

Appendix 3: Facilitators to Routine HIV Screening

Facilitator Title	Socioecological Level	Included Items	
Reimbursement	Public Policy	<ul style="list-style-type: none"> • clinician reimbursement for HIV testing • compensation for rapid testing • creative approaches to financing could help expand routine testing in the ED • dedicated funding from Healthy San Francisco to expand HIV testing • establish billing protocols • free kits from collaborating agencies • providing grant funding for testing • insurance coverage and payments to cover testing • provide funding specifically for HIV testing (from CDC and Ryan White) • providing start-up costs for HIV testing • provisions of the Affordable Care Act that require and incentivize insurers to cover HIV testing • training on appropriate billing in context of the ACA and USPSTF recommendations 	<ul style="list-style-type: none"> • allow more time when seeing patient • provide reliable supply of testing kits and antiretroviral treatment • funding for HIV testing programs • increased education regarding billing for HIV testing and screening • availability of third-party reimbursement • universal third-party reimbursement • clinician reimbursement for HIV testing • external funding • onsite HIV education, testing, and counseling through SAMHSA funding • incentivize insurers to cover HIV testing • financial support/ • free kits from collaborating agencies • the test being free of charge
Campaigns to Promote HIV as a Public Health Priority	Public Policy	<ul style="list-style-type: none"> • belief that it is in the public good for all people to be aware of their HIV status • emphasize benefits to the baby by reducing 	<ul style="list-style-type: none"> • emphasis on benefit to public health • capitalize on existing culture of infectious disease prevention

		<p>vertical transmission among pregnant women</p> <ul style="list-style-type: none"> • benefits to the mother and maternal well-being • benefitting the public good as the primary reason to undertake HIV screening in dental practices • having a flu-shot like campaign • HIV testing seen as "doing the right thing for patients" • more HIV care at public clinics and FQHCs • public health campaigns • recognition of public health benefit of expanded HIV testing in dental practices • belief that patients who know their serostatus are more likely to reduce risky behavior - even in the absence of treatment 	<ul style="list-style-type: none"> • use of universal screening due to patient failure to divulge risk factors • public campaigns to encourage patient acceptance • public health campaigns to increase community awareness and legitimize routine testing policy • better media exposure that would encourage patients to request HIV screens • increasing the profile of HIV in public health • having local leadership to promote testing • increasing perception of HIV testing as a useful public health intervention
Legislative Initiatives	Public Policy	<ul style="list-style-type: none"> • provide information about state and local consent laws • provide more information on HIV test consent rules and policy • develop stronger state-level guidance on consent, counseling, testing, and reporting test results • pass legislation requiring HIV testing • increasing awareness of policies regarding test notification 	<ul style="list-style-type: none"> • require HIV testing for college enrollment • educate providers that professional associations and USPSTF endorse routine testing • educate providers on USPSTF A level recommendation on HIV testing • HIV testing policies in place at facilities

		<ul style="list-style-type: none"> • passing governmental mandates 	
Develop Quality Indicators for HIV Testing	Public Policy	<ul style="list-style-type: none"> • make HIV testing quality core measurement required for every patient 	<ul style="list-style-type: none"> • making HIV testing part of routine testing • require testing during initial and wellness visits
Decrease Stigma	Community	<ul style="list-style-type: none"> • decrease stigma • community education and sensitization • concurrent community awareness-raising events to tackle stigma • availability of celebrity role models to reduce stigma of HIV testing • demonstrate HIV testing as a normal part of health care • media campaigns about the importance of knowing one's status and linking STDs with HIV • normalizing screening or deferring to authority (e.g., the CDC) to justify screening • routine testing reduces stigma 	<ul style="list-style-type: none"> • opt-out testing and general consent for testing (rather than separate written consent) is same approach used for other types of tests, so implementing with HIV would help to reduce stigma and HIV exceptionalism • social marketing to address stigma • use of teams (government, media, sub-specialists) to increase patient acceptance • offering routine testing would eliminate stigma patients may feel asking for a test
Enhanced Linkages to Specialty Care	Community	<ul style="list-style-type: none"> • enhancing linkages between general practitioners and specialists for follow-up • establishing protocols for follow-up appointments for patient who test positive (e.g., after their first visit to ID clinic) • allow providers to shadow local HIV clinics on testing 	<ul style="list-style-type: none"> • information on sites to refer patients with high risk behaviors • personalized local resources available to patients • provision of specialty care through telemedicine services • collaboration with outside

		<p>protocols and to establish a method for linking patients who test positive to care</p> <ul style="list-style-type: none"> • resource lists of HIV clinics and facilities • printout of personalized risk reduction plan 	<p>organizations (state and local health departments, Ryan White clinics, universities, churches, homeless clinics)</p>
Promoting HIV Testing as State of the Art	Community	<ul style="list-style-type: none"> • interest in providing state of the art care • present training in HIV screening and other oral fluid diagnostics as "cutting edge" and helpful in future (dental) practices • HIV screening and oral diagnostics, more broadly, as the wave of the future 	<ul style="list-style-type: none"> • presenting HIV testing as the standard of care in dental practices • recognition of role of dentist as "total health providers" • training about HIV for dentists and staff
Enhance Community Support	Community	<ul style="list-style-type: none"> • enhance external environment that is supportive of HIV testing within the community • festivals and health fairs to promote testing • having local leadership to promote HIV testing • reminders from attending physicians/preceptors 	<ul style="list-style-type: none"> • health department involvement with community-based organizations • support from Citizenship and Immigration Canada to promote testing of immigrants • community leadership
Patient Education	Institutional	<ul style="list-style-type: none"> • provide appropriate patient education materials related to HIV • developing culturally sensitive educational materials (language appropriate) • display posters on HIV education and testing • enhancing patients' role in the decision-making process 	<ul style="list-style-type: none"> • HIV education and knowing the benefits of treatment • sharing information that nearly 20% of those infected are unaware of their status • provide more literature on HIV • offer printed materials on HIV

		<ul style="list-style-type: none"> • having small pamphlets people can pick up • HIV posters in exam rooms • educating patients that a positive result is not an automatic death sentence • patient education may encourage patients to request HIV tests • patient education may encourage patients to take an active role in HIV conversations • provide brochures with HIV information to encourage inmate willingness to be tested • putting a banner to remind people to be tested • share Know Your Status video • promote widescale patient buy-in • educating patients about HIV risk • patient education • use of patient education materials 	<ul style="list-style-type: none"> • provide in-office patient information materials • display posters on HIV testing • show Share Know Your Status video and provide brochures with HIV information to encourage inmate willingness to be tested • utilize resources from existing public health campaigns in other localities (Learn Now patient brochures, HIV testing Action Kit, poster, condom training information sheet from New York State) • encourage patient awareness of signs and symptoms of sexually transmitted infections
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<p>Provider Training</p>	<p>Institutional</p>	<ul style="list-style-type: none"> • education and training opportunities to support HIV testing (including building skills and comfort to address sexual health issues) • more formalized and consistent staff training • online training on HIV testing • sharing of information that nearly 20% of those infected are unaware of their status • training on giving a positive test result • training on how to do sexual health assessment • asking specific questions about sexual practices • conducting a comprehensive sexual history • train clinic staff and practitioners on appropriateness for rapid test In terms of testing roles • increase physician awareness of HIV prevalence in the communities where they practice • information about which HIV tests are available and when and how to order the appropriate test • routinely asking about sexual history • HIV-specific training for clinic staff • belief in need for sexual history training 	<ul style="list-style-type: none"> • training in the academic curriculum of general practitioner students • staff training and on-call support for HIV testing • training in how to conduct confidential sexual health assessment and education • how to conduct discussions with patients and consultation regarding how to incorporate routine testing into practice flow • presentation of HIV screening and other oral fluid diagnostics would be "cutting edge" among dentists and helpful in their future practices • providing the skills to discuss HIV testing • allow providers to shadow local HIV clinics on testing protocols and to establish a method for linking patients who test positive to care • provide evidence that physician's recommendations to test are strong predictors of testing uptake
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Adapt Testing Model to Clinic Needs	Institutional	<ul style="list-style-type: none"> • find the testing model that best fits clinical flow and staff needs • flexibility and teamwork to maintaining an effective and efficient process of intervention delivery • identify best practices approaches for a busy clinic • developing a model that allows testing without increasing waiting time • ease of HIV test administration • ease of integrating rapid test into patient intake appointments • consultation regarding how to incorporate routine testing into practice flow • investment in multi-disciplinary health care teams to streamline workflow 	<ul style="list-style-type: none"> • quality improvement efforts to enhance workflow • setting-specific protocols • conduct rapid testing during non-peak times • flexibility to alter screening efforts according to patient census • having all resources in one central place • incorporating testing consent into intake process • providing information on permanent test kit storage and subsequent access • integration of routine testing into clinic activities • systems routinizing testing into clinical workflow
Provide Access to Rapid Tests	Institutional	<ul style="list-style-type: none"> • availability of rapid screening • point of care testing available • reduction of the risk for the patient not returning for their test result with rapid HIV test • speed of test results 	<ul style="list-style-type: none"> • use of rapid test eliminates need for second appointment • provide access to onsite testing
Expand Testing to Non-Traditional Sites of Care	Institutional	<ul style="list-style-type: none"> • patient population is unlikely to access primary care • patients already use the ED for non-emergent services so HIV testing 	<ul style="list-style-type: none"> • you can't tell if someone has HIV by just looking at them – expansion of testing to all health care settings will capture more cases

		<p>can be incorporated (ED as safety net)</p> <ul style="list-style-type: none"> • ED can identify cases that would otherwise be missed • ED covers a cross section of general population • ED covers a more diverse population • ED has a high profile in public health • ED providers are used to working with patients with complex health needs • ED provides earlier diagnosis of disease • ED provides greater anonymity • EDs represent high volume and high HIV prevalence settings enabling identification of large numbers of newly diagnosed HIV infected patients • EDs are open continuously and capture at risk patients • risk based testing misses some who are infected • provisions of care through telemedicine services 	<ul style="list-style-type: none"> • NC Department of Health and Human Services supports community-based organizations and non-traditional testing • ready availability of treatment on-site for those found to be HIV-positive in ED • trust that patients feel due to regularity of dental care can encourage testing in dental settings • recognition of role of dentist as "total health providers" • HIV screening can be seen as being within the dental profession's scope of practice • HIV screening, and oral diagnostics more broadly, are seen as the wave of the future of dental
<p>HIV Testing Champions</p>	<p>Institutional</p>	<ul style="list-style-type: none"> • health center "champions" to encourage adoption of routine testing • buy-in from laboratory staff and leadership • commitment of senior-level management • establish a clinical champion 	<ul style="list-style-type: none"> • opinion leader influence • recommendation from hospital policy or college of obstetricians and gynecologist • gain staff buy-in (i.e., appointment clerk, medical and

		<ul style="list-style-type: none"> • good organizational support for testing • medical directors' willingness to expand testing • leadership support 	<p>laboratory assistants, clinicians)</p> <ul style="list-style-type: none"> • HIV testing policies in place at facilities • change champion that drives implementation
Electronic Prompts for Testing	Institutional	<ul style="list-style-type: none"> • automatic HIV test reminder • clinical reminders in the electronic medical record • clinical reminders seen as facilitative and not burdensome • creation of individualized prompts or EMR template • embedding HIV testing into EMR preventive services screening template • include automated reminders and computer-generated reports in EHRs 	<ul style="list-style-type: none"> • modifying medical record templates to include HIV screening • training and refresher courses on using the clinical reminder • include automated reminders and computer-generated reports in EHRs • provide frequent reminders in the systems for HIV testing • prompts to offer HIV tests • setting a reminder in the EMR to test for HIV at least once
Eliminate Written Consent	Institutional	<ul style="list-style-type: none"> • allowing oral consent • change consent from written to oral • change laws and policy to eliminate requirement for consent to test • using general consent can streamline the testing process • written consent for testing not required except for occupational exposure • elimination of written HIV consent 	<ul style="list-style-type: none"> • general consent includes testing • emphasize the fact that the CDC no longer recommends formal pre-test counseling or separate written consent • obtaining general consent that includes permission for HIV testing • use of opt-out screening

Add HIV Testing to Standing Orders	Institutional	<ul style="list-style-type: none"> • add HIV testing to standing laboratory orders • combine HIV testing with other laboratory blood tests and routine health maintenance • offer STD testing (including HIV test) to all new patients • include HIV testing in new patient health inventories • require HIV testing for college enrollment • testing during initial and wellness visits 	<ul style="list-style-type: none"> • add an HIV test to lab work • require providers to routinely test • emphasis on routine testing (over provider-driven or risk-based testing) • standardize protocols • adaption of routine testing for all patients • making HIV testing part of routine and annual blood tests
Staff Dedicated to HIV Testing	Institutional	<ul style="list-style-type: none"> • dedicated program for HIV testing • dedicated staff person whose sole responsibility is HIV testing • having an HIV counselor on site to do education and counseling • provide dedicated staff or hybrid staffing models to perform HIV testing 	<ul style="list-style-type: none"> • staff dedicated specifically to HIV testing initiative • provider dedicated staff or hybrid staffing models to perform HIV testing • delegating testing to nurses • health educators present
Flexible Staffing Models	Institutional	<ul style="list-style-type: none"> • addressing staffing needs and competing job responsibilities • allow designated licensed vocational nurses to administer rapid test • use medical students or volunteers to deliver a tablet intervention to provide results • routine HIV screening performed by non-physician staff 	<ul style="list-style-type: none"> • no restrictions on rapid HIV testing (enables use of nonclinical staff and staff on mobile units to test) • provide peer-mediated technical assistance in implementing HIV testing • invest in multi-disciplinary health care teams to streamline workflow

		<ul style="list-style-type: none"> allow nurses and other staff to obtain consent 	
Include HIV in Formal Training Programs	Institutional	<ul style="list-style-type: none"> including HIV and provider-initiated testing and counseling training in the academic curriculum of general practitioners in training incorporating HIV screening into other relevant national guidelines for general practitioners 	<ul style="list-style-type: none"> include training related to the skills necessary to discuss HIV testing incorporate HIV testing into existing education programs training primary care providers to offer testing in a non-judgmental manner
Eliminate Pre-Test and Post-Test Counseling	Institutional	<ul style="list-style-type: none"> eliminate posttest counseling for negative results streamlining pre-/post-test counseling 	<ul style="list-style-type: none"> eliminate pretest counseling replace face-to-face counseling with written format
Use Automated Systems for Counseling	Institutional	<ul style="list-style-type: none"> computerized system testing seen as a way to provide personalized and private counseling and testing services patients' reduced sense of judgment when being queried about sensitive topics by a computer instead of a person 	<ul style="list-style-type: none"> replace face-to-face counseling with written format (e.g., brochure) use of medical students or volunteers to deliver a tablet intervention
Use Oral Test Kits	Institutional	<ul style="list-style-type: none"> test saliva sample - eliminate need for blood draw use noninvasive testing 	<ul style="list-style-type: none"> use of oral HIV tests to avoid needles
Ensure Confidentiality	Institutional	<ul style="list-style-type: none"> offering test and communicating results in a private space implement procedures to ensure confidentiality provide clinic assurance of confidentiality of test and results 	<ul style="list-style-type: none"> provide relevant information and referral, maintenance of boundaries ensuring confidentiality

Provide Immediate Access to Mental Health Services	Institutional	<ul style="list-style-type: none"> • on-site or on-call access to a mental health professional • testing and counseling through SAMHSA funding (on-site) 	<ul style="list-style-type: none"> • provide support to staff to deal with emotions when giving a patient a positive test result
Sexual History Taking	Institutional	<ul style="list-style-type: none"> • include HIV testing as part of sexual history inventory • normalization of sexual history taking • provide special consultations on "sexual practices" • asking specific questions about sexual practices 	<ul style="list-style-type: none"> • use intake forms with specific behavioral risk questionnaires • routinely asking about sexual history • include sexual history as part of new patient health inventories
Highlight Benefits of Rapid HIV Testing	Institutional	<ul style="list-style-type: none"> • reduction of the risk that the patient will not go to the laboratory for testing • reduction of the risk that the patient will not return for their test result • accuracy of rapid test (e.g., low rate of false positives upon confirmatory testing) 	<ul style="list-style-type: none"> • immediate availability of the result • simplicity of rapid HIV testing (adapted to the high-risk population with a need for regular testing) • ease of performing the test • speed of results
Testing Patients at High Risk	Intrapersonal	<ul style="list-style-type: none"> • looking for cues that patient may be at high risk • offer HIV testing if the patient has concerns about sexual practices • offer HIV testing to anyone who tests positive for an STD • offer HIV testing to anyone with opportunistic infections • offer on-site testing to partners of clients • increase provider perception of serving an 	<ul style="list-style-type: none"> • provide special consultations on "sexual practices" • test patients with abnormal Pap results, even without other symptoms • increase awareness of medical indications for testing • prioritize testing for patients who have risk factors for testing (e.g., MSM, history of STDs,

		<p>at-risk patient population (MSM, IDUs, homeless)</p> <ul style="list-style-type: none"> • look for problems related to sexual health that can trigger the discussion • identify patients engaging in high risk behavior 	<p>new sexual partner, 30 or younger)</p> <ul style="list-style-type: none"> • offering testing to all patients in certain groups that may be at higher risk
Increase Awareness of Guidelines	Intrapersonal	<ul style="list-style-type: none"> • increase awareness of screening recommendations • educate providers on evidence for routine testing (cost effective to test for HIV in ED) • demonstration of cost efficacy • distribution of practice guidelines • education and training opportunities to support HIV testing (including building skills and comfort to address sexual health issues) • education on recommendations for routine testing (i.e., CDC, USPSTF, American Medical Association, World Health Organization) 	<ul style="list-style-type: none"> • education on professional association and USPSTF endorsement of routine testing • support from Citizenship and Immigration Canada • emphasize agreement with recommendations among hospital administrators and specialty organizations (e.g., College of Obstetricians and Gynecologists) • continuing medical education session on HIV testing and counseling
Educate Providers on Patient Willingness to Test	Intrapersonal	<ul style="list-style-type: none"> • inform providers that 86% of patients said they would agree to screening if offered • being aware that patients most likely will not be offended if offered an HIV test • evidence that physicians' recommendations to test 	<ul style="list-style-type: none"> • educate providers that patients already assume HIV testing being done • focus on fact that younger patients more likely to accept testing • promote staff understanding patients are more

		<p>are strong predictors of testing uptake</p> <ul style="list-style-type: none"> • mentioning and offering HIV testing, rather than waiting for patient to request • emphasis on patients wanting to know their status 	<p>willing to test than providers may expect</p> <ul style="list-style-type: none"> • educate on widescale patient buy-in
Feedback on Individual Testing Performance	Intrapersonal	<ul style="list-style-type: none"> • audit and feedback of provider practices • increase awareness of personal low rates of screening • educational detailing • HIV screening included as part of a self-audit required of residents • public health detailing program 	<ul style="list-style-type: none"> • encourage personal desire to improve individual performance rates • increase awareness of physician's poor performance on HIV screening versus other preventive services
Approach HIV Testing in a Non-Judgmental Manner	Intrapersonal	<ul style="list-style-type: none"> • adopting a non-judgmental stance • being empathetic to patients' feelings about being tested • showing concern for patient welfare • adopting a positive attitude toward routine HIV screening • engaging in honest communication 	<ul style="list-style-type: none"> • focusing on developing a good patient-provider relationship • imparting a non-judgmental attitude toward the HIV test recipient • creating a comfortable and safe environment
Provide Standard Scripts to Facilitate Communication	Intrapersonal	<ul style="list-style-type: none"> • developing introductory phrases regarding expert recommendations on routine HIV screening • provide scripts or talking points • provide scripts for dialogue between physicians and patients • use standard language for introducing testing (e.g., normalizing HIV testing and/or deferral to 	<ul style="list-style-type: none"> • promote the 6 Rs approach: Raise - “We are now offering to screen everybody for HIV just as we screen for other things”; Rationale - “It is possible to have HIV for a long time without knowing it.”; Reassure - “There’s nothing I

		CDC as an authority recommending testing)	know about you or your health that makes me think you might have HIV”; Respond - “Lots of people have questions about HIV disease or getting screened.”; Request - “Given what we’ve discussed, would you like me to screen you for HIV along with your other blood screens today?”; Results - “It takes about 2 weeks for the results to come back.”
Enhance Self-Efficacy	Intrapersonal	<ul style="list-style-type: none"> • promote idea that greater experience with HIV testing will enhance sense of self-efficacy • equating HIV screening to screening for other chronic conditions as a way to increase confidence 	<ul style="list-style-type: none"> • provide evidence of cases of people diagnosed with HIV who would have been considered low-HIV-risk cases • increase confidence about counseling patients alone through role play, case studies
Devote Time to HIV Screening	Intrapersonal	<ul style="list-style-type: none"> • devote more time during initial visit • highlight experiences to show that HIV screening does not interfere with medical service 	<ul style="list-style-type: none"> • setting aside time dedicated to HIV testing and screening • allow more time when seeing patient
Patient Factors	Intrapersonal	<ul style="list-style-type: none"> • include HIV testing as routine care for patients concerned about/experiencing symptoms of STDs or among those suspected of having experienced sexual assault 	<ul style="list-style-type: none"> • emphasize that some patients are just curious to know HIV status or want to start a new sexual relationship • increase contact with people living with HIV as a way

		<ul style="list-style-type: none"> • emphasize research showing that patients often feel relieved after sharing sexual history • encourage patients to request of HIV test • offer HIV testing if the patient has concerns about sexual practices • offer testing to patients with partners who are positive • test patients with abnormal pap results • test patients who have, or are suspected of having, active TB 	<ul style="list-style-type: none"> to encourage HIV testing • recommending annual HIV testing for sexually active patients • encourage patient self-advocacy (requesting a test for yourself) • use problems with sexual health as a trigger to discuss HIV
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