MALPH Practice Exchange

Ingham County Health Department – Urban
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HOUSE CALLS: BUILDING EFFECTIVE TOBACCO TREATMENT SERVICES

For Pregnant and Parenting Women

A "Model Practice" - NACCHO

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- Not Available

POPULATION SERVED:

- Pregnant Women who smoke
- Parenting Women who smoke

ABSTRACT

House Calls provides home-based smoking cessation education and support to pregnant and parenting women who smoke. Services are delivered in a relationship-based model of care, and the practice addresses the important public health issue of reducing tobacco use.

The target population for the practice is low-income pregnant and parenting women who smoke and receive services at Ingham County Health Department (ICHD). Eighty-six percent of the 813 women receiving prenatal care at ICHD's Women's Health Services in 2006 were covered by Medicaid. Research has shown that persons on Medicaid smoke at higher rates than the general population.

House Calls began in November 2008 with the goal of developing comprehensive, sustainable, and accountable smoking cessation services for pregnant and low-income women. Initial program objectives included developing a multi-component home-based cessation intervention and training staff to deliver services.

House Calls was strategically integrated into existing home-visiting services to assure its sustainability. Public Health Nurses (PHN) and Public Health Advocates (PHA) provide tobacco cessation services as part of an existing home visit. Staff were trained to utilize Carbon Monoxide (CO) monitors, that identify the level of carbon monoxide in a person's system. An incentive system is in place that provides support for participation in the program. Nicotine Replacement Therapies (NRT) were also available for women whose doctor prescribed it to them.

Project objectives were attained, and the intervention was delivered to twice as many women (107) than had been projected in the first year (50). Over 230 women have now been served, and enrollment in *House Calls* continues. The specific factors leading to the success of the practice included:

- The practice is specifically designed to address barriers identified by the target population.
- The practice is integrated into existing home-visiting services predicated on a relationship-based model of care.
- Vigorous outreach is used to engage community partners in making referrals.
- Staff receives training to increase their knowledge about tobacco cessation support and to facilitate their confidence in delivering the intervention.

OVERVIEW

The Centers for Disease Control and Prevention has recognized reducing tobacco use as a winnable public health battle.[1] Over the past 40 years, smoking has increasingly and disproportionately become a habit of low income, less educated, and disenfranchised individuals. These individuals suffer a disproportionate burden of tobacco-related disease.[2] In 2006, Ingham County Health Department (ICHD) served 20,659 patients, over 14,000 of them women and 81.6 percent of them living below the poverty level.

In the United States, smoking prevalence is higher among women living below the poverty level.[3] Additional work reports smoking prevalence as high as 44 percent among young women who earn a high school equivalency degree (GED) compared to 12 percent among female college graduates.[4] This population also comprises the "most exploited victims of predatory marketing practices that capitalize on their lack of education and other vulnerabilities."[5] As a consequence, social justice and health inequity issues are inherent considerations in the use of tobacco among this population.

In 2006, 86 percent of the 813 women receiving prenatal care at ICHD's Women's Health Services were covered by Medicaid. ICHD also compared data of the last trimester pregnancy smoking rates of the general population to that of Special Supplement Nutrition Program for Women, Infants, and Children (WIC) Program participants (185% federal poverty level), both across the state and served by ICHD. Almost a quarter of WIC participants served by ICHD reported smoking during their last trimester of pregnancy.

Planning for *House Calls* was a collaborative process that involved both Administrative staff as well as direct-service staff. ICHD also worked with Dr. Scott Thomas, a national tobacco consultant to deliver content training/feedback sessions, where staff were listened to and feedback was used to adjust the intervention. In response, a multi-component intervention was developed and refined based on client feedback and staff recommendations.

ICHD developed *House Calls* in November 2008 with the goal of developing comprehensive, sustainable, and accountable smoking cessation services for pregnant and parenting low-income women. *House Calls* reframes the tobacco control message to focus initially on the short-term message ("stop consuming tobacco during pregnancy") rather than the long-term ("quit smoking forever"). This shift makes the message more manageable for many clients. Further, the model is predicated on the "mutual expert" model in which clients are the experts in their quit attempts.

The goals for *House Calls* (described below) were achieved using a number of different objectives. Through these different strategies, ICHD has developed and been able to sustain a tobacco use treatment initiative to meet women where they are in their quit journey. Through these efforts, we have been able to see women take an active approach to improving their own health, as well as the health outcomes of their children.

- Goal I: Develop comprehensive, sustainable, and accountable smoking cessation services for pregnant and parenting low-income women.
- Goal II: Increase the number of smoking pregnant and parenting women who engage in cessation support and successfully stop smoking.
- Goal III: Increase the number of women who maintain abstinence from tobacco in the postpartum period.

The first year goal for the *House Calls* project was to enroll 50 women in services. That number was exceeded, when over 100 women enrolled during the first project period. As a result, a second year of funding was obtained, and since the program began in 2008, 237 women have enrolled in *House Calls.*

JUSTIFICATION OF THE PRACTICE

In 2007, ICHD offered group tobacco education at 123 weekly clinic sessions, representing 1,857 patient visits. Despite this level of comprehensive education and support, only 42 patients scheduled an individual appointment with the tobacco addiction specialist, and only 16 kept the appointment. A study by a medical resident identified a number of barriers for low-income women to using tobacco cessation services at ICHD and included:

- Lack of transportation
- Lack of childcare
- Smoking cessation not being a priority
- Being too busy to participate
- Believing the program would not help
- Lack of support to quit at home.

This internal assessment was the impetus for ICHD to begin to identify and overcome barriers to client use of cessation services. ICHD developed *House Calls* to mediate or eliminate these barriers by taking the service to the clients where they were—both physically (in their homes) and in their stage of readiness to eliminate or reduce their smoking habits.

INPUTS, ACTIVITIES, OUTPUTS AND OUTCOMES OF THE PRACTICE

Staff found the question "Why do you think you smoke?" and other open-ended questions to be most important to ask. This technique allowed clients to give a wide range of possible answers, showed appreciation for their unique perspectives, built rapport, allowed clients to feel heard, and helped address crucial issues. Abuse, financial stress, family stressors, and underlying mental health conditions were common issues that surfaced during the interviews, allowing staff to make helpful referrals and provide additional support.

Respect for the client was another critical factor for effective client engagement. Staff gained clients' permission before sharing information about how smoking affects fetal development, toxic chemicals in cigarettes, or the long-term effects of smoking, so as to show the value of the relationship between them.

ADMINISTRATION, OPERATIONS, SERVICES, PERSONNEL, EXPERTISE AND RESOURCES

House Calls is provided by PHN and PHA, both of whom provide home-based services to women and families. Staff were actively involved in the decision-making process as *House Calls* was implemented and as it evolved. During regular meetings with a consultant, staff candidly discussed components of *House Calls* and shared stories about how their clients had responded to the cessation education and support they had been offered. While administrators guided the overall project, direct services staff was instrumental in determining how *House Calls* services were shaped and delivered.

Incentives were another key component of *House Calls*. Clients received gift cards to a local superstore upon enrollment and throughout their participation in *House Calls*. The amount provided depended upon a client's quit status, which was verified by the CO monitors (a reading of six parts per million (PPM) or less). While incentives may have been the initial "hook" for women to enroll in the intervention, staff believes that incentives also helped to start conversations about tobacco.

BUDGET ESTIMATES AND FORMULAS OF THE PRACTICE

The American Legacy Foundation provided implementation funding ($98,966) which covered the cost of a national tobacco expert who helped to develop the intervention, and provided staff training; incentives, carbon monoxide monitors, nicotine replacement therapies, and evaluation. Staff time was an in-kind cost as was project coordination and administrative oversight. In-kind costs were estimated at $36,000 for the project's first year. ALF provided $45,000 for year two of the project and required ICHD to put up a dollar-for dollar match to demonstrate sustainability and long-term commitment to the initiative.

LESSONS LEARNED AND/OR PLANS FOR IMPROVEMENT

1. Reframing the tobacco control message to initially focus on the short-term (stop smoking during pregnancy) rather than the long term has made quitting easier for many clients.
2. Staff does not need to be experts on cessation. Instead, they need to be willing to ask about tobacco use, be good listeners, help with problem solving and provide support and encouragement. In essence, staff have learned to make the clients the experts in their quit attempts and to provide the support and resources to help them be successful.
3. Incentives open the door for conversations about tobacco use, and this can lead to deeper conversations that provide insights about the client for staff. Deeper conversations have also helped clients better understand why they smoke and engage in other problem behaviors as coping mechanisms.
4. Home-based services make a difference. Enrollment numbers confirm that taking the program to the client has made it possible for more women to participate.

AVAILABLE RESOURCES

In 2010, the promotional materials developed for *House Calls* (by Red Head Design, a local company) was recognized with a PACE Pinnacle Award, Mid-Michigan's highest honor for public relations activities. Later that year, ICHD was nominated for a 'Spirit of Collaboration' Award from the Michigan Cancer Consortium. MCC presents this award to member organizations that have done outstanding collaborative work to significantly advance comprehensive cancer control activities in our state. Finally, in 2011, *House Calls* received a Model Practice designation through the National County and City Health Officials (NACCHO), and was published in their journal, the NACCHO Exchange.

- Campaign for Public Health Foundation: Public Health Program Survey – Maternal and Child Health
  Available: http://www.cphfoundation.org/documents/LansingMISmokingCessationforPregnantWomen.pdf
- National Association of County & City Health Officials: Model Practice
  Available: http://www.naccho.org/topics/modelpractices/database/practice.cfm?practiceID=881
- Chambers, L., & Doolittle, T. (2011). NACCHO Exchange: Promoting Effective Local Public Health Practice. *Building Effective Tobacco Treatment Services for Pregnant and Parenting Women: The "House Calls" Smoking Cessation Program*, 10 (4), pp. 19-22.

A HOUSE CALLS EXPERIENCE

A PHA enrolled a prenatal mother, Tonya (name changed to protect privacy), a heavy smoker, in the House Calls program. The PHA met with Tonya weekly, giving her support and helping her with strategies to try to cut down on her smoking and lengthen the time between cigarettes. During one visit, the PHA used the CO monitor and found Tonya's level was over 50ppm. The PHA encouraged Tonya to consider what factors in her life could have resulted in the setback. Tonya revealed she had signed off her rights to her older children in foster care that week. The PHA discussed how this significant change had impacted Tonya's smoking. She empathized with Tonya and let her know that she could start fresh. Together, they strategized ways to help Tonya cope without smoking in the coming week. At the end of the visit, Tonya was recharged to try again. At the next visit, Tonya's CO level was considerably lower, and she was proud of herself. Tonya continues to work with the PHA to stop smoking for good.

EVALUATION PROCESS

House Calls focused on two primary objectives: (1) increase the number of smoking pregnant and parenting women engaging in tobacco cessation support and (2) reduce the average exhaled carbon monoxide level of women in the program.

House Calls clients reported an average age of tobacco use initiation of approximately 13 years. By an average age of 15, tobacco use was a habit. Women in the program reported smoking an average of 10 cigarettes (half a pack) daily. Daily consumption among Year 2 participants ranged from two cigarettes per day to 30 cigarettes per day. Nearly all clients reported smoking cigarettes (100% in Year 1 and 93.9% in Year 2), but a small minority in both grant years also reported using cigars, cigarillos, pipes, and smokeless tobacco products.

As described, the amount of carbon monoxide (CO) exhaled by the client was measured using a PICO Smokelyzer®. A CO measurement greater than six parts per million (ppm) was an indication of smoking. At intake the average exhaled CO level for Year 1 participants was 9.5ppm (standard deviation (sd): 9.9). For Year 2 participants the average exhaled CO at intake was 10.3 ppm (sd: 8.2). Exhaled CO for Year 2 participants at their intake visit ranged from 1.0 ppm to 41.0 ppm.

Because tobacco reduction is a process, ICHD focused its work on the reduction in CO levels, both at the individual level and the group level. The opportunity clients have to receive feedback at each visit using the PICO Smokelyzer® enabled them to experience "small" successes and maintain their motivation to quit. At the group-level mean exhaled CO was used to measure program progress. Year 1 participants experienced an average CO decline from 9.5 ppm to 5.4 ppm over the course of five sessions. The Year 2 cohort experienced a decline from 10.3 ppm to 6.6 ppm over the course of five sessions. Non-smoking is defined as having an exhaled CO measurement of 6 ppm or less using the PICO Smokelyzer®. The Year 2 cohort experienced a modest increase in the number of non-smoking women. Over five sessions, the prevalence of non-smoking increased from 60.7 percent to 65.0 percent. As self-efficacy increases and small successes compound, participants will likely be able to transition into becoming permanent non-smokers.

ICHD obtained the objectives of *House Calls*. ICHD proposed serving 50 participants in Year 1 and actually served 107. By the end of the grant period, 210 women had participated in the House Calls program. As of November 2010, 237 pregnant and parenting women had participated in the program.

IMPACT/ EFFECTIVENESS

ICHD has always been active in tobacco control, and our Health Officer is strongly committed to this important work. Involvement in *House Calls* has strengthened ICHD's capacity to provide cessation support. ICHD offered free cessation support in the past to low-income pregnant and parenting women, but these services were not highly utilized. *House Calls* enabled ICHD to take cessation services to people in their homes, a very different, more client-friendly approach.

Low-income parenting and pregnant women who smoke are a critically important group to reach because of the harmful effects of tobacco smoke on themselves and their children, both unborn and born. This need was previously unmet in our community. *House Calls* has enabled us to begin to meet this need.

House Calls has the potential to impact tobacco control in our community and beyond because it has demonstrated success in engaging a population (low-income pregnant and parenting women) which has traditionally been very difficult to reach. We know that studies show that individuals with lower income and lower education levels smoke at higher rates that the general population. This is the population served by ICHD. *House Calls* has enabled ICHD to begin to make significant inroads with these clients.

Because many presentations have been made to agencies and groups, many people serving low-income pregnant and parenting women in our community are aware of *House Calls* and they refer women to the program. There is no other similar home-based cessation support program available in the community.

EFFICIENCY

Because *House Calls* was built into the existing work of the PHNs and PHAs, it provides an efficient means to provide tobacco cessation services. Rather than offering classes with little attendance or participation; *House Calls* brings the services to where the women already are. By working to eliminate barriers such as transportation and child care, ICHD has positioned the program to be more efficient and successful.

House Calls has impacted ICHD's capabilities by creating a way to serve clients more effectively and to better meet their needs. Working on this project has helped staff engage in deeper, richer conversations with clients to address needs and, when necessary, link them to additional resources.

DEMONSTRATED SUSTAINABILITY

As is typical with other ICHD programs, *House Calls* began with the end in mind, a philosophy critical to the program's sustainability. *House Calls'* services were designed to be incorporated into the existing, home-based services of PHNs and PHAs. This shift has altered the way that ICHD provides smoking cessation services, rather than ceasing services once grant funds have ended.

Staff received ongoing training on cessation support, and the increase in their confidence in delivering the intervention was marked at training sessions. Through the project, PHAs and PHNs increased their knowledge and comfort level talking with clients about tobacco use and other issues. Staff clearly sees that tobacco use is not simply a lifestyle choice.

ICHD believes that the relationship-based model of cessation support is responsible for the project's outstanding response. Further, the service is home-based, and this makes it convenient for clients to participate. Lastly, the cessation intervention was integrated into ongoing work of PHAs and PHNs, making it highly sustainable. These are lessons that can inform the field of tobacco prevention in terms of replication and sustainability.

While formal grant funding ceased in 2010, home visiting staff at ICHD continue to enroll women in *House Calls*, providing cessation services to pregnant and parenting women in the community. This programmatic decision has resulted in a shift in how staff view their role in tobacco use treatment, and how ICHD continues to use the strategies described above to impact this significant public health issue.

COLLABORATION/ INTEGRATION

ICHD worked with both internal and external partners in order to implement the practice. Internally, the health department worked closely with Women's Health Services and WIC, partners that provided ready access to the target population and suggestions for implementation and adaptations as the practice evolved. Staff also collaborated with other local organizations and entities including area hospitals and the Michigan Department of Community Health's Tobacco Section and provided trainings to other local community based groups and organizations. The Michigan Cancer Consortium recognized such collaboration by awarding *House Calls* the Spirit of Collaboration Award in November 2010.

House Calls staff conducted a variety of presentations throughout the community. Some of the organizations include the Ingham County Great Start Collaborative, Infant Mortality Coalition, staff at Women's Health Services at Ingham Regional Medical Center, Ingham Substance Abuse Prevention Coalition, Shared Pregnancy, Pregnancy Services, Sparrow Obstetrics, Michigan Department of Community Health's Tobacco Section and Healthy Homes University, WIC, Michigan Works Successful Parenting Class, Expectant Parent Organization, Dr. Autumn Clos, a local pediatric pulmonologist, Well Child and Child Health Clinics, and the annual Pow Wow for Native Americans at Michigan State University.

The *House Calls* team presented at the Health Education Council's national conference focusing on Promising Practices: Achieving Health and Social Equity in Tobacco Control in 2010. Later that same year, staff presented at the MALPH Premier Public Health Conference. Staff have also participated in a national webinar on Medicaid Coverage of Tobacco Cessation in Health Care Reform, and a statewide webinar focusing on the Maternal Infant Health Program, to local MIHP Coordinators.

ADDITIONAL OBJECTIVES/ RATIONALE

The Healthy People 2020 Goal focusing on tobacco is to reduce illness, disability, and death related to tobacco use and secondhand smoke exposure. *House Calls* is actively working to address this issue among the pregnant and parenting women that it serves. The program has been sustained beyond grant funds, and has transformed how staff think about tobacco use and cessation services in this community.

The Public Health Accreditation Board provides a broad range of Standards related to tobacco use and education. Standard 3.1 states that local health departments should provide health education and health promotion policies, programs, processes, and interventions to support prevention and wellness. *House Calls* does this by providing education in a way that women can hear how tobacco use impacts their health. Standard 7.1 states that local health departments should work to assess health care service capacity and access to health care services. Populations may lack access to health care services include, for example: pregnant women who use tobacco and are at risk of giving birth to a low birth weight baby. *House Calls* ensures that women are able to obtain and utilize these supportive services and access tobacco use treatment services.

[1] Centers for Disease Control and Prevention. (n.d.). Retrieved Sept. 12, 2011, from Winnable Battles: http://www.cdc.gov/winnablebattles/tobacco/

[2] Smith, M. et al. (2005) The Community Action Model: San Francisco Health Department takes a Social Justice Approach. *NACCHO Exchange*, 4(3): 12-14.

[3] Centers for Disease Control and Prevention. (2006). Tobacco use among adults – United States, 2005. *Morbidity and Mortality Weekly Report*, 55(42):1,145-1,148. Retrieved Sept. 14, 2011, from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5542a1.htm

[4] Barbeau, E.M. (2004). Smoking, social class, and gender: What can Public Health Learn from the Tobacco Industry about Disparities in Smoking? *Tobacco Control*, 13: 115-120.

[5] Healton.C. (2004). Reversal of Misfortune: Viewing Tobacco as a Social Justice Issue. *American Journal of Public Health*, 2: 186-191.