Executive Summary

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EXECUTIVE SUMMARY

The CDC’s prevention initiative, *Advancing HIV Prevention: New Strategies for a Changing Epidemic*, focuses on the need to expand HIV testing in clinical settings to increase the number of infected patients who are successfully referred to treatment and prevention services. The purpose of this research is to examine current policies, practices, facilitators, barriers, and opportunities to incorporate HIV testing in hospital settings, particularly emergency departments.

**HIV Testing in Hospital Settings: Background**

Unrecognized HIV infection is a persistent problem in the U.S., resulting in continued transmission and morbidity of this devastating disease. While testing has long been a cornerstone in HIV prevention, its effectiveness is limited when individuals fail to return for test results and by missed opportunities to provide tests where individuals can be immediately linked to follow-up care. The availability of rapid, point-of-care HIV tests presents a new opportunity to test more people in more settings, without requiring return visits or costly tracking and follow-up to deliver results to individuals.

The CDC has recommended HIV *screening* in all U.S. emergency departments serving high-risk populations. This recommendation has not been adopted, and many in the emergency medicine community question the practicality of conducting public health prevention when ED resources are already over-stretched.

Pilot studies using routine, rapid HIV tests in emergency departments have yielded promising results. For example, HIV screening did not disrupt normal ED operations and was more feasible, economical and convenient than the standard testing protocol. Rapid HIV screening also reached many individuals who otherwise would not have access to HIV testing.

**This Study**

While U.S. hospitals, particularly emergency departments, can make a real difference in diagnosing large numbers of HIV-infected people, little is known about the extent and nature of HIV testing in various hospital settings, particularly with respect to rapid testing and routine screening. This report is a comprehensive summary of a survey conducted in 2004 by the Health Research and Educational Trust (HRET) on hospital policies and procedures related to HIV testing, as well as perceived barriers to making HIV testing in hospital settings routine.
METHODS

HRET conducted a survey to collect information on hospital-based HIV testing. HRET identified hospitals eligible for this survey using the 2002 American Hospital Association Annual Survey Database. All general medical and surgical hospitals within the United States were eligible. HRET surveyed 4,497 hospitals (the universe of hospitals satisfying our eligibility criteria) during the summer of 2004. In total, 1,230 hospitals responded to the survey, resulting in a response rate of 27.4%. Due to the finite nature of the population, a finite population correction was applied to produce more accurate variances.

Analysis

HRET analyzed the survey data based on hospital characteristics, location, and disease burden to identify variables that are associated with HIV testing in hospitals. The variables examined include hospital ownership, hospital size (number of beds), teaching hospital status, system membership, region, size of metropolitan area, and state AIDS case rate.

RESULTS

Current HIV Testing in Hospitals

Ninety-one percent of U.S. hospitals offer HIV tests in their facilities. The percentage varies by teaching status and hospital size. HIV testing is nearly universally available in both teaching and large hospitals, and less so in nonteaching institutions (90%) and small hospitals (80%).

HIV testing also varies significantly according to the hospital’s location. Hospitals in larger metropolitan areas, the Northeast, and high AIDS burden states are the most likely to offer HIV testing.

A majority of U.S. hospitals offer HIV tests in at least one of the following settings:

- Inpatient
- Employee health
- Emergency department

Less than 50% of hospitals offer HIV testing in labor and delivery, outpatient settings, and urgent care centers. HIV testing is least common in trauma centers.

Hospital HIV Testing Policies and Practices

Indications for HIV Testing in Hospitals

The number one indication for HIV testing is health care workers after occupational exposure (over 90%), followed by provider concern (80%). Evaluation for STDs is the least likely indicator for HIV testing (39% of hospitals offering HIV tests).

Medical Evaluation for Patients Who Test Positive

Forty-one percent of hospitals refer patients who test positive to an HIV or community clinic that is not part of the hospital. More than one-third refer patients to a hospital-based clinic or outpatient center or conduct a medical evaluation on-site, on the same day. Hospitals are least likely to evaluate the patient at the hospital at a later date.

Availability of Other HIV Services

Hospitals are slightly more likely to provide primary care services, social services, and HIV counseling on-site, while drug/alcohol treatment, partner notification and referral, and infectious disease specialists are provided through referral. About one-third of hospitals that provide HIV testing do not provide partner notification and referral services or infectious disease specialists either on-site or through referral. One-quarter do not provide case management or drug/alcohol treatment.
**Rapid HIV Testing in Hospital Settings**

Rapid HIV tests are currently used in 40% of all hospitals. Rapid test use is higher in teaching hospitals, large hospitals, nonprofit hospitals, and system hospitals. It is lower in rural hospitals, Western hospitals, and hospitals in low AIDS burden states. Most rapid testing in hospitals occurs in the central laboratory, not at the point of care.

One-quarter of current rapid test users plan to use rapid HIV tests in new settings; 14% of current nonusers plan to introduce rapid HIV tests in the next 12 months.

**Reasons for Using Rapid HIV Tests**

Accuracy of rapid tests (89%) and the use of results in assisting with diagnosis and clinical care (80%) were the most frequently mentioned “very important” factors in the decision to use rapid HIV tests.

**Resources Required for Using Rapid HIV Tests**

While all factors are important, the factors most often cited as “very important” are support of the laboratory (75%) and staff training and expertise (74%).

**Routine HIV Screening in Hospital Settings**

Close to one-quarter of U.S. hospitals reported they provide routine HIV screening. Such routine screening occurs primarily in labor and delivery and is very low in any other setting.

**Facilitators and Barriers to ED-based HIV Testing**

**Operational Concerns**

Most respondents reported that HIV tests could be ordered and specimens drawn 24 hours a day, 7 days a week in their emergency departments. However, half of the respondents reported that their hospitals prohibit routine ED-based HIV screening.

In addition to prohibitive policies, data availability is a potential barrier. Less than half of the hospitals that offer HIV tests in the ED could report the number of tests performed in the ED or the number of positive tests.

**Implementation Concerns**

Privacy and confidentiality, together, is the most important factor in deciding whether to implement HIV screening in the ED, rated by 79% of respondents as “very important.” Staff time was also highly rated by two-thirds of respondents.

**DISCUSSION**

U.S. hospitals offer HIV testing in a variety of settings, with emergency department, inpatient, and employee health the most common; however, in most hospital settings routine HIV screening is essentially nonexistent. The one exception is labor and delivery.

Characteristics associated with HIV testing practices include a hospital’s size, teaching status, and geographic location. In general, large, teaching, and metropolitan hospitals are more likely to offer HIV testing than small, nonteaching, and rural hospitals. The extent and type of HIV testing offered varies significantly from region to region.

Rapid HIV tests are not widely used in hospitals, and, where they are used, they are not being used at the point of care or more often than standard HIV tests. This suggests that gains related to cost effectiveness and more patients linked to treatment are not being realized. Surprisingly, small, rural, nonteaching, and freestanding hospitals are more likely than others to report they use rapid tests more frequently than traditional HIV tests.
Laboratory support for rapid HIV tests is of utmost importance in hospital settings due to the quality assurance processes that point-of-care tests require. This clearly suggests that the laboratory can be a major facilitator or barrier to implementing rapid testing more broadly.

HIV tests are offered in the majority of emergency departments today, but not routinely. Making HIV testing in the ED more routine is complicated by the fact that rapid tests are not widely used in the ED. These findings suggest that in the near term, some hospitals are looking to adopt rapid tests in their EDs.

A troublesome finding is that almost half of all hospitals prohibit routine, ED-based HIV testing. This is an important organizational barrier that requires further investigation to understand the nature and rationale of such a policy.

**CONCLUSIONS AND RECOMMENDATIONS**

1. Target labor and delivery, outpatient centers, and urgent care centers for more routine HIV testing. There is precedent for HIV testing in hospitals; however, it varies considerably across settings.

2. Because emergency departments are also opportunity areas, further explore and resolve hospital policies that prohibit routine HIV testing in the ED. Resolve concerns about privacy protection and such issues as staff time, cost, quality, and linkages to care. Consent and counseling, while important, do not top the list of concerns.

3. In promoting rapid testing, emphasize using the test at the point of care so that practice can demonstrate the benefits of cost effectiveness and linkages to care, now cited in emerging research. Engaging the laboratory is critical to this effort to address concerns about staff training in point-of-care testing and quality assurance.

4. In working to expand the number of hospitals that conduct routine HIV screening, be sure to address different concerns in various parts of the county and to various types of hospitals.

5. Further explore small hospitals, small metropolitan and rural hospitals, nonteaching institutions, and hospitals in the South and Midwest in efforts to increase routine HIV testing in hospital settings. Their tendency to adopt rapid HIV testing may signal a growing need and openness to new technologies and new strategies.

6. Make locally relevant HIV prevalence data, which reflects the burden of undiagnosed HIV, available to hospitals. If higher prevalence underlies the push to implement routine hospital-based HIV testing, and the changing epidemiology of the disease creates pockets of undiagnosed HIV among new populations, hospitals will need information that enables them to be proactive in testing patients and developing systems to link HIV-positive patients to care.