Linking to Care

Notifying Partners

Diagnosing Coinfection

Improving Compliance

CONNECTIONS That COUNT

Health Departments and Community-Based Providers

Imagine the following scene:

One afternoon, Jeanine, age 40, enters the emergency room at Barnes–Jewish Hospital in St. Louis, Missouri, with a broken arm. While seeing a patient care technician, she agrees to be tested for HIV. Unless they opt out, Barnes–Jewish Hospital patients are given an HIV test as part of the Centers for Disease Control and Prevention's (CDC's) Expanded Testing Initiative, which funds the Missouri Department of Health and Senior Services' efforts to increase HIV testing across the State.

In approximately 20 minutes, a physician comes back with Jeanine's result. She has tested positive for HIV. At the physician's urging, Jeanine agrees to be connected to HIV care services through the Linkage to Care Program line, a Ryan White Part A and B grantee. A coordinator is on call from 9 a.m. to 9 p.m. on weekdays and will be at the hospital within an hour to help Jeanine make medical appointments and find out what social support services she needs.

Scenes like this one happen daily and illustrate the power of relationships among health departments and providers in clinical care settings. Health departments and providers depend on one another to help do the critical work of HIV prevention and treatment. When providers share information about clients and services, health departments

DID YOU KNOW?

Approximately 64 percent of health departments serve populations of less than 50,000.[1]

More than 60 percent of local health departments provide HIV screening directly or through contracts with providers in their jurisdiction.[1]

Twenty percent of local health departments provide treatment for HIV/AIDS.[1]

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Health departments come in all sizes, but they share the same goal—getting more underserved people the health care they need. That is no simple task, however. Although health departments may offer HIV testing and counseling, referral systems, and partner notification, only with the help of providers serving on the frontlines can they truly achieve their mission.

Whether it's a system that identifies out-of-care patients or a simple e-mail about emerging coinfection trends, collaboration between health departments and community-based providers creates more effective ways to bring people living with HIV/AIDS (PLWHA) into care. Communication between health departments and providers can also improve policy compliance and funding processes, further advancing the work of serving PLWHA.

Building these relationships, though, takes time—time to identify a shared need, develop a solution, and see it through. For Ryan White HIV/AIDS Program grantees and the PLWHA they serve, that time means more saved resources and, ultimately, lives. That is time well spent.

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can create programs that effectively identify people living with HIV/AIDS (PLWHA) and connect them to care. In turn, health departments conduct trainings in cultural competency and other HIV-related topics to help providers serve PLWHA more effectively.

With grants from the Ryan White HIV/AIDS Program, health departments support a care continuum, often with help from community-based subgrantees. This continuum includes core medical services, such as outpatient care, case management, and oral care, as well as support services like outreach, transportation, and language services.[2] The scope of services health departments offer, however, depends on factors such as their jurisdiction and location.

HEALTH DEPARTMENTS AND HIV/AIDS

Health departments come in all shapes and sizes. At the State level, health departments usually have hundreds of staff and administer large-scale programs (e.g., emergency medical services, immunization programs, and family planning services) as well as programs related to home care, injury prevention, and social work. They also protect the public health through testing water supplies, conducting disease surveillance and providing disease prevention services, administering Ryan White program funds to providers, and other activities.[3] State health departments also ensure that health departments within their jurisdiction (classified as either local or county health departments) remain in compliance with State and Federal policies.

Health departments in large cities provide additional services and administer public health programs, such as substance abuse or mental health treatment. Conversely, many small jurisdictions, especially rural counties, may have health departments whose responsibilities are comparatively few and whose array of services is limited.

The staffing levels at health departments vary widely. Health departments range from an average of 3 employees in jurisdictions with fewer than 10,000 people to an average staff size of 585 in areas with populations of more than 1 million.[3] The most common full-time staff positions at

health departments are nurses, clerical workers, environmental health specialists, managers, health educators, and nutritionists.[3]

No matter what their jurisdiction is, health departments are committed to promoting public health through activities to correct health disparities, alert and educate the public about environmental health hazards and disease epidemics, ensure compliance with health laws, and deliver care to the underserved.[4]

State health departments, in part because of their mandates, play a lead role when it comes to addressing HIV/AIDS. Health departments at the State level conduct HIV/AIDS surveillance, convene providers and other stakeholders to coordinate planning and reimbursement of HIV prevention and care services, and set policies and standards to guide the provision of HIV/AIDS care statewide.[5] State health departments coordinate outreach to underserved populations and ensure that Federal and State mandates are met in their jurisdiction.[5] Along with many local health departments, State health departments carry out the following prevention-based activities with support from CDC:

▸ Distribution of public health information
▸ Counseling, testing, referral, and partner services
▸ Capacity building through funding and technical assistance
▸ Health education and risk reduction programming
▸ Community planning.[5]

Health departments also receive grants through every part of the Ryan White HIV/AIDS Program to deliver care services. County and city health departments are typically funded through Parts C, D, and F.[6]

Health departments in large urban regions play a pivotal role in implementing Part A grants and are charged with forming HIV Planning Councils comprising providers, consumers, and other stakeholders.[7] Planning Councils meet regularly to set priorities for their jurisdiction and allocate funds for HIV service delivery.

Health departments also administer Ryan White HIV/AIDS Program Part B grants (which provide funding to States and territories). State health departments use Part B grants for direct services or to fund subcontracts with HIV Care Consortia, which are associations of public and nonprofit care providers that plan, develop, and deliver services for PLWHA.[8]

Through coordination of consortia services and Planning Council meetings, health department staff and providers often develop strong bonds. Similar relationships may form through collaborative projects or phone conversations between individual public health officials and providers working together to counter a local coinfection trend. Regardless of their nature, however, these connections all help improve the health of PLWHA.

THE POWER OF CONNECTIONS

Like Jeanine, many PLWHA don't know their HIV status—and many who do know are not receiving medical or support services. Health departments and providers have resources that, when combined, can help connect PLWHA to a continuum of care.

Identifying Out-of-Care PLWHA

Approximately 25 percent of PLWHA in the United States don't know their HIV status,[9] partly because many underestimate their risk and do not seek testing.[10] Without knowing their status, however, PLWHA forego needed care and risk poor health outcomes and increased morbidity and mortality.[11]

Routine HIV rapid testing at key points of care entry* increases the number of people who learn their status,[12] because many PLWHA present in those settings to address other medical issues—as Jeanine did for her broken arm.[12] Yet, routine testing can be a major challenge in many clinics and emergency rooms, where providers often face a lack of time, funding, and training in rapid testing.[13] Concerns about patient confidentiality and followup also create testing obstacles.[13]

Health departments often help providers overcome testing barriers through provision of rapid test kits, laboratory services, and training to administer tests.[14] They can also help providers establish screening algorithms to include a confirmatory HIV test, which is required when rapid HIV testing produces a reactive, or HIV-positive, result.[15]

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* Key points of care entry include health care settings such as Community Health Centers, hospital emergency departments, urgent care clinics, inpatient facilities, substance abuse treatment clinics, public health clinics, community clinics, correctional health care facilities, and primary care settings. These settings are listed in the CDC's *Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings*, available at www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm.

Federal Drug Administration–approved rapid HIV testing using blood drawn from a finger prick has seen widespread adoption.

"Our State health department provided trainings on rapid HIV testing to staff who would be administering the tests. We also worked with our State health department for about a year on developing protocols, like pretest counseling procedures and posttest documentation, as well as getting buy-in from emergency room providers for opt-out HIV testing," says Tawnya Brown, director of the Part C program grant for Washington University's Division of Infectious Diseases. The division receives Ora-Quick HIV tests as part of the CDC's Expanded Testing Initiative, which provided $35 million to 23 State health departments over a 3-year period to increase routine testing.[16] We certainly couldn't have gotten our emergency departments to perform more HIV tests without the health department's technical help and funding," explains Brown.

Linking to a Continuum of Care

Many PLWHA face poverty, mental health disorders, and substance abuse problems, which present challenges to care entry and retention.[17] Ensuring that newly diagnosed PLWHA stay in care requires referrals to primary care as well as to substance abuse treatment, counseling, and other necessary social support services.

"In Missouri, the Linkage to Care Program really creates a perfect marriage, because now providers don't have to worry about someone testing positive and not knowing where to refer them," says Kim Donica, director of AIDS/HIV Resource and Knowledge (Project ARK), a Ryan White Part D grantee.

Receiving immediate linkages to care is especially critical for HIV-positive pregnant women, who need treatment to avoid perinatal transmission. Coordinators with the Linkage to Care Program refer pregnant PLWHA to Project ARK, which offers medical care, child care during appointments, peer family counseling, support groups, and mental health services. "We can get pregnant women on medications consistent with perinatal protocol. We haven't had an HIV-infected baby born in 3 years now, which just shows the value of this linkage system," says Donica.

Linkage-to-care systems can help increase access to care for PLWHA who test positive but fail to seek treatment or drop out of care. These systems are critical, because 250,000 PLWHA in the United States know their status but lack regular care.[18]

The Louisiana State University (LSU) Health Care Services Division, a grantee of the Special Projects of National Significance (SPNS) Program Information Technology Networks of Care Initiative, has partnered with the Louisiana Office of Public Health (OPH) to bring PLWHA into care through the Louisiana Public Health Information Exchange (LaPHIE). "Staff at LSU hospitals and the OPH saw that people testing positive were being lost to one care system but accessing the other. LaPHIE was developed so that there would be no 'wrong door' for care entry," says Amy Zapata, HIV surveillance program manager at OPH.

LaPHIE is an electronic network that connects the Louisiana OPH with the seven hospitals in the LSU Health Care Services Division system. When a provider registers a patient on a computer at one of the hospitals, the data flow back to OPH. "If the data indicate a patient is 'out of care,' a message from OPH comes back through the system and tells the hospital provider that the patient requires followup. The message includes steps for providers to take, such as offering HIV education, initiating a treatment and monitoring plan, and facilitating linkages to appropriate care," explains Jane Herwehe, LaPHIE project director.

Under LaPHIE, patients who meet the following criteria are considered out of care: people who have tested positive for HIV but might be unaware of their results, children born to HIV-positive mothers but who have not received appropriate follow-up testing, and people who have no reported CD4 or viral load test results for 12 or more months.

Reaching out to Partners of PLWHA

Sexual and needle-sharing partners of PLWHA may be unaware of their partner's status or fail to reduce their risk of getting HIV. Tragically, many partners contract the virus and remain unaware, thereby risking their health and well-being. They also risk spreading the virus to others—PLWHA who don't know their status account for 54 percent of new HIV infections annually.[19]

Notifying partners of PLWHA, however, can help reduce HIV incidence. Many health departments employ specialists trained in partner notification, which involves locating and then contacting any person whose name has been supplied by a PLWHA or their provider. When meeting with these individuals, partner notification specialists provide counseling and referrals to care, assess opportunities for behavior change counseling, and discuss anger or blame reactions.[20]

Using public health officials trained in partner notification is the best—and often the fastest—way to ensure that partners are contacted.[20] At the Michigan Department of Community Health, partner notification specialists notify partners within 48 hours of receiving their names. "We wanted to get in touch with partners faster than the recommended State guideline of 30 days, because the longer you wait to knock on someone's door, the more that sense of urgency diminishes," says Audrea Woodruff, partner counseling and referral services coordinator, Michigan Department of Community Health.

By notifying and following up with partners who test HIV positive, health departments relieve community-based providers from these tasks.[20] Many PLWHA and their providers, however, are concerned about confidentiality or are uncomfortable discussing sexual or drug-using partners. The Michigan Department of Community Health strives to lessen concerns by offering in-service conversations with providers. "We explain how partner notification helps the client and [his or her] at-risk partner avoid HIV reinfection or infection, and we also show them how to do counseling if they choose to confidentially notify the at-risk partner themselves. We also explain that our health department provides this service one-on-one with partners, and most providers choose to do partner notification that way. We also ensure that providers and patients understand that the partner notification process is confidential," says Woodruff. "We do our best to get providers' buy-in, because we can't do our job without their help," she adds.

Diagnosing and Treating Coinfections

Untreated coinfection with a sexually transmitted infection (STI), tuberculosis (TB), or hepatitis C (HCV) can seriously harm the health of PLWHA. Because of their weakened immune systems, many PLWHA experience more severe reactions from STIs such as herpes and gonorrhea than do people who are HIV negative.[21] According to a study published in the journal *AIDS*, syphilis infection appears to increase HIV viral load.[22]

Infection with HIV is also the strongest known risk factor for progressing from latent TB, which cannot be spread to others, to active TB, which is contagious and can be fatal if not properly treated.[23,24] Infection with HCV also increases the risk of liver damage in PLWHA.[25]

Like HIV, many coinfections may be asymptomatic and go undetected.[25-27] Left untreated, however, coinfections can increase risk of HIV transmission (as well as transmission of the coinfection itself). Male PLWHA with gonorrhea, for example, have twice the amount of HIV in their genital secretions as those who are not coinfected. This phenomenon is particularly worrisome because HIV concentration greatly increases transmission risk.[28]

Rising rates of many STIs have made the need for STI testing and diagnosis even more urgent.[29] Rates of syphilis in the United States, for instance, have increased more than 80 percent since 2000, especially among HIV-positive men who have sex with men.[30,31]

In many instances, health departments provide tests for STIs as well as for TB and HCV. Health departments work with community-based providers to identify PLWHA who test positive for these conditions but remain untreated. For example, the LaPHIE system in Louisiana also identifies out-of-care persons with TB or syphilis. Using funds from its SPNS grant, LSU and OPH created electronic messages administered through LaPHIE that, in addition to indicating when a patient has HIV, inform providers of an untreated TB or syphilis infection.

"Louisiana leads the Nation in syphilis rates and has high TB rates, and coinfection with HIV, and either of these diseases can increase morbidity and mortality," says Herwehe. "Physicians need to know when patients with HIV have syphilis or TB so they can treat them properly."

Sharing Information for Timelier Responses

Sharing information about epidemiologic trends helps health departments and providers deliver timely care.

AIDS EDUCATION and TRAINING CENTERS

Through the HIV Recommendations Training Initiative, AIDS Education and Training Centers (AETCs) support training and technical assistance to make HIV screening part of routine medical care for people ages 13 to 64. The CDC awarded $1.7 million to HRSA to support the initiative, which provides training on topics such as initiating a testing discussion, gaining consent, and giving test results. From September 2006 to June 2008, AETCs held 2,522 trainings nationwide in the following priority settings:

▶ Hospital emergency departments/urgent care clinics
▶ Inpatient facilities in acute care hospitals
▶ Correctional health clinics
▶ STI clinics
▶ Prenatal clinics
▶ Community Health Centers.

AETC trainings have reached 40,152 providers. AETCs have also worked with providers at local health departments to develop tools to increase testing, including manuals for emergency departments and clinics, tools to assess testing readiness, and patient brochures on testing in English and Spanish. In addition, the National HIV/AIDS Clinicians' Consultation Center, an AETC partner organization, provides 24-hour expert consultation to health care providers on HIV testing in pregnant women and managing health care worker exposure to HIV. Providers can call the National Clinicians' Post-Exposure Prophylaxis (PEPline) at (888) 448-4911 or the National Perinatal HIV Consultation and Referral Service (Perinatal HIV Hotline) at (888) 448-8765. More information can be found at www.nccc.ucsf.edu.

"When we identify coinfections or other trends in newly diagnosed populations with HIV, we as providers can alert health departments before the reported data can and create a faster response," says Donica.

To see how this information might be shared, picture the following scenario: A provider diagnoses his sixth HIV patient with syphilis in the course of a month. He calls the local health department to tell officials about the coinfection trend. The official e-mails colleagues on the Planning Council notifying them of the trend and adds the topic to the agenda for their meeting the following week. The official also e-mails the health department's Part A subgrantees. In this way, local providers are alerted instantly.

Improving Compliance and Funding Processes
Program compliance ensures that providers receive the resources they need to serve PLWHA. Relationships between health departments and community subgrantees boost compliance through communication about program goals. Staff with Public Health–Seattle & King County, for instance, provided information and training to Part A subgrantees about potential spending requirement changes for core medical services in the Ryan White HIV/AIDS Program. In addition to updates to subgrantees on legislative developments, Public Health provided presentations and training on potential legislative changes to the Seattle Planning Council, at provider workgroups, and to staff at several Part A–funded subcontractor agencies. With those resources, grantees could make program adjustments once the Ryan White HIV/AIDS Treatment Modernization Act of 2006 passed. "We also helped providers draft a letter to let consumers know about service changes and that these changes were part of a Federal mandate," says Jeff Natter, manager of the Ryan White HIV/AIDS Program Part A grant at Public Health.

Directly involving community providers while planning programs also reduces resources grantees must use to meet program-related standards. To help subgrantees create quality management plans each year, Public Health holds a 6-hour comprehensive training course on developing quality improvement measures. "Providers leave that meeting with a draft of a quality management plan, so they're well on their way to having [something final] to submit by the beginning of their contract year in March," says Hutchenson.

BUILDING CONNECTIONS

Relationships between health departments and community providers create many opportunities to serve PLWHA. Building those relationships, however, requires time, effort, and a strategic approach to addressing local HIV care needs.

Identifying Needs and Starting a Dialogue

Health departments and community-based providers can collaborate by first identifying an issue, such as rising HIV rates among youth, and then by developing programs with clear, achievable outcomes. Regular meetings also offer opportunities to identify challenges and possible solutions. "At our statewide Ryan White grantee meeting several years ago, we talked about creating statewide case management standards, so that people moving from one part of the State to another would have a more seamless transition to care," says Donica.

Creating Formal Relationships

Institutionalized connections may be critical to prevent or reduce program disruption.[32] Institutionalized relationships within health departments may ensure effective resource use by minimizing prevention service overlap. Florida's Orange County Health Department cross-checks its HIV/AIDS and STI surveillance information. "This way, there won't be two public health officers showing up at someone's door to do counseling," says Jim Hensen, regional coordinator of the health department's STI program.

Communicating Openly and Regularly

Establishing routine input and communication mechanisms is key to developing partnerships. Before launching LaPHIE, LSU and OPH reviewed business processes, laws, and policies related to health information exchange among public health and health care providers. "We set up workgroups for each of these areas. One group, [comprising] LSU clinicians and OPH personnel, was charged with extensively mapping the work flows involved in diagnosing, reporting, and ensuring timely treatment for persons with HIV, TB, and syphilis to determine opportunities for process improvement," says Herwehe.

Good communication also ensures that public health staff and community-based providers address and resolve any issues that arise during project development, such as time and resource commitments. For example, although LaPHIE is an automated system that exchanges information in real time, staff must monitor the system and troubleshoot in the event connection fails.

"We had to reach consensus on how to manage any connectivity challenges that might arise after hours," says Herwehe. LSU hospitals are open 24 hours daily and have resources to manage the system around the clock, whereas OPH operates on a different schedule. Together, OPH and the LSU Health Care Services Division monitor the volume of messages and connection failures on nights and weekends. Fortunately, connectivity failures have been extremely rare; should they become an issue, however, ongoing dialogue between the partners ensures that they will be addressed.

CONCLUSION

Health departments are committed to improving the health of PLWHA. Yet, their efforts to expand HIV testing, improve partner notification, and provide links to care depend on collaboration with people and organizations within the community. By working together to identify needs and shared resources, health departments and community-based providers can serve more PLWHA than they could independently. Through partnerships, they can improve program compliance, identify epidemiologic trends, and build programs and systems linking PLWHA to care and ensuring they lead healthier lives.

➤ ONLINE RESOURCES

AETC Health Department Resources: www.aidsetc.org/aidsetc?page=home-search&post=1&SearchEntry=health+departments

HIV/STC Partner Notification: The Health Provider's Role: www.dshs.state.tx.us/hivstd/info/edmat/13-10479.pdf

Public Health Resources: State Health Departments: www.cdc.gov/mmwr/international/relres.html

The Role of Health Departments in Administering Federal HIV/AIDS Programs: http://nastaddemo.dedicated.advansiv.com/Docs/Public/Resource/200852_Role%20of%20States.pdf

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