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Shifting Resources and Focus to Meet the Goals of the National HIV/AIDS Strategy: The Enhanced Comprehensive HIV Prevention Planning Project, 2010–2013

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ABSTRACT

In September 2010, CDC launched the Enhanced Comprehensive HIV Prevention Planning (ECHPP) project to shift HIV-related activities to meet goals of the 2010 National HIV/AIDS Strategy (NHAS). Twelve health departments in cities with high AIDS burden participated. These 12 grantees submitted plans detailing jurisdiction-level goals, strategies, and objectives for HIV prevention and care activities. We reviewed plans to identify themes in the planning process and initial implementation. Planning themes included data integration, broad engagement of partners, and resource allocation modeling. Implementation themes included organizational change, building partnerships, enhancing data use, developing protocols and policies, and providing training and technical assistance for new and expanded activities. Pilot programs also allowed grantees to assess the feasibility of large-scale implementation. These findings indicate that health departments in areas hardest hit by HIV are shifting their HIV prevention and care programs to increase local impact. Examples from ECHPP will be of interest to other health departments as they work toward meeting the NHAS goals.

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Set forth in 2010, the National HIV/AIDS Strategy (NHAS) aimed to produce significant programmatic and policy changes to address the human immunodeficiency virus (HIV) epidemic in the United States.¹ The NHAS has four goals: (1) reduce new HIV infections, (2) increase access to care and optimal health outcomes for people living with HIV (PLWH), (3) reduce HIV-related health disparities, and (4) achieve a more coordinated response to the epidemic. No single solution to the HIV epidemic in the United States exists, and NHAS highlights the importance of combination prevention (i.e., integrating behavioral, biomedical, and structural HIV interventions or strategies²). Because not all combinations are equally efficacious or cost-effective, the Centers for Disease Control and Prevention (CDC) introduced the high-impact prevention (HIP) initiative in 2011, which emphasized the need for combinations of cost-effective, feasible interventions and public health strategies that are most likely to improve HIV outcomes.^{3,4} Recent biomedical advances⁵⁻⁷ and the ability to extend and increase the quality of life of PLWH⁸ also have strengthened the available prevention tools. NHAS and CDC's HIP initiative each call for using all available HIV prevention resources strategically, with a clear emphasis on cost-effective, evidence-based approaches.

PURPOSE

In collaboration with local health departments and other federal partners, CDC conducted the Enhanced Comprehensive HIV Prevention Planning (ECHPP) project from 2010 to 2013 in the 12 metropolitan statistical areas (MSAs) or divisions with highest acquired immunodeficiency syndrome (AIDS) prevalence in 2007 (207,785 people or 44% of AIDS cases).⁹ State and local health departments in these MSAs developed comprehensive jurisdiction-level plans with support from CDC and other federal partners (Table 1). Although ECHPP funded planning and some implementation, its mechanism for public health impact was by leveraging CDC's separate, large, five-year cooperative agreements in addition to other available funds. We describe the planning and initial program shifts made by these health departments in response to ECHPP and the NHAS.

METHODS

CDC awarded ECHPP grantees a total of \$42.8 million for enhanced prevention planning, coordination, and some implementation from September 30, 2010, to September 29, 2013. Jurisdiction-level plans could include

up to 24 interventions (Table 2). Plan development was guided by the following principles: (1) examine all local HIV prevention, care, and treatment resources; (2) direct resources to achieve maximum impact on HIV incidence; (3) implement a combined, targeted set of behavioral, biomedical, and structural interventions scaled to maximize coverage and impact; and (4) increase data-driven decision making by incorporating available epidemiologic, cost-effectiveness, and efficacy data.³ Beyond this guidance, additional coordination was provided both within the Division of HIV/AIDS Prevention at CDC and across federal agencies. This federal coordination supported improved communication, technical assistance, and guidance to health departments, and facilitated communication among key staff members.

Plans included a situational analysis that described the pre-ECHPP distribution of HIV prevention, care, and treatment resources in the MSA organized by intervention across all funding sources. This analysis was based on an assessment of current services in the context of available intervention effectiveness data, resources targeted for groups at highest risk of HIV transmission or acquisition, and cost-effectiveness data when available. The situational analysis formed the basis for setting local ECHPP goals, strategies, and objectives to address gaps in coverage, to increase the coordination of services, and to realign resources for maximum impact. Data and funding sources were documented for each intervention to facilitate program monitoring and identify areas where more coordination could be beneficial.

For each grantee, two authors of this article (SAF and MG) independently reviewed the plans and agreed on common themes to summarize the content in spring 2012. Themes were discussed with ECHPP project staff members and grantees to gain additional context and revise themes as needed. Themes related to planning and programmatic shifts are summarized hereinafter.

OUTCOMES

The planning process

Data sources. Grantees used several data sources in preparing their ECHPP plans, including HIV/AIDS, sexually transmitted disease (STD), tuberculosis (TB), and hepatitis surveillance data; HIV testing and partner services data; Ryan White Program Part A and Part B data; U.S. Census data; CDC behavioral risk surveillance systems data;¹⁰⁻¹² Ryan White Program needs assessments; existing comprehensive prevention and HIV services plans; cost and budget data; local health department reports; national guidance

Table 1. Enhanced Comprehensive HIV Prevention Planning project metropolitan statistical areas and metropolitan divisions,^a health department grantees, and supporting federal partners, 2007

2007 rank	2007 estimated number of AIDS cases ^b	Enhanced Comprehensive HIV Prevention Planning health department grantees	
		Metropolitan statistical area/ metropolitan division	Health department
1	66,426	New York Division	New York City Department of Health and Mental Hygiene
2	24,727	Los Angeles Division	Los Angeles County Department of Public Health
3	15,696	Washington, D.C.	District of Columbia Department of Health
4	14,175	Chicago Division	Chicago Department of Public Health
5	13,105	Atlanta-Sandy Springs-Marietta, Georgia	Georgia Department of Public Health
6	12,732	Miami Division	Florida Department of Health
7	12,469	Philadelphia Division	Philadelphia Department of Public Health
8	11,277	Houston-Baytown-Sugar Land, Texas	Houston Department of Health and Human Services
9	11,026	San Francisco Division	San Francisco Department of Public Health
10	10,301	Baltimore-Towson, Maryland	Maryland Department of Health and Mental Hygiene
11	7,993	Dallas Division	Texas Department of State Health Services
12	7,858	San Juan-Caguas-Guaynabo, Puerto Rico	Puerto Rico Department of Health

Federal partners

- Health Resources and Services Administration
- Substance Abuse and Mental Health Services Administration
- National Institutes of Health
- Bureau of Indian Health Services, Department of Housing and Urban Development
- Department of Health and Human Services' Office of HIV/AIDS and Infectious Disease Policy
- The White House's Office of National AIDS Policy

^aA metropolitan statistical area contains a core urbanized area with at least 50,000 inhabitants. A metropolitan division is a county or group of counties that contains a population of at least 2.5 million. Source: Office of Management and Budget (US). 2010 standards for delineating metropolitan and micropolitan statistical areas; notice. Fed Reg 2010;75:37246.

^bCenters for Disease Control and Prevention (US). Diagnoses of HIV infection and AIDS in the United States and dependent areas, 2008. HIV Surveillance Report 2008;20:1-143. Also available from: <http://www.cdc.gov/hiv/surveillance/resources/reports/2008report/index.htm> [cited 2014 Feb 19].

HIV = human immunodeficiency virus

AIDS = acquired immunodeficiency syndrome

and recommendations; and intervention efficacy data. Strategies for data use included geomapping (i.e., overlaying HIV/AIDS prevalence data with service sites), use of ZIP Code-level incidence and prevalence data, and input from stakeholders.

Partners in decision making. To identify all federally funded HIV-related efforts in the jurisdiction, HIV prevention health department staff members collaborated with other health department units (e.g., mental health, surveillance, and HIV care), staff members from federal agencies, and statewide and local partners (e.g., commissioners of health, department of public welfare coordinators, STD program managers, and epidemiologists). Health departments benefited from long-standing relationships with these partners. These meetings facilitated information sharing among key players in the MSA and laid the foundation for

the ECHPP plans. Health departments also gathered input from consumers in populations at increased risk for HIV infection (e.g., African American gay and bisexual men); community leaders; service providers; legal, advocacy, and training experts; and academic institutions.

Modeling. Several health departments collaborated with academic and private partners to conduct mathematical modeling to inform their planning. Resource allocation modeling¹³ can aid decision making about allocation of HIV prevention resources by incorporating information about program cost, efficacy, and other data. Although such modeling results were not intended to provide a final decision about programmatic shifts, they provided important input into the planning process, such as which program areas to consider scaling up or down. Grantees took slightly different approaches to

Table 2. Required and recommended intervention and public health strategies for the Enhanced Comprehensive HIV Prevention Planning project, 2010

<i>Required or recommended</i>	<i>Intervention and public health strategies</i>
Required	<ul style="list-style-type: none"> • Routine, opt-out HIV screening in clinical settings of patients aged 13–64 years • HIV testing in nonclinical settings to identify undiagnosed HIV infection • Condom distribution prioritized to target HIV-positive people and those at highest risk of acquiring HIV • Provision of postexposure prophylaxis to populations at greatest risk • Changing existing structures, policies, and regulations that are barriers to optimal prevention, care, and treatment • Linkage to HIV care, treatment, and prevention services for those testing positive and not currently in care • Interventions or strategies promoting retention or reengagement in care • Policies and procedures for the provision of antiretroviral treatment in accordance with current treatment guidelines • Interventions or strategies promoting adherence to antiretroviral medications • Sexually transmitted disease screening according to current guidelines • Prevention of perinatal transmission • Ongoing partner services • Behavioral risk screening followed by risk-reduction interventions for HIV-positive people • Linkage to other medical and social services
Recommended	<ul style="list-style-type: none"> • Condom distribution for general population • HIV and sexual health communications or social marketing campaigns • Clinic- or provider-delivered, evidence-based HIV prevention interventions for HIV-positive patients and patients at highest risk of acquiring HIV • Community-level interventions that reduce HIV risk • Behavioral risk screening followed by individual- or group-level evidence-based interventions for HIV-negative people at highest risk of acquiring HIV • Integrated hepatitis, tuberculosis, and sexually transmitted disease testing, partner services, vaccination, and treatment • Targeted use of HIV/sexually transmitted disease surveillance data • Broadened linkages to and provision of other services for social factors impacting HIV incidence for HIV-negative people at highest risk of acquiring HIV • Brief alcohol screening and interventions for HIV-positive people and HIV-negative people at highest risk • Community mobilization to create environments that support HIV prevention

HIV = human immunodeficiency virus

modeling, including investigating the cost effectiveness of different HIV testing approaches, examining optimal combinations of HIV prevention strategies to maximize new infections averted using available funds,¹⁴ and using a risk-benefit frame¹⁵ to consider outcomes associated with options for distributing existing resources.

Major shifts in planned HIV prevention activities

Several major themes related to programmatic shifts emerged from the ECHPP plans: organizational change, partnerships, data management and use, protocols and policies, training and technical assistance, and pilot programs. The themes discussed hereinafter describe efforts the health departments planned to undertake to shift scale and program funding allocations during ECHPP.

Organizational change. Two health departments engaged in organizational restructuring, between HIV prevention and care planning bodies and across health department units. Such organizational changes support the proposed shifts in HIV prevention delivery to increase

coordination across prevention, care, and treatment services. Examples included hiring more staff members to implement activities, forming a prevention committee with stakeholders, formally merging HIV prevention and Ryan White planning groups, and reorganizing HIV prevention offices to function more efficiently (e.g., expediting approval processes and simplifying processes for sharing information across offices).

Partnerships. Another major theme was the increasingly proactive role that health departments’ HIV prevention units played in HIV treatment/care responsibilities. Traditionally, these units operate relatively independently of each other—CDC is the major federal funder for HIV prevention and the Health Resources and Services Administration (HRSA) is the major federal funder for HIV treatment and care. Increased coordination across these units during the planning process, and in some cases program integration, reflects the emphasis the field of HIV prevention is placing on care and treatment as two parts of one HIV prevention strategy. Examples of such coordination, facilitated

by the health department, include working with Ryan White grant administrators to improve coordination in planning and implementation, local leadership of Medicaid managed care organizations to increase routine HIV screening, and state department of education staff to develop and implement a comprehensive sexual health curriculum. Several grantees worked with CDC's Business Responds to AIDS/Labor Responds to AIDS program, a public/private partnership that promotes the involvement of business and labor in HIV prevention, awareness, and workplace policies.¹⁶ Examples of planned activities from this partnership included a condom distribution program, promotion of improved access to HIV care, and transportation assistance.

Data management and use. Many grantees planned to improve data use by enhancing or merging existing data systems, or developing new ones. For example, the District of Columbia Department of Health in Washington, D.C., proposed integrating program and surveillance systems for HIV/STD/TB/hepatitis to improve partner services by identifying medical sites in greatest need of disease intervention specialists. This integration also would help create improved viral load maps and match HIV patient data to monitor treatment adherence. Other proposed uses of integrated data systems focused on interfacing across other health department data systems to improve electronic laboratory reporting, outbreak detection and management, and tracking of prevention and care referral completions.

The Florida Department of Health in Miami, Florida, proposed using information from two HRSA CAREWare databases (which contain patient information associated with two of HRSA's Ryan White-funded activities: Part A Service Delivery Information and Part B Case Management) to help Ryan White-funded linkage specialists locate newly diagnosed individuals and link them to care. The San Francisco Department of Public Health in San Francisco, California, proposed developing and implementing a name-based service utilization data system (for tracking service use) for all health department-supported programs to improve linkage to medical care for PLWH.

Protocols and policies. Many health departments planned to draft new protocols and policies to support an increased level of coordination and related programmatic procedures. For example, the Los Angeles County Department of Public Health in Los Angeles, California, planned to write protocols for integrating linkage to care and HIV partner services, and to write best-practice protocols for integrated/co-located social and medical services related to HIV, substance abuse, and mental health services. Such protocols

would improve communication among providers and standardize key prevention components. The Texas Department of State Health Services in Dallas, Texas, described plans to develop protocols for community-based organizations and health-care providers throughout its jurisdiction. These protocols would support routine STD screening and prioritize partner services based on viral loads of index clients. The department also planned to require all Ryan White-funded agencies in Dallas to have protocols for risk-reduction referrals and STD screenings.

The New York City Department of Health and Mental Hygiene in New York City planned to require all funded clinics to develop protocols for opt-out and oral consent for HIV testing, as well as monitoring and quality assurance protocols focusing on the number of patients offered testing. Similarly, to support an increased number of tests, the Maryland Department of Health and Mental Hygiene in Baltimore, Maryland, planned to work with hospital emergency departments to establish reimbursement protocols for HIV tests. The Philadelphia Department of Public Health in Philadelphia, Pennsylvania, planned to develop a condom distribution protocol for PLWH and high-risk HIV-negative people by all health department-funded medical and medical case-management programs. The Philadelphia Department of Public Health also planned to develop a protocol for nonoccupational postexposure prophylaxis (nPEP) for physicians and policies for prevention staff to support reengagement of PLWH who have fallen out of care.

New protocols and policies created a need for training and technical assistance programs to support health department partners. Such programs included training clinical staff on routine testing, nPEP, and cultural competency. The San Francisco Department of Public Health planned to train local law enforcement on proper procedures related to syringe access and disposal programs.

Pilot programs. The last major theme identified was the use of pilot programs (i.e., trying out new programs before they are brought to scale to test implementation and potential outcomes). Other issues explored by pilot programs were feasibility, acceptability, accessibility, reach, cost, and sustainability. Many pilot programs focused on linkage and retention in medical care for PLWH. The Philadelphia Department of Public Health planned a pilot program to refer adolescents with multiple prior STDs or first STD acquired at a young age to appropriate evidence-based behavioral interventions. New York City's Prevention with Positives pilot program was designed to identify the most effective and

appropriate provider-delivered intervention model for local clinics.

Three behavioral risk screening and risk-reduction approaches were tested. The San Francisco Department of Public Health piloted a program to identify PLWH lost to care, serve as a single point of contact for all new HIV diagnoses in the city, and triage new cases to appropriate services; the program was coordinated with all existing reengagement/retention resources in the city. The Los Angeles County Department of Public Health piloted an HIV medical care coordination model¹⁷ at two medical care sites and evaluated its impact on retention rates. This model integrated medical and nonmedical case management into a multidisciplinary care coordination team at patients' medical homes to optimize access, retention, and treatment adherence, and improve patient health outcomes and self-management.

LESSONS LEARNED

An overarching theme in ECHPP was addressing ways to increase and sustain improved coordination across HIV prevention and care programs, especially given the proven high level of effectiveness of care as a prevention strategy.¹⁸ Grantees placed a heavy emphasis on partnerships to improve this coordination and built relationships directly among key health department staff members who manage and allocate prevention and care funds (typically separate funding streams). Simply initiating such conversations provided opportunities to discuss points of coordination that were needed or could be prioritized. Some grantees were also able to engage in strategic reorganizations to support ongoing coordination efforts. ECHPP also played an important role in a National Institutes of Health initiative to support the work of these health departments through Centers for AIDS Research centers.¹⁹

This approach has influenced other CDC programmatic efforts,²⁰ which should result in an increase in the effectiveness of HIV prevention dollars and improved outcomes for PLWH. Another key partnership common across grantees was stakeholder engagement. ECHPP grantees found many ways to work with local communities most affected by HIV to keep them informed and engaged. The vast majority of health department-supported HIV prevention efforts would not be viable without such community support. Much of grantees' success during planning and implementation was due to these relationships (e.g., a high-impact HIV prevention project in Miami-Dade County, Florida²¹).

ECHPP grantees were also successful at establishing new protocols and identifying opportunities for policy

changes. These types of changes are not linked to specific funding sources and are, therefore, more likely to be sustainable compared with other program shifts. They also support sustaining the increased emphasis on coordination by communicating standard practices within an organization and by creating larger-scale policy changes across an entire jurisdiction. Additionally, grantees appreciated the importance of data in improving coordination and service delivery. Many jurisdictions set out to develop new data systems to integrate with existing ones. Others planned to develop data-sharing agreements across programs or identify new ways of data sharing to create a more complete picture of their local epidemic. A final theme that emerged was implementation of pilot programs—many pilot programs focused on services for PLWH, which will be critical to the ultimate success of NHAS.

CONCLUSION

This article describes how, by participating in the ECHPP project, health departments in high HIV prevalence cities proposed major shifts in program planning in response to NHAS and the HIP initiative. Initial findings indicate these health departments were able to scale up important HIV prevention activities, such as HIV testing, condom distribution, and partner services activities.²² Although ECHPP was not a research study, much will be learned from the project, and the evaluation aims to provide a comprehensive picture of services provided and related outcomes in these high-burden areas.²³ Additionally, many of the systems-level changes accomplished by ECHPP grantees should continue to have an impact in the future,²⁴ and lessons learned may inform other health departments as they strive to improve coordination, collaboration, and integration for HIV prevention at the local level.

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