

# Public Health and Clinical Impact of Increasing Emergency Department Based HIV Testing: Providers Perspectives from the 2007 Conference of the National Emergency Department HIV Testing Consortium



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## INTRODUCTION

The 2006 CDC revised HIV testing recommendations call attention to Emergency Departments (EDs) as important medical settings for expanded HIV testing because:

- ED visits represent 10% of ambulatory care visits
- Prevalence of HIV is often higher than in nearby care settings
- EDs represent one of the most frequent missed opportunities for testing

Rates of testing in EDs prior to the 2006 guidelines were exceedingly low (~0.3%), and controversy remains regarding the role of EDs in implementing large scale public health programs. Experience gained with HIV testing, and how this testing affects patient care, might be expected to impact emergency physicians perceptions of their role in HIV testing. Yet, emergency physician perspectives on the public health and clinical impact of ED-based HIV testing remain unclear. This study describes:

- Perceived strengths, weaknesses, opportunities and threats associated with ED HIV testing in relation to potential public health impact.
- Perceived clinical impact of HIV testing in the ED

## METHODS

**Subjects:** Attendees at the Inaugural National ED HIV Testing Consortium meeting which included emergency physicians directly involved in running or establishing an ED based HIV testing program and their infectious disease or public health partner from their center. There were 98 attendees and 42 health care institutions represented at the meeting, which was held on November 17, 2007 in Baltimore MD. Participants were divided into four groups of 20-25 persons. Each group attended a 70-minute discussion session during which public health impact and clinical impact of ED-based HIV testing were discussed.

**Public health impact:** A SWOT (strengths, weaknesses, opportunities, and threats) analysis of the impact of ED-based HIV testing on improving public health status and providing health services both locally and nationally was conducted. Each participant provided up to 3 answers in each category.

**Clinical impact:** A structured questionnaire and a modified, 3-5 round Delphi technique were used. The initial rounds were designed to be generative, whereas subsequent rounds were designed to clarify, refine, and facilitate the emergence of consensus. Questions asked about the impact of diagnostic testing, screening, and counseling on clinical care for the individual patient from both the provider and patient perspective. Questions specifically addressed how provision of a test result might alter clinical course, and also how clinical outcomes might be impacted.

## RESULTS

**Public health impact:** Results of the SWOT analysis describing perceived public health impact of HIV testing in ED: patient centered and provider centered. Percent of respondents listing item in parentheses.

Patient centered		Provider centered	
Setting Strengths (% of total votes)		Setting Opportunities (% of total votes)	
<ul style="list-style-type: none"> <li>•High volume and high prevalence (17.2)</li> <li>•Captures patient population that does not have an access (14.0)</li> <li>•Diagnosing early (12.4)</li> <li>•Most diverse population (4.0)</li> <li>•Anonymity (2.4)</li> <li>•Cross section of general population (0.7)</li> </ul>	<ul style="list-style-type: none"> <li>•Open 24/7 (15.6)</li> <li>•Patient management, easier linkage to care (12.3)</li> <li>•Captures at risk patients (6.9)</li> <li>•Identifying previously unidentified infections (4.0)</li> <li>•High profile in Public Health (4.0)</li> <li>•Existing education programs (2.9)</li> <li>•Providers used to difficult patients (2.9)</li> <li>•Cost effective (0.7)</li> </ul>	<ul style="list-style-type: none"> <li>•Reducing stigma (31.0)</li> <li>•Reaching broader population (19.7)</li> <li>•Increase public health awareness (5.6)</li> <li>•Geographical location (1.4)</li> </ul>	<ul style="list-style-type: none"> <li>•Better Surveillance (21.1)</li> <li>•More resources (staff and funding) (12.8)</li> <li>•Uniform testing across all ED with National database (4.2)</li> <li>•Opportunity to do cost effectiveness analysis (4.2)</li> </ul>
Setting Weaknesses (% of total votes)		Setting Threats (% of total votes)	
<ul style="list-style-type: none"> <li>•Inadequate patient privacy and confidentiality (12.3)</li> <li>•Overcrowding of ED (9.7)</li> <li>•Repeat testers (1.1)</li> <li>•Failure to follow up on results (1.1)</li> <li>•Transient population (0.6)</li> </ul>	<ul style="list-style-type: none"> <li>•Burden on ED (time and staff) (19.9)</li> <li>•Inadequate linkage ability of ED for positive patients (15)</li> <li>•Hesitation behalf of ED providers (10.2)</li> <li>•Expensive and excessive (9.1)</li> <li>•Inadequate counseling (7.5)</li> <li>•Insufficient resources and funding (6.5)</li> <li>•Sustainability (5.9)</li> <li>•No uniformity in collecting data (1.1)</li> </ul>	<ul style="list-style-type: none"> <li>•Avoidance of EDs (7.3)</li> <li>•Decreasing testing and taking funds from other settings (6.1)</li> <li>•Effect on rural EDs (1.2)</li> <li>•Increased cost of medications (1.2)</li> <li>•Community Perceptions (1.2)</li> </ul>	<ul style="list-style-type: none"> <li>•Resources for Funding (providing, allocation, sustainability) (44.0)</li> <li>•Deduct from the primary role of ED (13.4)</li> <li>•Competing PH interests in ED (11.0)</li> <li>•ED Liability (7.3)</li> <li>•Hesitation of hospital administration(7.3)</li> </ul>

**Clinical impact:** Perceptions from provider and patient perspective (number of votes in each category)

Impact of NOT providing HIV test in the ED

	No Test Done
Patient +	Less time in ED (4), Blissful ignorance (3)
Patient -	Missed opportunity for testing (21), Missed opportunity to diagnose in early stages (19), Missed opportunity for treatment (12)
Provider +	Less burden on staff (17), Better patient flow (4)
Provider -	Missed opportunity for testing (13), No opportunity to provide optimal care (10), Missed PH impact (4)

Impact of offering a DIAGNOSTIC TEST in the ED

	Diagnostic Test	
	Test Results POS (+)	Test Results NEG (-)
Patient +	Improved health outcomes (23), Linkage to care (15), Decreased transmission (10)	Knowledge of serostatus (15), Decreased transmission (via education) (7),
Patient -	Dx tests too late for optimal treatment (6), Potential to overwhelm pt (5), No linkage would lose pt (4)	Patient misconception of negative test (false reassurance, risk behavior) (10), Cost and time (4)
Provider +	Easier clinical management (30), Less visits due to earlier Dx (4), Provider satisfaction (4)	Can rule out HIV diagnosis/patient management (8)
Provider -	Patient management (9), Increased work (9), Linkage difficulties (3)	Use of time (7), Cost and time (2)

Impact of offering HIV SCREENING in the ED

	HIV Screening	
	Test Results POS (+)	Test Results NEG (-)
Patient +	Earlier diagnosis leads to better treatment (16), Linkage to care (9), Decreased transmission (via education) (7), Knowledge of serostatus (7)	Knowledge of serostatus (12), Decreased transmission (via education) (5), Opportunity for counseling (4)
Patient -	Stress of new diagnosis (9), Unprepared for test results (4), Potential to have false positive (3)	Patient misconception of negative test (16), Patient does not get results (3), Time (3)
Provider +	Increased opportunity for treatment (6), Better surveillance (3), Provider satisfaction (2)	Rule out HIV diagnosis/patient management (2), Surveillance (2)
Provider -	Use of time (6), Patient adverse reaction(2)	Use of time (5), Cost (4), Staff Resources (4)

Impact of offering HIV TESTING in the ED

	Associated Patient Interaction	
	Education information only	Pre and Post test counseling
Patient +	Knowledge of serostatus (3), Increase awareness (3), Decrease stigma (2), Reduced risk behavior (2)	Reduced risk behavior (15), Opportunity for education (10), Appropriate care (4), Knowledge of serostatus (2), Decreased stigma (2)
Patient -	Patient misconception of test results (9) Lost opportunity for patient counseling (9), Decreased patient care (2)	Time (4), Less testing due time constraint (3)
Provider +	More time efficient (8), Makes ED HIV testing feasible (3), Easier (2)	Provider satisfaction (3)
Provider -	Use of time (3), Cost (2), Improper use of ED (2), Provider burden (2), Decreased patient care (2)	Use of time (23), Cost (7), Provider burden (7), ED overcrowding (3)

## CONCLUSIONS

While SWOT analysis identified both the individual and public health benefits possible through expanded diagnostic testing, screening, and prevention in EDs, the ways in which ED settings are not ideal were frequently mentioned. Predominate perceived barriers to ED involvement in HIV testing include increased burden on providers and lack of funding for HIV testing programs are seen as most common weaknesses and threats. However, among participants of this consortium, the ED is viewed as an appropriate and important site for HIV testing.

The clinical impact on individual patients was generally considered to be positive for diagnostic testing, screening and counseling. There remains substantial debate about the impact of counseling on behavior change for persons who test negative for HIV. Any need to provide patient education or risk reduction counseling, or to appropriately counsel newly diagnosed patients, was viewed as prohibitive.

Achieving balance between the issues raised by participants demands further study, education, and evidence-based policy change if the full potential of HIV testing in EDs is to be realized.