

**SOCIAL NETWORK TESTING AS AN OPTION TO INCREASE IDENTIFICATION
OF UNDIAGNOSED HUMAN IMMUNODEFICIENCY VIRUS (HIV)
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Social network testing (SNT) for HIV is a peer-driven recruitment strategy designed to increase testing among people who are at highest risk for contracting the virus, to identify undiagnosed disease, and to connect people diagnosed with HIV to medical care, treatment, and related services. SNT is based on the concepts that: 1) people in social networks often share the same behaviors and risks; and 2) diseases often spread through the social networks through which people are linked (Centers for Disease Control and Prevention (CDC) 2006). Therefore, if those who are living with HIV or those who are at highest risk for contracting the virus are engaged in a process of recruiting those in their own networks to get tested, the likelihood of identifying new HIV cases is greater than that seen in more conventional counseling, testing, and referral (CTR) settings. Although only a limited number of research studies have been conducted on the efficacy of SNT as an alternative to conventional CTR, those studies are showing that use of the SNT strategy is resulting in both increased testing rates among high-risk individuals and significantly higher positivity rates (Saha, et al 2008; CDC 2005; Vargo, et al 2004). Currently, publicly funded CTR sites across the United States account for approximately 30 percent of all positive tests. The prevalence of HIV positive tests among these sites is highly variable, but is often less than one percent. Alternatively, studies of SNT have shown prevalence rates ranging from 3.2 percent (Vargo, et al 2004) to 6.0 percent (CDC 2005), indicating that it is a viable option for helping to increase the identification of undiagnosed HIV. One study also showed that 30 percent of those testing through the SNT project reported that they otherwise would not have done so (Saha, et al 2008). In Colorado in 2008, the positivity rate at publicly funded sites, including CTR and Sexually Transmitted Infection (STI) clinics, ranged between zero and 2.7 percent, with an average of 0.8 percent, indicating that many of those most in need of HIV testing were not accessing those sites. Adding SNT to the CTR toolkit in Colorado is likely to increase this rate, and facilitate bringing more people living with HIV into medical care, treatment, and related services.

Social network testing can be conducted in various ways and through a number of different types of agencies and venues. Having peer recruiters bring people for testing to clinic-based sites could likely best facilitate linkage to care for those testing positive for HIV. However, many people at high risk for HIV may be reluctant to access clinic settings. Therefore, other viable options for SNT may include peers recruiters encouraging people to access testing in mobile vans that have regular stops and schedules, at community-based organizations (CBO), and at other venues in which or near which high risk behaviors tend to occur. SNT projects can be “stand alone” efforts, or connected to other types of programming. Such projects must be based on a very clear definition of their target populations, and substantial knowledge of the target population. Once this is established, projects must, to a significant degree, be designed, implemented, and evaluated by members of the target population (CDC 2006). Decisions about testing venues, hours of operations, incentives for those accessing testing services, compensation for recruiters, project procedures, and services offered at the sites should be made in collaboration with target population representatives acting as advisors to the project. Given that the SNT strategy is based on relationships and trust, those involved in recruiting people for testing must believe that they

are helping their friends, associates, and community (Wilson, et al). Their “buy-in” and the appropriateness and effectiveness of the projects will rely heavily on a high level of target population involvement and community acceptance.

Based on a review of the literature, SNT projects should include the following features:

- An advisory group made up of members of the target population and others with relevant expertise is organized for the purposes of planning, assuring appropriate implementation, and evaluating the project.
- Procedures are developed governing: 1) planning and implementing the program, 2) engaging recruiters, 3) testing, 4) linkage to care and other services, 5) linkage to PCRS, 6) record keeping/tracking, 7) quality assurance, 8) maintaining confidentiality, 9) data security, and 10) recruiter safety.
- People living with HIV and people at very high risk are engaged to act as recruiters, encouraging appropriate people in their social networks (especially sexual and drug contacts) to receive testing for HIV and accompanying people to the designated testing sites.
- Recruiter training includes: 1) appropriate information on HIV and testing, 2) maintenance of confidential information, 3) outreach techniques, 4) safety measures to adopt when recruiting people for testing, and 5) other information and procedures relevant to their jobs.
- Recruiters receive adequate and appropriate compensation for their work as decided by project administrators and the advisory group.
- Rapid HIV testing is used whenever possible to ensure that those with preliminary positive tests receive their results; blood draws for confirmatory testing should be done onsite once preliminary positive results are given.
- Initially, only confidential rather than anonymous testing procedures should be used so that the efficacy of the projects can be more accurately evaluated.
- A professional counselor is on site to: 1) help those testing positive to deal with initial emotions, 2) conduct an initial assessment of needs, and 3) begin the process of linking people to medical care and other needed services. Arrangements are also to be made to connect people to partner, counseling, and referral services (PCRS).
- Peer mentors are available and, when appropriate, assigned to those testing positive to help them: 1) cope with their diagnosis, 2) learn to navigate the service system, and 3) develop any needed social and community connections.
- Very high-risk individuals who test negative for HIV are assisted in connecting to needed services, such as substance abuse treatment, mental health care, housing and other basic needs assistance, risk reduction counseling, etc.
- Quality assurance procedures are developed that ensure that project procedures are followed with fidelity and that the most appropriate people are being recruited for testing.
- Information is gathered from each person receiving testing as designated by Colorado Department of Public Health and Environment (CDPHE.)
- Numbers of people receiving tests as well as test results are tracked according to CDPHE guidelines for monitoring and evaluation purposes.

Social network testing projects can be evaluated according to a number of different criteria.

Variables to be assessed should include:

- Number of tests provided
- Number of new positive infections identified

- Positivity rate (based only on new positive infections identified)
- Percent of people tested who have engaged in high-risk activities
- Percent of high-risk testers
- Percent of those receiving testing who would not have otherwise done so
- Percent of those tested using rapid tests that receive preliminary results
- Percent of those tested positive using rapid tests that receive confirmatory results
- Percent of those testing positive who are linked to medical care
- Percent of those testing positive who are linked to PCRS
- Percent of testers linked to other needed services, such as substance abuse treatment, mental health treatment, and poverty-related services
- Costs per person tested
- Costs per new positive identified
- Customer satisfaction

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