

*Editor's Note:*

The following chapter is the first of a set of guidelines that were developed to provide prevention strategies to primary care practitioners treating HIV-infected patients. The forthcoming chapters will address prevention of transmission, prevention of secondary disease, health promotion and maintenance, and public health issues.

## CHAPTER 1: HOW TO INTEGRATE PREVENTION INTO PRIMARY CARE

### I. INTRODUCTION

#### RECOMMENDATIONS:

**Clinicians should address prevention during routine clinical encounters for all patients, regardless of race, age, gender, sexual orientation, or ARV status, in one or more of the following ways:**

- **assessing the patient's current level of risk or willingness to address specific sexual or drug-using risk behaviors**
- **assessing the patient's readiness to think about prevention**
- **discussing specific goal-oriented harm-reduction strategies**

**Clinicians should frame prevention messages within the context of maintaining the patient's health. Consistent messages should be reinforced by members of the healthcare team.**

**Clinicians should encourage HIV-infected patients to assume personal responsibility to maintain their health and to prevent HIV transmission to others. Patients should also be encouraged to carry out their responsibility to inform sexual and needle-sharing partners of their HIV infection.**

Clinicians play a key role in helping their patients stay healthy, avoid or reduce risk behaviors, and maintain safer practices. Prevention messages from primary care clinicians are especially effective; studies have shown that the majority of patients view their clinicians as a trusted source of prevention information.<sup>1-3</sup>

Clinicians who care for HIV-infected patients should include prevention as part of comprehensive HIV care. Prevention is an ongoing process, which should be addressed on a routine basis. At each clinical visit, patients should receive prevention messages in one of the following ways: printed materials in the clinical setting, counseling by clinicians or other qualified staff, or referral to community organizations providing prevention services. However, it should be kept in mind that printed materials are not a substitute for a direct encounter with the clinician. Routine brief interventions may lead patients to adopt and consistently practice healthy behaviors and safer practices over time.

The following components of prevention should be addressed:

- Risk assessment, including discussion of risk behaviors
- Risk-reduction counseling
- Harm-reduction counseling

- Positive reinforcement of risk-reducing changes in behavior
- Screening for and treatment of STDs
- Referral to specialized services as necessary (e.g., substance use treatment, syringe exchange, mental health, domestic violence, or housing services)
- Assistance with partner notification

Secondary prevention efforts include reduction of high-risk HIV/STD behaviors and the maintenance of physical and emotional health, to prevent disease progression in those already HIV-infected and to prevent transmission. Patients should be educated about the personal benefits of safer practices, such as avoiding superinfection, STDs, unplanned pregnancy, or cervical/anal cancer, as well as the benefits to others, such as protection of partners and preventing further spread of HIV. Scripted dialogue or phrases can be especially helpful for clinicians who are not comfortable or experienced with initiating discussion about sexual and drug-using behaviors (see Chapter 2, Section III: *Obtaining a Risk Assessment and Delivering Effective Risk-Reduction Counseling* for examples of scripted dialogue). Consistent messages should be reinforced by members of the healthcare team.

**Key Points:**

- Prevention messages should be brief and should be tailored specifically to each patient's situation and lifestyle.
- Ensuring that prevention messages are consistently delivered by different members of the healthcare team is a key element of delivering effective prevention counseling.

Clinicians should encourage HIV-infected patients to assume personal responsibility to maintain their health and to prevent HIV transmission to others. Education emphasizing each person's role in curbing transmission is an important strategy in reducing HIV transmission. Patients need information on how HIV may be transmitted and how they may be re-infected (superinfection) with HIV, potentially accelerating their own disease progression. Patients should be encouraged to carry out their responsibility to inform sexual and needle-sharing partners of their HIV infection and may need training and skills-building to assist and encourage them to disclose their status to potential partners.

Clinicians often cite the following barriers to providing prevention counseling in primary care settings: time constraints, discomfort discussing sex and drug use, lack of training, clinicians' perception that their efforts will not be successful or that their patients are not at risk, and clinicians' misunderstanding of their roles and responsibility.<sup>4,5</sup> Although HIV providers acknowledge the importance of addressing HIV prevention in the clinical care setting, they may often be reluctant to routinely discuss prevention during medical visits. Growing pressure to increase productivity while addressing the complex issues of patient management, including adherence to HAART and managing comorbidities, such as concomitant hepatitis C or mental health disorders, has reduced the emphasis on discussions about HIV prevention. In addition, many clinicians may not feel comfortable discussing sexual practices and drug use with their

patients. They may recognize that other members of the healthcare team or community-based providers will also discuss prevention and decide that they do not need to also directly discuss risk behaviors. However, the role of the primary care clinician in discussing prevention and behavior change has been demonstrated to be an effective strategy to reduce risk.<sup>1-3</sup> Discussions about prevention can occur with a practicable level of effort, even in constrained clinical settings. Interactions can be brief, and then extended by involving members of the healthcare team if more in-depth counseling is needed.

## II. MODELS FOR PREVENTION COUNSELING ACCORDING TO THE CLINICAL ENVIRONMENT

### RECOMMENDATIONS:

**In addition to directly discussing prevention issues with patients, clinicians should establish alliances with others who can also deliver these messages as part of the healthcare team.**

**At institutions where staff members other than the clinician provide the bulk of risk-reduction counseling, regular communication is imperative so that both the clinician and counselor are providing the same message.**

Different approaches to delivery of prevention counseling can be applied and adapted to the individual clinical environment. Institutions, clinics, and offices should have written procedures and a plan for delivering prevention counseling that is adapted to the individual clinical environment and available organizational support.

One study evaluated the three approaches listed in Table 1 and identified the advantages of each approach.<sup>5</sup>

<b>Model</b>	<b>Description</b>	<b>Advantages</b>
Clinician-based model	The clinician performs risk assessment and delivers prevention counseling as part of routine care visits	Patients respond well to prevention messages from their clinicians
Specialist-based model	Clinician refers patients to an on-site, non-physician staff member (e.g., case manager, peer educator, health educator, nurse, social worker) who performs risk assessment and delivers prevention counseling as part of routine care visit	The specialist has more time to spend with patients and has more training in skills such as health education, motivational counseling, and case management
Multidisciplinary model	Risk assessment and prevention counseling are the shared responsibility of the healthcare team	Patients hear the same message repeated from different staff members

In clinical settings where clinicians provide the bulk of prevention counseling, screening for behavioral risk factors can be accomplished through self-administered questionnaires or a brief interview with support staff before the patient is seen by the clinician to reduce time constraints. The clinician then reviews the results on the patient's medical record.<sup>6</sup>

For patients who need intensified prevention counseling, clinicians should build partnerships with other members of the healthcare team who can supplement the prevention messages given by clinicians with more in-depth counseling. At institutions where staff members other than the clinician provide the bulk of risk-reduction counseling, regular communication is imperative so that both the clinician and counselor are providing the same message.

Because prevention is one of many necessary components of HIV care, some institutions use provider reminder systems to help ensure that risk screening and harm reduction are regularly performed.

### III. SPECTRUM OF INTERVENTIONS

#### RECOMMENDATION:

**Clinicians should use a spectrum of prevention interventions in the clinical setting, including education, assessment, counseling, medical screening, and referral to both internal and external resources.**

The focus on prevention with positives requires that primary care clinicians be familiar with various interviewing styles and approaches to help patients understand their role in prevention. The spectrum of prevention interventions that should be used in the clinical setting includes education, assessment, counseling, medical screening, and referral to both internal and external resources to complement and augment the clinical activities. Although all of these interventions would not be used at each visit, interventions used as part of ongoing care should be comprehensive and multiple, including both structural and behavioral approaches.

**Structural interventions** include display and dissemination of materials that incorporate prevention messages in clinical settings, such as posters, educational brochures and, when available, videotaped programs. Pamphlets and brochures should emphasize key messages, such as identifying behaviors that increase or decrease risk, the role of STDs in enhancing transmission, the importance of partner notification, the relationship of viral load to transmission, and the potential increased risk of sexual transmission with use of alcohol and drugs (see Section IV: *Materials and Tools to Augment Preventive Messages*).

**Routine assessment** for behaviors associated with HIV transmission should occur at each visit. See Chapter 2, Section III: *Obtaining a Risk Assessment and Delivering Effective Risk-Reduction Counseling*, for specific recommendations on assessing risk behaviors.

**Individualized counseling** should occur at each visit, involving the care team and engaging the patient to participate actively as a partner in developing strategies to promote their health. The clinician should verbally state prevention goals and enlist the patient in the establishment of

goals. Prevention messages should be reinforced at all routine visits. Counseling should be nonjudgmental and should occur in a comfortable setting.

Most individualized interventions are based on cognitive behavioral models. Studies have suggested that negative framing techniques that emphasize the losses associated with risk behaviors are most effective.<sup>7</sup> Various techniques for counseling have been used and include:

The *brief intervention* is a time-limited, patient-centered counseling strategy that focuses on changing patient behavior. The brief intervention delivers messages about HIV transmission and prevention, corrects misconceptions the patient may have about HIV infection, and encourages dialogue with the patient. Brief interventions fit well into established medical settings and can be built upon the established patient-clinician relationship, permitting opportunities to provide reinforcement and reach a large number of people.

The essential elements of brief interventions are 1) assessment and direct feedback, including expression of concern and linking behavior to consequences; 2) negotiation and goal-setting; 3) behavior modification through identification of risky situations, developing coping strategies, and identification of a support network; 4) using written materials and practice strategies; and 5) follow-up with reinforcement. Patient attitudes and understanding may be assessed by direct interview or by self-questionnaire.

Brief interventions are linked to *motivational interviewing* which encourages open, productive discussions using the patient's own strengths and beliefs as a tool to motivate behavior change. Motivational interviewing is a "directive, client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence."<sup>8</sup> The operational assumption is that ambivalence or lack of resolve is the main obstacle to triggering change. Motivational interviewing can help the patient to begin discussing behavior and help the clinician to involve the patient in the decision-making process. This approach encourages patients to describe their behaviors and develop their own solutions. The motivation to change is elicited from the patient, relying on the patient's intrinsic values and goals to stimulate change.

The acronym OARS outlines the basic approach to interactions in motivational interviewing: 1) open-ended questions; 2) affirmations; 3) reflective listening; and 4) summaries. Open-ended questions will require patients to provide more information than yes or no, and will help them to explore their own motivators for change. Affirmations provide opportunities for clinicians to recognize the patients' strengths, which often will strengthen the clinician-patient relationship. Reflective listening is key to motivational interviewing because it will help the clinician to understand the patient and identify areas of ambivalence, which can then be reflected back to the patient. Summaries will emphasize the main points of the discussion and will show the patient that the clinician is interested in his/her individual circumstances. The summary can also be used to shift focus or direction when the patient is expressing impassable resistance. The clinician should invite the patient to make any corrections to the summary.

Newer models of prevention counseling that have been studied include asking patients to rank the importance of certain prevention practices, and then to explore their own ideas about prevention. Open discussion is thereby encouraged in a way that builds on the patient's own

strengths and beliefs. This approach empowers the patient to acknowledge their current attitudes about prevention, while exploring options for change. Based on the content that emerges, the clinician can give the patient a *prescription for prevention* to work on for the next visit.

Direct persuasion and aggressive confrontation are not part of motivational interviewing. For clinicians who are accustomed to giving advice and directives, motivational interviewing will seem slow and passive. Scripted messages may be helpful initially, until the clinician becomes comfortable engaging patients in the prevention conversation.

More information on motivational interviewing and training resources are available at <http://www.motivationalinterview.org>.

**Multi-session interventions** involve group sessions that focus on short-term behavior change and skill-building. Although the benefits of peer interactions may be high, individuals who choose not to disclose their status are not likely to participate.

**Scripting of conversations** help clinicians to overcome feelings of discomfort when discussing sexual and drug use behaviors. Examples of scripted conversations can be found in Chapter 2, Section III: *Obtaining a Risk Assessment and Delivering Effective Risk-Reduction Counseling*.

**Reinforcement of messages** occurs by involving the healthcare team. Patients may have greater receptivity to different members of the team and may respond when the message is delivered by several providers. During subsequent medical visits, the clinician should ask about progress toward goals, convey the prevention message, and emphasize healthy behaviors. Clinicians should provide positive feedback and encouragement when appropriate.

**Referrals** to other service providers may be important to reinforce messages through other methods, such as group sessions and peer counseling. A resource list should be readily available in the clinical setting to refer patients to community-based organizations who offer these services. Some patients may need referral to other support services in the community to reduce substance use or address mental health. Often these issues require attention in order to effectively change risk behaviors.

**Medical screening** should include STD screening. Recommendations for STD screening are included in Chapter 2, Section IV: *The Role of STD Screening and Treatment*. Other medical screening recommendations to maintain physical and emotional health and to prevent disease progression can be found in Chapter 3: *Prevention of Secondary Disease: Preventive Medicine*.

#### **IV. MATERIALS AND TOOLS TO AUGMENT PREVENTIVE MESSAGES**

##### **RECOMMENDATION:**



**Prevention messages, including printed materials and posters, should be visible and part of the clinical environment. Condoms should also be readily accessible.**

Posters containing prevention messages can be displayed in examination rooms and waiting rooms. Patients should be given printed information outlining principles of prevention, such as a

hierarchy of sexual risk behaviors. These materials, however, are meant to augment the prevention message and are not a substitute for a direct encounter with the clinician. Clinicians can obtain materials from the following sources:

- New York State Department of Health at [www.health.state.ny.us](http://www.health.state.ny.us)
- National Prevention Information Network at [www.cdcnpin.org](http://www.cdcnpin.org)
- HIV Stops With Me Campaign at [www.hivstopswithme.org](http://www.hivstopswithme.org)

In addition to printed materials, condoms should be readily accessible in clinical settings and offices. Patients should be advised to use condoms and should be educated about their proper use (see Chapter 2, Section III: *Obtaining a Risk Assessment and Delivering Effective Risk-Reduction Counseling*). Writing prescriptions for specific elements of risk reduction, such as condom use, may also be useful to reinforce prevention messages (see example).



Prevention Prescription (example)  
(This "prescription" is to be given to the consumer)

Risk Reduction Plan

<input type="checkbox"/> Abstinence <input type="checkbox"/> Monogamy <input type="checkbox"/> Limit number of partners <input type="checkbox"/> Avoid "pick-ups" <input type="checkbox"/> Condom use <input type="checkbox"/> Dental dam use <input type="checkbox"/> Avoid drug use in potential sexual situations <input type="checkbox"/> Partner notification <hr style="width: 200px; margin-left: 0;"/>	<input type="checkbox"/> Will not share needles/works <input type="checkbox"/> Needle exchange <input type="checkbox"/> Enter rehab <input type="checkbox"/> Use new needles <input type="checkbox"/> Use clean needles <hr style="width: 200px; margin-left: 0;"/>
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Signature

Date

County of Suffolk DOH

Depending on the clinical setting, screening for behavioral risk factors might be accomplished through brief self-administered written questionnaires; computer-, audio-, and video-assisted questionnaires; structured face-to-face interviews; and personalized discussions.

Literacy and cultural barriers must be considered before using self-administered tools. Written materials need to be adapted for different levels of health literacy and written in the languages most commonly spoken and read among the populations in the individual clinical setting. Special consideration should be given to availability of materials for the visually or hearing-impaired patients who cannot benefit from written or videotaped information.

**New Technologies for Assessing HIV Risk Behaviors**

Technological advances in survey methodology, including computer-delivered risk assessments, have facilitated more frequent reporting of risk behaviors in both clinical and research settings. Studies comparing computer-delivered assessments with identical pen-and-paper or clinician-administered assessments have found that respondents using computers are generally more willing to report sensitive sexual and drug use behaviors.<sup>9-11</sup>

Many clinics use pen-and-paper surveys in the waiting or examination room to solicit patients’ self-reported medical and sexual histories. Recently, computer-assisted self interview (CASI) and audio computer-assisted self interview (ACASI) have been used to assess general health risks and HIV-specific risk behaviors in a variety of clinical and research settings. ACASI and other computer-based formats have been found to be acceptable among low income, minority, and low computer-literate populations, and among patients waiting in examination rooms. They also have been shown to attract participation and to provide a high degree of privacy.<sup>12</sup> Table 2 lists some advantages and disadvantages of using ACASI technologies in clinical settings.

<b>Table 2</b>	
<b>Advantages and Disadvantages of Audio Computer-Assisted Self-Interview</b>	
<b>Advantages</b>	<b>Disadvantages</b>
<ul style="list-style-type: none"> <li>• High-degree of privacy</li> <li>• More frequent reporting of risk behaviors <sup>9-11</sup></li> <li>• Literacy barriers are reduced because question and answer choices are provided through audio files accessed with headphones</li> <li>• Fewer missing data than pen-and-paper surveys</li> <li>• More consistent question administration than clinician-administered interviews</li> <li>• Ability to produce reports for inclusion in the patient’s medical record (e.g., summaries of the patient’s risk behaviors, suggestions for targeted prevention messages<sup>12</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>• Significant start-up costs</li> <li>• Limited opportunity to explore complex topics that may arise naturally in a clinician-patient dialogue</li> <li>• Question probing may not be sufficiently deep to encourage patients to reveal sensitive information</li> <li>• May not be able to facilitate accurate response to certain questions</li> </ul>

In addition to risk assessment, computer-based technologies have been used to deliver interactive interventions to increase motivation to change risk behaviors, such as smoking, dietary fat intake, weight control, and alcohol use. Video clips tailored to specific stages of change are delivered by an actor-portrayed video doctor who has pre-recorded a library of digital video clips containing various follow-up risk questions and intervention messages. The video doctor is able to respond accurately to patient input and to tailor appropriate intervention messages, simulating an

interview with a live person.<sup>12</sup> Although these interactive programs have numerous advantages, their formidable start-up costs have kept them from being widely used in clinical settings.

## **V. THE ROLE OF REFERRALS**

### **RECOMMENDATIONS:**

**Clinicians should be familiar with community prevention resources, including peer education and support, and should make this information readily available in the clinical setting.**

**Clinicians should refer substance-using patients to treatment programs or other substance use services that best meet the patient's needs.**

Some patients may be participating in risky behaviors (sexual or drug-using) but are unable or unwilling to adopt and maintain safer practices. Clinicians may choose to refer these patients for more intensive prevention counseling.

Patients who do not have a stable social situation often will not be receptive to prevention messages because issues such as housing, food, and access to medical care are the focus of their attention. Clinicians should maximize the use of supportive services and community resources to help stabilize the patient's social situation. Forming relationships with staff at local programs will facilitate subsequent referrals.

## **VI. CLINICIAN EDUCATION**

### **RECOMMENDATION:**

**All clinical staff should be educated about HIV prevention and trained to effectively deliver prevention messages to patients.**

Clinicians who do not have experience in prevention counseling should become educated about health behavior change to realize that it is an ongoing, often slow process, and to learn how to assist their patients in this process. Studies suggest that clinicians who receive some training, particularly training that includes role-play, are more likely to perform effective risk screening.<sup>13-16</sup>

All clinical staff should be educated about HIV prevention and trained to effectively deliver prevention messages to patients. Clinicians should be trained in the following skills to deliver effective prevention messages:

- interactive counseling
- motivational interviewing techniques
- goal-setting strategies
- using words objectively that describe behaviors and avoiding value statements
- speaking with patients about sex and drug use behaviors in simple, everyday language
- using culturally appropriate language
- addressing the patient's health beliefs as part of the prevention messages and overall treatment plan

Several strategies are available to providers to increase their comfort with delivery of prevention messages. In New York, the most important resource available is the Clinical Education Initiative which can provide on-site tailored educational sessions to address prevention, skill-building sessions for clinicians, and technical expertise. Support from clinic leaders and reinforcement from opinion leaders can help engage clinicians more effectively to integrate prevention messages into routine care. Scripts for both specific risk-reduction messages and general prevention discussions should be provided for clinicians to follow (see Chapter 2, Section III: *Obtaining a Risk Assessment and Delivering Effective Risk-Reduction Counseling*).

The following resources are available for obtaining free training in risk screening and prevention:

- The AIDS Institute's Clinical Education Initiative and Division of HIV Education and Training Programs (<http://www.hivguidelines.org>, under Clinical Education)
- CDC-funded STD/HIV Prevention Training Centers (<http://depts.washington.edu/nnptc>)
- HRSA-funded AIDS Education and Training Centers (<http://www.aids-ed.org>), which also offer CME credit

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