



Published in final edited form as:

J Public Health Manag Pract. 2018 ; 24(3): 225–234. doi:10.1097/PHH.0000000000000575.

The Changing Landscape of HIV Prevention in the United States: Health Department Experiences and Local Adaptations in Response to the National HIV/AIDS Strategy and High-Impact Prevention Approach

Dr Holly H. Fisher, PhD,

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Dr Aبا Essuon, PhD,

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Mss Tamika Hoyte, MPH,

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Mss Ekaterine Shapatava, MPH,

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Dr Gene Shelley, PhD,

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Dr Aisha Rios, PhD,

Karna LLC, Atlanta, Georgia

Dr Stephanie Beane, PhD,

Rollins School of Public Health, Emory University, Atlanta, Georgia

Mss Stacey Bourgeois, BS,

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Mss Erica Dunbar, MPH,

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Mss Tobey Sapiano, MPH

Correspondence: *Holly H. Fisher, PhD, Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, 1600 Clifton Rd, NE, Mailstop E-59, Atlanta, GA 30333 (hfisher@cdc.gov).*

The authors declare no conflicts of interest.

Supplemental digital content is available for this article. Direct URL citation appears in the printed text and is provided in the HTML and PDF versions of this article on the journal's Web site (<http://www.JPHMP.com>).

Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia

Abstract

Objective: HIV prevention has changed substantially in recent years due to changes in national priorities, biomedical advances, and health care reform. Starting in 2010, motivated by the National HIV/AIDS Strategy (NHAS) and the Centers for Disease Control and Prevention's (CDC's) High-Impact Prevention (HIP), health departments realigned resources so that cost-effective, evidence-based interventions were targeted to groups at risk in areas most affected by HIV. This analysis describes how health departments in diverse settings were affected by NHAS and HIP.

Methods: We conducted interviews and a consultation with health departments from 16 jurisdictions and interviewed CDC project officers who monitored programs in 5 of the jurisdictions. Participants were asked to describe changes since NHAS and HIP and how they adapted. We used inductive qualitative analysis to identify themes of change.

Results: Health departments improved their HIV prevention practices in different ways. They aligned jurisdictional plans with NHAS and HIP goals, increased local data use to monitor program performance, streamlined services, and strengthened partnerships to increase service delivery to persons at highest risk for infection/transmission. They shifted efforts to focus more on the needs of people with diagnosed HIV infection, increased HIV testing and routine HIV screening in clinical settings, raised provider and community awareness about preexposure prophylaxis, and used nontraditional strategies to successfully engage out-of-care people with diagnosed HIV infection. However, staff-, provider-, and data-related barriers that could slow scale-up of priority programs were consistently reported by participants, potentially impeding the ability to meet national goals.

Conclusion: Findings suggest progress toward NHAS and HIP goals has been made in some jurisdictions but highlight the need to monitor prevention programs in different contexts to identify areas for improvement and increase the likelihood of national success. Health departments and federal funders alike can benefit from the routine sharing of successes and challenges associated with local policy implementation, considering effects on the overall portfolio of programs.

Keywords

High-Impact Prevention; HIV; National HIV/AIDS Strategy; policy

The landscape of HIV prevention, care, and treatment in the United States has changed substantially due to changes in federal priorities, new biomedical interventions, and health care reform (Table 1). Major change began in 2010 with the National HIV/AIDS Strategy (NHAS),¹ a national plan directing US public health and private agencies to align HIV efforts for a common purpose. The NHAS focused on 4 goals: reduce new HIV infections, improve access to care and outcomes for people living with HIV infection (PLWH), reduce HIV-related disparities, and achieve a more coordinated national response. In response, the Centers for Disease Control and Prevention's (CDC's) High-Impact Prevention (HIP) approach prioritized the use of evidence-based programs targeted to groups at highest

risk for infection and transmission in the most highly affected communities.² Through HIP, CDC directed health departments to maximize HIV prevention efforts by allocating the majority of HIV prevention funds to the most impactful programs and aligning their work with NHAS goals. CDC first implemented NHAS and HIP at health departments in 2010³ in 12 high prevalence cities and then nationally in 2012.⁴ During this same period, Congress passed the Affordable Care Act (ACA)⁵; Truvada—a daily pill to prevent HIV infection—was approved by the Food and Drug Administration⁶; routine HIV screening recommendations were published⁷; and federal guidance on HIV treatment⁸ and integrated planning across HIV prevention and care activities⁹ was published.

The health department plays an important role in HIV prevention and is a major provider and funder of HIV-related services. It is important for CDC and other funders of HIV prevention programs to understand how NHAS and HIP have affected health departments in the midst of other changes in the field. Understanding how policy change has affected real-world planning and programming can help funders highlight successful practices and identify areas for improvement. Furthermore, HIV prevention providers at different stages of adapting their practices (eg, funding and staff capacity levels, support from local stakeholders) may benefit from learning about promising practices at other sites.

This article summarizes findings from the Changing Landscapes project, an initiative within CDC's Division of HIV/AIDS Prevention (DHAP) to evaluate NHAS/HIP-related changes in the field and document key impacts from these policies. In this project, we asked HIV prevention staff in different health department jurisdictions to describe changes they have experienced, exploring local, contextual factors that contributed to program successes and challenges. In this analysis, we describe themes of change since NHAS/HIP in 16 health department jurisdictions.

Methods

We selected 16 CDC-funded health department jurisdictions (see Table, Supplemental Digital Content 1 for a list available at <http://links.lww.com/JPHMP/A316>) to represent a mix of funding levels, geographic regions, and HIV prevalence. Purposive sampling ensured diversity of jurisdictions and allowed us to explore change in different contexts (eg, rural and urban, city and state level). Data were collected through open-ended interviews (November-December 2014) and a consultation (October 2015) using an inductive approach (Table 2). We first interviewed AIDS directors and HIV prevention program managers (n = 8) from 5 health departments and CDC project officers (n = 5) who have monitored HIV prevention programs at these agencies. Health department staff were asked 1 open-ended question at the start of the interview: "What are the biggest changes you have experienced in HIV prevention since 2010, since NHAS and HIP were implemented?" Interviewees were encouraged to talk about any topic—considering work across all funding streams—and were probed for more detail when clarity or additional information was needed to understand the change. Project officers were asked to provide their perspectives on health department changes. All interviewees had experience working in HIV prevention (range, 3–14 years). Interviews lasted approximately 1 hour and were conducted in person in private settings, except for 1 phone interview. We next held a 2-day consultation in

Atlanta, Georgia, with 11 AIDS directors and program managers from 11 new jurisdictions to gather additional information about change in a group setting (and identify changes not described in interviews). Representatives from the National Association of State and Territorial AIDS Directors, Urban Coalition for HIV/AIDS Prevention Services, and DHAP staff also attended. A meeting facilitator asked participants the same open-ended question as the interviewees at the start of the consultation, using similar probes. If a change identified during the interviews was not raised by participants, the facilitator probed on that topic.

Interviews were recorded and transcribed. Two coauthors used an inductive approach¹⁰ to independently code transcripts, identify themes of change, and discuss and resolve differences in coding. Codes represented areas of change experienced/made by the health departments (examples are “collaboration and coordination,” “HIV continuum of care,” and “testing”). At the consultation, multiple coauthors took detailed notes, which were merged into 1 document. Two coauthors reviewed the notes, independently identified themes, and resolved differences. During data analysis, coders met regularly to discuss codes and emerging themes and synthesize data in a meaningful way. This activity was not considered to be human subjects research, as information collected will be used for program evaluation.

Results

We summarize themes of change that emerged from the interviews and consultation for the 16 jurisdictions, whether reported by health departments or project officers. Example strategies to adapt to change are presented in Table 3.

Organizational change and program planning

All health departments described changes in organizational infrastructure and program planning. Many of those in high prevalence jurisdictions successfully integrated HIV prevention and HIV care activities, in alignment with federal guidance, by merging planning bodies, jurisdictional plans, and work units. Because of small agency size, prevention and care activities were typically already integrated in low and medium prevalence jurisdictions. Barriers to integration included difficulty blending distinct HIV work cultures, role confusion, and differences in approach. One participant explained:

I think the cultures are so different between the two planning councils ... the prevention planning council is sort of responsible for thinking about the whole city and the epidemic on a population level, whereas the care council is focused on consumers of Ryan White services. It's really two completely very different populations with different sets of issues. (HD3)

To further streamline services, some agencies integrated HIV with non-HIV programs, for example, using HIV serum collection to screen for other sexually transmitted diseases and hepatitis. Health departments also reorganized teams to focus on function (eg, population health team), rather than specific diseases, and combined surveillance, health informatics, and field services teams to improve data sharing.

Health departments described being more strategic in their planning, spending considerable effort to align activities with NHAS/HIP and increase allocations to priority programs. Some

indicated that DHAP's new allocation requirements for prevention services for PLWH were helpful because they could justify to stakeholders the need to de-emphasize risk-reduction programs for people with HIV-negative/unknown status. Funding shifts were substantial in some communities, resulting in the loss of funding for long-standing, community-based organizations (CBOs) that traditionally served people with HIV-negative/unknown status. One of the participants described discussing their new direction with CBOs:

And so we went to them pretty early and sort of said ... tell us how you're going to serve everybody in your region. Nobody did that.... So when we went to them and said, we can't sustain this everywhere anymore, they understood, but it was hard ... because these have been important, historic, longstanding organizations, but it was time to make a change, and we had a responsibility. (HD5)

Partnerships, collaborations, and federal support

Most health departments strengthened existing partnerships (eg, CBOs) and forged new relationships with nontraditional partners (eg, legislators, universities). They stressed that CBOs are good at finding and engaging undiagnosed PLWH; however, it took time to convince some CBOs to shift away from traditional risk-reduction programs. Partnerships with private health care providers, correctional facilities, pharmacies, community health centers, universities, and providers of mental health and substance abuse services were broadened to raise awareness about HIV services and provide training on testing and billing for services. The importance of educating nontraditional partners about HIV was stressed, as they may have limited knowledge/experience. Some health departments worked with advocates to promote lesbian/gay/bisexual/transgender (LGBT) and HIV issues to medical providers, legislators, and their state Medicaid office.

Collaborations within the health department across HIV prevention, care, and surveillance units increased in some jurisdictions. For example, more frequent communication across prevention, care, and surveillance groups helped staff become more familiar with different aspects of HIV-related work and improved overall services. Despite increased collaborations, some reported ongoing challenges with territorialism and uncoordinated data systems.

Although a few health departments noted that federal support for prevention programs has increased, the majority reported challenges. A common complaint was that federal agencies require that grantees report outcomes by funding announcement, rather than stage of the HIV continuum, but it may not be appropriate to attribute success in one outcome (eg, viral suppression) to a single program/funding source. Increasing overlap in federally funded HIV programs has made it more difficult to link programs to outcomes, and redundancies in data reporting are time-consuming and shift resources from services.

Data use

Almost all health departments described using different types of data (eg, surveillance, program, survey) to inform planning, improve the targeting of HIV testing programs, and identify not-in-care PLWH who need services. Many integrated data from different sources and systems to identify service gaps and optimize staff workload. Resource allocation

modeling was conducted in some jurisdictions to identify the most effective interventions, directing resources accordingly. Routinely sharing program performance data with CBOs and other health departments helped pinpoint areas for improvement, and sharing data with community groups helped illustrate why programming shifts were needed (to increase buy-in). One health department stressed the power of data to dispel outdated notions:

Mind-set change was difficult. There was the perception that black women were highly affected. Changing this mind-set was hard but important ... did this by continuously showing them the data. Now more emphasis on testing black men.
(HD12)

To improve the reach of specific groups, health departments used survey data to identify venues frequented by populations at risk and mapped high morbidity and high poverty Census tracts to identify testing gaps. There were many examples of using data to guide programs for PLWH, such as matching client data across data systems to determine care status, distinguishing between previously identified and new HIV diagnoses in data systems, and prioritizing services based on highest prevalence areas or PLWH with greatest need (eg, high viral load). The most frequently reported barrier involved reconciling incomplete or inconsistent client information across data systems.

HIV testing

Almost all health departments described strategies to improve testing programs and routine HIV screening in clinical settings. Many shifted to more targeted testing of men who have sex with men, young men, sex workers, and persons who inject drugs and broadened testing access (eg, home test kits). Because funding shifted nationally to align with a high-impact approach, health departments were required to adjust their funding accordingly, which may have meant targeting different populations than in the past. A few participants noted difficulty shifting from “feel good” groups (eg, high school students, older women, people at health fairs) to groups identified through epidemiological trends; data-driven testing does not “feel” the same as community-driven testing, and they wanted to continue working with groups they have traditionally served. One participant cautioned that dramatic shifts in testing focus could compromise the existing testing infrastructure (if testing agencies are defunded) and, if priorities change again, it would take time to rebuild. For routine screening, health departments used innovative funding (eg, funded a quality improvement coordinator from the state primary care association to work with community health centers, used pharmaceutical funds for clinic screening) and settings (eg, emergency departments, clinics supported by Indian Health Service) to increase the number of people screened. Many challenges with routine screening were reported, including concern for missed opportunities for prevention services, ineffectiveness of opt-out screening, and inability to characterize HIV risk for populations screened in clinical settings.

Many health departments, particularly in high HIV prevalence jurisdictions, had difficulty meeting CDC testing and positivity targets, mainly because increased testing can lead to lower positivity or saturation of testing services. In some areas, testing outside health department-funded programs increased and led to half of all new HIV diagnoses in the jurisdiction (resulting in fewer undiagnosed PLWH for the health departments to “find”

through their testing programs). Justifying positivity targets to health department–funded agencies was challenging because it was unclear what a realistic positivity target should be. Some wanted to evaluate the cost of “finding” undiagnosed PLWH to make testing more cost-effective and increase their ability to meet targets. One participant questioned the use of targets, describing the value of testing regardless of result:

Need to use the testing event to link people to anything they need—HIV-negative people linked to PrEP, people with no insurance linked to ACA, linked to hepatitis testing, etc. Means to another end. (HD16)

Pre-exposure prophylaxis

The majority of health departments felt that the use of medication to prevent infection (pre-exposure prophylaxis [PrEP]) was an important prevention tool for high-risk populations. Health departments advocated for PrEP in different ways. They raised awareness, provided education, and built skills related to PrEP use with physicians, community health centers, and potential consumers through trainings and community forums. They identified physicians willing to offer PrEP and worked with practices not currently prescribing it to determine whether it made sense to do so. They asked providers and clients what they wanted/needed to make PrEP successful and provided assistance where possible (eg, helped clients get health insurance to access it). Similarities between HIV-negative people taking PrEP and PLWH on antiretroviral treatment (ART) were noted, as well as potential implications for services:

PrEP as a prevention strategy blurs the line between prevention and treatment. Linkage, medication, and retention issues are similar for HIV-negative clients on PrEP and HIV-positive clients on ART. (HD9)

Many health departments described challenges in implementing PrEP because of lack of funding, poor provider support, and/or local political climate.

Prevention services for PLWH

PLWH are a priority population for NHAS and HIP.² Health departments described their experiences scaling up prevention services for PLWH (eg, behavioral risk interventions, HIV/STD partner services, linkage to HIV medical care) that frequently involved leveraging specialized staff and community partnerships. Disease intervention specialists (DIS), hospital staff, CBO patient navigators, and health department staff embedded in CBOs were used successfully to link newly identified and not-in-care PLWH to medical care. CBOs were noted as valuable in linkage and reengagement activities because of their existing relationships with people in affected communities and their cultural competence to talk with them about sex and drug use:

CBOs know how to find people ... they have great rapport. They get more partners than the DIS do because you're in a setting a person chose to go to. They already have rapport with the test counselor. It's not a stranger knocking on their door. (HD1)

Effective partnerships with medical providers and primary care clinics were also described as key to increasing the number of PLWH in care (eg, working with community health

centers to increase HIV care services in impoverished neighborhoods). Other strategies included media campaigns that emphasize treatment effectiveness, a coordination of services agreement so that client data can be shared across providers, and assigning patient navigators to distinct geographic areas to increase efficiencies. Multiple barriers to scaling up services were reported. Some barriers were staff-related—not enough trained staff, resource-intensive programs, and excessive workloads because the scope of HIV prevention work has expanded. Others were provider-related—providers may not communicate a patient’s care status to the health department (who then has to rely on laboratory reporting), and engagement with providers takes time because of their availability and workload. One participant noted:

If talking about “real engagement” with medical provider, we don’t have the capacity to do that. Need four months usually for success. If you just want lab results, we can do that in 30 days but actual linkage takes longer. (HD10)

Affordable Care Act

Although not directly related to NHAS/HIP, most health departments commented on effects of ACA on HIV prevention work. Those in medium and high HIV prevalence jurisdictions, typically located in ACA-driven Medicaid expansion states, tended to describe greater change/more positive experiences than low prevalence jurisdictions. Health departments trained staff and providers to educate clients about ACA benefits and enroll them in insurance plans, incorporating ACA information into prevention counseling and when linking PLWH to HIV medical care. Enrolling PLWH in ACA insurance plans also helped alleviate costs on other publicly funded programs (eg, AIDS Drug Assistance Program). Despite these benefits, health departments described various challenges with ACA, including expensive co-pays for HIV drugs, poor coverage of behavioral health services and providers, effort required to get reimbursed for HIV services (third party billing), and reimbursed funds not covering costs.

Health department role in HIV prevention

Some health departments felt their role in HIV prevention has evolved. An increased presence of pharmaceutical companies that provide HIV services and the increased availability of HIV prevention services through private health care have resulted in more options. Health departments recognize that there are more service access points than in the past and are proactively working with clients so that they can access services elsewhere. Some health departments perceived themselves as leaders of policy and best practices who should proactively facilitate system change, focusing on the broader goal of improving jurisdiction-level outcomes and considering the collective contribution of different programs:

[There is a] shift from viewing the health department as a service provider to a catalyst to get people to access health care and ensuring all pieces of the system are working to achieve goals rather than just the role of funder/service provider. (HD13)

Some advanced HIV policy by addressing legal barriers (eg, criminal transmission laws, laws that prevent data sharing). However, policy work takes time and is not typically supported by a single funding source. Health departments also emphasized their role in using a holistic approach to treat HIV, providing for basic needs (eg, transportation, food, and housing) and specialized care (eg, mental health and substance abuse services) at each stage of the HIV continuum to improve long-term outcomes.

Discussion

These findings illustrate how 16 health departments have responded to NHAS/HIP in their HIV prevention work and are consistent with recent surveys that show, nationally, health departments have undergone many changes since 2010.^{11,12} Health departments used varied strategies to improve HIV-related planning, infrastructure, partnerships, data use, and programming to align with NHAS/HIP goals. Their ability to adapt to large-scale change is noteworthy, given flat, federal HIV prevention funding (3% of annual HIV budget each year since 2011),¹³ CDC's revised health department prevention funding formula,⁴ other pressing public health emergencies (Ebola virus disease), and complex changes in health services due to health care reform.

Health departments indicated they improved planning and organizational processes by changing management structures, shifting resources to highest priority populations, and using data and modeling to identify gaps and determine an appropriate combination of programs. They engaged important stakeholders during planning to explain funding shifts, highlight successful and problematic areas, and get input. Ongoing engagement during implementation provided additional opportunities to discuss progress toward goals and modify activities. They also invested in new partnerships to expand HIV prevention into new settings, help new HIV service providers build capacity, and cultivate advocates to champion LGBT and HIV issues in the community. Results are similar to those of other studies that showed the importance of agency infrastructure, strategic planning, and coordination in meeting NHAS goals.^{3,14}

Programmatically, health departments felt they were improving the reach of their HIV testing and screening programs and their strategies for engaging PLWH and connecting them to services. Community partnerships and use of data-based strategies to monitor programs and outcomes were heavily emphasized. Creative collaborations with CBOs helped many health departments reach out-of-care PLWH, and CBOs were consistently described as valuable partners that were skilled at engaging PLWH in different ways. In addition, all health departments discussed the importance of having accurate and timely data to inform prevention programs and increase impact. However, incomplete data, incompatible data systems, and limited opportunity for data sharing impeded their work. Nationally, many health departments have begun implementing Data to Care strategies^{15–17} (HIV surveillance data are used to identify PLWH not in care and link them to care), but the extent to which these strategies show success varies across jurisdictions.^{18,19} These findings are consistent with those of the previous work that suggests strong partnerships and data use can help increase the number of people reached by high-impact programs.^{3,20}

While the full effects of health care reform are unknown, many of the health departments reported that ACA affected their HIV prevention efforts (in the midst of NHAS and HIP implementation) in positive and negative ways. Investments in helping PLWH get health insurance and get the right doctor could increase the proportion of PLWH linked to medical care (an NHAS indicator). However, the health department's ability to leverage ACA-related benefits for PLWH is limited if not in a Medicaid-expanded state. Also, high insurance co-pays/premiums, and barriers to services and medications important for HIV outcomes, could deter people from enrolling in insurance plans.

These findings suggest that the health department's role in HIV prevention is evolving. Health departments described greater focus on advancing jurisdiction-level prevention goals, mentoring non-traditional HIV service providers, and being a catalyst to connect people to a variety of HIV-related services—going beyond their role as service provider. Federal support may be needed to facilitate these new roles, for example, by helping health departments develop (or improve existing) jurisdiction-wide monitoring systems to better monitor routine HIV screening and PrEP services.

Several limitations are noted. Analyses are limited to topics that participants chose to discuss and people may have been more/less willing to discuss specific issues depending on data collection method. Also, it is possible that health departments were not completely forthright, given CDC (a major funder) led the project. However, many participants expressed appreciation at the opportunity to discuss important issues not routinely captured through other mechanisms. Finally, we cannot generalize findings to other health departments, although the diversity of participating jurisdictions provides valuable information about change in different settings.

Conclusion

Routine synthesis of contextual information related to health department programs, and understanding how policy change affects practices, can help federal and state funders assess the utility and value of a policy and identify areas for improvement. This analysis represents the first time CDC's DHAP has synthesized the experiences of health departments in different settings across a broad portfolio of programs, across funding sources, to understand local implementation of NHAS/HIP. DHAP routinely produces quantitative reports that monitor progress toward HIV prevention goals,^{21–23} and the updated NHAS²⁴ tracks progress via quantitative surveillance data. Quantitative indicators, however, provide minimal information about local context. Qualitative data can be a powerful tool in decision making and can provide in-depth, context-rich descriptions of how real-world practices are affected by policies from the perspective of implementers. Providing a routine forum for policy implementers to describe how and why policies are working allows for timely corrective action and supports program evaluation.^{25–27} DHAP will continue evaluating NHAS/HIP, using qualitative methods to obtain a comprehensive picture of practices in the field.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

This work was funded by the Centers for Disease Control and Prevention. The authors acknowledge the hard work and commitment of the members of the Changing Landscapes project team: Maria Alvarez, Lisa Belcher, Reginald Carson, Erika Copeland, Samuel Dooley, Odessa Dubose, Frank Ebagua, Renata Ellington, Kimberly Fambro, Benny Ferro, Janet Heitgerd, Angela Hickman, Lisa Kimbrough, Barbara Maciak, Jesse Milan Jr, Antonya Rakestraw, Shuenae Smith, Renee Stein, Dale Stratford, Gary Uhl, and Marlena Wald.

The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

References

1. The White House Office of National AIDS Policy. National HIV/AIDS Strategy for the United States. <https://www.aids.gov/federal-resources/national-hiv-aids-strategy/overview>. Published July 2010. Accessed January 27, 2017.
2. Centers for Disease Control and Prevention. High-impact HIV prevention: CDC's approach to reducing HIV infections in the United States. http://www.cdc.gov/hiv/pdf/policies_NHPC_booklet.pdf. Published 2011. Accessed August 18, 2016.
3. Flores SA, Purcell DW, Fisher HH, et al. Shifting resources and focus to meet the goals of the National HIV/AIDS Strategy: the Enhanced Comprehensive HIV Prevention Planning (ECHPP) Demonstration Project. *Public Health Rep.* 2015;131:52–58.
4. Centers for Disease Control and Prevention. Funding opportunity announcement (FOA) PS12–1201: comprehensive human immunodeficiency virus (HIV) prevention programs for health departments. <http://www.cdc.gov/hiv/policies/funding/announcements/ps12-1201/index.html>. Published 2011. Accessed August 9, 2016.
5. Department of Health and Human Services. Affordable Care Act. <http://www.hhs.gov/healthcare/about-the-law/read-the-law> Published 2010. Accessed August 9, 2016.
6. Federal Drug Administration. Truvada for PrEP fact sheet: ensuring safe and proper use. <http://www.fda.gov/downloads/newsevents/newsroom/factsheets/ucm312279.pdf>. Published 2012. Accessed August 9, 2016.
7. US Preventative Services Task Force. Human immunodeficiency virus infection: screening. <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/human-immunodeficiency-virus-hiv-infection-screening>. Published 2013. Accessed August 9, 2016.
8. Department of Health and Human Services. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. <https://aidsinfo.nih.gov/contentfiles/adultandadolescentgl003093.pdf>. Published 2012. Accessed August 14, 2016.
9. Centers for Disease Control and Prevention and Health Resources Services Administration. Integrated HIV prevention and care plan guidance. <http://www.cdc.gov/hiv/pdf/funding/announcements/ps12-1201/cdc-hiv-integrated-hiv-prevention-care-plan-guidance.pdf>. Published 2014. Accessed August 9, 2016.
10. Patton MQ. Qualitative analysis and interpretation. In: Patton MQ, ed. *Qualitative Research & Evaluation Methods* (pp. 520–651). 3rd ed. Thousand Oaks, CA: Sage Publications; 2002.
11. National Alliance of State and Territorial AIDS Directors. 2013 funding survey report. <https://www.nastad.org/sites/default/files/NHPI-2013-Funding-Report-Final.pdf>. Published 2013. Accessed August 22, 2016.
12. National Alliance of State and Territorial AIDS Directors. National HIV prevention inventory module 3: analysis of health department HIV prevention programming in the United States. https://www.nastad.org/sites/default/files/Report-NHPI-Module-3-FINAL-May-2014_0.pdf. Published 2014. Accessed August 22, 2016.

13. Kaiser Family Foundation. U.S. federal funding for HIV/AIDS: trends over time. <http://kff.org/global-health-policy/fact-sheet/u-s-federal-funding-for-hivaids-trends-over-time>. Published 2016. Accessed August 13, 2016.
14. Kinsky S, Maulsby CH, Jain KM, Charles V, Riordan M, Holtgrave D. Barriers and facilitators to implementing access to HIV care interventions: a qualitative analysis of the Positive Charge Initiative. *AIDS Educ Prev*. 2015;27(5):391–404. [PubMed: 26485230]
15. Centers for Disease Control and Prevention. Care and Prevention in the United States Demonstration Project. <http://www.cdc.gov/hiv/research/demonstration/capus/index.html>. Accessed September 8, 2016.
16. Centers for Disease Control and Prevention. Partnerships For Care (P4C): health departments and health centers collaborating to improve HIV health outcomes. <http://www.cdc.gov/hiv/research/demonstration/p4c/index.html>. Accessed September 8, 2016.
17. Centers for Disease Control and Prevention. Data to Care—using HIV surveillance data to support the HIV care continuum. <https://effectiveinterventions.cdc.gov/en/HighImpactPrevention/PublicHealthStrategies/DatatoCare.aspx>. Accessed September 8, 2016.
18. Beltrami J, Sanchez A, Duncan T, et al. Final results from CDC-funded PS 12–1201 Category C projects, 2012–2015. Paper presented at: 2016 United States Conference on AIDS; 2016; Hollywood, FL.
19. Beltrami J, Duncan T, Lyles C, et al. Linkage and re-engagement to HIV care: results from CDC-funded demonstration projects using HIV surveillance data. Paper presented at: 2015 National HIV Prevention Conference; 2015; Atlanta, GA.
20. Fisher HH, Hoyte T, Purcell DW, et al. Health department HIV prevention programs that support the National HIV/AIDS Strategy: the Enhanced Comprehensive HIV Prevention Planning project, 2010–2013. *Public Health Rep*. 2016;131:187–196.
21. Centers for Disease Control and Prevention. National HIV Prevention Progress Report. <http://www.cdc.gov/hiv/pdf/policies/progressreports/cdc-hiv-nationalprogressreport.pdf>. Published 2015. Accessed August 14, 2016.
22. Centers for Disease Control and Prevention. State HIV Prevention Progress Report, 2010–2013. <http://www.cdc.gov/hiv/pdf/policies/progressreports/cdc-hiv-stateprogressreport.pdf>. Published 2015. Accessed August 14, 2016.
23. Centers for Disease Control and Prevention. PS12–1201—comprehensive HIV prevention programs for health departments: monitoring and evaluation report, 2012–2013. http://www.cdc.gov/hiv/pdf/funding/announcements/ps12-1201/cdc-hiv-ps12-1201_monitoring_and_evaluation_report.pdf. Published 2016. Accessed August 18, 2016.
24. The White House Office of National AIDS Policy. National HIV/AIDS Strategy: updated to 2020. <https://www.aids.gov/federal-resources/national-hiv-aids-strategy/nhas-update.pdf>. Published 2015. Accessed August 19, 2016.
25. Centers for Disease Control and Prevention. A framework for program evaluation. <http://www.cdc.gov/eval/framework> Published 1999. Accessed August 14, 2016.
26. Beebe J. *Rapid Qualitative Inquiry Methods: A Field Guide to Team-Based Assessment*. Lanham, MD: Rowman & Littlefield; 2014.
27. Centers for Disease Control and Prevention. Brief 1: overview of policy evaluation. <http://www.cdc.gov/injury/pdfs/policy/Brief%201-a.pdf>. Published 2011. Accessed August 16, 2016.

Implications for Policy & Practice

- Federal, state, and local funders of HIV prevention programs routinely receive quantitative and qualitative information about program implementation from their grantees.
- This information is typically limited to programs supported by a specific funding stream and may include little information about the broader context of implementation (eg, considering the overall portfolio of HIV-related programs at the agency and their collective contribution to client outcomes).
- Funders and program evaluators at different levels need methods to routinely assess program implementation, across different funding sources and contexts, to determine how programs work together and how policy change affects local practices.
- Routine assessment of the rapidly changing HIV prevention landscape can help funders and evaluators identify areas where additional grantee support may be needed and inform program indicators and targets.

TABLE 1

National HIV-Related Policies, Initiatives, and Other Milestones in the United States, 2010–2014

National HIV/AIDS Strategy (2010)	White House released a national plan that set priorities for HIV prevention, with recommended action steps and measurable outcomes aligned to specific goals
Affordable Care Act (2010)	Congress passed a law to expand health insurance coverage and preventive health care services, including HIV testing and HIV medical care and treatment
High-Impact Prevention (2011)	CDC prioritized the use of high-impact programs with groups at highest risk for infection and PLWH in geographic areas most affected by HIV
Enhanced Comprehensive HIV Prevention Planning (ECHPPP) project (2010) and Comprehensive HIV Prevention Programs for Health Departments (2012)	CDC required health department grantees to allocate the majority of HIV prevention program funding to high-impact programs: 75%—Core HIV prevention activities, including HIV testing, prevention services for PLWH, policy activities, condom distribution 25%—Other activities, including evidence-based prevention services for groups at highest risk for HIV infection
Pre-exposure prophylaxis (PrEP) (2012)	FDA approved Truvada for use as pre-exposure prophylaxis, in combination with safer sex practices, to reduce the risk of sexually acquired HIV infection
Guidelines for antiretroviral therapy for HIV-infected persons (2012)	DHHS recommended clinicians initiate antiretroviral therapy for all HIV-diagnosed people
Routine HIV screening (2013)	Preventative Services Task Force gave routine HIV screening an “A” rating, indicating substantial benefit: Recommended that clinicians should routinely screen for HIV among all individuals aged 15–65 years, regardless of risk
Integrated HIV Prevention and Care Plan Guidance (2014)	CDC and HRSA required federally funded health departments to develop and implement an integrated HIV prevention and care plan aligned with NHAS goals

Abbreviations: CDC, Centers for Disease Control and Prevention; DHHS, Department of Health and Human Services; FDA, Food and Drug Administration; HRSA, Health Resource and Services Administration; PLWH, people living with HIV infection.

TABLE 2

Data Sources

Data Source	Participant Type	Sample Size	Selection Factors
Interviews	Health department staff	8	From 5 CDC-funded health department jurisdictions that represented a mix of: <ul style="list-style-type: none"> • High, medium, and low prevalence jurisdictions^a • CDC and non-CDC funding • Geographic locations
Interviews	CDC project officers	5	Experience managing CDC-funded HIV prevention programs at the 5 health departments
Consultation	Health department staff	11	From 11 CDC-funded health department jurisdictions that represented a mix of: <ul style="list-style-type: none"> • High, medium, and low prevalence jurisdictions^a • CDC and non-CDC funding • Geographic locations

Abbreviations: CDC, Centers for Disease Control and Prevention; PLWH, people living with HIV infection.

^a2010 HIV prevalence data reported to CDC's National HIV Surveillance System by CDC-funded health departments. <http://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2011-vol-23.pdf>. HIV prevalence categories: high = 20 000 people living with HIV, or PLWH; medium = 10 000–19 999 PLWH; low = <10 000 PLWH.

Examples of Health Department Strategies Used to Adapt to Changes in the Field of HIV Prevention

TABLE 3

Organizational change, program planning	<ul style="list-style-type: none"> • Housed all HIV programs in the same unit with same management structure • Assigned one contract manager to oversee HIV prevention and HIV care contracts • Integrated HIV care and treatment data system with HIV prevention and testing data system
Partnerships, collaborations, and federal support	<ul style="list-style-type: none"> • Educated doctors about HIV partner services and importance of getting patient locating information so that health department can follow up • Worked with community health centers to implement routine HIV screening and enhanced HIV care in primary care sites • Identified and promoted LGBT-friendly medical providers • Routinely visited the state capitol to discuss HIV with legislators • Worked with the state Medicaid office on quality improvement issues
Data use	<ul style="list-style-type: none"> • Showed funded agencies how performance at their agency compared with other agencies' performance • Generated lists of PLWH with specific characteristics (eg, high viral load, pregnancy) to prioritize linkage to care services • Prioritized linkage to care services in counties with highest HIV prevalence • Shared HIV/STD/hepatitis prevalence data with community health centers to illustrate need for routine screening in communities served by health centers
HIV testing	<ul style="list-style-type: none"> • Funded a quality improvement coordinator from the state primary care association to work with community health centers to improve routine HIV screening • Estimated the number of MSM and persons who inject drugs in specific geographic areas to highlight for the community planning group where more testing was needed • Broadened opportunities for persons in high-risk groups to get tested (eg, home test kits, pharmacies, emergency departments)
PrEP	<ul style="list-style-type: none"> • Provided staff at an HRSA-funded community health center with strategies that helped them talk to gay men about HIV risk • Enrolled young gay black men in health insurance so that they could access PrEP • Worked with gay men's health network to identify providers willing to offer PrEP and shared provider contact information through the LGBT-focused Web site • Funded regional PrEP centers and required them to have strong provider/CBO collaborations (where CBO role is to inform communities about PrEP, adherence, and peer navigation)
Prevention services for PLWH	<ul style="list-style-type: none"> • For acute HIV infection cases, had disease intervention specialist waiting at the site where individual would receive his or her diagnosis to initiate HIV/STD partner services and initiate medical care • Developed standard protocols for data sharing with medical providers (eg, laboratory data, surveillance data, clinical outcome data) • Embedded health department staff in CBOs to conduct partner services • To improve linkage of PLWH to care, helped CBOs align their strategies with health department strategy, incentivized performance, and routinely discussed with CBOs how well programs were working
Health care reform	<ul style="list-style-type: none"> • Created a team to focus on health care delivery systems and payers • Enlisted insurance providers to support HIV prevention and care efforts • Partnered with a local university to train providers on billing • Engaged different partners (eg, community planning group, Ryan White HIV/AIDS Program staff, providers, consumers, state Medicaid office) during development of their state comprehensive HIV prevention plan (considering effects of the Affordable Care Act)

Abbreviations: CBO, community-based organization; HRSA, Health Resources and Services Administration; LGBT, lesbian, gay, bisexual, transgender; MSM, gay, bisexual, and other men who have sex with men; PLWH, people living with HIV infection; PrEP, pre-exposure prophylaxis; STD, sexually transmitted diseases.