

Introducing Technology into Partner Services

A toolkit for programs

December 2015

Acknowledgements

This toolkit benefited from the invaluable input, feedback and editing of numerous people. We are thankful for their time and contribution.

These individuals are:

Steve Beagle (NC)	Scott Janes (CDC)
Elin Begley (CDC)	Sandra Kendrick (WA)
Gail Bolan (CDC)	Bernard Linzy (AL)
Ryan Cramer (CDC)	Mary McFarlane (CDC)
Johnny Cross (LA LGBT Center)	Juan Mendez (OR)
Samuel Dooley (CDC)	Victoria Moody (CDC)
Elise Dunnigan (KS)	Mark Pawelczak (OH)
Jeffrey Egan (CA)	Daniel Pohl (Howard Brown)
Kelly Firenze (NY)	Alan Powell (CA)
Chad Hendry (Howard Brown)	Rolanda Renteria (Howard Brown)
Matthew Hogben (CDC)	Raul Romaguera (CDC)
Jill Huppert (CDC)	Lamont Scales (CDC)
Kathleen Irwin (CDC)	Jennifer VandeVelde (KS)
Priya Jakhmola (CDC)	

Lastly, we would like to remember Juan Mendez, whose dedication to STD Prevention and contributions to the advancement of partner services will be sorely missed.

Suggested Citation:

Kachur, R., Strona, F.V., Kinsey, J. & Collins, D. *Introducing Technology into Partner Services: A Toolkit for Programs*, Atlanta (GA): Centers for Disease Control and Prevention; 2015.

1 CONTENTS

2	EXECUTIVE SUMMARY	6
2.1	INTRODUCTION	7
2.1.1	<i>Technical Assistance for Technology-based Partner Services.....</i>	<i>7</i>
2.2	USING THIS TOOLKIT.....	9
2.3	BACKGROUND.....	11
2.4	A BRIEF HISTORICAL CONTEXT OF IPS	11
3	CULTURAL UNDERSTANDING AND AWARENESS.....	14
3.1	COMMUNICATING IN DIGITAL VENUES	15
3.2	CODE OF CONDUCT IN DIGITAL VENUES.....	16
3.3	ENGAGEMENT OF APPROPRIATE STAKEHOLDERS	16
4	INTERNET PARTNER SERVICES (IPS) COMPONENTS	18
4.1	CREATING PROFILES, SCREEN NAMES, AND E-MAIL ADDRESSES.....	18
4.2	INTERVIEWING AND ELICITATION	20
4.2.1	<i>IPS-specific parts of the original interview</i>	<i>20</i>
4.2.2	<i>Access to internet/mobile devices during the interview.....</i>	<i>21</i>
4.2.3	<i>Geographic location of a partner.....</i>	<i>21</i>
4.2.4	<i>Out of Jurisdiction (OOJ) Issues.....</i>	<i>21</i>
4.3	LANGUAGE USED FOR TECHNOLOGY-BASED PARTNER NOTIFICATION	21
4.3.1	<i>Language specificity</i>	<i>22</i>
4.3.2	<i>“Urgent health matter”</i>	<i>23</i>
4.3.3	<i>“Exposure to an infectious disease”.....</i>	<i>24</i>
	<i>Example 2: San Francisco Department of Public Health.....</i>	<i>24</i>
4.3.4	<i>“Exposure to a specific disease”</i>	<i>24</i>
	<i>Example 3: Tennessee Department of Health.....</i>	<i>25</i>
4.4	CONFIDENTIALITY DURING PARTNER NOTIFICATION/PARTNER SERVICES	27
4.4.1	<i>Reaching the right person.....</i>	<i>27</i>
4.4.2	<i>Protecting confidentiality</i>	<i>27</i>

4.5	TEXT NOTIFICATION & MOBILE APPLICATIONS	28
4.5.1	<i>Using Text Messaging/Short Message Service (SMS) for Partner Notification</i>	<i>29</i>
4.5.2	<i>Confidentiality and risks of text messaging.....</i>	<i>30</i>
4.5.3	<i>Communication etiquette.....</i>	<i>31</i>
4.5.4	<i>Mobile applications (apps)</i>	<i>31</i>
4.5.5	<i>Current challenges.....</i>	<i>31</i>
4.5.6	<i>Tips for gathering information on mobile app profiles.....</i>	<i>32</i>
5.	DOCUMENTATION, DATA COLLECTION AND EVALUATION.....	33
5.1	DATA SECURITY AND CONFIDENTIALITY	34
5.2	EVALUATION.....	35
5.2.1	<i>Logic Models.....</i>	<i>35</i>
5.3	EXAMPLES OF PROCESS & OUTCOME EVALUATION QUESTIONS AND ASSOCIATED INDICATORS.....	36
5.4	SUPPORTING RESOURCES FOR PROGRAM EVALUATION	38
6.	IPS STAFFING AND SUPERVISION.....	39
6.1	IPS STAFFING	39
6.2	IPS SUPERVISION.....	39
6.3	TRAINING	39
7.	SUMMARY.....	41
8.	GLOSSARY OF ACRONYMS.....	42
9.	TABLES	43
9.1	NATIONAL PARTNER SERVICES GUIDELINES TABLE 1	43
9.2	TECHNICAL ASSISTANCE (TA) FOR IPS TABLE 2	45
10.	APPENDICES	46
10.1	APPENDIX A – IPS PROGRAM CHECKLIST EXAMPLE	47
10.2	APPENDIX B- ELICITING WEBSITE AND MOBILE APP INFORMATION	50
10.3	APPENDIX C – EXAMPLES OF INITIAL EMAIL ATTEMPTS.....	53
10.3.1	<i>Example 1: New York City Department of Health and Mental Hygiene Bureau of STD Control</i>	<i>53</i>
10.3.2	<i>Example 3: San Francisco Department of Public Health.....</i>	<i>54</i>

10.4	APPENDIX D – EXAMPLES OF FOLLOW UP EMAILS FOR NON-RESPONSES	55
10.4.1	<i>Example 1: North Carolina Department of Health and Human Services</i>	<i>55</i>
10.4.2	<i>Example 2: Tennessee Department of Health.....</i>	<i>56</i>
10.4.2	<i>Example 3: San Francisco Department of Public Health.....</i>	<i>57</i>
10.5	APPENDIX E – EXAMPLES OF TEXT MESSAGING POLICIES FOR PARTNER SERVICES	58
10.5.1	<i>Example 1. Multnomah County, Oregon Texting Protocol.....</i>	<i>58</i>
10.5.2	<i>Example 2. North Carolina Field Services Unit Text Messaging Policy for Partner Notification</i>	<i>63</i>
10.6	APPENDIX F - EXAMPLES OF DOCUMENTATION LOG	67
10.6.1	<i>Example #1- Colorado Bureau of Public Health.....</i>	<i>67</i>
10.6.2	<i>Example #2 Arkansas Department of Health.....</i>	<i>68</i>
10.7	APPENDIX G - EXAMPLES OF DOCUMENTATION PROCEDURES	69
10.7.1	<i>Example - Massachusetts.....</i>	<i>69</i>
10.7.2	<i>Example – Washington DC.....</i>	<i>71</i>
10.8	APPENDIX H - EXAMPLES OF CONFIDENTIALITY AGREEMENTS.....	74
10.8.1	<i>Example #1 – Howard Brown Health Center.....</i>	<i>74</i>
10.8.2	<i>Example #2 – San Francisco Department of Health</i>	<i>76</i>
10.9	APPENDIX I – EXAMPLE OF ACCEPTABLE USE FOR ACCESSING RESTRICTED WEBSITES.....	77
10.9.1	<i>Example- Maryland Department of Health and Mental Hygiene</i>	<i>77</i>
10.10	APPENDIX J – LOGIC MODELS.....	78
10.10.1	<i>Logic Model Template</i>	<i>78</i>
10.10.2	<i>2014 STD-AAPPS Logic Model</i>	<i>79</i>
10.11	APPENDIX K - LIST OF SUGGESTED TRAININGS	80
10.12	APPENDIX L – NATIONAL INTERNET PARTNER SERVICES (NIPS) WORKGROUP	81
11.	REFERENCES	82

2 EXECUTIVE SUMMARY

The Toolkit for technology-based STD and HIV Partner Services (IPS) serves as a general resource for health departments, community-based organizations (CBOs) and others authorized to provide HIV/STD partner services (PS). It is designed for use with the Internet and other digital technologies, such as mobile phones, computers, and social networking sites, to trace and contact persons potentially exposed to HIV and other STDs. This toolkit updates IPS information found in the [2008 National Coalition of STD Directors \(NCSDD\) Guidelines for Internet-based Partner Services](#)¹ and is a supplement to the 2008 Centers for Disease Control and Prevention (CDC) [Recommendations for Partner Services Programs for HIV Infection, Syphilis, Gonorrhea, and Chlamydial Infection](#).²

As trends in communication and technology have advanced, the use of current and emerging technologies to reach at-risk individuals has become essential. Individuals for whom there are only virtual identifiers, such as an email address or user name, are unreachable without online search engines, email, access to online communities, and other electronic tools.

This toolkit provides information, suggestions, and resources about the various components of an IPS program. It should be useful in planning, developing, implementing, and evaluating a jurisdiction-specific IPS program. It is not intended to be used as a list of “required activities” for Disease Intervention Specialists (DIS)*. The information presented in the toolkit is based on published and unpublished evaluations, program experience, expert opinion, and input from several state health departments and community-based nonprofit organizations.

*For the purposes of this document, we use the term DIS to include any staff who interview patients and elicit partner information and perform partner notification. Other terms for DIS may include Public Health Investigators, Disease Prevention Specialists, Public health Advisors, etc.

2.1 INTRODUCTION

Partner services, according to the 2008 CDC Recommendations for Partner Services Programs for HIV Infection, Syphilis, Gonorrhea, and Chlamydial Infection ², are defined as “a broad array of services that should be offered to persons with HIV infection, syphilis, gonorrhea, or chlamydial infection and their partners. A critical function of partner services is partner notification, a process through which infected persons are interviewed to elicit information about their partners, who can then be confidentially notified of their possible exposure or potential risk. Other functions of partner services include prevention counseling, testing for HIV and other types of STDs (not necessarily limited to syphilis, gonorrhea, and chlamydial infection), hepatitis screening and vaccination, treatment or linkage to medical care, linkage or referral to other prevention services, and linkage or referral to other services (e.g., reproductive health services, prenatal care, substance abuse treatment, social support, housing assistance, legal services, and mental health services).” Partner Services is supported by the CDC as an effective public health strategy to reduce STD and HIV transmission and associated morbidity.³ Partner notification is an important component of partner services and is intended to identify, locate and inform people of their potential exposure to infections, and to refer them into care, thereby breaking the chain of infection and reducing morbidity.

For the purposes of this toolkit, Internet Partner Services (IPS) is the use of technology, including, but not limited to, the Internet, and venues accessed through the Internet, such as social networking sites, email, instant messaging (IM), and mobile devices, for partner services (Note: currently some programs are also using technology for technology-based outreach, recruitment, and health communications, which are not extensively addressed in this toolkit). IPS is also supported by the CDC^{4,5} It can be used to identify partners of STD positive patients, to collect locating information of partners, and notify them of a possible exposure or potential risk. IPS can also assist patients who choose to notify partners on their own. Lastly, it can be used as a means to notify communities about local epidemics or outbreaks and provide information and access to relevant resources and services, such as testing and treatment for STD/HIV.

National guidance exists, and applies to the provision of partner services, and these guidelines remain applicable to IPS as well. A list of these guidelines and relevant resources can be found at the end of this document or by clicking [here](#).

Additionally, technical assistance (TA) for IPS is available from various sources on a variety of IPS topics. Resources available to all STD/HIV programs for IPS-related TA are listed below and at the end of this [document](#).

2.1.1 Technical Assistance for Technology-based Partner Services

Technical Assistance Provider	Contact information
CDC’s Division of STD Prevention, IPS Working Group. Members of the IPS Working Group have extensive knowledge and experience working with health departments	Contact Frank Strona (fhs3@cdc.gov) or Rachel Kachur (rlk4@cdc.gov) for more information.

<p>on developing, implementing and evaluating IPS programs. They can provide TA and trainings. Additionally, they facilitate quarterly conference call discussions with DIS staff across the nation about IPS related topics.</p>	
<p>CDC's Division of HIV Prevention, Capacity Building Branch. Organizations and health departments that receive direct funding from CDC may request TA through the web-based Capacity Building Assistance Request Information System (CRIS).</p> <p>Organizations not funded directly by the CDC can ask the health departments in their jurisdictions to submit a TA request on their behalf.</p>	<p>Capacity Building Assistance Request Information System (CRIS) - https://wwwn.cdc.gov/Cris2009/pages/main/e1.aspx.</p> <p>Health department listings - http://www.cdc.gov/hiv/dhap/cbb/crisUsers.html.</p>
<p>The National Network of STD/HIV Prevention Training Centers (NNPTC) offers courses related to IPS.</p>	<p>http://nnptc.org/partner-services-ptcs/</p>

Technical assistance from experienced programs has also proven to be a valuable tool to those programs new to IPS. CDC and NCSA staff can help refer programs to peers.

2.2 USING THIS TOOLKIT

This toolkit was developed to be a flexible resource for use by a variety of stakeholders, from seasoned programs with years of IPS experience to the individual DIS brand new to partner services. This toolkit is not meant to be a one size fits all resources rather we hope programs can take what they need to adapt or improve their current IPS efforts.

While developing the toolkit, we worked under the following assumptions;

1. You have a solid understanding of the basics of traditional partner services.
2. Internet Partner Services is viewed as a part of a menu of activities and is intended to augment, not to replace, face to face services.
3. This is not a manual or a set of guidelines. Instead, we have curated and developed some of the shared best practices and experiences from those already doing this type of work.
4. Just like technology, the content, examples and web links currently found in the toolkit will change.

The layout of the toolkit is designed to be easily navigable by topic/action. Those of you accustomed to the formal “start to finish” instruction manuals may find this different. While you can read the entire contents from acknowledgement to references – you may find it more useful to start in the sections that are most relevant to your program.

The toolkit is made up of easily navigated sections.

Section 2 Introduction

- Using this Toolkit
- Executive Summary
- Background
- A Brief Historical Context of IPS

Section 3

- Cultural Understanding & Awareness
- Communicating in digital venues
- Code of conduct in digital venues
- Engagement of Appropriate Stakeholders

Section 4: (IPS) Components

- Creating Profiles, Screen Names, and E-mail Addresses
- Interviewing and elicitation
- Language used for Technology-based
- Partner notification
- Confidentiality during Partner Notification/Partner Services
- Text Notification & Mobile Applications

Section 5 Documentation, Data Collection and Evaluation

- Data Security and Confidentiality
- Evaluation
- Logic Models
- Examples of possible evaluation questions and associated indicators
- Supporting Resources for Program Evaluation

Section 6 IPS Staffing and Supervision

- IPS staffing
- IPS Supervision
- Training

Section 7 Summary

Section 8 Glossary of Acronyms

Section 9 Tables

Section 10 Appendices

Section 11 References

Whenever possible we have created hyperlinks to reinforce the content, and have provided examples shared from existing programs. Lastly, we welcome your feedback. Hearing what worked for you and what didn't and how your program is implementing IPS will be us improve future iterations of the toolkit.

2.3 BACKGROUND

Mobile phone ownership and access to the Internet has become nearly universal for most Americans. Eighty-four percent of all U.S. adults are online⁶ and 90% own a cell phone⁷, 58% of which are smart phones.⁸ The wide use of the Internet and mobile devices for communication makes them ideal settings for meeting prospective sex partners. Research has shown that these venues are, in fact, being used to find potential sex partners, by a variety of populations, and that this behavior can lead to STD acquisition and transmission.⁹⁻²⁰ Furthermore, mobile phones and mobile phone applications can increase the speed with which a sex partner can be found, further compounding STD risk.¹⁹ As a result of the pseudo-anonymity of the Internet and mobile communications, individuals, who are newly diagnosed with STD/HIV, may know little more than a profile name or email address of their sex partners. When partner-locating information is limited to such virtual identifiers, the Internet and other digital media often become the only means for notifying a partner of their exposure. These venues can also provide access to valuable information that can then be used for partner notification (PN), such as locating information and physical and behavioral characteristics of sexual partners.^{14,21,22} As such, STD and HIV prevention programs have been encouraged to incorporate the Internet and other digital technologies into their prevention efforts.^{4,5}

2.4 A BRIEF HISTORICAL CONTEXT OF IPS

The first documented instance of the Internet being used for the purposes of partner notification was in 1999 and was a response to a syphilis outbreak in San Francisco attributed to sexual encounters that were facilitated through a chat room.²³ In the same year, another study was conducted that focused on the Internet as a sex-seeking environment and was identified as a possible STD/HIV risk environment.⁹

As a result of a significant increase in the number of patients reporting sex partners met online through chat rooms, social networking, and “hook-up” sites, public health programs began incorporating the internet and email into their partner services programs.²⁴⁻²⁶ These early efforts showed that Internet-based partner services held promise as a legitimate tool when partnered with other traditional methods for disease prevention.

By September of 2005, CDC had responded to the promising outcomes shown in several areas with a “Dear Colleague Letter”⁴ that encouraged program areas to explore the Internet as a disease intervention and prevention tool. A second CDC “Dear Colleague Letter” supporting the use of the internet for partner services was released in 2010.⁵

Since the release of the first Dear Colleague letter, several studies have been conducted to evaluate IPS outcomes by assessing rates of partner elicitation, notification, and testing and quantifying the number of partners who otherwise would not have been contacted without IPS.

In Texas, Vest et al found that the use of email to reach partners for whom no other contact information was available resulted in 50% of those partners being notified of which 26% were found to be infected with an STD. Additionally, they found that sending emails did not require additional staff time, and allowed for rapid PN communication.²⁷

Ehlman et al. assessed the effectiveness of Internet partner services in Washington, D.C. using STD program disposition codes and found Internet partner notification (IPN) improved notification and treatment for early syphilis. Using IPN led to a 75% increase in the number of partners investigated and a 26% increase in number of partners examined and treated, when necessary. At least 285 partners who would not have otherwise been contacted were notified of exposure.²⁸

In addition to emails, social networking sites can also be a venue for PN. The Milwaukee Health Department in Wisconsin reported on the use of the social networking site, Facebook, to augment partner notification efforts involving a syphilis cluster (n=55). Within the cluster, 17 positive cases of syphilis were found, 10 of which were coinfecting with HIV. Among the cluster, two of the positive cases had been named as Facebook contacts, and as a result, were able to be located by DIS when traditional methods failed. Moreover, these two cases were found to be key connectors within the cluster. Facebook was also used to augment traditional partner notification for an additional five individuals. Hunter et al (2014) found that the use of Facebook augmented traditional efforts by allowing DIS to reach partners more quickly, especially among those individuals who may frequently change phone numbers or addresses while also aiding in the identification of sought-after partners.²⁹

More recently, texting has also been shown to be a very effective way of reaching partners. In a 2011 Letter to the Editor, Kachur et al. described a case in which text messaging was successfully used for partner notification. In this case, DIS in the New York State Department of Health were able to reach and notify a partner of their syphilis exposure through text messages after traditional efforts had failed.¹⁵

In 2012, Mendez et al reported on Multnomah County's texting PS program, which consisted of sending a text message for partner notification immediately following an attempt to reach cases by phone, but before mailing letters or conducting a field visit. Text messages were sent to 149 clients immediately following an attempted phone call; 56% of those texted responded to DIS with a phone call, many within 10 to 15 minutes. They also found texting reduced the need for mailing letters and making field visits.³⁰

Hightow-Weidman et al evaluated the use of text messaging for the partner notification of 29 contacts in North Carolina. Text messaging was used only after traditional or IPN attempts did not elicit a response. Of the 29 contacts, 48% (n=14) responded to the text, all within in a median time of 57.5 minutes. Among the 14, two new cases of syphilis and one new case of HIV were identified.³¹

Udeagu et al. compared traditional, internet and text-based (txtPS) PS delivery methods on contact, notification, and HIV testing rates. They found the contact rates for txtPS (77%) to be significantly higher than traditional PS (69%) or IPS (41%; p<0.0001). IPS (odds ratio (OR), 2.1; 1.2-3.4) and txtPS (OR, 2.4, 1.7-3.2) resulted in a greater likelihood of notifying partners than traditional PS (p<0.0001), but traditional PS yielded the highest proportion of partners testing for HIV (69% versus 34% and 45%, respectively; p<0.0001). They concluded that augmenting their PS program by incorporating the three modes of PS improved their overall PS outcomes, reached partners who were otherwise unreachable, and improved their operational efficiency.³²

Lastly, Pennise et al reported on the Monroe County Department of Public Health in New York, which has, since 2012, issued smartphones to the DIS for use during field investigations. They reported on a cluster investigation conducted between February and May 2013 through which partner elicitation, notification, and testing was improved through the use of smart phones. Use of smartphones allowed DIS to search online sites and mobile applications with patients in order to elicit partner information in real

time. These efforts resulted in seven new cases of disease being diagnosed, including two new cases of HIV.²²

In addition to augmenting traditional partner services, partner notification through an online community is considered an acceptable tool by members of that community. In a national IPS study performed by The Fenway Institute, Fenway Community Health looked at the acceptability of IPS among men who have sex with men (MSM). A total of 1,848 MSM were recruited online via an Internet sex partner-seeking website between October and November 2005. The study concluded that IPS should be considered an acceptable tool for partner services, with more than 92% of participants reporting that they would use IPS in some capacity to inform their sexual partners of possible exposure, if they were to become infected with an STD in the future.³³

Since its inception in 1999, IPS has become a standard practice in many health departments. IPS has been an effective tool for the elicitation, notification, and testing of partners and for reaching those partners, who otherwise would not have been notified of their exposure to an STD or HIV.

3 CULTURAL UNDERSTANDING AND AWARENESS

The importance of cultural competency cannot be overstated or overemphasized. It is the ability to “deliver services that are respectful of and responsive to the health beliefs, practices, and cultural and linguistic needs of diverse patients.” (NIH, clear communication, <http://www.nih.gov/clearcommunication/culturalcompetency.htm>. Retrieved 12/29/14) Experts and programs experienced in IPS have found that DIS competence and comfort with IPS contributes to a successful IPS program. This includes understanding and functioning effectively in diverse environments, as well as being able to comfortably communicate with patients and their partners who use these sites for sex-seeking.

Internet communities often have their own culture, which may include language and behaviors. It is critical that staff conduct themselves in a professional manner and have a true openness to, and respect for, the differing sexual lifestyles, viewpoints and experiences of others. Staff members are expected to possess the same level of awareness, insight, and skill at communicating with online communities and people as they do when interacting face to face with individuals and offline communities. Assumptions and judgments regarding an individual’s sexual orientation or their actual sexual behavior should be avoided. For instance, the lack of an HIV status in an online profile does not imply that the member does not know their status or that the individual is positive; it may simply be that they choose not to include this in the profile, or prefer to discuss it in person. Partner services staff are expected to be culturally appropriate regardless of the venue within which they are working. Any concerns or prejudices DIS have need to be addressed and discussed prior to conducting IPS within online communities.

If staff feel they cannot conduct themselves in a professional, objective manner, then supervisors should retrain or reassign those staff.
--

It is important to understand that the online community offers individuals an opportunity to interact in a way that they may not feel comfortable doing offline. For example, the anonymity of the Internet may allow someone to be more sexually open or direct. However, it is important to not profile or “label” a patient based on any perceived observations or information. A profile is simply a tool that offers a glimpse into one or more aspects of a personality that the user is intending to use that day. One person may join several different online communities in an effort to have different needs met (this can include sexual networking and social activities). It is not unusual for a person to login to a sex-seeking site where the focus is on seeking a partner for immediate, anonymous sex, while simultaneously maintaining a separate profile on a dating site where their intention may be to find a life partner. Personal information and identifiers like sex, race, age, HIV status, drug use, or sexual orientation are self-disclosed or self-selected and may be exaggerated or completely false. Often these self-selected options are limited and do not account for the wide variety of sexual behaviors and desires. For example, it is not uncommon to encounter individuals that disclose their sexual orientation as heterosexual, but who also engage in same sex behaviors.

Online and mobile-based communication is different from what occurs face to face or over the telephone. The fast-paced and anonymous nature of digital technology has added a new level of communicating and sex-partnering that could be perceived as inappropriate or unacceptable in any other medium or venue. Names and phone numbers may not be exchanged and, in some cases, the email or messages may be purged shortly after the encounter. This is particularly true for online venues and communities that are focused on facilitating real-time contact, where communication may be brief and lacking information. These activities can range from finding a group sex party to finding an anonymous sex partner for a discreet encounter. Many people may use the Internet specifically so that they can engage in a desired behavior while protecting their offline identity. Fantasy is also an element of some adult-oriented websites. Some online descriptions of sexual pursuits may be nothing more than an expression of fantasy.

Unlike traditional names, email addresses, screen names, and online identifiers can be changed easily and quickly. It is not unusual to lose contact with a person because of a changed screen name. It may be possible to track down a contact that has changed their screen name by reviewing profile information, pictures and other identifying information, but caution should be heeded to confirm that the profile name belongs to the person being sought. Some communities also allow for duplicate profile names based on geographic locations. That is, the same profile name can be used by more than one person as long as the geographic locations are different. So an online community can have two members with the name of, for example, BigBoi69, but those members will be located in two different states.

To learn about a website or app and its users, staff can spend time browsing the venue, reading the “about us” and “terms of service” sections, and noting the images and terminology used.

3.1 COMMUNICATING IN DIGITAL VENUES

When communicating with persons online or via text, it is important to remember that this form of communication can be void of voice inflections or facial expressions that typically mitigate conversations.

Remember that when communicating online or via text, the recipient of your message cannot infer your meaning or may infer the wrong meaning.

Anecdotal evidence suggests that maintaining professionalism when reaching out to patients and their partners is important. This includes avoiding the use of acronyms (e.g., LOL), icons, and emoticons (e.g., ☺), and other terminology or vernacular that gives the appearance of being overly casual or familiar with the person with whom you are trying to communicate.

When joining any website or app, you are required to agree to the terms of service (TOS). TOS are important to understand before you begin using the site for IPS because it might affect whether you are allowed on the site at all. These service agreements will describe both acceptable and unacceptable

behaviors allowed on the site or app. The TOS will also define if communications between persons on that specific website/app will be confidential. All TOS are legally binding agreements that outline the site's operating policies.

3.2 CODE OF CONDUCT IN DIGITAL VENUES

When conducting IPS through a website, it is important to be aware that you are a member of the community and are subject to the rules and regulations of the website or app. DIS conducting partner notification within online communities are, in essence, “invited guests” as they aren’t, nor should they be, conducting PN as a member of the venue. It is important to remember that you are representing your agency.

Rules and regulations regarding Internet interventions will vary from site to site. Some websites will allow one type of Internet effort and not another. For example, a website may allow passive outreach, but not IPS. Other websites may require separate profiles for IPS and outreach and will state that they should not be used interchangeably. Awareness of the rules and regulations for each website and following those policies will help to ensure that Internet efforts can be continued. Some sites may initially be indifferent to IPS or Internet outreach, but if complaints are received from members of the site, IPS accounts may be suspended or deleted.

Periodically updating on-line venue profiles and reviewing TOS agreements may reduce the risk of violating a site’s policies.

It is important to remember that the websites/apps where patients meet sex partners and from which IPS is being conducted do not have a public health mission. Most of them are private businesses whose primary mission is to generate revenue either from membership subscriptions or ad sales. It is possible that a health department or CBO presence will be perceived as a threat to that mission. It is imperative to be aware of such rules and regulations pertaining to IPS prior to joining the site. In sites that do not explicitly allow IPS, conducting IPS activities will most likely be considered a breach of the TOS and could result in suspension or banishment from the website/app.

3.3 ENGAGEMENT OF APPROPRIATE STAKEHOLDERS

Engagement of key stakeholders can affect the success or failure of an IPS program. In addition to providing support, engaging stakeholders can help validate IPS efforts to clients and partners. Often patients will call their private physicians or other trusted agencies to confirm that the attempt to reach them is valid, and the verification and positive support can expedite the time the patient takes to respond to the email notification. Stakeholders can be an additional source of information in identifying local populations who use technology to find sex partners and the specific websites and venues to be targeted. Important internal stakeholders include, among others, the health department medical

director, the health department information technology (IT) director, the health department legal department, STD/HIV program directors, managers, and DIS.

For the IT department, specifically, engaging managers and staff early on can help alleviate potential barriers that may prohibit initiating program-wide IPS services.

External stakeholders may include community-based organizations (CBOs), private providers, the affected population, and online and mobile businesses where individuals might seek sexual relationships.

It is important to recognize that the different stakeholders will each have different goals and interests. Some stakeholders simply need to be made aware of a program's intention to proceed with IPS; others may need to be involved in the creation of IPS policies, IPS implementation, and evaluation.

4 INTERNET PARTNER SERVICES (IPS) COMPONENTS

There are several features that are important to consider when developing an IPS program, such as adapting patient interviews to include questions about online sex partners, creating profiles, developing email language, and understanding how to confidentially notify partners through the various mediums. These features will be described in this toolkit.

See [Appendix A](#) for an example of an IPS program checklist.

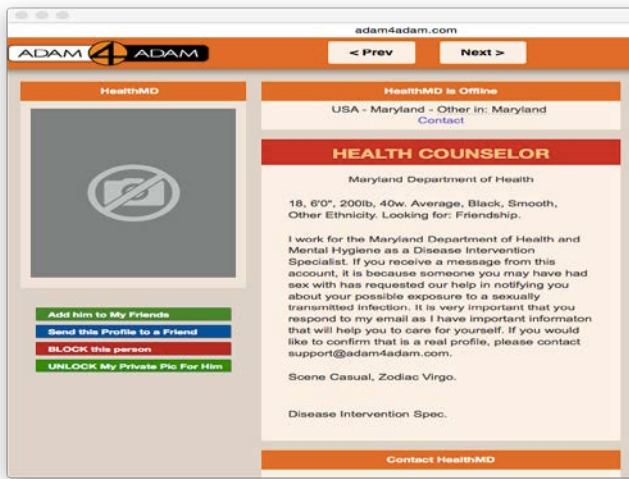
4.1 CREATING PROFILES, SCREEN NAMES, AND E-MAIL ADDRESSES

In order access many of the online applications to conduct IPS, programs may need to create a user or member profile. When creating a profile, it is suggested that an official health department email should be associated with the profile, the official health department logo should be used as the account picture, and other identifying information should be provided respective to ISP/website protocol for health departments. Several sites will not allow logos and the profile picture must be of a person. Some profile fields are required for membership but may not be applicable. These could include age, sexual positions, etc. Lastly, some websites may require certain scripted information be contained within your profile. For example, one popular website created a standard logo for all profiles conducting IPS or outreach in order to provide a validation of legitimate IPS-related profiles.

Example from BarebackRt.com, San Francisco Department of Public Health



Example from Adam4Adam.com, Maryland Department of Health



Example from Manhunt.com, California Department of Public Health



It is recommended that before a profile is initiated, a complete review of all “Terms of Services” (TOS) and membership rules be understood.

4.2 INTERVIEWING AND ELICITATION

4.2.1 IPS-specific parts of the original interview

The CDC’s Program Operation Guidelines states: “While interviewing the patient, the DIS should make every attempt to enlist the patient as a resource, making it clear that the information the patient provides will be confidential and very helpful to the DIS, the patient, and the patient’s partners. The DIS can incorporate elements of patient-centered counseling by acknowledging and treating the patient as a partner in reducing additional STDs in their community. The partnership should be clear to the patient.”³⁴

IPS-related questions should be asked in all interviews, whether the patient specifically mentions online venues/apps or not. Until the original patient (OP) indicates otherwise, it can be assumed that the OP has

Programs that are new to IPS often have concerns regarding patient confidentiality and the use of email for IPN. One concern is that sending an email, especially from an organization that uses the acronym ‘STD’ in their email address may unwittingly breach confidentiality if anyone other than the intended recipient views all or part of the email. It is important to note that sending an email carries similar risks to leaving a letter on a doorstep or a voicemail message on a telephone.

met or communicated with at least some of their sex partners through virtual or technology-based media. When interviewing patients, DIS can ask about sex partners met through online networking by using open-ended questions and specifically naming known websites used for sex-seeking. This helps to let the patient know that the DIS is familiar with and comfortable discussing such venues. See [Appendix B](#) for examples of IPS-related questions to ask during interviews.

Example of an opened ended versus a yes/no question

Open ended – What is your profile name on [insert name of website]?

Yes/no question – Do you use [insert name of website]?

At a minimum, it is important that DIS attempt to obtain OP screen names and associated venue (website, mobile app), email addresses and verify physical locating information. This information will be useful if a partner references the OP in an interview. Furthermore, in future cases, if the OP’s screen

name is named as a partner, locating information will already exist in the database, and PN can be initiated. It is equally important for DIS to gather and confirm the exact spelling of partner screen names, email addresses and physical locating information. Confirming the exact spelling is extremely important because often numbers and characters are used in lieu of letters i.e. Man4you vs. Manforu. However, it is important to remember that all information provided within a profile is subject to change and that the profile itself can be deleted at any time. Lastly, DIS can ask about physical locations where sexual encounters took place such as a person's home or hotel. This information can help give an approximate geographic location of a partner.

4.2.2 Access to internet/mobile devices during the interview

Having computers and mobile devices that can access the internet available during the interview can improve the information obtained during an interview. Having access to named websites allows the OP or the DIS to immediately log on to that site to access and verify information about sex partners and can lead to an increase in the number of partners named. Notification emails can also be sent to all sex partners at the time of the interview either through the program's profile or from the OP.

4.2.3 Geographic location of a partner

Prior to initiating IPN, it is important to attempt to obtain and confirm the geographic location of the individual being contacted. Knowing the geographic location of the sex partner will allow the DIS to confirm whether the client resides within the DIS's jurisdiction and provide appropriate referral information (i.e., clinic locations, clinic times). The physical location of a website member is often listed within the individual's online profile. However, the true physical location of a partner may not be known until contact is made, due to the ability to change location within many online and mobile sites. Thus, the location of a profile at any given time may not actually reflect the user's residency, but instead may indicate that the partner is "surfing" the site for members in that particular geographic area.

4.2.4 Out of Jurisdiction (OOJ) Issues

Email addresses and screen names with an identified geographic location outside of a program's jurisdiction may require that an "out of jurisdiction" (OOJ) field record be initiated. It is important to discuss the situation with the appropriate program in the jurisdiction in which the partner is believed to reside to understand that jurisdiction's protocols for handling Internet locating information and IPN. If there are not established standards of practice for handling OOJ, these situations will need to be handled on a case-by-case basis.

4.3 LANGUAGE USED FOR TECHNOLOGY-BASED PARTNER NOTIFICATION

The language used for partner notification varies, depending on several factors, including the specific person you are contacting, the venue (e.g., email versus a website versus text) through which you are

attempting to contact a person, the type of infection that the person has been exposed to, and state and local regulations on what can be disclosed in what medium. IPS works best when protocols, guidelines, handbooks, and manuals allow for notification language to be adjusted based on these factors.

The language you use for partner notification is important and depends on these factors:

- The specific person you are attempting to contact
- The medium/venue (e.g., email versus a website versus text) you are using
- The infection (e.g., syphilis versus HIV)
- State and local regulations (e.g., some states prohibit the use of IPS for HIV PS cases)

Legitimacy of the notification is enhanced when the following information is included: name of the contacting DIS, program or health department affiliation, contact information, and a brief message encouraging the partner to contact the DIS as soon as possible. Other information can be included, space permitting, such as times the DIS can be reached in the office, frequency with which emails, voicemails, etc. are checked, how the patient can confirm the DIS's identity, such as the name of a supervisor and his/her telephone number, and the case referral number. It may also be helpful to mention that leaving a message on voicemail is confidential, if this is indeed the case. Some programs require all outgoing emails to have a legal disclaimer. Programs can discuss the language used, and if a legal disclaimer is necessary, with their legal department. Below are a few examples of legal disclaimers

At a minimum, it is important all notification messages include the following information:

- name of the contacting DIS
- program or health department affiliation
- contact information of the DIS
- brief message encouraging the partner to contact the DIS as soon as possible.

Sending notifications from and to official health department email addresses or profiles also helps to legitimize the notification for the recipient. Partner notification from personal email addresses or digital profiles is discouraged. Whenever possible, messages should be accompanied by an automatic request for notification when the message is read.

4.3.1 Language specificity

Patient characteristics (e.g., adolescent versus adult) and the venue through which you are trying to reach a patient will determine the type of language you use. Care and consideration should be given to both the person you are attempting to reach and the medium through which you are trying to reach them when deciding what type of language to use when sending a message. Programs typically err on the side of caution and use the most conservative or vague language when there is any concern about potentially breaching confidentiality. See [Appendix C](#) for additional examples of initial IPN emails.

4.3.2 “Urgent health matter”

For text messages, which can be seen by others and for certain social networking sites, like Facebook, where accounts are shared with friends or monitored by parents, broad or generic language such as “urgent health matter” is suggested. Instant messaging is not recommended for partner notification but in cases where it is used, broad or generic language should be employed.

Example 1: New York City Department of Health and Mental Hygiene Bureau of STD Control

Dear <<screenname>>

*****This email is intentionally vague in order to protect your privacy.****

I am contacting you about an urgent health matter. It is most important that you report to the _____ Health Center located at _____.

Please print a copy of this email and bring it with you as it can reduce your waiting time. If you are unable to bring a copy of the email please let the health center staff know that you were contacted by me and asked to visit the clinic. If you have any questions regarding this notice, please feel free to contact me at (212) 788-6619 Monday through Friday from 8:30 a.m. to 4:00p.m.

Services at the health center are free and confidential. If you prefer to consult a private physician please ask him or her to contact me for information on the health matter I am contacting you about.

If I am not available at the time of your call please leave a number and time when I can reach you. My voicemail is private, confidential, and password-protected.

This email is intentionally vague in order to protect your privacy. Please visit the health center or contact me by telephone for more information.

Sincerely,

DIS NAME

NYC Department of Health & Mental Hygiene

4.3.3 “Exposure to an infectious disease”

Sexual networking sites and certain email addresses, such as those found on dating sites, are more amenable to language that indicates exposure to an unknown infection such as “you may have been exposed to an infectious disease.”

Example 2: San Francisco Department of Public Health

Internet Contact Letter #1 (Email letter and Handled letter)

Hi/Hello:

My name is _____, I work for the San Francisco Department of Public Health. Please contact me as soon as possible; you may have been exposed to an infectious disease. You will need to be examined, even if you do not feel sick.

Please call me at 415-487-xxxx. If I am not at my desk, please leave me a message with your name, phone number and the best time to reach you on my confidential voicemail.

We offer confidential screening and treatment at no cost, at 356 7th Street (between Folsom and Harrison). To be seen more quickly, please bring this letter with you when you come in and/or ask for me by name. Our drop-in hours are listed below.

Sincerely,

Worker Name

Worker's Title

356 7th Street (between Folsom and Harrison)

Drop-In Hours: Monday/Wednesday/Friday (8:00am-4:00pm), Tuesday (1:00pm-6:00pm) and Thursday (1:00pm-4:00pm)

**** CONFIDENTIALITY NOTICE**** This letter and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use or distribution of the information included in this message and any attachments is prohibited. If you have received this communication in error, please notify the sender immediately and permanently delete or otherwise destroy the information.

4.3.4 “Exposure to a specific disease”

Lastly, some of the sexual networking sites require the use of disease specific language when reaching out to their members for partner notification e.g., “someone you may have had sex with tested positive for syphilis.” It is important to review the Terms of Services (TOS) and determine what acceptable actions are allowed.

Example 3: Tennessee Department of Health

To: <screen name/email address>

From: Name@tn.gov

Subject: (leave blank)

Hello <name, if known>, (do not use screen name)

A few days ago, I sent you an email, but I have not heard back from you.

My name is ____ and I work for the Tennessee Department of Health. I am contacting you because someone who was recently diagnosed with laboratory confirmed <gonorrhea, Chlamydia, syphilis> asked that you be notified of an exposure to this infection.

It is important that you call me at _____ so I can speak with you confidentially about the specific exposure and provide you with options for testing and treatment.

To confirm this email is authentic and legitimate, you can call my supervisor _____ at ####. [If using Manhunt to conduct notification include: *If you would like to confirm that this email is real though Manhunt, please call the Manhunt Health Liaison at 617-674-8945. If using Adam4Adam include: "If you would like to confirm that this email is real though Adam4Adam please contact support@adam4adam.com"]

Thank you for your prompt response.

DIS name

DIS title

Phone #

To date, no formal studies have been conducted to determine the most effective means of getting a contacted partner to respond to a DIS, however, anecdotal evidence from experienced programs has found that including specific disease information in proprietary email systems is safe and acceptable to the recipients. In general, proprietary systems are password-protected, and members of websites with proprietary email systems typically have individual accounts. If members choose to share an account with another person, it is typically because they are in a relationship and looking for group sexual encounters.

Because of the unique issues found within online communities, the emails you send to contacts may at first be perceived as "spam" (unsolicited email) or a hoax. To encourage patients to read email and avoid appearing as "spam," some programs leave the subject field blank, containing no text. Other programs have standard subject lines such as "Confidential message from the (insert local health department name)," or, "Please call the (insert local health department name)." If emails aren't being read, new subject lines and methods can be considered.

Subsequent attempts to contact the partner may include, where appropriate, additional information to increase the sense of urgency, request the individual’s consent to receive information via another medium, such as a private email address, or provide disease-specific exposure information.

Programs will need to determine the allowable number of times a patient may be contacted. Experienced programs recommend no more than three attempts to initiate contact with the patient. Some websites have policies regarding the number of times a health department or CBO may contact their members, with most limiting it to a maximum of three attempts. It is important to remember that each situation may require different strategies.

See below and [Appendix D](#) for additional examples of follow up emails

To: <screen name/email address>

From: Name@tn.gov

Subject: (leave blank)

Hello <name, if known>, (do not use screen name)

A few days ago, I sent you an email, but I have not heard back from you.

My name is ____ and I work for the Tennessee Department of Health. I am contacting you because someone who was recently diagnosed with laboratory confirmed <gonorrhea, Chlamydia, syphilis> asked that you be notified of an exposure to this infection.

It is important that you call me at _____ so I can speak with you confidentially about the specific exposure and provide you with options for testing and treatment.

To confirm this email is authentic and legitimate, you can call my supervisor _____ at #####. [If using Manhunt to conduct notification include: *If you would like to confirm that this email is real though Manhunt, please call the Manhunt Health Liaison at 617-674-8945. If using Adam4Adam include: “If you would like to confirm that this email is real though Adam4Adam please contact support@adam4adam.com”]

Thank you for your prompt response.

DIS name
DIS title
Phone #
Email address

4.4 CONFIDENTIALITY DURING PARTNER NOTIFICATION/PARTNER SERVICES

4.4.1 Reaching the right person

It's very important to ensure that all emails and messages are sent to the intended recipients. Locating online partners has become much more challenging due to the variable ease and frequency with which email addresses, screen names, and IM and smartphone app accounts can be obtained and changed. Screen names may be very similar and sound the same. For example, members with the screen names "partyboi" or "Man4U" are likely different users than members with the screen names "partyboy" or "Manforyou." When feasible, have the OP access email messages, SMS profiles and saved instant messages to confirm the spelling of partners' screen names during the original interview. Be sure that the OP has logged completely out of their account when done. Additionally, eliciting descriptive details about partners, such as race, height, weight, interests, location, and other identifying characteristics, can help DIS verify that the correct person is being contacted. The experience reported by many STD programs is that patient confidentiality can be maintained in the same way that confidentiality is maintained when conducting PN via the telephone.

It is important to acknowledge that the individuals we are attempting to contact could share an email account or profile with another person. However, anecdotally, experienced programs have found that the vast majority of email addresses and profiles reported are not shared. Profile names that indicate that a profile may be shared by two or more people (e.g. "2hotmen) should be closely reviewed before sending information. If there is evidence that an email or profile is shared, or any level of uncertainty exists, then information should not be sent and should be discussed with a Supervisor.

4.4.2 Protecting confidentiality

In some cases, the use of individual identifiers (screen names, email addresses, profile names, etc.) combined with language that specifically mentions exposure to a specific infection, such as HIV, may be interpreted as a confidentiality breach. As mentioned earlier, certain venues may be less secure than others. For example, contacting a minor through Facebook using language such as "someone you had sex with was recently diagnosed with an infectious disease" may be a breach of confidentiality, as many parents monitor their child's Facebook account. However, when contacting the same individual through an online sex-seeking venue, where his or her account would most likely not be known or monitored by a parent, using the same language may be appropriate. Some barriers related to confidentiality and messaging can be avoided by using broad or generic messaging that omits any mention of sexual activity. Examples of broad or generic messaging include "potential exposure to an infection" and "urgent health matter".

Be aware that different websites have different options that may help maintain or potentially breach confidentiality.

For example, when creating a profile on certain sex-seeking websites, the default settings include a function that allows all users to see who has visited a profile. Unless that functionality is turned off in the "Accounts Options" section, all users will be able to see that a health department virtually visited a member's profile. This can lead to breaches in confidentiality or distrust of health department activities.

Some health departments have found IPS to be more successful when the OP makes first contact with named partners, with follow-up by DIS, versus first contact by DIS.

DIS can provide support and guidance to the OP about how to notify their sex partners, including what language to use, provide resources, such as testing sites, or provide an example email. Patient-initiated IPN messages should include the name and contact information of the DIS.

When the OP makes first contact with a potentially-infected partner, there are generally three ways in which contact can occur:

The OP contacts their partner(s) directly, on their own initiative, notifying partners of their potential exposure and indicating that DIS will be reaching out to the partner for STD screening and partner services. Afterwards, the OP will follow up with the DIS on whether or not partners were contacted.

OPs can also notify their partners in the presence of DIS by contacting partners through health department computers or phones, or by using their own digital devices (e.g., mobile phone). This method provides evidence that partners were, indeed, contacted and notified.

Lastly, OPs can use third-party sites, which allow them to contact and notify partners anonymously. There are limited outcome evaluation data available on these third-party notification sites, and there is potential for false or “joke” notifications. These sites may have the potential to improve PS for STDs such as chlamydia and gonorrhea, which often do not fall within the purview of PS. However, for STDs such as HIV and syphilis, the DIS model is still recommended because there is no way of verifying that a partner was actually notified, or that the individual sending the notification even has a laboratory-confirmed STD.

When a partner calls or comes to the clinic, it is important to ask how the partner was notified of a potential exposure. If the individual was notified via IPS, the DIS may not have the real name of the individual. DIS should ask the individual for the referral letter or number or his/her Internet screen name or e-mail address, then search the case management data system (e.g., STD*MIS). Once the DIS confirms the identity of the individual through other identifying information obtained from the original patient, the field record needs to be updated. It is important to retain the IPS information such as the screen name and website; not delete the screen name or website from the AKA section.

4.5 TEXT NOTIFICATION & MOBILE APPLICATIONS

Mobile technologies (smart phones, tablets, cell phones, etc.) are changing the way in which we contact people, including how we conduct partner notification. Mobile phones and sex-seeking mobile applications (apps), in particular, have become increasingly relevant to STD prevention and partner notification.

In the U.S., 90% of adults (persons 18 years and older) have a cell phone⁷ and, often, a cell phone may be the only form of contact information available for a partner. Increasingly, cell phones are replacing landline telephones. A report released in June 2015 by the CDC found that more than two of every five American homes, or 45%, did not have landline telephones but did have at least one wireless phone.³⁵ Additionally, cell phones are used for much more than making phone calls. Eighty one percent of cell phone users send and receive cell phone texts, 60% of cell phone users use their phones to access the

Internet, and 52% use their phones for email.³⁶ Currently, 64% of U.S. adults own a smart phone,⁷ which allows quick and easy access to social and sexual networking sites.

Little is known about the use of sex-seeking mobile apps and their impact on STDs. Popular mobile apps such as Grindr and Tinder self-report 5 million (www.grindr.com) and 10 million (<http://en.wikipedia.org/wiki/Tinder>) users respectively. Current knowledge about the sex-seeking apps has primarily focused on those apps that cater to gay, bisexual, and other men who have sex with men. Two studies found that users of gay, sex-seeking, mobile apps are more likely to be younger, to be white or Asian, and to report more sex partners.^{37,38} In the Beymer et al. study, sex-seeking app users also had a greater proportion of gonorrhea and chlamydia, but a lower proportion of HIV, when compared to those who meet sex partners either in-person or online. In terms of sexual risk, these two studies looked at unprotected anal intercourse (UAI) among sex-seeking mobile app users and found a range of 14.7% to 46% of users engaged in UAI.^{16,19}

95% of young men who have sex with men and use Grindr also report using Facebook.¹⁴ This suggests that users of sex-seeking mobile apps may also be locatable on other social networking sites.

Because of the popularity of cell phones and mobile apps and because, in some cases, it is the only means of reaching a person, health departments are now using text messaging protocols for partner notification and exploring how to conduct PN through mobile apps.

4.5.1 Using Text Messaging/Short Message Service (SMS) for Partner Notification

Some health departments have implemented text messaging as part of the standard efforts to notify a partner of their exposure. For example, if a cell phone number is known, then a text message is sent in conjunction with other notification efforts. Other programs resort to text messaging only when other notification efforts have failed. Regardless of when texting is used, the goal of texting is to get the patient to call the DIS. Multnomah County has found that 67% of clients return a phone call immediately after receiving an IPS text (personal correspondence, J. Mendez, August 15, 2014). In 2012, Multnomah County began using Google Voice to send texts, which allows DIS to send, receive and store free text messages. See [Appendix E](#) for examples of text messaging policies for partner services including a copy of the Multnomah Guidance on using Google Voice for sending texts for partner services. Programs have found texting to improve outcomes, reach people for whom other notification efforts were unsuccessful and to reduce the need for mailing letters or making field visits.^{15,30-32}

Many smart phone users can receive text messages even if the phone is not accepting phone calls, i.e., they run out of minutes.

4.5.2 Confidentiality and risks of text messaging

Maintaining patient confidentiality is of the utmost importance when using texts for partner notification. Text messages carry similar risks as other forms of partner notification. Just like a letter or voice mail message that can be read or listened to by someone other than the intended recipient, text messages can also be sent to or read by others. It is important to remember that text messages can be copied, forwarded to others, altered or stored electronically without authorization or detection. Programs can minimize these risks by taking the following suggested precautions.

- Broad partner notification language should be used, i.e., “important health matter.” Sending disease specific information via text message is not recommended. (See [Appendix E](#) for examples of acceptable PN texting language.)
- Text messages should only be sent from a work phone or computer. We do not recommend the use of personal cell phones or computers when communicating with clients or their partner(s).
- All mobile devices should be password protected
- Text messages should be sent from a private space
- Some cell phone carriers will provide you with an option to receive a text message delivery confirmation. This service, where available, is requested by you through the settings on your cellular phone or through your carrier account preferences.

A concerted effort should be made to ensure that the correct telephone number is being use for contact. This can be done by confirming the contact number with the number on file or by using Internet tools such as reverse search tools to confirm the number is connected to a mobile device. Example: <http://www.phonelookup.com> – at the time of this writing, this website could reveal whether a number was a cell or landline phone number and the general location, but it does not provide names or street addresses. It is important to note that information obtained through a reverse lookup may not be the most current information. It is also possible for a cell phone subscriber to retain a cell phone number that has been assigned by one carrier when switching to a new cellular provider. In this case the previous cellular provider may be inaccurately listed as the current provider.

To search for a telephone number using Google

In the Google search box, type allintext (all one word), followed by a colon, followed by the number you are searching for in quotations.

Example - allintext: “555-555-5555”

4.5.3 Communication etiquette

Understanding and using mobile device etiquette is important and can help improve response rates from patients and/or their partners. Following are some helpful tips.

- Be professional at all times. Avoid the use of abbreviations, jargon, acronyms, or images.
- Be timely in your response to returned texts. Returned texts can come at any time of the day. Be prepared to respond within a reasonable time frame.
- Recognize that it is extremely difficult to discern tone in text messages. It is very hard to discern humor, sarcasm, etc. from a text.
- Know that some users may not have a text messaging plan and that each incoming and outgoing text may cost them money
- Texts may be limited in character count. For example, a text message over 160 characters may be split into two messages.
- If, after making contact with a patient or partner, you would like to text to confirm an appointment or meeting time, it is important to obtain the person's permission.

4.5.4 Mobile applications (apps)

Sex-seeking, mobile apps come with a unique set of issues that can make notifying a partner challenging. Mobile apps are developed to increase the speed and efficiency of meeting potential partners through the use of the global positioning system (GPS) functionality of many mobile phones. By using GPS, mobile apps are able to locate users in space and provide that information to other users who are within a designated radius. What potential partners of a mobile app user will see depends on where they are physically located at the specific moment they are using the app. When a person closes the app or is outside the designated radius, their profile is often not seen. This geographic specificity creates challenges for PN.

4.5.5 Current challenges

DIS face a number of challenges when attempting to reach a partner for whom only mobile app information is known. Presently, we know of no mobile apps that have officially sanctioned the use of their apps for partner services purposes. The few programs who are attempting to use mobile apps for partner services have done so without expressed permission and many of these program profiles have been blocked by the managers of the app. Additionally, few DIS have access to mobile applications either for information gathering or for partner notification purposes. A recent assessment of STD programs and IPS activities indicated that 71% of individuals responding reported not being able to use mobile apps for PN, and 61% were not able to use mobile apps for information gathering. Lack of access can be a result of local policies, a lack of training and/or not having access to the necessary equipment (smart phone). Even with access, however, reaching an identified partner can be challenging because of the app's design and because of GPS functionality. Many of the mobile apps do not require unique profile names. As a result, there may be multiple profiles with the same profile name (e.g. James), making it difficult to ascertain if you are reaching the intended person. Additionally, many of the apps do not have a search function, so even in the event of a unique profile name, there may not be a way to search the entire mobile app for that user. Lastly, GPS functionality creates an additional barrier to

finding a particular person, since that person has to be both actively using the app and be within the required radius in order for his or her profile to appear on the app.

To overcome some of these challenges, some programs have focused on working with the OP to access and gather information using the OP's mobile app profile. DIS can ask the OP to log onto the mobile app during the interview and look in certain sections of the app for pertinent information. For example, most sex-seeking mobile apps contain certain functions, such as an internal messaging system and a way of "favoriting" people that is, marking them so that they can be easily retrieved. The OP can look at his internal messages and his favorites list to help name, identify, and reach partners. In the event of a unique profile name, the search function can be used, if available. Some DIS will search for a specific username in the physical vicinity where the sexual contact between the OP and the partner was made.

While it is not necessary for the DIS to look at an OP's mobile phone and/or mobile app profiles, doing so can be extremely helpful when gathering and verifying partner information.

4.5.6 Tips for gathering information on mobile app profiles

Similar to going onto a sex-seeking website with a patient, accessing a patient's mobile app profile during an interview can help to confirm the spelling of profile names, provide physical descriptions and pictures, and obtain information forgotten by the patient. Asking the patient to check sent folders, trash folders, and "favorites" can yield additional locating information such as cell phone numbers, physical addresses, and profile names of additional sex partners. It is important to remember that a mobile app profile is a marketing tool to attract sex partners and may contain fantasy or be written in a specific way. Allowing someone else to view a sex-seeking profile can make the patient feel vulnerable and subject to judgment. It is important to practice respect and emphasize confidentiality when a patient provides DIS access to their profiles. If a patient is unwilling to access their mobile app profiles in the presence of the DIS, DIS should encourage the patient to email or call with a list of partners and relevant partner information. It is important to emphasize confidentiality and the need to be timely in providing the information.

5. DOCUMENTATION, DATA COLLECTION AND EVALUATION

How information is documented influences what data is collected, which will determine exactly what pieces of a program can be monitored, evaluated, and improved upon. Conversely, the activities a program evaluates will determine what data needs to be collected and how it will be documented. Developing documentation, data collection, and evaluation plans in concert helps to ensure that the right information is collected in order to monitor and evaluate an IPS program’s progress, quality, and effectiveness, and identify possible improvements to the program. Program activities that are not documented or evaluated present programmatic blind spots that are often undetected and unaddressed.

Currently, there is not a standardized way to document and evaluate IPS efforts. Programs use different data management systems and the information they collect varies widely. Below is an example of an IPS documentation form. See [Appendix F](#) for additional samples of documentation logs and [Appendix G](#) for examples of documentation procedures.

Sample Log Sheet									
INTERNET PARTNER NOTIFICATION LOG SHEET									
Partner #	Email Date	Website Name	Partner’s Email	Email Script #	AM Logon Time	PM Logon Time	Notes/Outcomes of Activity	Disease Verification (3rd Email)	Closure Code

Initiation Date: _____ OP Id # and Disease: _____

5.1 DATA SECURITY AND CONFIDENTIALITY

Standards for the collection, sharing, and security of HIV, viral hepatitis, STD, and TB data can be found in the National Center for HIV, viral Hepatitis, STD and TB (NCHHSTP) Data Security and Confidentiality Guidelines. <http://www.cdc.gov/nchhstp/programintegration/docs/pcsidatasecurityguidelines.pdf>

These guidelines require that all newly hired staff sign confidentiality agreements before being given access to identifiable information and require annual renewal of that agreement.³⁹ Examples of confidentiality agreements can be found in [Appendix H](#).

Because screen names, email addresses, and telephone numbers are considered to be personal identifying information (2 C.F.R. § 200.79), and are to be held to the same levels of confidentiality as a patient's first name and surname, programs offering IPS typically require DIS to sign additional agreements regarding the specific use of technology. For example, programs create policies describing the acceptable use of technology for PS, including what websites, apps, and social networking sites may be used for PS, what information can be shared or discussed over these mediums, expected professional and behavioral standards, and consequences for violations of the policy. These policies may also indicate whether staff may conduct IPS from personal computers and devices and other structural limitations. For an example of an acceptable use agreement, see below and [Appendix I](#).

Example of Acceptable Use for Accessing Restricted Websites

Example- Maryland Department of Health and Mental Hygiene

Agreement for Accessing Restricted Websites

Purpose

Staff members that perform Internet Partner Services (IPS) are often required to access websites that are restricted and may contain adult oriented material during the course of their normal job duties. This agreement has been developed to establish clear expectations when restricted sites are to be accessed while performing IPS, and the consequences for acting outside of these expectations. All staff performing IPS must sign this agreement prior to being granted access to restricted websites

Agreement

1. I agree to access restricted websites for official business only.
2. I understand all passwords are confidential.
3. I understand I must not disclose passwords to anyone other than an authorized individual, nor may I make any password accessible to persons other than my immediate supervisor, or an equally authorized co-worker.
4. I understand passwords are for official business only and I will not use website passwords, profiles, pages, avatars, email accounts, or other technology for any personal endeavors.
5. I understand I am not to use my personal home computer for any endeavors related to official department business.
6. I understand that my use of department equipment such as a computer or a cell phone will be monitored.
7. I understand I must document my Internet activities, dates, times, and sites visited on the *Internet-Based Partner Services Website Log Sheet*.
8. I understand I am to print out all correspondence and keep a copy in a place designated by my supervisor.
9. I understand all correspondence must conform to existing policies and procedures regarding Internet-Based Partner Services.
10. I understand I will be subject to disciplinary action should I engage in any activities on restricted websites outside the boundaries of my job requirements.

I have read, understand, and agree to comply with this agreement.

Employee Name

Date

Some programs may require a non-networked computer, one with Internet access that is separate from the internal network, in order to protect servers from viruses or unauthorized intrusions, and may alleviate IT networking concerns about security breaches.

5.2 EVALUATION

5.2.1 Logic Models

Logic models are an effective way to describe the inputs, outputs, and desired outcomes of IPS and may help in developing evaluation plans.

Example Logic Model: 2014 STD-AAPPS Logic Model
Assurance: Partner services and linkage to care

<u>Activities</u>	<u>Outputs</u>	<u>Key outcomes</u>
<ol style="list-style-type: none"> 1. Increase the provision of targeted and effective health department Disease Intervention Specialists partner services for: <ol style="list-style-type: none"> a. Primary and secondary syphilis cases b. HIV co-infected GC and syphilis cases c. GC cases with possible GC treatment failure or suspected/probable cephalosporin-resistant GC 2. Link partners who have not been diagnosed previously with HIV who test positive for HIV to care 3. Within state law, increase the provision of EPT for CT and GC according to CDC guidelines 4. Increase the provision of effective partner services through social media websites and other digital or communication technologies (e.g., IPS) 5. Link newly identified HIV-infected individuals in STD clinics to HIV care 6. Link uninsured or uninsured partners to safety net services 	<p>Partner services</p> <ul style="list-style-type: none"> • #, timeliness, & quality of PS provided (to OP and partners), including counseling/education • Formalization & use of a PS triage/prioritization plan • IPS utilization • # EPT distributed, by provider/mode • % of eligible who were offered; who got <p>Linkage</p> <ul style="list-style-type: none"> • #/% linkages made • Linkage protocols in place, provider connections maintained/developed 	<p>Partner services</p> <p>Short-term</p> <ul style="list-style-type: none"> • Identification of new cases/infections of HIV and others STDs • Reduction in sexual risk behaviors of OP and partners • Decreases in reinfection of OP and partners <p>Long-term</p> <ul style="list-style-type: none"> • Decreased morbidity/mortality related to STD reduction (e.g., infant mortality due to CS, PID) • Decreased incidence, prevalence, cost <p>Linkage activities</p> <p>Short-term</p> <ul style="list-style-type: none"> • Increases in people receive care for HIV • Increases in people receiving care for other health issue and prevention care (eg., PreP & diabetes screening) • Increases in people receiving needed social services <p>Long-term</p> <ul style="list-style-type: none"> • Reduced morbidity, mortality, and costs • Reduced HIV transmission • Increases in quality of life, improved social determinants of health

An example of an IPS logic model and a blank logic model for your use can also be found in [Appendix J](#).

Once the logic model is complete, programs can consider whether to conduct a process or an outcome evaluation, or both.

Examples of possible evaluation questions and associated indicators

Both process and outcomes evaluations can provide valuable insight into the effectiveness of a program. Process evaluations can assess whether IPS activities have been implemented as intended. For example, process measures can capture whether patients are being asked about technology-based, sex-seeking, or if attempts have been made by DIS to contact online or mobile-based partners. Outcome evaluations determine the effects of the intervention on the targeted population and may include numbers of partners notified, tested, infected, and treated.

The following is a sample of PS and IPS-specific process and outcome evaluation questions and possible indicators a program may choose to consider.

iPartner is defined as any partner met via the Internet or other digital technology (e.g. mobile app). Sometimes the only means of contacting an iPartner is through these digital venues.

5.3 EXAMPLES OF PROCESS & OUTCOME EVALUATION QUESTIONS AND ASSOCIATED INDICATORS

Process Evaluation Questions	Indicator/Measure
How productive are interviews in terms of eliciting iPartners for field investigation?	Total number of interviews
	Total number of partners, regardless of locating info
	Number of patients asked about iPartners
	Number of iPartners for which some contact information was obtained (e.g. profile name, email address, phone number)
	Number of iPartners initiated for field investigation
Outcome Evaluation Question examples	Indicator/Measure
How productive are field investigations of iPartners in terms of notification of exposure?	Number of iPartners sent notification ¹ of their possible exposure
	Number of iPartners contacted ² about their possible exposure
	Number of iPartners for whom traditional contacting information is obtained (telephone number or physical address)

	Number of iPartners notified ³ of their possible exposure
How productive are field investigations of iPartners in terms of testing/examination?	Number of iPartners previously diagnosed with HIV
	Number of iPartners tested/examined (STD or HIV)
How productive are field investigations of iPartners in terms of identifying new infections?	Number of iPartners preventively treated for STD
	Number of iPartners infected, brought to treatment, for STD
	Number of iPartners newly-diagnosed with HIV
How effective are efforts to link newly diagnosed HIV + and previously HIV + partners to HIV care?	Number of HIV+ partners linked to HIV care (includes newly diagnosed partners and previously positive partners who have fallen out of care)

¹ – The term notification refers to a message being sent to an iPartner by email, text message via a social/sexual networking site, or similar format. It does not imply that any response was received back to the DIS from the iPartner.

² – Contact refers to a message that has been sent to an iPartner and for which there is some indicator that the iPartner received and read the message, for example, the delivery of a “read receipt” back to the DIS or direct contact by the iPartner.

³ – Notify refers to a face to face or telephone conversation between the DIS and an iPartner notifying the iPartner of their possible exposure.

Some of the above questions can be further analyzed for more nuanced detail that may reveal useful insight. For example, partner notification methods can be compared to determine the most effective means of reaching partners, i.e., a field visit versus a telephone call versus an email versus a text message.

Measures can be monitored over time to track the status or performance of IPS activities.

As with any evaluation effort, the findings are most useful when used to inform, modify or further develop program planning and activities and are an integral part of the quality improvement process.

For example, evaluation results can be used to

- Understand the effectiveness of IPS components (e.g., notification via email versus social/sexual networking site);
- Identify technical assistance and training needs (e.g., cultural competency training);

- Allocate program resources (e.g., more DIS allowed to conduct IPS); or
- Identify gaps that could be addressed by increased resources (staff, equipment, funding)
- Identify virtual communities in need of additional services.

5.4 SUPPORTING RESOURCES FOR PROGRAM EVALUATION

There are online resources that programs may find useful related to program evaluation. These resources are comprehensive and serve as a good reference for evaluating any STD/HIV intervention or activity, including Partner Services (PS).

- Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide, <http://www.cdc.gov/eval/guide/index.htm>
- Practical Use of Program Evaluation for STD Programs, <http://www.cdc.gov/std/program/pupestd.htm>
- Partner Services Evaluation Field Guide, <https://www.effectiveinterventions.org/en/HighImpactPrevention/PublicHealthStrategies/PartnerServices.aspx>

6. IPS STAFFING AND SUPERVISION

6.1 IPS STAFFING

Historically, there are multiple ways in which IPS programs have been staffed:

- All DIS conduct IPS
- A limited number of select DIS are assigned to conduct IPN in order to more adequately manage the work and assure quality
- Designation of a specific DIS to act as the point person for all IPS activities to ensure consistency of services by a highly skilled individual
- Contract with a university or CBO to conduct some or all of IPS

No staffing model has proven to be more effective than another. Rather, each model has been successful in different jurisdictions. One published study has compared IPS staffing models.³¹ The North Carolina Department of Health found that the centralization of IPS activities, compared to all DIS conducting IPS, resulted in increased notifications as well as a higher yield of new HIV and syphilis diagnoses.

Regardless of the model used, anecdotally programs have found that when interviewing patients, those DIS who are familiar with popular websites, mobile apps and other online meeting venues are able to gather more information about a patient's sex partners and sex-seeking activities.

Whether all DIS conduct IPS or only one does, it is helpful during partner service interviews when all DIS are familiar with popular websites, mobile apps, and other online meeting venues.

6.2 IPS SUPERVISION

As with all partner services activities, effective supervision can reduce the likelihood of error, demonstrate the program's commitment to quality assurance and improvement, reduce the risk of misusing the Internet and other technologies for non-work related activities, and build the skills and competencies of staff conducting the intervention.

Supervisors typically maintain a list of all IPS-related passwords and screen or profile names used or referred to by the patients. Additionally, they have access to all exchanges made between DIS and patients, including interview records, field records, IPS logs, and any other documentation, electronic or written, in order to evaluate staff activities, provide feedback, and assess quality assurance.

6.3 TRAINING

For IPS to be successful in meeting its program goals, STD/HIV programs will need to provide supervisors and staff with training specific to the use of technology for PS. See [Appendix K](#) for a list of suggested

trainings. Ongoing support and training for IPS staff are important, as technology is constantly changing. Depending on the training topic, it is often helpful to conduct a pre-training assessment to determine staff's knowledge, attitude, skills, and beliefs about IPS. New IPS staff may also find it useful to "shadow" experienced DIS, particularly when exploring websites frequented by target populations. This helps new DIS gain familiarity with how these sites work and to understand the sites from a public health perspective.

As with other partner service elements, other key program staff are encouraged to attend trainings on IPS, as needed. For example, it may be beneficial for administrative staff, such as receptionists at STD clinics, to be aware that some patients may use their profile names when coming to a clinic or may only be known to the DIS by a profile name. Understanding IPS can help all staff provide the best and most appropriate care to patients. Another important part of training include peer-to-peer sharing. The National Internet Partner Services (NIPS) Workgroup hosts quarterly calls open to DIS, managers and others interested in hearing more. These calls provide peer to peer support and information sharing on the use of technology for partner services through case studies, presentations, overviews of specific websites and new social technology tools and discussions. See below or [Appendix L](#) for information on how to join these calls.

National Internet Partner Services (NIPS) workgroup

To subscribe to the NIPS List-serve:

Please send an email from the account you wish to use, to List@cdc.gov

Include the following information in the body of the email using this format:
"SUBSCRIBE [listname] [your firstname] [your last name]":

Example: SUBSCRIBE NATIONAL-INTERNET-PARTNER-SVC frank strona

For more information on the NIPS calls, TA or questions, contact Rachel Kachur (rlk4@cdc.gov; 404-639-2387) or Frank Strona (fhs3@cdc.gov; 415-355-2016)

7. SUMMARY

Technology and the ways people use technology to communicate, learn, and interact with one another is constantly changing. When we first began to see the impact of online sex-seeking on STD and HIV transmission, chat rooms were the main online venue. During those days, desktop computers and dial-up internet service acted as natural constraints to instant access to online sexual and social networking. Today, the constant, lightning speed access to the Internet through tablets, hand-held computers, and smart mobile devices allow users, with a touch of a finger, to find and meet a willing sex partner in a matter of minutes. As each generation of equipment evolves for consumer use, we can expect to see cheaper smart devices, better mobile technology, and even faster Internet access, as well as changes in the way people use them as part of day-to-day living.

Internet Partner Services (IPS) provides a unique set of tools that can facilitate the contact of potentially infected individuals. Currently, IPS is most valuable in contacting individuals that may otherwise be unreachable through traditional partner services. By the time this document is distributed, some of the information contained within will be dated or obsolete as the world of technology changes. Some of the information may become irrelevant and new and emerging trends and technology may be missing. We encourage programs to learn about this constantly changing landscape and to think of how their programs can adapt to, and incorporate, these technological changes into their partner service activities.

The need for direction in regards to IPS has been well established; both the Division of STD Prevention and the Division of HIV/AIDS Prevention at the Centers for Disease Control and Prevention (CDC) encourage use of the Internet for STD/HIV prevention, including IPS.

Overall, technology, and the environment surrounding it, will continue to change. IPS as a tool must adapt to these changes. This may require new training of staff, use of surveys or interviews to assess markets and communities, pilot testing of new strategies, and other programmatic changes. It may require state and local public health entities and business to revise or develop new social policies, and most certainly will lead to more collaboration between online businesses, researchers, program planners, community members, and other stakeholders.

To ensure that partner notification is effective in its mission to reduce STD and HIV transmission, public health programs are encouraged to employ new technologies as they are adopted by the general public. Integrating documentation, program evaluation, process measures, outcome measures, and other forms of data collection and program review specific to IPS remain critical to the long-term success of PS.

This toolkit has attempted to address concerns and provide suggestions on areas such as confidentiality, ethics, computer security, staffing, training, and supervision. It is understood that some significant barriers to the use of IPS in some jurisdictions remain, which make IPS a unique challenge.

This toolkit sets the foundation for effective and productive IPS as a part of overall strategy to reduce STD rates and improve health outcomes.

8. GLOSSARY OF ACRONYMS

AKA	also known as
CBOs	community based organizations
CDC	Centers for Disease Control and Prevention
DIS	disease intervention specialist
FAQ/A	frequently asked questions/answers
HIPAA	Health Insurance Portability and Accountability Act
IM	instant message or instant messaging
IT	information technology
IPN	Internet partner notification
IPS	Internet partner services
ISP	Internet service providers
MSM	men who have sex with men
MMWR	Morbidity & Mortality Weekly Report (CDC)
NGOs	nongovernmental organizations
NCSD	National Coalition of STD Directors
OOJ	out of jurisdiction
OP	original patient
OR	odds ratio
PN	partner notification
PCRS	partner counseling and referral services
PS	partner services
SNS	social networking sites
STD*MIS	STD data management information system

9. TABLES

9.1 NATIONAL PARTNER SERVICES GUIDELINES TABLE 1

Requirements for Partner Notification Programs	Sources
<p>Goals of Partner Services.</p> <p>Principles of Partner Services. “The following principles serve as the foundation for providing partner services to persons with HIV infection or other STDs and their partners”</p> <p>Data security. “Partner services programs should ensure that clearly defined, written protocols and procedures that address confidentiality and data security are in place to address incoming and outgoing requests for intrastate and interstate transmission of information.”</p> <p>Duty to Warn. “Certain states have laws requiring practitioners (directly or with the assistance of public health authorities) to warn persons they know to be at risk for infection with a communicable disease, an STD, or HIV by their patients. Many other states have laws permitting but not requiring practitioners to warn persons that they are at risk (i.e., privilege to warn).”</p> <p>Legal Authority. “States hold the legal authority for the notification and referral of partners of persons with HIV infection and other types of STDs. Public health agencies responsible for partner services should conduct a thorough review of all laws relevant to their provision of these services.”</p> <p>Staffing. “Staff development and support begins with a clear description of staff roles and responsibilities, as well as of the knowledge and skills required for the job. All staff members conducting partner services activities need in-depth training on partner services goals and principles,</p>	<p>2008 MMWR, Recommendations for Partner Services Programs for HIV Infection, Syphilis, Gonorrhea, and Chlamydial Infection http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5709a1.htm</p> <p>State Statutes Explicitly Related to Sexually Transmitted Diseases in the United States, 2013 http://www.cdc.gov/std/program/final-std-statutesall-states-5june-2014.pdf</p> <p>Communicable Disease Intervention Protocol Map http://lawatlas.org/query?data-set=communicable-disease-intervention-protocol</p>

<p>methods of partner services, and any specific concerns related to specific infections.”</p> <p>Supervision. “Program staffing infrastructure should include enough staff members who have specific training and expertise in technical supervision of partner services activities to supervise DIS. Quality improvement and review of performance of staff members should be made clear priorities for supervisors.”</p> <p>Training. “Programs should develop and implement comprehensive training plans for partner services staff members at all levels, including program managers and supervisors.”</p>	
<p>Confidentiality. “Confidentiality refers to keeping information obtained from or about index patients, partners, social contacts, and associates in confidence; information is not divulged to others or obtained or maintained in a way that makes it accessible to others.”</p>	<p>2008 MMWR, Recommendations for Partner Services Programs for HIV Infection, Syphilis, Gonorrhea, and Chlamydial Infection</p> <p>http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5709a1.htm;</p> <p>CDC Data confidentiality and security guidelines 2014</p>
<p>HIPAA Privacy Rule. “Balancing the protection of individual health information with the need to protect public health, the Privacy Rule expressly permits disclosures without individual authorization to public health authorities authorized by law to collect or receive the information for the purpose of preventing or controlling disease, injury, or disability, including but not limited to public health surveillance, investigation, and intervention.”</p>	<p>45 CFR § 160.102;</p> <p>MMWR 2003, HIPAA Privacy Rule and Public Health</p> <p>http://www.cdc.gov/mmwr/preview/mmwrhtml/m2e411a1.htm</p>

9.2 TECHNICAL ASSISTANCE (TA) FOR IPS TABLE 2

Technical Assistance Provider	Contact information
<p>CDC’s Division of STD Prevention, IPS Working Group. Members of the IPS Working Group have extensive knowledge and experience working with health departments on developing, implementing and evaluating IPS programs. They can provide TA and trainings. Additionally, they facilitate quarterly conference call discussions with DIS staff across the nation about IPS related topics.</p>	<p>Contact Frank Strona (fhs3@cdc.gov) or Rachel Kachur (rlk4@cdc.gov) for more information.</p>
<p>CDC’s Division of HIV Prevention, Capacity Building Branch. Organizations and health departments that receive direct funding from CDC may request TA through the web-based Capacity Building Assistance Request Information System (CRIS).</p> <p>Organizations not funded directly by the CDC can ask the health departments in their jurisdictions to submit a TA request on their behalf.</p>	<p>Capacity Building Assistance Request Information System (CRIS) - https://wwwn.cdc.gov/Cris2009/pages/main/e1.aspx.</p> <p>Health department listings - http://www.cdc.gov/hiv/dhap/cbb/crisUsers.html.</p>
<p>The National Network of STD/HIV Prevention Training Centers (NNPTC) offers courses related to IPS.</p>	<p>http://nnptc.org/partner-services-ptcs/</p>

10. APPENDICES

10.1 APPENDIX A – IPS PROGRAM CHECKLIST EXAMPLE

Shared by Los Angeles County STD

(Some steps may vary slightly based on your data management system):

Step 1. Partner Elicitation during OP Original Interview

- Elicit screennames & corresponding websites (e.g. Manhunt, Adam4Adam, Gay.com) and e-mails of sex partners. Exact spellings are necessary!!!
- Elicit physical descriptions of those internet partners

Step 2. Cutting field records for each Internet partner

- Create patient records for each Internet partner.
- Cut field records for each Internet partner, and assign it to the IPS coordinator. ***Field Records will only be cut if the OP is a confirmed case**

Step 3. Preparatory Work

- Confirm that OP Interview Record has the “# Internet Partners” >0.
- Confirm that P1 is not in the system (check First Name, Last Name, and AKA).
- Confirm that P1 has name recorded as “<<screenname>>@website” “Internet”. If not, make necessary changes.
- In the P1’s Field Record, under the Field Records page, indicate that the P1 is Internet Initiated with a “Yes, Manhunt” (or “Yes, email”) in the IPS field.

Step 4. Preparatory Work in the Website.

- Use the website search feature to locate the sexual partner you want to communicate with. It must be the exact same spelling as was provided by the OP.
- Once the profile is found, confirm that the demographic information provided by the OP matches the description in the profile. If there are considerable differences that cannot be reconciled, do not send an email.

Step 5. First Communication

- (As practice, send an email to yourself beforehand to see how the email will look—Adam4Adam has character limit and some font issues!)
- Locate the P1 profile
- Cut and past “Email 1” from IPS Protocol to the website. DO NOT CUT AND PASTE P1’S SCREENNAME!!!
- Replace “<<screenname>>” in the greeting with the P1’s screenname.
- Proofread email
- One final time, compare P1’s screenname in the email to that in the profile to that in the Field Record
- Send Email 1
- Note in the Field Record and the log sheet that email was sent

Step 6a. Written Response from P1

- Print a copy of the response and attach it to the P1's file
- Save an electronic copy of the response
- Send the appropriate follow-up-email (Email "POSITIVE RESPONSE" or Email "NEGATIVE RESPONSE" or Other email). Follow same procedures as in Step 3.
- Note in the Field Record and the log sheet that another email was sent
- If locating information is obtained, search (data management system) and/or make changes to the Field Record

Step 6b. Telephone Response from P1.

- Note the telephone number that appears in the Caller ID
- Have the P1 confirm identity by asking for screenname and website.
- Introduce yourself (according to your jurisdictions guidelines)
- Ask if they have had syphilis/HIV/co-infection in the past (If allowed by local laws) (You can say, "I can help you get through this quickly. If you tell me about your syphilis history, I can help determine what type of treatment, if any, is necessary. In addition, I can help set up an appointment or can communicate directly with your physician, and you don't have to be involved with me anymore.")
- Explain syphilis/HIV/co-infection exposure and natural history.
- Encourage other STD screening.
- Offer to assist the P1 in obtaining free services at either a public STD Clinic or CBO.
- Ask P1 for name, date of birth, phone number, and physician's contact information to follow up in a week. Offer to follow up with the physician instead of the P1.
- Note in the Field Record and the log sheet that another email was sent.
- If locating information is obtained, search your data management system and make changes to the field record.

Step 6c. No Response from P1

- Every morning and every evening, check the P1 profile for any account activity (i.e. P1 read email or logged onto account and did not read email). Make note in the Field Record and the log sheet.
- If there is some type of activity on the P1's account (i.e. a log-in, or a "read" email, or a deleted email, etc.), send Email 2 (or later, Email 3, as needed) 24 hours late. Follow the same procedures as in Step 3.
- Note in the Field Record and the log sheet that another email was sent
- If there is no activity on the P1 account after two weeks, "Unsend" the email (if the website offers this feature) and close the Field Record.
- Note in the Field Record and the log sheet that another email was sent

Step 7. Closing the P1

- Every day, check your sent email messages to determine the status of the email. Note if the email was "read" and/or deleted in the Field Record and the log sheet that another email was sent.

- On the seventh day without a response, close the P1 Field Record and enter information into your data management system.
- Record P1 Disposition
- Within P1 Field Record, under Events, within Internet-based Partner Notification, identify the appropriate Internet Disposition Code.
- Delete all communication with P1 (both sent and received) that exist within the dating website.
- Close OP case file.

10.2 APPENDIX B- ELICITING WEBSITE AND MOBILE APP INFORMATION

To Begin - Start by explaining why the Health Department needs to ask questions about one's sex partners and sex behaviors. Emphasize confidentiality and explain why it might be best to let the Health Department do the partner notification. Talk about the period of time that is relevant, showing a calendar of the period of time in question maybe helpful.

TIPS

- Assume all patients use the internet.
- Make no assumptions about the sexual behavior or the internet use of married/heterosexual clients.
- Capture all internet behaviors on the interview record
- It may be helpful to prompt the client by naming a few popular, sex seeking, websites and mobile apps. It may help jog their memory and will let the client know that you are familiar and comfortable with such sites.
- It may be bet to get the names of all partners first and then go back and gather details about each partner.

Sample Questions:

Prompt 1:

Many patients/clients/men use the following websites. Please tell me your profile name for the following sites: *Note – Because profile names can have slight but significant differences in spelling, have the patient spell out the profile name for you*

Facebook: _____

Twitter: _____

Manhunt: _____

Adam4Adam: _____

Grindr: _____

Scruff: _____

BlackGayChat: _____

BarebackRT: _____

Prompt 2:

What other websites or mobile apps are you a member of?

Name of website/app:

Profile name:

Name of website/app:

Profile name:

Name of website/app:

Profile name:

Name of website/app:

Profile name:

Prompt 3: Partner online information

When was the last time you had sex with someone you met online?

What website did you meet him/her on?

Where did you guys hook up after that? (What was the address?)

When was the last time you used the internet to meet a sex partner?

What sites did you use?

When was the last time you used that site?

When was the last time you used a mobile app to meet a sex partner?

Which apps did you use?

When was the last time you used that app?

Do you use certain sites/apps for finding certain types of partners?

What time of day do you log on?

Do you keep a list of your sexual partners? Maybe a "Buddy List" (Manhunt) or a "Friends List" (Adam4Adam) or an iTrick list?

Prompt 4: For named partners

On what site/app did you meet this partner?

What other websites have you seen him/her on? What were his/her screennames on those sites?

What was the profile name of this partner? (Ask patient to write it down. If patient can't remember, encourage OP to log on to the site/app right then to gather that information)

What is his/her name/nickname?

How did you contact him/her? (Try to get the OP to visit the website with you—ask to see his buddy list in order to obtain the exact spellings of the screennames.)

What is his/her telephone/mobile number? (Ask patient to write it down.)

What is his/her email address? (Ask patient to write it down.)

What days and times of day did you interact with this partner on the site/app? (This may help track down the partner for partner notification and service)

Where does this partner live?

What does this partner look like?

Sex

Race/ethnicity

Age

Height

Weight

Hair (color, length)

Where did you meet for sex?

What day and time of the day?

Did you favorite him?

Do you have a smart phone? Can we log in and find their screen names?

10.3 APPENDIX C – EXAMPLES OF INITIAL EMAIL ATTEMPTS

10.3.1 Example 1: New York City Department of Health and Mental Hygiene Bureau of STD Control

Dear <<screenname>>

***This email is intentionally vague in order to protect your privacy.**

I am contacting you about an urgent health matter. It is most important that you report to the _____ Health Center located at _____.

Please print a copy of this email and bring it with you as it can reduce your waiting time. If you are unable to bring a copy of the email please let the health center staff know that you were contacted by me and asked to visit the clinic. If you have any questions regarding this notice, please feel free to contact me at (212) 788-6619 Monday through Friday from 8:30 a.m. to 4:00p.m.

Services at the health center are free and confidential. If you prefer to consult a private physician please ask him or her to contact me for information on the health matter I am contacting you about.

If I am not available at the time of your call please leave a number and time when I can reach you. My voicemail is private, confidential, and password-protected.

This email is intentionally vague in order to protect your privacy. Please visit the health center or contact me by telephone for more information.

Sincerely,

DIS NAME

NYC Department of Health & Mental Hygiene

DIS EMAIL

10.3.2 Example 3: San Francisco Department of Public Health

Internet Contact Letter #1 (Email letter and Handle letter)

Hi/Hello:

My name is _____, I work for the San Francisco Department of Public Health. Please contact me as soon as possible; you may have been exposed to an infectious disease. You will need to be examined, even if you do not feel sick.

Please call me at 415-487-xxxx. If I am not at my desk, please leave me a message with your name, phone number and the best time to reach you on my confidential voicemail.

We offer confidential screening and treatment at no cost, at 356 7th Street (between Folsom and Harrison). To be seen more quickly, please bring this letter with you when you come in and/or ask for me by name. Our drop-in hours are listed below.

Sincerely,

Worker Name

Worker's Title

356 7th Street (between Folsom and Harrison)

Drop-In Hours: Monday/Wednesday/Friday (8:00am-4:00pm), Tuesday (1:00pm-6:00pm) and Thursday (1:00pm-4:00pm)

**** CONFIDENTIALITY NOTICE**** This letter and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use or distribution of the information included in this message and any attachments is prohibited. If you have received this communication in error, please notify the sender immediately and permanently delete or otherwise destroy the information.

10.4 APPENDIX D – EXAMPLES OF FOLLOW UP EMAILS FOR NON-RESPONSES

10.4.1 Example 1: North Carolina Department of Health and Human Services

To: SexKitten@sexsite.com

From: StarDIS@ncsddc.org

Subject: HEALTH DEPARTMENT MATTER

My name is John Investigator and I work with NCSD. I attempted to contact you on 01/01/04; I have some very important health information to share with you. This is a very urgent matter, and because of the confidential nature of this information, it is vital you contact me. Please call me at (555) 234-5678. I can be reached at this number from 8am to 5pm, Monday through Friday or you can contact me using my e-mail address StarDIS@ncsddc.org or my cell phone at (555) 255-5888. To assist you in confirming my identity, I have included my supervisor's name and phone number: Josefina Boss, Program Manager, (555) 234-5679. Please do not delay in contacting me.

John Investigator

Disease Intervention Specialist

NCSD

South Central District Office (555) 234-5678

Note: If no response after Day 4, the DIS should discuss the situation with their supervisor. Attempt to re-interview the original patient for additional locating information, and/or consider having the original patient attempt to notify the partner. The original patient can explain that a representative from the health department will be contacting him/her with important health-related information, plus provide the DIS name and office number.

10.4.2 Example 2: Tennessee Department of Health

To: <screen name/email address>

From: Name@tn.gov

Subject: (leave blank)

Hello <name, if known>, (do not use screen name)

A few days ago, I sent you an email, but I have not heard back from you.

My name is ____ and I work for the Tennessee Department of Health. I am contacting you because someone who was recently diagnosed with laboratory confirmed <gonorrhea, Chlamydia, syphilis> asked that you be notified of an exposure to this infection.

It is important that you call me at _____ so I can speak with you confidentially about the specific exposure and provide you with options for testing and treatment.

To confirm this email is authentic and legitimate, you can call my supervisor _____ at #####. [If using Manhunt to conduct notification include: *If you would like to confirm that this email is real though Manhunt, please call the Manhunt Health Liaison at 617-674-8945. If using Adam4Adam include: "If you would like to confirm that this email is real though Adam4Adam please contact support@adam4adam.com"]

Thank you for your prompt response.

DIS name

DIS title

Phone #

Email address

10.4.2 Example 3: San Francisco Department of Public Health

Internet Contact Letter #2 (Email letter and Handle letter)

Hi/Hello:

Email to Handle: I see you had a chance to read my previous email. It's still very important that I speak about a serious infectious disease. Due to confidentiality, I can't go into further details via email.

Please call me at 415-487-xxxx. If I am not at my desk, please leave me a message with your name, phone number and the best time to reach you on my confidential voicemail.

Email using an Email company: I sent you an email on __/__/__. It's still very important that I speak about a serious infectious disease. Due to confidentiality, I can't go into further details via email.

Please call me at 415-487-xxxx. If I am not at my desk, please leave me a message with your name, phone number and the best time to reach you on my confidential voicemail.

Sincerely,

Worker Name

Worker's Title

356 7th Street (between Folsom and Harrison)

Drop-In Hours: Monday/Wednesday/Friday (8:00am-4:00pm), Tuesday (1:00pm-6:00pm) and Thursday (1:00pm-4:00pm)

**** CONFIDENTIALITY NOTICE**** This email message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use or distribution of the information included in this message and any attachments is prohibited. If you have received this communication in error, please notify the sender immediately and permanently delete or otherwise destroy the information.

10.5 APPENDIX E – EXAMPLES OF TEXT MESSAGING POLICIES FOR PARTNER SERVICES

10.5.1 Example 1. Multnomah County, Oregon Texting Protocol

MULTNOMAH COUNTY OREGON
HEALTH DEPARTMENT CLINICAL STANDARDS
SECTION: Community Health Services

CHAPTER: General

ORIGINATED: 05/17/2012

TITLE: Using Google Voice for texting (SMS) clients for Partner Services

Applies to: Disease Intervention Specialists (DIS) staff in the STD Prevention Program

Purpose Statement

Text messaging (SMS) can be an effective method of contacting individuals that are difficult to reach and do not respond or answer phone calls.^{2,3} Text messaging is not a secure method of communication and text messages are subject to public records retention laws. Therefore, staff should limit the use of text messaging to those when clients do not respond to phone calls.

The purpose of sending a text message is to engage the individual in a voice call or face-to-face conversation or to inform a client of an appointment time or meeting place or missed appointment. Protected health information (PHI) must never be sent via text messaging. References:
<http://www.ncsddc.org/upload/wysiwyg/documents/IGE.pdf>

The texting guidelines are used to provide Disease Intervention Program partner services. Studies have shown that partner services are cost-effective and cost saving, and the many benefits extend to the people living with HIV or other STDs⁴, their partners and the larger community as well. Providing timely services is a core component of our program.

-
- ² Kachur R, Adelson S, Firenze K, et al. Reaching patients and their partners through mobile:text messaging for case management and partner notification [letter]. *Sex Transm Dis* 2011;38:149 –150.
 - ³ Mendez, Juan; Maher, Julie **Sexually Transmitted Diseases**. 39(3):238-239, March 2012.doi: 10.1097/OLQ.0b013e3182471b31

⁴ <http://www.cdc.gov/nchhstp/partners/Partner-Services.html>

Procedure for texting clients via Google Voice

- Confidentiality is of the utmost importance. Sending a text message carries the same risks as leaving a message on voicemail or an answering service. Because messages may be viewed by people other than the intended recipient, make sure the content of the text message is appropriate (see below).
- Caution must be taken to ensure that staff have the correct phone number and that the correct number is being used for texting.
- All text messages must be sent using Google Voice Text via the account and number that is assigned to the user.
- All text messages sent or received will be documented and stored by Multnomah County in accordance with record retention requirements.*
- Clients must be informed to never send PHI to Multnomah County via text messaging.
- Do not erase any text messages, the messages will be stored by Multnomah County in accordance with record retention requirements.*
- Text messaging is a rapid means of communication and timely response will be anticipated. Be prepared to respond immediately.
- If the individual responds with a text message, respond with another text message asking the individual to call you.
- Be aware of the tone of your text. It is extremely difficult to discern tone in text messages. Remain professional at all times.
- Text messages are limited to 160 characters (including spaces). If a message is over 160 characters, most cell phone carriers will split the oversized message into two messages.
- Be aware that some people do not have a text messaging plan as part of their cell phone service and they may be charged for each text message that is received.

- If text messaging is being used to contact an individual, texting should cease once contact is made with the individual or as soon as the case investigation is completed.
- If you are using text messaging to confirm an appointment time or meeting location or to inform the client of a missed appointment, you must first obtain the client's written consent (see Attachment) unless as part of a DIS case investigation.⁵
- Personal text messaging with clients is strictly prohibited.

Information you may include in a text message	Prohibited information in a text message
Your name	Protected Health Information
Your County Phone Number	Information that identifies you as a health care Provider or specialist
Statement that identifies that you are from Multnomah County	Client Referral information
Request for the client to call you	
Clients appointment time (no consent if for "partner services")	
Appointment location (no consent if for "partner services")	
Missed appt reminder ((no consent if for "partner services")	

Initiating Text Communication:

- Log on to Gmail account [XXX](#)
- Log onto Google voice with phone XXX

Examples of language to use when texting clients for partner services:

⁵

http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/ReportingGuidelines/Documents/hiv_aids.pdf

- I am Jane Doe with Multnomah County and I need to speak with you. Please call me as soon as possible at 503-988-xxxx.
- I am with Multnomah County and I have important information regarding your personal health. Please call me as soon as possible at 503-988-xxxx.
- I am with Multnomah County and I have information regarding an urgent health matter. Please call me at 503-988-xxxx.
- I have made numerous attempts to contact you. It is very important that we talk. Please call me at 503-988-xxxx.
- Your appointment with Jane Doe is at 3:00 p.m. today, call me if you have any question Juan Doe 503-988-xxxx
- Your appointment with Jane Doe is at 3:00 p.m. today at 92nd and Powell, call me if you have any question Juan Doe 503-988-xxxx
- You missed your appointment. Please call 503-988-xxxx to reschedule,

Responding to Text Messages

- If a client responds to your text message with another text message instead of calling, use an approved message to encourage the client to call you.
- Never respond to a text message from an individual that contains PHI. Instead, send a new text message to encourage the individual to call you.

Examples are:

- I am not able to give you specific information in a text message. Please call me at 503-988-3780.
- I can tell you more when you call. Please call me at 503-988-3780.
- This is urgent and needs your immediate attention. Please call me at 503-988-3780.
- The information I have for you is confidential. I can tell you more when you call. Please call me at 503-988-3780.

- When you are unsure how to respond to a text message, ask your supervisor or manager for guidance.
- Managers and supervisors are responsible for insuring that staff understand the proper use of text messaging.

*Documentation:

- Text messages sent to contact an individual must be documented in the client's/contact's record via the STD Database
- Text messages sent to remind a client of an appointment time or location must be documented in the client's record via the STD Database
- Text messages sent to inform a client that he/she missed an appointment must be documented in the client's record via the STD Database
- Text messages sent from a client with PHI must be documented in the client's record.
- Document all text attempts and results in STD Database.

10.5.2 Example 2. North Carolina Field Services Unit Text Messaging Policy for Partner Notification

Text messages may ONLY be used to set up appointments or request a return phone call. Texts may NEVER be used to provide any kind of health or partner information

The goal of text messaging by DIS is to enable the DIS to expedite contact with a client to schedule a time/date to meet. Text messaging is particularly applicable in situations where a client or partner is not responding to traditional means of follow-up e.g. phone calls and/or field visits.

Text messaging can be an effective method of contacting individuals that are difficult to reach or only have access to texting service, and is particularly applicable when an individual has not responded to phone calls, letters or field visits. However, text messaging is **not** a secure method of communication. Further, telecom providers are not required to protect the content of text messages and may make these records available to external parties such as law enforcement when requested even without a court order. Therefore, staff should ensure that no confidential information is ever transmitted via text message. The purpose of sending a text message is to engage the individual in a voice call. Identifiable health information **must never be sent via text messaging. (This is information that relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual; ... that identifies the individual; or With respect to which there is a reasonable basis to believe the information can be used to identify the individual.)**

Protocol for Field Services Staff

The text messaging feature on cell phones will only be used for partner notification activity. It is not to be used for intrastate communications between staff or personal business. **DIS must strictly adhere to the text messaging protocol at all times.**

Confidentiality is of the utmost importance. Sending a text message carries the same risks as leaving a voicemail on a home answering machine or a Public Health letter at a client's residence. Because messages may be viewed by people other than the intended recipient, make sure the content of the text message follows the approved text messaging guidance below. No protected health information will be permitted in text messages.

Conducting PN through text is applicable in situations where a client or partner has not responded to phone calls and/or field visit attempts. A text message should be sent in order to prompt the person to respond. Caution must be taken to ensure that the DIS has the correct number and that the correct number is being entered. Ideally the DIS will confirm that the contact number on file is a number that is connected to a mobile phone through internet tools

DIS Initials _____

such as 'reverse search', (i.e. www.reversemobile.com). It is important to note that information obtained through a reverse lookup may not be the most current information. It is possible for a cell phone subscriber to retain a cell phone number that has been assigned by one carrier when switching cellular providers. In this case the previous cellular provider may be inaccurately listed as the current provider.

- Text messages should be sent when you are in a space that offers privacy.
- Clients must be informed to never send protected health information (PHI) to the DIS via text messaging. If a client does send PHI via text messaging to the DIS, the message must immediately be transcribed and then immediately deleted from the phone or smart device. Copies of other text messages sent or received should be retained in the mobile device and/or email account during the investigation and deleted upon case closure.
- Text messages should be utilized after attempts to contact the client by phone have failed. DIS should then send the standard Public Health text to the client (see below) to encourage them to call back. If there is no response to the text message within 1 hour of sending, DIS should attempt a field visit for clients with a documented address.
- Text messages should be sent to clients, their partner(s), or members of their social network only during the course of a public health investigation and when texting when clients have failed to respond to phone calls, when locating information is unknown, or when the client and/or partner states that texting is the preferred method of communication.
- When conducting PN via text, messages must be sent from a work phone or a work computer; personal cell phones or computers should not be used to communicate with clients or their partner(s). All cell phones or smart devices used to send or receive text messages must be password protected. Confidentiality is of the utmost importance regardless of the tools used for communication
- As you are attempting to initiate contact, you may not send more than a total of three text messages as described below. The final message should indicate that it is your last attempt at contact.
- All messages should be as professional as possible and spelled correctly. Avoid abbreviations and acronyms. Remember that you are sending a message on behalf of the NC DHHS and all your communications should reflect professionalism. Do not send smiley faces, symbols, or use SMS or multimedia message service (MMS) to send photos or other media.
- Text messaging is a rapid means of communication and timely response should be anticipated. Be prepared to respond immediately.

- If the individual responds with a text message, you may respond with another text message asking the individual to call you.
- Be aware of the tone of your text as it is extremely difficult to discern tone in text messages. Remain professional at all times.
- For unsolicited messages: Respond to the incoming messages with a message such as: "Please avoid these types of messages. As I cannot respond to you by text. Please call me at _____. Thank you."
- Texting should not be used to conduct any interview or counseling session.
- All communication/interaction should be documented in detail on the appropriate forms and retained in the investigation case file.

Information You May Include in a Text Message	Prohibited Information in a Text Message
Your name	Identifiable health information
Your landline or cell phone number	Information that identifies you as a health care provider or specialist
Statement that identifies that you are from NC DHHS	Client referral information
Request for the client to call you	

Approved Text Message

1. Your first text message should identify who you are and/or where you work and provide a brief message and your contact phone number.

- This is *(insert DIS Name)* with the *North Carolina Department of Health and Human Services*. I need to speak with you regarding an urgent health matter. Please call me as soon as possible at *(insert DIS number)*.

2. If the person does not respond to your initial text within 24 hours a second message urging the person to call you may be sent and it should read:

- This is *(insert DIS Name)* again with the *North Carolina Department of Health and Human Services*. I need to talk to you regarding an urgent health matter, please call me at *(insert DIS number)*.

DIS Initials _____

3. If the person does not respond to either of your first two messages a final text may be sent, it should read:

- This is *(insert DIS Name)* again with the *North Carolina Department of Health and Human Services*. I have been trying to contact you regarding a urgent health matter. Please call me at *(insert DIS number)*. This will be my last attempt at contacting you.

Should the person you are texting respond with a text message requesting more information, your response should read:

- The information I have for you is confidential. I am not able to give you the information in a text message. Please call me at *(insert DIS number)*.

The use of text messaging to improve Partner Notification Services is a privilege that must be carefully implemented. Text messages sent from business cell phones will be closely monitored for content and appropriateness and phone/text records can and will be audited by management at will. Misuse or breaches to the text messaging policy may result in disciplinary action up to and including dismissal. Your signature below acknowledges your understanding of this policy

DIS Signature _____ *Date* _____

10.6 APPENDIX F - EXAMPLES OF DOCUMENTATION LOG

10.6.1 Example #1- Colorado Bureau of Public Health

INTERNET PARTNER NOTIFICATION LOG SHEET

Your Name:

DIS # & State:

Partner #	Email Date	Website Name	Partner's Email	Email Script #	AM Logon Time	PM Logon Time	Notes/ Outcome of Activity	Disease Verification (3rd Email)	Closure Code

Initiation Date:

OP Id # and Disease:

10.6.2 Example #-2 Arkansas Department of Health

INTERNET-BASED PARTNER NOTIFICATION LOG SHEET

Month: _____ Year: _____

Field Record #	Date Recd P1 to:	Screen Name/ Email Address	Website	Dis No.	Attempt And ii Outcome #1iii	Attempt and ii Outcom e #2iii	Attempt And ii Outcome #3iii	Dispo iv/ Date	SN DB	Notes

10.7 APPENDIX G - EXAMPLES OF DOCUMENTATION PROCEDURES

10.7.1 Example - Massachusetts

Documentation Requirements

- The DIS will document all Internet activity.
- DIS must document all work with the date, time and description of each interaction on the Internet PN Log Sheet.
- All e-mail documentation should be kept in a case file.
- Internet PN must be entered and kept up-to-date in STD*MIS (see below).

Entering Internet Screen names into STD*MIS

This section of the policy seeks to address sexual contacts of infected individuals who are known to the infected patient by their screen names or e-mail addresses only. This flexible approach is based on how much information is available about a partner and serves as a systematic way to maintain accurate records of not just names, addresses and phone numbers, but also screen names. In this way, we can perform searches for individuals by their screen names and/or e-mail addresses when no other information is available.

- Individuals who are only known by their screen name are entered into STD*MIS as: Internet, screen name (For example, Internet, Sexyperson.) Both the first and last names should be updated when more information becomes available.
- Screen names are entered into the Also Known As (AKA) section. AKAs should never be changed or deleted. New screen names must be added as needed. (It is important to note that individuals can be searched for in STD*MIS by their AKA only- no other information about first or last names is needed to perform a search.) If the individual is not currently in the STD*MIS system, we can add them and open a new Field Record.
- Screen names pertain to specific Internet sites. These sites (Manhunt, AIM, Yahoo, etc.) must be noted in the Notes section of the Field Record. Individuals may change their screen names frequently, so it is essential that the date of the last known use of the screen name be noted in the Notes section. (For example: MH "Sexyperson" 4/19/06, Yahoo "SexyP" 4/19/05, AIM "SexyPER" 4/19/04.)
- The way we currently manage missing locating information remains the same. For example, if we know a client's first name and address, this individual is entered into the system as "John UNK." Now, with this new system for entering names into STD*MIS, sexual contacts will be entered into the system as "Internet, screen name," or, if we know the client's first name, "John Internet."
- Case dispositions should be entered into STD*MIS with the following codes (STD*MIS does not allow numbers to be entered after letter codes; this can be noted in the case file):

Code	Description
A*	Preventative treatment (not infected - confirmation of examination and/or treatment)
C*	Infected, brought to treatment (infected - confirmation of examination and/or treatment)
L1**	Patient states examination and/or treatment (not infected - no provider confirmation)
L2**	Patient states examination and/or treatment (infected - no provider confirmation)
J**	Informed of disease exposure - no further contact with MPDH (located, received specific STD exposure info, no further contact with MDPH)
H1	E-mails read but never responded (located but refused to respond, did not receive specific STD disease information)
H	E-mail(s) not read (unable to locate)

* Infers direct contact with DIS

** Infers e-mail or phone communication without disclosure of identifying information

10.7.2 Example – Washington DC

Within 72 hours of the Original Interview, the investigating (Ix) DIS will record in the OP’s STD*MIS file that the OP had a “PARTNERS INTERNET” risk factor. Internet partners are recorded as contacts of the OP; if a partner is not listed in STD*MIS (after a search using the FIRST NAME, LAST NAME, and AKA fields), a patient record is created for him/her. The Ix DIS should then complete a Field Record for the partner with all information pertaining to the Internet partner (including physical descriptions, identical spelling of e-mail addresses, sex venues, etc.). The Ix DIS will then assign this partner to the IPS Coordinator (writing the IPS Coordinator’s Worker Number STD*MIS number in the Field Record).

For data entry, Ix DIS should follow this format:

Individuals who are only known by their screen name (internal e-mails) or e-mail address (external e-mails) are entered into STD*MIS as FIRST NAME: “<<SCREENNAME@WEBSITE or e-mail address>>”, LAST NAME: “INTERNET”. Both the first and last names should be updated when more information becomes available. The screen names will be entered followed by the website. Note: For long screen names or e-mail addresses, simply enter as much of the name that will fit into the space (20 characters).

10.7.2.1 Examples for Internal Emails:

Website	Screenname	STD*MIS Entry
Manhunt.net	SWEATYnDC	SWEATYNDC@MANHUNT.NET
Adam4Adam.com	SWEATYnDC	SWEATYNDC@ADAM4ADAM.COM
Manhunt.net	HOTnSWEATYnDC	HOTNSWEATYNDC@MANHUNT.COM
Adam4Adam.com	HOTnSWEATYnDC	HOTNSWEATYNDC @ADAM4ADAM.COM

10.7.2.2 Examples for External Emails:

Website	Screenname	STD*MIS Entry
Gay.com	SWEATYnDC	SWEATYNDC@GAY.COM
Yahoo.com	SWEATYnDC	SWEATYNDC@YAHOO.COM
Gay.com	HOTnSWEATYnDC	HOTNSWEATYNDC@GAY.COM
Yahoo.com	HOTnSWEATYnDC	HOTNSWEATYNDC@YAHOO.COM

In addition, screen names and e-mail addresses are entered into the AKA section. AKAs should never be changed or deleted. New screen names must be added to the AKA section as needed. (It is important to note that individuals can be searched for in STD*MIS by their AKA only—no other information about first or last names is needed to perform a search.) If the name of the Internet partner becomes known at a later date, it is important that the screen name is moved to the AKA section because it will allow for the individual to be searched in the future under his/her screen name.

Individuals may change their screen names frequently, so it is essential that the date of the last known use of the screen name be noted in the Notes section (e.g., "SWEATYnDC@MANHUNT 4/19/06").

The way we currently manage missing locating information remains the same. For example, if we know a client's first name and address, this individual is entered into the system as "JOHN UNK." Now, with this new system for entering names into STD*MIS, sexual contacts will be entered into the system as "<<SCREENNAME@WEBSITE>> INTERNET" (or "<<EMAIL ADDRESS>> INTERNET") or, if we know the client's first name, "<<FIRST NAME>> INTERNET."

For data entry, IPS DIS should follow this format:

Within the Field Record, under "EVENTS", the IPS DIS shall choose the last option: "INTERNET PARTNER NOTIFICATION". In the "INTERNET PARTNER NOTIFICATION" screen, there are a series of Y/N fields. The first field, "IPS", indicates whether the individual is an Internet partner. The remaining 13 fields, "IPS_L1a through IPS_L4" allow for further explication of the "L" disposition that is designated for an Internet partner (see Dispositions below).

Case dispositions should be entered into STD*MIS with the following codes (STD*MIS does not allow numbers to be entered after letter codes; this can be noted in the case file):

Code	Description
A	Preventative treatment
B	Refused preventive treatment
C	Infected, brought to treatment
D	Infected, not treated
E	Previously treated for this infection
F	Not infected
G	Insufficient information to begin investigation
H	Unable to locate
J	Located, refused examination
K	Out of Jurisdiction

- L Other*
- L1 Informed of specific STD exposure (2nd e-mail, phone call, in-person communication)
 - a. Informed of specific STD exposure, claims preventive treatment
 - b. Informed of specific STD exposure, refuses preventive treatment
 - c. Informed of specific STD exposure, claims to be infected and treated
 - d. Informed of specific STD exposure, claims to be infected and not treated
 - e. Informed of specific STD exposure, claims to be previously treated
 - f. Informed of specific STD exposure, claims to not be infected
 - g. Informed of specific STD exposure, no further contact
- L2 Informed of an STD exposure (first e-mail)
- L3 Not informed of STD exposure
- Refused—E-mails not read even though patient logs in
- Refused—Patient blocks IPS screen name
- Not known if e-mails are read
- Unable to locate (Patient has not logged in during Field Investigation period.)
- L4 Insufficient information to begin investigation (Screen name does not exist.)

*The L disposition will be used for Internet disposition codes, provided the Internet partner does not have any physical locating information (i.e., name and/or address). If physical locating information is acquired at any point throughout IPS, traditional disposition codes (A-K) shall be used.

10.8 APPENDIX H - EXAMPLES OF CONFIDENTIALITY AGREEMENTS

10.8.1 Example #1 – Howard Brown Health Center

PLEDGE OF CONFIDENTIALITY

It is the goal of Howard Brown Health Center (HBHC) to provide our clients (anyone seeking care or services with or through HBHC) with professional, competent and quality care and education in a respectful, affirming atmosphere. As an employee, consultant, auditor or volunteer of HBHC, you have a responsibility to maintain a sense of concern and professionalism while performing your duties. In the execution of this duty, you must be sensitive to the comfort, sensitivities and confidentiality of the client.

The comfort and confidentiality of our clients is of primary concern to HBHC. The professionalism of our staff is necessary to maintain the comfort and trust we have built through the years. Courts and health care professionals maintain that upholding patient confidentiality is an absolute necessity. Federal Courts guarantee absolute privacy regarding all STD medical records. Furthermore, sexual health histories may not be subpoenaed by any court. Breaches of confidentiality regarding the aforementioned data may be punished by dismissal. As an employee, consultant, auditor or volunteer of the HBHC, it is imperative that you follow all Federal, state and local confidentiality laws.

In addition to the legal confidentiality laws, as an employee, consultant, auditor or volunteer of HBHC, you must also abide by the following:

Some of us, in the context of our duties, advise, within the clinical setting, appropriate and inappropriate behavior as it pertains to physical and/or mental wellness. In the context of this document, clinical setting includes all areas and/or physical space in which you perform your assigned duties.

We do not, and can not, be “moral custodians”, nor do we have policing rights.

Do not discuss clients or client data with unauthorized persons.

Discuss clients or client data only to conduct legitimate business, and such discussions should take place only in a manner(s) and location(s), which affords absolute privacy.

Do not discuss clients or patients outside of HBHC for any reason.

Make no reference to a client visit to HBHC should you meet a client elsewhere.

Preserve the confidentiality of friends who are HBHC clients as you would any HBHC client.

Never acknowledge the presence or absence of clients to any caller.

Respect for clients is mandatory as a representative of HBHC.

Client confidentiality is respected and maintained by all staff and other members of the Howard Brown Health Center's workforce after concluding their working relationship with Howard Brown Health Center.

BREACH(ES) OF CONFIDENTIALITY WILL NOT BE TOLERATED AND IS GROUNDS FOR IMMEDIATE DISMISSAL.

We guarantee our clients absolute confidentiality of their records. Any client requesting a copy of their records must follow the HBHC Policy of Chart Access. No person shall be permitted to view client medical, mental health, or case management records, unless written documentation of permission by the client involved is provided.

Your signature below confirms that you have read, understand and accept to follow the Howard Brown Health Center's Pledge of Confidentiality.

Signature: _____

Name: _____

Date: _____

10.8.2 Example #2 – San Francisco Department of Health

CONFIDENTIALITY AGREEMENT USE OF DPH RECORDS AND INFORMATION SYSTEMS

Individuals with access to the records and information systems (Internet, e-mail, telephone, pager, fax machines, etc.) of the San Francisco Department of Public Health have a legal and an ethical responsibility to protect the confidentiality of medical, financial, and personnel information, and to use that information and those systems only in the performance of their jobs. The following rules apply to information that you receive or send from any source, including computer, paper, telephone, and facsimile.

Confidential information may not be accessed, discussed, or divulged in any form except as required in the performance of your duties. Sharing confidential medical information is allowed within DPH among medical professionals in order to provide medical care to a patient.

You may not use any DPH information system for any type of personal use. Use the following test: “Is my use of this information system enabling me to provide better service, or to perform my duties more effectively or less expensively?” If the answer is no, then your use of the information or system is unnecessary and/or inappropriate.

Be aware that most DPH information systems maintain records of what is viewed and/or sent by whom. You may be asked to justify why you viewed or released specific information.

You may be given a user ID and a password to enable you to view computerized information. Under no circumstances may you disclose your User ID or password other than to your supervisor or to IS staff. If you suspect someone else has knowledge of your password, you must immediately notify your supervisor and the divisional IS Manager.

The hardware, software, and data used in the DPH information systems are the property of DPH. All software installed on a DPH computer must be authorized in writing by IS and must be licensed to allow installation on a DPH computer. DPH has the right to review and remove personal or unlicensed software and data on any DPH computer.

If you, inadvertently or intentionally, misuse or improperly disclose your user ID or password, misuse or improperly disclose confidential information, use DPH information systems for personal reasons, or install personal or unlicensed software or data on a DPH computer, you may lose access to the computer system, be subject to disciplinary action up to and including termination, be reported to the appropriate licensing board, and/or be subject to civil or criminal liability.

I understand that I have no privacy right in the information in my DPH computer or the information that I access or send via my computer or other DPH equipment. I acknowledge that my use of DPH information systems and equipment may be monitored.

PRINT NAME

DIVISION

SIGNATURE

SSN

10.9 APPENDIX I – EXAMPLE OF ACCEPTABLE USE FOR ACCESSING RESTRICTED WEBSITES

10.9.1 Example- Maryland Department of Health and Mental Hygiene

Agreement for Accessing Restricted Websites

Purpose

Staff members that perform Internet Partner Services (IPS) are often required to access websites that are restricted and may contain adult oriented material during the course of their normal job duties. This agreement has been developed to establish clear expectations when restricted sites are to be accessed while performing IPS, and the consequences for acting outside of these expectations. All staff performing IPS must sign this agreement prior to being granted access to restricted websites

Agreement

1. I agree to access restricted websites for official business only.
2. I understand all passwords are confidential.
3. I understand I must not disclose passwords to anyone other than an authorized individual, nor may I make any password accessible to persons other than my immediate supervisor, or an equally authorized co-worker.
4. I understand passwords are for official business only and I will not use website passwords, profiles, pages, avatars, email accounts, or other technology for any personal endeavors.
5. I understand I am not to use my personal home computer for any endeavors related to official department business.
6. I understand that my use of department equipment such as a computer or a cell phone will be monitored.
7. I understand I must document my Internet activities, dates, times, and sites visited on the Internet-Based Partner Services Website Log Sheet.
8. I understand I am to print out all correspondence and keep a copy in a place designated by my supervisor.
9. I understand all correspondence must conform to existing policies and procedures regarding Internet-Based Partner Services.
10. I understand I will be subject to disciplinary action should I engage in any activities on restricted websites outside the boundaries of my job requirements.

I have read, understand, and agree to comply with this agreement.

Employee Name

Date

10.10 APPENDIX J – LOGIC MODELS

Goal/Situation:

Inputs

Activities

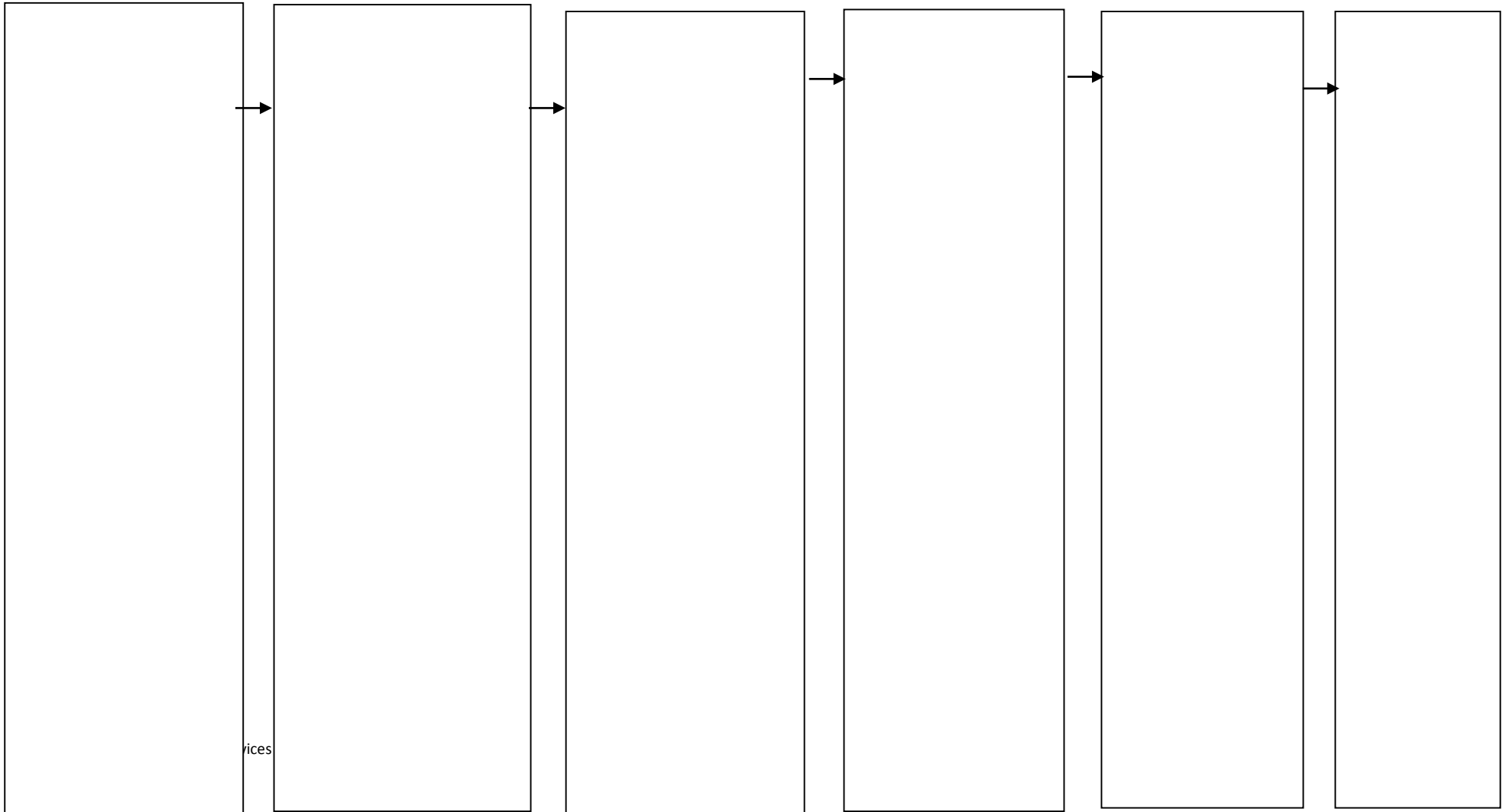
Outputs

----- Outcomes -----

Short

Intermediate

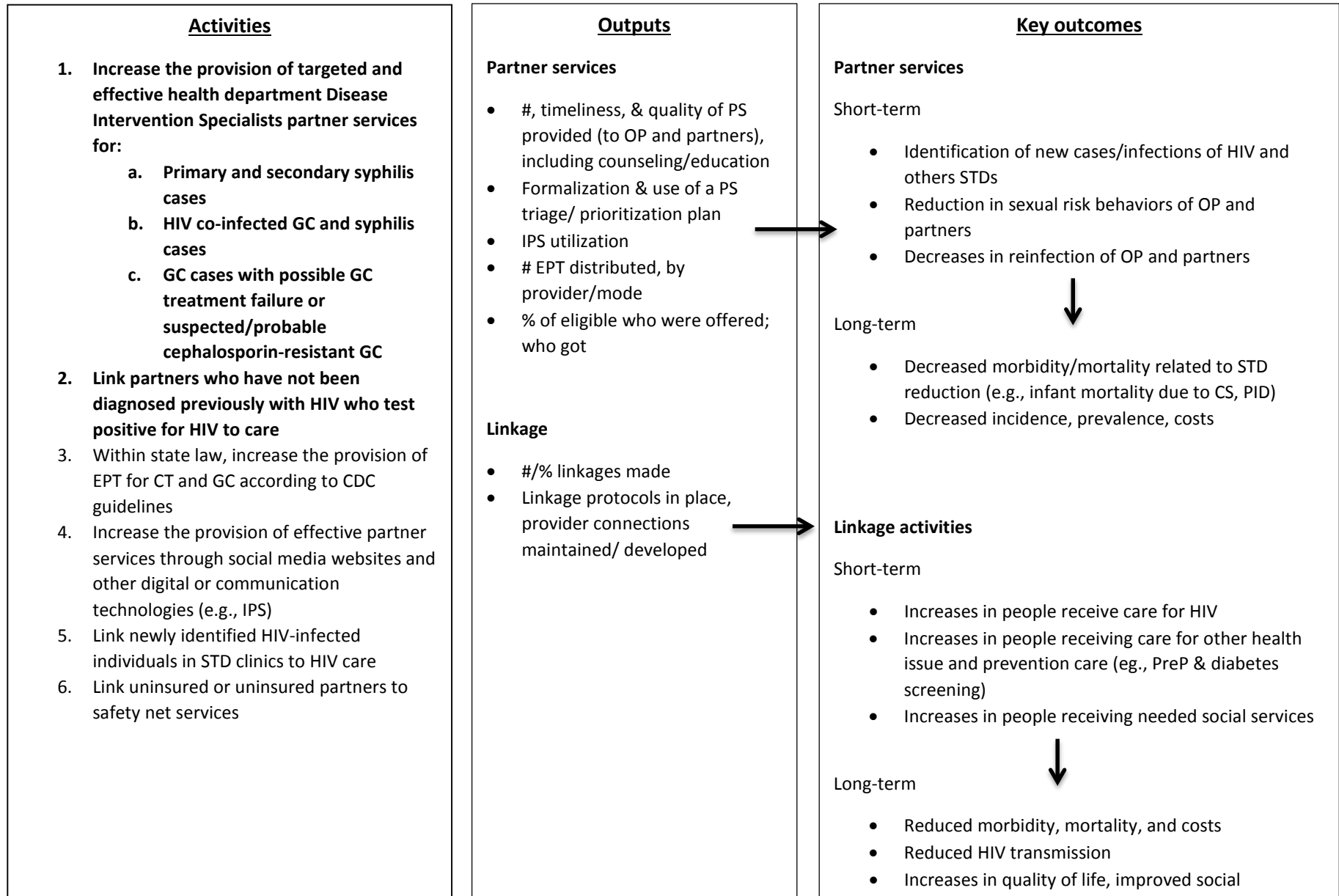
Long



ices

10.10.2 2014 STD-AAPPS Logic Model

Assurance: Partner Services and Linkage to care



10.11 APPENDIX K - LIST OF SUGGESTED TRAININGS

The following is a list of suggested trainings. This list is not exhaustive and trainings may vary by staff role. Please contact your CDC program consultant for assistance on finding trainings relevant to your program.

Some examples include:

- Appropriate and effective questions to use when attempting to elicit partner information for online partners
- Acceptable content and wording of IPS profiles
- Use of approved, standardized online correspondences and providing guidance for instances that require variation from the script
- Reviewing case scenarios and best practices from other programs or health jurisdictions that have successfully implemented IPS
- Data collection and entry
- Basics of the Internet: Internet service providers (ISP), websites, chat rooms, Instant Messaging (IM) services, mobile apps, texting, terminology, and iconography.
- Cultural competency including who, why, when, and how the Internet is used for sex-seeking, terminology, etiquette, and navigation
- Internet safety and the various levels of confidentiality associated with different methods of online communication
- Hands-on website experience.

10.12 APPENDIX L – NATIONAL INTERNET PARTNER SERVICES (NIPS) WORKGROUP

The National Internet Partner Services (NIPS) Workgroup hosts quarterly calls open to DIS, managers and others interested in hearing more. These calls provide peer to peer support and information sharing on the use of technology for partner services through case studies, presentations, overviews of specific websites and new social technology tools and discussions.

To subscribe to the NIPS List-serve:

Please send an email from the account you wish to use, to List@cdc.gov

Include the following information in the body of the email using this format: "SUBSCRIBE [listname] [your firstname] [your last name]":

Example: SUBSCRIBE NATIONAL-INTERNET-PARTNER-SVC frank strona

For more information on the NIPS calls, TA or questions, contact

Rachel Kachur (rlk4@cdc.gov; 404-639-2387) or

Frank Strona (fhs3@cdc.gov; 415-355-2016)

11. REFERENCES

1. National Coalition of STD Directors. 2010. National guidelines for Internet-based STD and HIV prevention: Accessing the power of the internet for public health. Washington, DC: National Coalition of STD Directors.
2. Centers for Disease Control and Prevention. 2008. Recommendations for partner services programs for HIV infection, Syphilis, Gonorrhea, and Chlamydial infection. *Morbidity and Mortality Weekly Report* 57, no RR-9:1-63.
3. Centers for Disease Control and Prevention. 2013. Improving Sexually Transmitted Disease Programs through Assessment, Assurance, Policy Development, and Prevention Strategies (STD AAPPS). Atlanta, Georgia: Centers for Disease Control and Prevention. http://www.cdc.gov/std/foa/aapps/PS14-1402-FOA-Amendment-I-Final_07-08-13.pdf
4. Douglas JM, Janssen R. 2005. Dear Colleague Letter. Atlanta, Georgia: Centers for Disease Control and Prevention. .
5. Walsh C. Dear Colleague Letter. 2010. Atlanta, Georgia: Centers for Disease Control and Prevention.
6. Perrin A, Duggan M. 2015. *Americans' Internet Access: 2000-2015*. Washington D.C.: Pew Research Center.
7. Pew Research Center. 2014. Cell phone and smartphone ownership demographics. Washington, D.C.: Pew Research Center.
8. Pew Research Center . 2014. Smartphone owners in 2014. Washington, D.C. : Pew Research Center.
9. McFarlane M, Bull SS, Rietmeijer CA. 2000. The Internet as a newly emerging risk environment for sexually transmitted diseases. *Journal of American Medical Association*. 284(4):443-446.
10. McFarlane M, Kachur R, Bull S, Rietmeijer C. 2002. Women, the Internet, and sexually transmitted infections. *Journal of women's health* . Jul-Aug 2004; 13(6):689-694.
11. Garofalo R, Herrick A, Mustanski BS, Donenberg GR. 2007. Tip of the Iceberg: young men who have sex with men, the Internet, and HIV risk. *American journal of public health*. Jun 97(6):1113-1117.
12. Horvath KJ, Rosser BR, Remafedi G. 2008 Sexual risk taking among young internet-using men who have sex with men. *American journal of public health*. 98(6):1059-1067.
13. Buhi ER, Cook RL, Marhefka SL, et al. 2012. Does the Internet represent a sexual health risk environment for young people? *Sexually transmitted diseases*. 39(1):55-58.
14. Holloway IW, Dunlap S, Del Pino HE, Hermanstynne K, Pulsipher C, Landovitz RJ. 2014. Online Social Networking, Sexual Risk and Protective Behaviors: Considerations for Clinicians and Researchers. *Current Addiction Reports*. 1(3):220-228.
15. Kachur R, Adelson S, Firenze K, Herrera M. 2011. Reaching patients and their partners through mobile: Text messaging for case management and partner notification. *Sexually transmitted diseases*. 38(2):149-150.
16. Landovitz RJ, Tseng CH, Weissman M, et al. 2013. Epidemiology, sexual risk behavior, and HIV prevention practices of men who have sex with men using GRINDR in Los

- Angeles, California. *Journal of urban health : bulletin of the New York Academy of Medicine*. 90(4):729-739.
17. Lehmilller JJ, Ioerger M. 2014. Social networking smartphone applications and sexual health outcomes among men who have sex with men. *PloS one*. 9(1):e86603.
 18. Grosskopf NA, LeVasseur MT, Glaser DB. 2014. Use of the Internet and mobile-based "apps" for sex-seeking among men who have sex with men in New York City. *American journal of men's health*. 8(6):510-520.
 19. Rice E, Holloway IW, Winetrobe H, et al. 2012. Sex risk among young men who have sex with men who use Grindr, a smartphone geosocial networking application. *Journal of AIDS & Clinical Research*. S4(005).
 20. Phillips G, 2nd, Magnus M, Kuo I, et al. 2014. Use of geosocial networking (GSN) mobile phone applications to find men for sex by men who have sex with men (MSM) in Washington, DC. *AIDS and behavior*. 18(9):1630-1637.
 21. Hunter P, Oyervides O, Grande KM, et al. 2014. Facebook-augmented partner notification in a cluster of syphilis cases in Milwaukee. *Public Health Reports*. 129(Supplement 1):43-49.
 22. Pennise M, Inscho R, Herpin K, et al. 2015. Using smartphone apps in STD interviews to find sexual partners. *Public health reports* 130(3):245-252.
 23. Klausner JD, Wolf W, Fischer-Ponce L, Zolt I, Katz MH. 2000. Tracing a syphilis outbreak through cyberspace. *Journal of American Medical Association*. 284(4):447-449.
 24. Centers for Disease Control and Prevention. 2003. Internet use and early syphilis infection among men who have sex with men - San Francisco, California, 1999-2003. *MMWR*, 52(50):1229-1232.
 25. Centers for Disease Control and Prevention. 2004. Using the internet for partner notification of sexually transmitted diseases - Los Angeles County, California, 2003. *MMWR*; 53(6):129-131.
 26. McFarlane M, Kachur R, Klausner JD, Roland E, Cohen M. 2005. Internet-based health promotion and disease control in the 8 cities: Successes, barriers, and future plans. *Sexually Transmitted Infection*; 32(10):s60-s64.
 27. Vest JR, Valadez AM, Hanner A, Lee JH, Harris PB. 2007. Using e-mail to notify pseudonymous e-mail sexual partners. *Sexually transmitted diseases*; 34(11):840-845.
 28. Ehlman DC, Jackson M, Saenz G, et al. 2010. Evaluation of an innovative internet-based partner notification program for early syphilis case management, Washington, DC, January 2007-June 2008. *Sexually Transmitted Diseases*; 37(8):478-485.
 29. Hunter P, Oyervides O, Grande KM, et al. 2014. Facebook-augmented partner notification in a cluster of syphilis cases in Milwaukee. *Public health reports*; 129 Suppl 1:43-49.
 30. Mendez J, Maher J. 2012. Evidence supporting the use of text messaging for partner services. *Sexually Transmitted Diseases*; 39(3):238-239.
 31. Hightow-Weidman L, Beagle S, Pike E, et al. 2014. "No one's at home and they won't pick up the phone": using the Internet and text messaging to enhance partner services in North Carolina. *Sexually transmitted diseases*; 41(2):143-148.
 32. Udeagu CC, Bocour A, Shah S, Ramos Y, Gutierrez R, Shepard CW. 2014. Bringing HIV partner services into the age of social media and mobile connectivity. *Sexually transmitted diseases*; 41(10):631-636.

33. Mimiaga MJ, Fair AD, Tetu AM, et al. 2008. Acceptability of an internet-based partner notification system for sexually transmitted infection exposure among men who have sex with men. *American journal of public health*; 98(6):1009-1011.
34. Centers for Disease Control and Prevention. Program Operations Guidelines for STD Prevention: Partner Services. Atlanta: Centers for Disease Control and Prevention. <http://www.cdc.gov/std/program/partners.pdf>
35. Blumberg SJ, Luke JV. 2015. *Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December 2014*. Atlanta, GA: Centers for Disease Control and Prevention.
36. Pew Research Center. Cell Phone Activities. Pew Research Center; 2013.
37. Beymer MR, Weiss RE, Bolan RK, et al. Sex on demand: geospatial networking phone apps and risk of sexually transmitted infections among a cross sectional sample of men who have sex with man in Los Angeles County. *Sexually Transmitted Infection*. 2014; Epub ahead of print.
38. Burrell ER, Pines HA, Robbie E, et al. 2012. Use of the location-based social networking application GRINDR as a recruitment tool in rectal microbicide development research. *AIDS and behavior*; 16(7):1816-1820.
39. Centers for Disease Control and Prevention. . 2011. Data Security and Confidentiality Guidelines for HIV, Viral Hepatitis, Sexually Transmitted Disease, and Tuberculosis Programs: Standards to Facilitate Sharing and Use of Surveillance Data for Public Health Action. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.