

Funded for special project: FY July 1, 2009-June 30, 2010

III. SPECIAL PROJECT PROPOSAL

This section presents proposals for one-time special project funding. JSI is submitting one overall proposal with two primary focus areas which address the evaluation and improvement of the effectiveness of the Region VIII screening activities. We believe this proposal has implications for regional and national decision-making.

Evaluating and Improving the Effectiveness of the Region VIII Infertility Prevention Project (IPP)

Overall Purpose and Background

Sexually Transmitted Diseases (STDs) remain one of the most challenging public health problems facing the United States. *Chlamydia trachomatis* (Ct) is the most common bacterial STD in the U.S. If left untreated, it can lead to serious consequences such as Pelvic Inflammatory Disease (PID), ectopic pregnancy and infertility.

The Centers for the Disease Control (CDC), in collaboration with the Office of Population Affairs (OPA) of the Department of Health and Human Services (HHS), supports the national Infertility Prevention Program (IPP) that funds chlamydia screening and treatment services for low-income, sexually active women attending family planning, STD, and other women's healthcare clinics.

The goals of the National Infertility Prevention Project are to: (1) implement effective prevention strategies designed to reduce the debilitating complications caused by *Chlamydia trachomatis* infections in the US through screening and treating women; and (2) create an interdisciplinary and collaborative STD prevention effort at the regional and state levels.

The proposed evaluation plan seeks to determine the effectiveness of the Region VIII IPP in addressing the National IPP Priority Area: Target/expand chlamydia screening to young sexually active women and men at risk for infection in public and private settings.

Principal Objectives

The principal objectives of this evaluation are to reduce chlamydia prevalence and pelvic inflammatory disease (PID) incidence in women by determining methods to improve and expand initial screening for Chlamydia and Gonorrhea in young sexually active women and improve rescreening for Chlamydia among recently infected women.

1. Improvement and Expansion of Initial Screening Evaluation (funded at \$12, 316)

Women requesting emergency contraception (EC) at STD clinics are considered to be at high risk for STDs because they typically report recent unprotected sex. Yet new research conducted at the ten STD clinics run by the New York City Department of Health and Mental Hygiene (NYC DOHMH) shows that only about one in four of these women were screened for Chlamydia and Gonorrhea at the time of their request for EC. Among those who were screened for Chlamydia and Gonorrhea, more than one in ten was infected,

suggesting that EC-related visits present an important opportunity to increase detection and treatment of Chlamydia and Gonorrhea that has not yet been widely adopted.¹ Additionally in several recent studies researchers estimate that, among private health insured patients, screening rates in the 16-25 year old female age group to be 42% at best.^{2, 3} These results clearly show room for improvement in screening practices of females in this age group who visit private provider offices and clinics.

2. Rescreening Evaluations (funded at \$7,500)

Because of their high prevalence of re-infection, recently infected women represent priority for repeat testing for *C. trachomatis*. A recent analysis of Region VIII IPP data suggested that women who had a recent history of chlamydia were 4 times more likely to be re-infected, and although the 2006 MMWR STD Treatment Guidelines⁴ recommends that clinicians consider advising all women with chlamydial infection to be retested approximately three months after treatment, due to lack of funding and shifting priorities, this practice has not routinely been applied throughout Region VIII IPP sites.

Repeat infections confer an elevated risk for PID and other complications when compared with the initial infection. The majority of post-treatment infections result from reinfection, frequently occurring because the patient's sex partners were not treated or because the patient initiated sex with a new partner infected with *C. trachomatis*. Other publications have found that this rescreening leads to the curative treatment of more infected women and also proves to be cost effective.^{5, 6}

Program Implications The integration of STD screening with Emergency Contraception (EC) visits and increasing screening among the private sector represent an opportunity for increased identification and treatment of infections in young women at risk for sequelae of chlamydia such as PID and infertility. This evaluation would also demonstrate the need for rescreening recently infected women in Region VIII, and provide data to shape programmatic decisions.

Approach

The plan represents a true collaboration across the STD, FP and Laboratory program areas. The evaluation plan addresses the following four focus areas:

- Improving Chlamydia Screening among the Region VIII key screening venues (Prevalence Monitoring sites [Family Planning], Indian Health Service and the

¹ Schillinger, J, Borrelli, J, Rogers, M, Rubin, S, and Blank, S. Oral Abstract B9c -- STD Testing at Emergency Contraception Visits, New York City STD Clinics, 2005–2007. In: 2008 National STD Prevention Conference, Chicago, Ill., March 10-13, 2008.

² Tao, G., Tian, L., & Peterman, T. (2007). Estimating Chlamydia screening rates by using reported sexually transmitted disease tests for sexually active women aged 16 to 25 years in the United States. *Sexually Transmitted Diseases: Journal of the American Sexually Transmitted Disease Association*, 34, 180-182.

³ Mangione-Smith, R., McGlynn, E., & Hiatt, L. (2000). Screening for Chlamydia in adolescents and young women. *Achieves of Pediatric Adolescent Medicine*, 154, 1108-1113.

⁴ Sexually Transmitted Diseases Treatment Guidelines, 2006 MMWR August 4, 2006 / Vol. 55 / No. RR--11

⁵ Applying a mixed-integer program to model rescreening women who test positive for *C. trachomatis* infection, Tao, et al., *Health Care Manag Sci* 2004 May; 7(2): 135-44

⁶ Screening for Chlamydia trachomatis in women 15 to 29 years of age: a cost-effectiveness analysis, *Ann Intern Med*. 2004 Oct 5;141(7):501-13

Private Sector)

- Increasing Chlamydia Screening among Women Accessing Services in Family Planning, Title X Clinics
- Rescreening Practices of Family Planning, Title X Providers Participating in the Region VIII IPP
- Rescreening of Chlamydia-Positive Women Using Self-Collected Vaginal Swabs

Increasing Chlamydia Screening among Women Accessing Services in Family Planning, Title X Clinics.

This study will be an evaluation of the impact of offering chlamydia screening during emergency contraception (EC) visits. The three project areas of the Infertility Prevention Project in Region VIII (STD, Family Planning and Laboratory) propose a multi-state demonstration project whereby women accessing pregnancy test services in Family Planning clinics will be screened for *Chlamydia trachomatis*, using a urine specimen, to determine the rate of infection in this population.

Objectives:

- Determine whether “off-table” visits, such as emergency contraception, improve the screening rates among women of reproductive health age.
- To estimate the prevalence of chlamydia infection among women being screened during “off-table” visits for use in shaping programmatic decisions.

Increasing Screening in the Private Sector

This study will be an evaluation of the effectiveness of a communication plan directed toward private providers to increase chlamydia screening among private providers in Region VIII. A pilot project using a convenience sample of IPP private providers in the region could potentially provide primary information in order to help guide the direction of this project on a larger scale. Along with distribution of a laminated screening card, qualitative surveys would be conducted to help provide additional background information about perceived barriers on behalf of providers and opportunities to improve the project’s implementation.

Objectives:

- Determine the most effective strategies and messages for reaching private sector providers.
- Determine how to best frame messages to the private sector.
- Develop a communication plan (to providers/clinicians, medical journals, etc.)
- Evaluate screening rates using the Region VIII IPP dataset pre/post communication campaign.

Rescreening Practices of Family Planning, Title X Providers Participating in the Region VIII Infertility Prevention Project

This study will be an evaluation, to determine the current practices and protocols regarding rescreening for chlamydia. The first step in this process would be utilizing a survey instrument that was presented at the November 2006 IPP meeting and refining it into a tool that averages 15 minutes to complete. Primary distribution will be via an

internet-based survey tool, Survey Monkey, and secondary distribution will be via mail or fax.

Objectives:

- To determine what current practices are in place in regards to rescreening procedures in FP, Title X clinics participating in the Region VIII IPP
- To determine the barriers to implementing the CDC treatment guidelines to rescreen three to four months after an initial positive result.

Rescreening of Chlamydia-Positive Women Using Self-Collected Vaginal Swabs

Clients seen at participating family planning or sexually transmitted disease clinics, who have tested positive for *C. trachomatis*, will be encouraged to return 3-4 months later for rescreening using a vaginal swab for self-collection. The clinician or health educator will explain the rationale for rescreening at the time of treatment and an informational appointment card will be given to the client, explaining the need for rescreening, with a return date included on the card. Participating sites will use a tickler system and contact the client at 3-4 months to remind them to come into the clinic for rescreening. Having the client return to the clinic, compared to having them self-collect a vaginal swab at home, alleviates many concerns such those related to confidentiality issues. The specimens can be transported from the clinic to the participating state public health laboratories using existing courier systems which will not require additional mailing charges, laboratory validation costs for testing specimens collected “off-label” will not be incurred, and IRB approval would not be needed. When the client returns to the clinic for rescreening she will be provided a vaginal swab and a card containing collection instructions. The participating site will complete a laboratory requisition, designate that this is a rescreening specimen, and transport specimen to one of the participating public health laboratories in Region VIII.

Objectives:

- To perform a feasibility study to determine whether self-collected vaginal swabs increase the acceptability of rescreening by both clients and impacted clinics.
- To provide positivity data on Region VIII reinfection rates for use in shaping programmatic decisions.

Application of Findings/Intended Users

The primary users of the information will be the Region VIII IPP Regional Advisory Committee. The committee will use the evaluation results to assist in shaping programmatic policy and procedure decisions for Region VIII reproductive health service providers. The information gathered from the evaluation project will also be shared with OPA, CDC and the other nine federal HHS IPPs.

Organizational Priorities

Findings from the evaluation will support OPHS, Region VIII and CDC strategies that

- Lead the HHS reproductive health programs that reduce unintended pregnancies, adolescent pregnancies, and the transmission of sexually transmitted diseases by developing and implementing policies and programs related to family planning

and other preventive healthcare services, including education and social support services.

- Provide leadership to promote health equity for women and girls through the development of innovative programs, through the education of health professionals, and through the motivation of consumer behavior change by disseminating relevant health information.
- Foster the development of evidence-based health and disease prevention practices for women through innovative national and community-based programs focused on conditions affecting women.

Overall Measures of Success:

The two measures of effectiveness that will be utilized to determine the success of each evaluation focus are the Infertility Prevention Program (IPP) Regional Infrastructure

Performance Measures:

Chlamydia Screening Coverage Estimate

The screening coverage estimate corresponds to GPRA performance goal #1: “Reduction in PID”; HP 2010 goals 25-1: “Reduce the proportion of adolescents and young adults with CT infections,” 25-6: “Reduce the proportion of females who have ever required treatment for PID”; and IOM goal #3: “Design and implement essential STD-related services in innovative ways for adolescents and under served populations.”

Chlamydia Screening Test Utilization

The screening test utilization corresponds to GPRA performance goal #1: “Reduction in PID”; HP 2010 goals 25-1: “Reduce the proportion of adolescents and young adults with CT infections” and 25-6: “Reduce the proportion of females who have ever required treatment for PID”; and IOM goal #3: “Design and implement essential STD-related services in innovative ways for adolescents and under served populations.”

Coordination/Collaboration

The proposed evaluation project is not a continuation project and is not related to other projects currently underway in Region VIII. Principle Investigators on this project will coordinate through the IPP Regional Advisory Committee consisting of members from region’s state health department laboratories and sexually transmitted disease programs as well as Title X family planning providers. CDC IPP project officers and the Office of the Regional Health Administrator (ORHA) will be routinely updated during the course of the evaluation project.