Appendix 2: Barriers to Routine HIV Screening

Barrier Title	Socioecological Level	Examples
Costs/ Reimbursement	Public Policy	• concern about reimbursement • concern about insurance coverage/out of pocket costs to patients • cost of the screen for undocumented immigrants • fear that patients would refuse based on cost • inadequate consideration and reimbursement for all costs involved in routine HIV testing • lack of American Dental Association (ADA) reimbursement code for dentists to test • lack of knowledge about appropriate reimbursement procedures (inability to bill for services) • limited number of free/reduced cost tests available • Medicaid will not reimburse • missed opportunities to obtain external federal funding to expand programs • patient cannot afford the test • rapid tests cost too much • additional financial burden due to increased HIV testing and diagnosis • competing state priorities and health needs for distribution of available funds • complexity and limitations of separate funding streams • concerns about sustainability of ED-based HIV • few programs receive special funding to test high-risk individuals due to lack of awareness • lack of knowledge on how to obtain funds • do not meet eligibility requirements to receive funding • increased cost of medications • insurance barriers for those who test positive • lack of financial compensation to attend trainings • concerns of cost effectiveness of routine testing • need for compensation of staff time to administer rapid test • fear that charging for HIV testing would been seen as "money making gimmick" for dentist • Medicare will not reimburse • decreasing testing at, and taking funds from, other health care settings

		for HIV testing and treatment • lack of sustainable funding	• insurance barriers for those who test positive
Incompatibility of Guidelines with State/Local Policies	Public Policy	• concerns about incompatibility with state HIV testing policies (state requirement of separate written consent for testing and specified procedures required for testing) • need for written consent • requirement for consent in Belgium perpetuates HIV exceptionalism • separate consent necessary to test for HIV • state and federal regulations • belief that local policy or General Medical Council guidance discouraged testing • differences between county health department and infectious disease practice regarding delivery of test results (e.g., via telephone or in-person) • too many state and federal regulations	• features of larger state environment in which substance abuse and HIV testing delivery system exist • state requirements to provide signed consent and pretest counseling • differing definitions of routine testing • lack of support of testing from health insurance • informed consent requirements based on state and local regulations • regulations for test use are hard to understand • regulations related to post-test counseling for those who test positive
Legal Issues	Public Policy	• concern with name-based reporting requirement associated with HIV testing • legal implications for partner notification • there is a lack of understanding of the legal implications of HIV testing • lack of understanding about legal procedures and implications for HIV testing • legal concerns (need to document outcomes for every patient tested, regardless of test result)	• need for provider education on regulations and requirements • concern about ED liability • lack of awareness of local or institutional policies (notification and linkage to care) • lack of knowledge about Mississippi laws regarding informed consent for screening

Provider Time Constraints	Institutional	• constraints on provider's time • lack of time • lack of time to attend trainings • rapid pace of primary care office visits • time constraints due to unpredictability of ED patient volume • time constraints, especially when trying to justify routinely taking sexual histories and conducting HIV/STD testing efforts to health care administrators • time required for nurse to document HIV testing in the medical record • crowding of ED • overcrowding of wards • difficult to fit rapid test counseling into one session • difficulty of integrating the rapid testing into consultation • limited time with patients, especially in managed care settings	• individual provider having the responsibility for each step in the testing process • takes too long to run the test • insufficient time to conduct and interpret test • ED crowding with limited resources • ED too busy • challenge presented by a subset of ED patients who are high-frequency repeat HIV testers • perception of difficulty performing testing in the ED • too much paperwork • there are too many administrative hassles • rapid pace of primary care office visit
Managing Care of Patients Who Test Positive	Institutional	• concern about how to manage care of an HIV positive patient • concern over linking patient to care • difficult to arrange follow-up for patients with positive result • health service system silos (no infrastructure for coordinating services, no incentives for coordination, no central referral system) • lack of contacts for follow-up referrals	• limited intra- and inter-agency communication (no shared responsibility, no shared patient information, no shared data collection, little shared knowledge and training) • difficulty obtaining treatment medications • poor primary and secondary care

		• lack of coordination across settings (e.g., "attending one hospital for one thing and another" for something else) • barriers with linkage to care (few HIV care providers available, patients have to travel long distances for treatment and care) • lack of HIV treatment resources in the community • lack of HIV-related referral networks • lack of medical/social services linkages • lack of data to identify appropriate facilities • lack of medical or social service linkages • lack of resources in rural areas for referring patients for HIV care (closest specialist over 100 miles away) • unsure how to provide follow-up for a positive test result	interface (lack of models of shared care, missed opportunities for shared care • lack of external partnerships • few HIV care providers available • lack of feedback from hospitals about patients who test positive • unwillingness of infectious disease practice to follow-up with patients who tested positive in the ED • lack of knowledge where to refer HIV-infected patients • lack of follow up care
Concerns about Confidentiality	Institutional	• concern about confidentiality with HIV testing • confidentiality cannot be guaranteed in small communities • lack of privacy for conducting HIV testing • fears that confidentiality is easily breached, especially in overcrowded environments • fears of confidentiality with billing • lack of anonymity in rural areas	• patient fear of lack of confidentiality • interruptions by other staff during testing • patients uncomfortable being asked HIV status at triage • patients do not feel that screening at triage is private • belief that patients prefer anonymous testing and would not want dentist to know of status

		• lack of private space in jail setting • lack of clinical space to conduct confidential screening	• logistics of test performance and counseling on the ward (issue of patient privacy)
Staffing Shortage	Institutional	• personnel needed to administer tests and follow-up with test result • poor organizational structure • resource constraints (inadequate staff for testing, follow-up, and support) • staffing shortages • strain on staff when others are absent to attend trainings • department does not have sufficient number of staff • fear of a "surge" in patients coming to the ED only for HIV testing • lack of male counselors	• not having a health care team of support • potential for increase in appointments for delivery of in-person test results • high staff turnover • staffing constraints • lack of sufficient staff to give rapid test • non-laboratory staff are not qualified to run rapid test • department does not have sufficient number of staff • organization unable to employ dedicated staff to perform test
Difficulty Following-up on Test Results	Institutional	• difficulty contacting patients for results • no system in place for follow-up on results • patients not waiting or returning for test results • short-stay treatment clients may be discharged before receiving test results • concern with follow-up • transient population treated in ED • wait time for receipt of test results • failure to follow up on result	• process concerns - obtaining confirmatory testing • patient unwillingness to wait 2 weeks for test results • difficulty obtaining test results • rapid testing does not allow more people to know their HIV status (need for confirmatory test) • lack of resources to follow-up with

		• lack of confidence that patients will return for results • system of scheduling patient follow-up is lacking • patient failure to return for results • patients tend to follow-up at another center • need for second test if rapid test is positive	patients who tested negative • lack of feedback from hospitals about patients who receive a positive result • follow up difficulty is a key barrier to STD and HIV screening in EDs, especially for HIV
Materials Needed for Testing	Institutional	• lack of availability of HIV testing on site • lack of lab access or services • lack of test kits • test kits out of stock • rapid testing not available • delayed delivery of products • hard to find written HIV test consent form • lack of HIV consent forms • non-rapid testing not available • unavailability of personal protective equipment (masks, goggles, and aprons) • difficulty to screen for other STIs with a rapid diagnostic test • resources and acceptability differ according to the type of test available	• shortage of resources • rapid test supply shortage • lack of resources for prevention and testing • resource constraints • lack of facilities • lack of open access to testing services or community support resources • unavailability of same-day testing • inadequate resources • insufficient resources for rapid testing • on-site testing not universally available through Mississippi substance abuse treatment programs
Clinical Inertia	Institutional	• inertia of previous practice • lack of habit of testing • clinical inertia • lack of staff initiative • clinic does not have a routine HIV screening system	• lack of integration of screening into practice • lack of models operationalizing HIV testing

		• difficult to design a testing protocol for the organization • doctors do not screen for diseases they rarely see • health provider resistance • historical delineation between sites of HIV testing and clinical care (providers not used to offering HIV testing unless the patient requested) • internal processes and decision-making	• intermittent office staff compliance with the new routine sexual history procedures • clinical reminders overload • delayed integration of new responsibilities with existing responsibilities • no uniformity in collecting data
Lack of Administrative Support	Institutional	• health care facility resistance • hesitation of hospital administration • HIV testing prohibited in practice • hospital administration does not support use • no shared goals or leadership • lack of a clinical champion • attendance at trainings deemed optional by administrators • lack of institutional guidelines • program culture • barriers are clinic-setting specific and not amenable to a general approach (rural vs. urban, ethnic mix, HIV risk and incidence in community)	• lack of participation of other professionals in training • difficulty justifying to administrators the importance of taking sexual history and provide HIV/STD testing • hospital administration does not support use of rapid HIV test • leadership resistance • culture changes required of inpatient caregivers and hospital administrators • practice policies not consistent with recommendations

Logistical Difficulties	Institutional	• logistical difficulties caused by adding screening to the visit and negative impact of work-flow • rapid tests are difficult to integrate into the laboratory • delay between training and the start of testing activities hindered or prevented nurses and physicians from providing HIV rapid test • delayed integration of new responsibilities with existing responsibilities with introduction of rapid testing • different locations for HIV testing and primary care • patients accustomed to having blood tests performed in a lab as impediment to rapid testing • inconvenient off-site referrals for HIV testing • health system silos • difficulties navigating through health care system • the difficulty of integrating the rapid diagnostics test • longer wait times for patients • lack of coordination across settings (e.g., attending one hospital for one thing and another for something else)	• the difficulty of integrating the rapid diagnostic test • clinical reminders overload • difficult to design protocols for the organization • poor primary and secondary care interface (lack of model of shared care, missed opportunities for shared care • chaotic commissioning model • lack of support resources and language services for newcomers • lack of political will and funding for immigrant health services • failure to integrate care with support organizations • different locations for HIV testing and primary care • lack of reminder for HIV testing in EMR
Need for Patient-Friendly Educational Materials	Institutional	• absence of patient-friendly literature • pamphlets not addressing older adults • lack of health education for patients • pamphlets not addressing older adults	• lack of awareness of information available to patients • ignorance of rapid testing among patients

Quality Assurance Concerns	Institutional	• ensuring quality control and traceability of results adding to time and expense • quality assurance procedures are too complex • HIV screening not included in performance measures • lack of institutional benchmarks for HIV testing	• no uniformity in collecting data • requirements for testing site quality assurance and policies • complexity of quality assurance procedures for rapid testing
Administrative Burden	Institutional	• administrative burden • managing data and paperwork associated with screening	• paperwork is too cumbersome • there are too many administrative hassles
Stigma	Interpersonal	• stigma • difficulty normalizing a highly stigmatized disease • fear that positive screen result would cause stigma for patient • HIV exceptionalized as a condition due to stigma has led to screening in specialist settings • stigma (do not want to offer screen without clinical reason to do so) • stigma associated with being seen as a provider who offers HIV testing (patients might assume that there are substantial numbers of at-risk individuals being seen at the practice) • refusal of testing at local health departments due to stigma • community perceptions regarding HIV testing in ED • community resistance • concerns about judging patients' sexual behavior and raising stigma	• patient would perceive the proposition to test as an accusation of sexual promiscuity • perception that recommending a screen would suggest judgment of patient's fidelity to relationship • conservative nature of communities • Arkansas is part of the Bible Belt with conservative moral values and politics • HIV-related stigma • HIV and substance abuse associated with moral weakness and shameful behavior • belief that patients prefer anonymous testing and would not want dentist to know of status • community and patient attitudes of denial, fear, stigma,

		• patient may view recommendation as accusatory or judgmental • lack of public acceptance • lack of community acceptance of HIV testing • fear related to the effect of positive status would have on life insurance/immigration/work • patient's fear of including HIV positive status on medical records • patient afraid to disclose sexual risk behaviors to provider • fear that patients would accuse provider of xenophobia and would perceive the proposition to test as an accusation of sexual promiscuity • patient may view recommendation as accusatory or judgmental	and discrimination associated with HIV • patient would not want to be identified as HIV positive • afraid others will find out • providers do not want to offend anyone • fear of uncomfortable interactions with patients • HIV-related stigma might deter patients from dental care • difficulty normalizing a highly stigmatized disease • patients with a positive test would be rejected by community
Culture/ Language/ Sexual Orientation/ Gender/Race/ Age	Interpersonal	• cultural barriers (Latinas - lack of assertiveness in sexual relationships) • cultural differences between provider and patient • religious factors impede discussions about HIV • language barrier • differences in sexual orientation between provider and patient • difficult to explain rapid tests to patients with low literacy skills • perception that males less likely to get tested • cultural/social/religious factors impede discussions about HIV	• uncomfortable due to religious, spiritual or cultural beliefs • difference in age between patient and provider • difference in culture • difference in language • gender differences between patient and provider • differences in sexual orientation between patient and provider • perception that men are reluctant to go

		• difficulty with cultural competency in communication with immigrant patients • patients' young age • patient's sexual orientation • lack of sensitive culturally appropriate health care, including HIV testing services	for testing (and to seek healthcare in general) • discomfort due to religious, spiritual, or cultural beliefs • difficulty talking about HIV or sex in the South ("Bible Belt")
Difficulty Testing Adolescents	Interpersonal	• discomfort taking a sexual history when parents present • parental consent needed for children and adolescents • consent should be obtained from parent or guardian • staff thought that parents and guardians would refuse screening • concerns about ability of children to give consent • difficulty testing minors when parents are present	• fears of how child would be treated if tested positive • guardian deemed HIV testing to be inappropriate • laws requiring providers to inform parents of teens younger than 14 if they test positive • inability to identify which adolescents should be screened
Lack of Established Patient-Provider Relationship	Interpersonal	• lack of established patient-provider relationship • lack of patient-provider rapport with new patients • patient being seen by someone other than regular provider	• lack of trust with patient • provider-initiated testing and counseling may affect the trust between patient and professional
Patient Discomfort Discussing HIV and Risk Factors	Interpersonal	• patient uncomfortable discussing high risk behaviors • patients may feel that requesting an HIV equates to admission of having done something "naughty" • patients unwilling to disclose risk behaviors	• patients would not feel comfortable discussing HIV, sexual behavior, or drug us with provider • personal relationship with patient (feeling that patient would not want them to know)
Family and Partner Dynamics	Interpersonal	• patients in need of comforting when children	• concerns about disease or death and

		were brought along to the consultation • partner of the patient being present • mother or other relative being present at the time of a patient visit • lack of childcare facilities at the clinic • difficulty figuring out family dynamics	effect of positive status on family or fear of having children • unwillingness or inability to contemplate the potential impact on an HIV diagnosis on a long-standing relationship
Pre-/Post-Test Counseling and Consent Process	Intrapersonal	• concerns about the pre-test discussion • increased time requirements due to pretest and posttest counseling • time constraints (concerns about time for counseling and education, completing necessary paperwork to obtain consent) • time management (pre/post-test counseling adds to consultation time) • time needed to discuss sexual practices and disorders • time required to obtain testing consent and provide counseling (lack of awareness of California state legislature removal of requirement for signed consent and counseling) • time necessary to complete separate written consent • unsure how to perform consent procedures • consent process too time-consuming/burdensome • onerous consent process • overly burdensome state pretest consent and counseling guidelines	• lack of experience providing pre-test or risk reduction counseling • need for pre-test counseling • need to have a conversation with the patient about HIV testing (not just "checking off a box on a lab slip and handing it to a patient") • not trained to perform pre-test counseling • counseling is hard to integrate with other client services • additional time needed to assess who needs testing • difficulty of accurately identifying those ED patients who are at greatest risk for HIV and most likely to have an undiagnosed infection • inability to identify which adolescents should be screened

		• concern that pre-test counseling fails to adequately prepare patients for a positive results • inadequate counseling • inadequate support staff for counseling • inadequate training in pre-test counseling • unsure how to perform counseling • separate consent necessary for HIV test • regulations related to counseling (post-test for those who test positive and perception that pre-test counseling is also required) • inadequate counseling for repeated testers • counseling session is difficult to integrate with other patient services • informed consent is hard to obtain • difficult to fit rapid test counseling into one session • concern that condensing pre-test counseling fails to adequately prepare patients for a positive result	• lack of training to assess risk behaviors • belief that many components of pretest counseling are inappropriate for the majority of women • if HIV testing increased there might be weakened possibilities to give pre-test counseling properly • lack of HIV consent forms • need for prescreen counseling • requirements for written informed consent • parental consent needed for children/adolescents • too many state and federal regulations for rapid test and consent requirements for parents' consent
Competing Clinical Priorities	Intrapersonal	• competing clinical priorities • guidelines recommend 1-time HIV screening for most patients within broad age range reduces the urgency for performing screening in any given clinic visit • prioritizing substance abuse treatment over HIV testing in substance abuse clinics • not feasible or desirable to adopt provider-initiated counseling and testing	• risk of fatigue among staff with responsibilities to perform related tasks (offering, charting, education, and following-up) • staff resistance (one more task to undertake, outside scope of practice) • wish to focus on primary complaint

		during all types of consultations • not thinking of HIV screening in encounter • organization unable to employ dedicated staff to perform testing • other health screenings (e.g., medical history, vital signs, BMI, substance abuse, and violence) seen as higher priority • potential staff burnout with introduction of rapid testing • providing rapid HIV testing gets in the way of ability to take care of patients	• ED too short-staffed to incorporate HIV testing • prioritizing other preventive screens when time is short • would result in neglect of other clinical responsibilities • HIV screening not relevant to the visit • HIV is not the reason for the patient's visit • visit is for palliative care • no blood test planned
Perception of Low HIV Prevalence or Patient Risk	Intrapersonal	• few injection drug users and low HIV prevalence translates to low prioritization of HIV testing • HIV disease prevalence is too low • HIV is too rare to warrant routine testing • belief of low risk of HIV among patients • perception that patients do not engage in risk behaviors • lack of awareness of HIV as a problem • patient and staff perception of low risk for HIV • usual patients seen in family practice are seen as low risk for HIV • lack of epidemiological risk factors • belief of low risk of HIV among patients • low risk in established patients	• lack of acknowledgment that older adults can be at risk for HIV • assumptions of patient risk based on age and marital status • misperceptions of patients' risks for HIV • low risk based on patient’s age • low risk due to patient's sexual orientation • perception regarding ED patients' risk for HIV • population seen as elderly and monogamous and therefore not at risk for HIV

		• prevalence of HIV below CDC threshold for universal testing	• incorrect assumptions about patients' risk status
Lack of Awareness of Guidelines	Intrapersonal	• confusion about testing guidelines and regulations • lack of awareness of testing recommendations (CDC or other national organizations) • lack of awareness of recommendations on screening for veterans • lack of awareness of the New York HIV testing law • lack of awareness on recommended frequency of HIV screening • lack of awareness that effectiveness of testing on basis of patient risk factors has diminished • small practice not up to date on recommendations • unsure of when to repeat an HIV test • lack of consistent guidelines • need for guidelines to normalize testing • lack of data to support or justify routine HIV testing • lack of awareness of local/institutional policies relating to notification and linkage to care • did not receive information about the recommendation for increased uptake of HIV screening • routine HIV testing is not currently recommended	• belief that local policy or general medical council guidance discouraged testing • physicians not trained in HIV and/or infectious disease are still not aware of the testing guidelines and still think that testing requires extensive pre-test counseling by HIV-trained physicians or certified nursing assistants • lack of awareness of provider-initiated testing and counseling policy • perception of lack of cost-efficiency in testing low-risk established patients • lack of clinical HIV factors to warrant testing • lack of medical indication to test • policy to order HIV testing only when clinically warranted (e.g., not at patient request) • no medical indication for testing • lack of HIV symptom presentation

Perception of Patient Discomfort with/Reluctance to Test	Intrapersonal	• belief that patients would refuse testing • older people more likely to refuse testing • perception of patient fear of positive result • patient embarrassment • patient discomfort discussing HIV testing • patient refusal • putting people off visiting health care for fear of a positive HIV diagnosis • rapid testing increases patients' anxiety about HIV • the new guidelines increase patient fear • perceived patient reluctance to be tested • patient may feel that requesting an HIV test equates to admission of having done something "naughty" • dental faculty expressed concerns that patients react negatively to HIV screening and/or offers of HIV screening • anticipation of low acceptance of HIV testing in dental setting • patients not motivated to screen	• anticipation of low acceptance of HIV testing dental settings • patients would react negatively to HIV screening or offers of HIV screening in dental practices • patients accustomed to having blood test performed in a lab as impediment to rapid testing • patients' assumption that they were already being tested/Patients thinking that they didn't need to be tested until symptoms appear • fear of a positive result • mistrust of health care services by aboriginal populations • patient attitudes towards HIV screening • lack of patient support for oral rapid HIV test
Provider Discomfort Discussing HIV/Risk Behaviors	Intrapersonal	• discomfort in raising the issue of HIV screening with patients • discomfort on the part of the physician or patient to discuss risk behaviors • discomfort talking to older adults about their sexual practices • discomfort discussing a sensitive topic	• discomfort discussing high risk behaviors with patients • discomfort discussing modes of HIV transmission • provider, patient, or community discomfort (including

		• female general practitioners report more difficulty discussing sexual health with men • hard to find the right question and time to discuss sexual health (phrasing questions so as not to be offensive) • inadequate training on taking sexual history • difficulty initiating discussions about sexual behaviors (particularly with men - women often discuss needs for contraception, Pap tests, and pregnancy, which more readily lead into discussions about sexual health) • discomfort asking patients about sexual behaviors • discomfort counseling about sex and sexuality • embarrassment on the part of the family practitioner • unsure how to initiate topic	discomfort discussing sexual health) • discomfort initiating discussions about HIV • discomfort introducing an HIV test when there is no link with the patients' request • available continuing medical education courses do not adequately address sexual health • discomfort talking to older adults about their sexual practices • registered nurses did not feel well-equipped to discuss patient's risk of HIV or answer patient questions
Lack of Self-Efficacy Providing Positive Test Result	Intrapersonal	• anxiety about managing a positive diagnosis • fear of negative patient reaction to positive test result • inability to provide support to patients who may have intense emotional reaction to a positive HIV test • discomfort delivering the test results • not trained to handle positive HIV results • physicians ill-equipped to deal with emotional reactions	• uncertainty with knowing how to deal with emotional response if patient tests positive • uncomfortable giving a positive HIV test result • difficulty breaking news of positive HIV diagnoses • difficulty in delivering a positive test obtained through a rapid test result • lack of provider emotional preparedness to

		• inability to provide clients necessary psychological support • psychological impact of having to give a positive test result • self-efficacy concerns - feeling inadequately trained to give positive results	handle the number of positive results found • challenges presenting the test results (patient's feeling in case of a positive result)
Lack of Provider Knowledge about HIV	Intrapersonal	• lack of education about HIV • lack of HIV-specific training • lack of knowledge and skills to offer screening and communicate the benefits of screening • lack of knowledge of benefits of treatment • lack of knowledge of HIV epidemiology (most common mode of transmission, percentage infected who are unaware, treatment as prevention, overall prevalence in Chicago) • lack of knowledge of presenting symptoms • lack of knowledge of value of screening • lack of medical education on HIV and aging • missing red flags for HIV • insufficient knowledge to provide HIV counseling and testing • staff members lack knowledge about HIV • concern about ability to answer patients' questions • not equipped to handle post positive result questions from family • patients may have questions staff cannot answer	• lack of awareness of HIV symptom presentation • lack of awareness of HIV as a problem • lack of training on HIV epidemiology and management of diagnosis • lack of education materials for implementing HIV testing • lack of consistent HIV training • lack of knowledge and skills on HIV prevention and treatment taught in schools • need for additional training • lack of training to assess risk behaviors • difficulty of accurately identifying those ED patients who are at greatest risk for HIV and most likely to have an undiagnosed infection • not conducting HIV risk assessment or

		• family practitioners unfamiliar with HIV • expertise not cultivated among general practitioners • failure to recognize symptoms of HIV	providing sexual risk reduction education • providers relying on the use of pamphlets for education and focusing on reproductive health instead of HIV prevention
Outside Scope of Practice	Intrapersonal	• it is not my job • it is not appropriate to involve registered nurses in HIV screening • out of scope of practice • it is not considered part of professional role • perception that the health department is responsible for all HIV testing • providers see role as diagnostic, not preventive • routine HIV testing not the responsibility of ED staff • scope of practice constraints (HIV testing inappropriate in dentistry) • seeing HIV testing as only a diagnostic tool, not prevention • view that primary care is not the appropriate site for screening • counselors refused to test • physician refusal to perform testing • staff unwilling • HIV screening should be performed by primary care physicians rather than EDs • HIV testing as outside scope of dental practice (need to refer patients who test positive to a physician	• burden of responsibility - provider uncertainty about extent of responsibility for HIV testing • difficulty treating chronic health conditions in the ED • providers do not believe it is their responsibility to offer HIV testing • fear that charging for HIV testing would be seen as "money making gimmick" for the dentist • not seen as physicians' responsibility • HIV as medical matter best addressed by physicians (not dentists) • detract from primary role of ED/ /PITC not seen as a nurse role • mission of ED is to treat acutely ill individuals (not

		anyway, so it is better for a physician to do the testing) • HIV testing would be taking funds from other health care settings • testing in ED may be seen as conflicting with interests of other community-based programs (which see HIV testing as their domain)	public health interests) • providers see role as diagnostic, not preventive • detracts from the primary role of ED • ED is for conditions that can be treated • HIV as a medical matter best addressed by physicians (not dentists)
Fear of Offending Patients	Intrapersonal	• afraid that broaching the topic would offend PTs • concern about upsetting patients and harming the patient-provider relationship • patient may be offended if offered HIV testing • patient likely to react to recommendation with denial or anger (I'm not gay, I don't feel sick) • personal relationship with patient (feeling that patient would not want them to know) • provider initiated testing and counseling may affect the trust between patient and professional • fear of appearing judgmental or racist	• fear that patients would accuse them of xenophobia • application of provider-initiated testing and counseling to sub-Saharan African migrants seen as discriminatory • fear of disrupting patient-provider relationship • belief that African-American patients are more likely to react to recommendations with denial, offense, or anger (I am not gay; I don't feel sick, I don't like needles or giving blood)
Patient Perception of Low-Risk	Intrapersonal	• patient reluctance due to low perceived risk • patients may not accurately assess or convey their own risks	• patient felt themselves to be at low risk • patients do not feel screening is appropriate

Lack of Familiarity with Test Procedures	Intrapersonal	• lack of experience with HIV screening • lack of familiarity with mechanics of performing rapid test • lack of knowledge of test availability • more education and training are needed to perform role in the rapid HIV testing program • lack of risk assessment skills • lack of self-confidence in ability to implement an evidence-based practice at their work • lack of self-efficacy in performing HIV testing • procedures are too difficult to learn	• procedures for running the tests are difficult to learn • complexity of oral HIV tests • complexity of ordering an HIV test • difficulty of procedures in ordering an HIV test • lack of awareness of the types of tests available and their specificity and sensitivity • unsure how to perform the test • no experience offering HIV testing prior to policy change
HIV Relegated to Specialists	Intrapersonal	• assumption that HIV care is provided only by specialists • belief that specialists are adequately meeting needs • staff not qualified • uncertainty about counseling patients (need to have someone with experience present) • belief that a HIV screen requires pre-screen counseling from a specialist • providers need special qualifications to inform patients of a positive test result • providers need special qualifications to suggest an HIV test • belief that testing requires extensive pretest counseling	• non-laboratory staff are not qualified to run rapid tests • pregnancy diagnosed (testing deferred to prenatal visit) • HIV testing "not an ordinary prescription" • inability to screen concomitantly for other STIs • "scattershot approach" – it is up to each local program to make referral arrangements for HIV testing among substance abuse clients

		by HIV-trained physicians or clinical nurse specialists • limited access to testing for substance abusers	• provider-deferred testing to an upcoming prenatal appointment
Concerns about Cost-Effectiveness	Intrapersonal	• concerns about cost effectiveness • lack of cost-effectiveness of universal ED-based HIV screening • difference in opinion regarding efficacy of routine HIV testing • already high rate of HIV testing (little added benefit to testing all patients) • belief that sufficient infrastructure is in place (no added benefit to expanded screening) • belief in importance of risk-based testing (due to limited resources)	• HIV testing should be offered only to those with risk factors • believing that it is not efficient to test every person • decreased clinic efficiency with introduction of rapid testing • lack of outcome expectancy • it is not feasible or desirable to adopt provider-initiated testing and counseling during all types of consultations
Additional Training Needed	Intrapersonal	• additional training necessary to be able to offer HIV testing • lack of training on how to perform rapid test • staff reluctant to attend new trainings • unsure how to perform the test • inadequate staff training • lack of self-confidence in their ability to implement an evidence-based practice at their work • concern about ability to answer patients' questions	• general practitioners' expertise not cultivated • lack of training in how to offer routine testing • procedures are too difficult to learn • lack of participation of other professional training • lack of training on provider-initiated testing and counseling

Patient Acuity	Intrapersonal	• patient acuity • patient ineligibility (illness/inability to consent/age > 5 years) • patient felt too ill to test • visit acuity • client too anxious, angry, or confused • cognitive difficulties among cancer patients • belief among some staff that HIV testing should be done 1-3 days after intake and not during the intake itself (inmates may refuse testing at intake because they are tired, hungry, or in alcohol/drug withdrawal) • focus on palliative care during visit • no blood test planned for cancer patients	• client fragility - introducing HIV testing could threaten clients' substance abuse recovery • may jeopardize client's sobriety • dealing with difficult patient • low patient general and health literacy • rapid testing increases patient's anxiety about HIV • difficult to fit rapid test to patients with low literacy skills • lack of clear understanding of what they are being treated for and why
Lack of Support for HIV as Public Health Issue	Intrapersonal	• opposition to the increasing number of “public health” or “primary care” services being taken on by EDs • assuming that providers do not care about prevention and just want to treat disease • belief that being HIV positive is not deserving of "special status" to morally obligate a provider to offer free testing • belief that services offered should reflect needs of population being served (other public health needs more prevalent) • HIV competes with other state public health priorities • lack of integration between public health and ED department	• need for strong and committed advocate or spokesperson at top levels of government to heighten awareness of HIV as public health issue • patients may not test if focus too much on public health (versus individual) benefit • lack of HIV awareness and activism within community • lack of public health infrastructure • competing public health interest in ED

		• difficulty identifying and testing hard to reach populations (e.g., domestic violence victims, sex workers, undocumented immigrants)	• lack of dissemination and implementation strategies for HIV testing programs • patients at risk do not present to general practice
False Positive Results	Intrapersonal	• concern about high false positive in low risk group • unnecessary fear on the part of patient who receives a false positive result • greater confidence in standard HIV testing with serology than rapid testing • unnecessarily raising alarm in patient	• preference to order a conventional (blood) test simultaneously rather than offer a rapid test • concern about liability for inaccurate test results
Forgetting	Intrapersonal	• forgetting to test • lack of reminder for HIV testing in EMR • forgot to offer	• staff forgetting to implement HIV screening
Disagree with Recommendations	Intrapersonal	• disagree with recommendations • distrust of CDC over professional society recommendations • doubts about the guidelines (belief that data do not support the need for testing) • evidence for recommendations insufficient • questions of ethics or morality of testing patients as young as 13 • uncertainty about organization issuing guidelines • lack of provider buy-in • nursing resistance	• intermittent staff compliance with guidelines • resistance to guidelines • being HIV positive is not deserving of "special status" to morally obligate a provider to offer free testing • lack of endorsement of recommendations among residents • not all nurses were convinced about provider-initiated testing and counseling

		• belief in importance of risk-based testing (due to limited resources) • guidelines do not address patient preferences, needs, and abilities	guidance to minimize • perception that HIV testing should be offered only to those with risk factors
Testing Seen as Coercive	Intrapersonal	• belief that opt-out testing may be seen as coercive to patients • potential for provider-initiated testing and counseling to breach human rights (patients may feel pressurized or coerced into having a test) • concerns about opt-out testing • patients need to be able to make an informed decision • patients may not be able to fully participate in consent process during ED visits or understand meaning of test results	• immediacy of rapid test seen as too intrusive • involuntary commitment to treatment • screening for HIV among undocumented immigrants seen as unethical if patients are deported and no longer have access to care • patients may feel pressure or coerced into having a test
Testing Not a Priority to Patients	Intrapersonal	• HIV testing not a priority to most patients (most patients are low income - concerned more about where they will sleep and where they will get their next meal) • ignorance of rapid testing among patients • patient assumption that there were already being tested • patient lack of time	• patient focus on immediate needs (what brought them to the ED) • patients not motivated to screen • test is offered in a manner that patients more likely to refuse (offered at the end of the ED visit) • unsure if patients want to be tested
Patients Should Request Screening	Intrapersonal	• belief that patients should request test • patient should raise topic • patients do not request testing	• fear of offering unneeded tests • reliance on patient request for screening

		• failure to truly perform universal testing may give patients a false sense of security that they have been tested and are negative	• instead of providers bringing up HIV to their patient, the patient should bring up the topic
Patient Fear of Needles	Intrapersonal	• not ordering HIV testing for patients who do not like needle sticks • patient fear of needles	• patient discomfort with finger stick of venipuncture
Lack of Efficacy of Test to Change Patient Behavior	Intrapersonal	• perceptions regarding testing's ability to cause patients to change their risk behaviors and lower transmission risk	• provider belief that patients are not likely to change behaviors even if risks identified and testing and counseling is offered