2001 Institute of Medicine report suggested that increasing numbers of HIV-positive individuals were engaging in activities that risk transmission to others (Institute of Medicine, 2001). This trend demonstrated the need for interventions to help prevent transmission to uninfected individuals from people who are already infected with the virus (Diaz, Chu,

F. E. Malitz (⊠) · L. Eldred HIV/AIDS Bureau, Health Resources and Services Administration, Rockville, USA e-mail: fmalitz@hrsa.gov Weinstein, Mokotoff, & Jones, 1998; Erbelding, Chung, Kamb, Irwin, & Rompalo, 2003; Fox et al., 2001; Hecht, 2001; Valleroy, Secura, MacKellar, & Behel, 2001; Villano et al., 1997).

Since 2000, the Health Resources and Services Administration (HRSA) has engaged in a number of activities directed toward increasing prevention efforts addressing the needs of HIV-positive individuals. At the same time, other Federal Agencies including the CDC and the National Institutes for Health (NIH) developed initiatives and supported research focusing on prevention with people living with HIV/AIDS. All of these initiatives and projects have informed the development of the initiative described in this special supplement to AIDS and Behavior, the Special Projects of National Significance (SPNS) Prevention with HIV-Infected Persons Seen in Primary Care Settings Initiative (Prevention with Positives Initiative). This special supplement details the implementation of behavioral prevention interventions in 10 of the 15 demonstration sites funded as part of the Prevention with Positives Initiative. HRSA also funded an evaluation center to conduct both quantitative and qualitative evaluations of the initiative. Baseline findings from these cross-site evaluations also are presented in this supplemental issue.

Background

Administered by HRSA, Ryan White Comprehensive AIDS Resources Emergency (CARE) Act programs provide a unique opportunity to incorporate risk assessment and prevention interventions into the clinical care of people living with HIV/AIDS. Ryan White programs fund State and local governments as well as other public and private nonprofit organizations to provide HIV primary care and support services for people living with HIV/AIDS. Each year over 900 clinical settings funded by the CARE Act provide HIV primary care to medically underserved HIV-infected persons.

In a study funded by HRSA in 2000, Morin and colleagues examined the practices of providers related to prevention with HIV-positive patients in 16 Ryan Whitefunded primary care settings. (Morin et al., 2004) Incentives and barriers to the provision of prevention services with HIV-positive patients in these settings also were assessed. Findings revealed that HIV prevention counseling was not routine in most clinics. Patients reported receiving HIV prevention counseling significantly less frequently than other health-related prevention discussions such as diet and nutrition and adherence to antiretroviral medications. Lack of time, lack of specialized training and funding dedicated to the provision of prevention counseling were cited as barriers to providing HIV prevention in the clinical setting. Some clinical providers did not understand their role in "prevention with positives" or expressed conflicted feelings about their roles and responsibilities. These providers felt that their primary responsibility was to the address the needs of their patients and this was more important than addressing public health concerns about the transmission of HIV during a clinical encounter.

Using data from patient exit surveys conducted as part of this study, Myers and colleagues (2004) examined the relationship between patient characteristics, receipt of HIV prevention counseling and clinic approaches to HIV prevention. Patients seen in clinics with written procedures for providing HIV prevention counseling were significantly more likely to report receiving prevention counseling than in clinics without written procedures to guide clinic staff. Overall, the study concluded that the low frequency of HIV prevention services in these clinical settings represented "missed opportunities" for reducing HIV transmission. These findings supported the need for a continued focus on HIV prevention with positives by HRSA and other Federal Agencies.

In 2003, CDC, in collaboration with HRSA, NIH, and the Infectious Diseases Society of America (IDSA), published guidelines to support the provision of HIV prevention in clinical settings (CDC, 2003b). These guidelines provide clinicians with tools needed to conduct a behavioral risk assessment, screen for sexually transmitted diseases, and provide appropriate prevention messages (Janssen & Valdiserri, 2004). In essence, these guidelines provide clinics with the written guidelines found to be so important (Myers et al., 2004).

The publication of these guidelines coincided with a new CDC Initiative launched in 2003 called Advancing HIV Prevention (AHP) (CDC, 2003a). The goals of AHP are to reduce barriers to the early diagnoses and support access to prevention services as well as quality medical care and treatment (Janssen & Valdiserri, 2004). To achieve these goals, AHP identifies four strategies: (1) make HIV testing a routine part of medical care; (2) increase the diagnoses of new cases in correctional facilities and other non-medical settings through outreach programs; (3) prevent transmission of HIV by increasing prevention services with people living with HIV/AIDS; and (4) increase efforts to prevent perinatal transmission by offering routine HIV testing to pregnant women.

Initiatives supported by HRSA, CDC and the Center for Mental Health Research on AIDS, National Institute of Mental Health (NIMH) to advance prevention with HIVinfected persons were well underway when AHP was launched. NIMH and other Federal agencies have sponsored randomized controlled trials in both communitybased and clinical settings to assess HIV prevention interventions to reduce behavioral risk and a number of these intervention trials were found to be effective (Baskin, Braithwaite, Eldred, & Glassman, 2005; Fisher et al., 2006; Gordon, Forsyth, Stall, & Cheever, 2005; Gordon, Stall, & Cheever, 2004; Healthy Living Project Team, 2007; Kalichman et al., 2001; Richardson et al., 2004; Rotheram-Borus et al., 2001; Wingood et al., 2004). Interventions found to be effective through these randomized controlled trials were adopted or adapted by several of the SPNS Prevention with Positives Initiative demonstration sites.

Prevention with HIV-infected Persons Seen in Primary Care Settings Initiative

In September 2003, HRSA funded 15 demonstration sites to participate in the Prevention with HIV-Infected Persons Seen in Primary Care Settings or "Prevention with Positives" Initiative. The 15 sites selected for the initiative are diverse clinical care settings. Six of the demonstration sites provide HIV primary care in university-affiliated clinics and four are community-based clinics (CBO), including two federally-funded Community Health Centers (CHC). Hospital-based clinics provide HIV primary care for two demonstration sites and 1 site is based in a County Board of Health clinic. The two remaining demonstration sites utilize multiple venues for providing HIV care. One site provides services in five venues including university-affiliated a community-based university-affiliated setting and four County Health Departments. The remaining site includes clinics in an urban, university-affiliated clinic and two CBOs (see Table 1).

In the year prior to selecting and funding the demonstration sites, HRSA funded the Center for AIDS Prevention Studies (CAPS) at the University of California, San Francisco (UCSF) to serve as the evaluation and support

Table 1 Intervention modality and type of professional delivering intervention

Site	Number of clinics	Setting type	Modality		Intervention delivered by:		
			Individual- level intervention	Group- level intervention	Primary care provider	Intervention specialist	Peer
Johns Hopkins University, Baltimore	5	1 University-affiliated clinic; 4 health departments			\checkmark		
University of Alabama, Birmingham	1	University-affiliated clinic	\checkmark		\checkmark		
University of California, Davis	3	1 University-affiliated clinic and 2 Community-based clinics	\checkmark		\checkmark	\checkmark	
County of Los Angeles	2	Community-based clinics			\checkmark		
St. Luke's Roosevelt Hospital, New York	2	Hospital-based clinic	\checkmark			\checkmark	
University of Washington, Seattle	1	University-affiliated clinic	\checkmark			\checkmark	
El Rio/Special Immunology Health Center, Tucson	1	Community Health Center		\checkmark		\checkmark	
DeKalb County Board of Health, Decatur, GA	1	County Board of Health Clinic	\checkmark		\checkmark	\checkmark	
Whitman Walker Clinic, Washington, DC	1	Community Health Center	\checkmark		\checkmark	\checkmark	
Drexel University, Philadelphia	1	University-affiliated clinic	\checkmark	\checkmark	\checkmark	\checkmark	
University of North Carolina, Chapel Hill	1	University-affiliated clinic	\checkmark		\checkmark	\checkmark	
UC, San Diego, Owen Clinic	1	University-affiliated clinic			\checkmark		
Fenway Community Health Center	1	Community-based clinic	\checkmark				\checkmark
Mt. Sinai Hospital., Chicago	4	Hospital-based clinics	\checkmark				\checkmark
University of Miami	1	University-affiliated clinic		\checkmark			\checkmark

center (Center) for this initiative. The demonstration sites were charged with working collaboratively with the Center and the SPNS program to tailor, implement and evaluate prevention interventions with HIV-positive individuals in primary care settings. The goal of the initiative is to evaluate the effectiveness of behavioral prevention intervention programs in improving behaviors and ultimately avert new HIV-infections.

The Prevention with Positive Initiative seeks to determine if behavioral interventions in primary care clinical settings can help HIV-infected clients reduce the risk of transmitting HIV to others. Evaluation of the interventions also assess the appropriateness of the models with different populations (e.g., men of color who have sex with men, heterosexual women, rural drug users) and for different primary care settings (e.g., rural, urban, high volume, community-based organization, large hospital). Outcomes of the interventions are being examined over time for both provider and patient behavior and attitudinal changes, and the relative cost effectiveness of the interventions is also being determined.

The 15 sites have implemented and are testing interventions tailored specifically to their individual clinics. As previous noted, several sites adapted or adopted interventions found effective in randomized controlled trials. For example, the SPNS demonstration site in Tucson, Arizona adapted Healthy Relationships, a community-based HIV prevention intervention that utilizes multiple group sessions, for use in the clinical setting (Kalichman et al., 2001). Tailored for HIV-positive men and women, Healthy Relationships was one of the first prevention with positives interventions to demonstrate a decrease in risky sexual behaviors. In a comparison of the Healthy Relationships intervention and a health maintenance support group (standard of care), Kalichman and colleagues found that HIV-positive individuals in the behavioral intervention group reported less unprotected sex and greater condom use at follow-up.

The first randomized controlled trials of prevention interventions with HIV-infected persons in clinical settings focused on brief, provider-delivered prevention discussions during routine clinic visits. Trials by Richardson and colleagues (2004) and Fisher and colleagues (2006) found that these provider-delivered prevention interventions were effective at reducing unprotected sex in HIV-infected patients. The County of Los Angeles Prevention with Positives site adopted the provider-delivered HIV prevention intervention developed, implemented and tested by Richardson and colleagues (2004)—Partnership for Health. Partnership for Health is a clinic-wide intervention where all staffs are trained on the material and prevention messages are displayed in posters and other printed material throughout the clinic. Primary care providers are trained to deliver prevention messages in the routine course of care. Richardson and colleagues found that loss-framed messages, focusing on the negative consequences of risk behavior, delivered by primary care providers was associated with significant reductions in unsafe practices among HIV-infected patients who reported engaging in risky sex with two or more partners.

Other SPNS demonstration sites developed new interventions based on accepted theoretical models. Interventions across the sites differ in terms of modality, target population, and the types of professionals, from peers to physicians, who "deliver" the intervention messages. Among the 15 demonstration sites, interventions in five sites assess and address risk behaviors for patients reporting sexual activity and/or drug use. Four prevention interventions are utilized with all patients. Additional populations targeted by demonstration sites include men who have sex with men (n = 2); women living with HIV (n = 1); male patients (n = 1); patients diagnosed with HIV for at least three months (n = 1); and HIV-infected patients age 45 and older (n = 1).

As seen in Table 1, the modality or level of the intervention varies across interventions. Ten of the implemented interventions utilize an individual-level approach with one-on-one interaction between the individual providing the intervention and the patient. Group-level interventions are offered in two sites with patients participating in five sessions. The remaining three sites utilize both one-on-one interactions and group meetings.

Finally, the initiative sites use different types and numbers of personnel to deliver the interventions (see Table 1). While clinicians are the sole providers of prevention interventions in three demonstration sites, clinicians and intervention specialists are used in five other interventions. One additional clinical setting utilizes clinicians, an intervention specialist and peers to deliver their prevention with positives model. Interventions delivered by intervention specialists have been implemented in three sites and three others have developed interventions delivered by peers. The types of professionals serving as intervention specialist included health educators, social workers, nurses, and mental health specialists. The 15 interventions implemented and evaluated in the SPNS Prevention with Positives Initiative are further described by Koester and colleagues in this issue.

Future Directions

Over the past three years, the 15 demonstration sites participating in the SPNS Prevention with Positives Initiative have implemented HIV prevention interventions designed to identify and reduce the risky sexual and/or drug using behaviors of their patients with the goal of averting HIV transmission. In this issue of AIDS and Behavior, ten sites provide insight into the rationale for selecting or developing a particular intervention model. The following articles describe the challenges of implementing prevention interventions in clinic settings by describing how the interventions were tailored to address the needs of their patient populations. In addition, the complexities and challenges of providing prevention with HIV-infected patients in busy medical care settings are discussed. The resources, training and quality assurance activities needed to integrate these programs into HIV care clinics are presented.

Over the next year, effectiveness of the 15 interventions in reducing risky behaviors and averting HIV transmission will be assessed. Remembering that a primary goal of the SPNS program is to disseminate innovative models of care that "work," we hope that a number of these interventions will be found to be effective and thus provide HIV clinical settings with additional HIV prevention with positives models to adapt or adopt for their clinics. The articles included in this special issue provide the crucial contextual data i.e., tailoring of the interventions, thus improving the ability to guide others in their selection of an appropriate, feasible and acceptable intervention to implement in their own clinical setting.

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