

PUBLIC HEALTH PROGRAM SURVEY- Maternal and Child Health

Contact Information

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Short Title: *House Calls*: Smoking Cessation for pregnant and parenting women

Program Location: Ingham County, Michigan

Objectives and Goals:

The Ingham County Health Department (ICHD) *House Calls Program* is a tobacco use treatment project funded through the Legacy Foundation designed to address disparities in cessation access among low income pregnant and parenting women. *House Calls* addresses identified barriers to utilization and augments the cessation support available to pregnant and parenting women. The project's three goals include:

1. Developing comprehensive, sustainable, and accountable smoking cessation services for low-income women who are pregnant and parenting and seek services at ICHD;
2. Increasing the number of pregnant and parenting women who smoke that engage in cessation support and successfully stop smoking; and
3. Increasing the number of women who maintain abstinence from tobacco during the postpartum period.

Methods:

House Calls utilizes an enhanced home visiting model that incorporates smoking cessation services for this at risk population. Services were integrated into the work of Public Health Nurses (PHNs) and Public Health Advocates (PHAs). Working in cooperation with line staff, health department managers developed a multi-component home-based smoking cessation intervention for pregnant and parenting women who smoke. Dr. Scott Thomas, a national tobacco expert, provided on-site consultation to the team and facilitated the inclusion of evidence-based practices into curriculum and protocols.

Two innovative components of *House Calls* includes the utilization of client motivational models and scientific verification of behavior change. Women who enroll in the home based cessation support program were eligible for progressive

incentives. All participants in the project received a \$20 gift card each month to a local grocery/super store; those who successfully quit smoking received an additional \$20 gift card. The use Carbon Monoxide (CO) monitors and cotinine test kits were used by trained program staff, provided verification of changes in smoking practices and also served as on-going positive reinforcement for women as they observed documented shifts in biometric measures. Program protocol defined quit status as verbal acknowledgement of no smoking by the women, and CO monitor levels less than 6.

Women are eligible to enroll at any time in their pregnancy and eligibility for support services, education, and incentives continued through the third month following the birth of their child. Women with children 0 to 3 years of age who were not pregnant were eligible for a three month period of service.

Program Length:

Legacy grant period was May 15, 2008 through May 14, 2010; staff are presently designed models for institutionalizing these services beyond the life of the grant.

Number of target population reached by effort:

The project enrollment goal of 50 women, was far exceeded, indicating the success of the initiative. Currently, 125 women are actively engaged in stopping smoking through *House Calls*.

Demographic Info:

The target population served by the *House Calls* project includes pregnant and parenting women who received home based services from Public Health Nurses and Public Health Advocates. Women served by the program are Medicaid eligible and reside within Ingham County, Michigan.

During the Year I of the program, the mother's mean age was 25 years (range 18 to 44 years old). The majority of women (66%) were unemployed, with 71% in household with incomes under \$10,000 per year. Women enrolled in House Calls represent a severely under-educated population, with 64% not completing high school (this includes 36% with a 8th grade education or lower). 29% had a high school diploma or GE. The remaining 7% has some college or their education level was unknown. Racial and ethnic distributions of the women included 50% Caucasian, 24% African-American, 8% Native American, 8% bi- or multi-racial, and 7% Hispanic. The majority of women (66%) were pregnant at the time of intake. Women served in the program reported a number of different medical concerns including a current or past history of high blood pressure (10%), high cholesterol (6%) and lung disease (21%), most typically asthma. A notable number of participants reported a current or past background of mental health issues, with 41% citing depression, 26% anxiety, 13% bi-polar disorder, 4% alcohol abuse and 12% reported drug abuse.

Overall Cost:

Year two of the *House Calls* project is currently funded by the American Legacy Foundation in the amount of \$45,500. Year one of the grant provided \$98,000 of

support (primarily funding expert consultation, program evaluation, incentives, CO monitors, cotinine, nicotine replacement therapy).

Funding Sources:

100 % Other, Funding from American Legacy Foundation
percentages are NOT estimates

Outcomes:

More mothers decreased their smoking than quit entirely. At the first home visit following intake, 77% of the mothers reported that they had smoked in the past 7 days (n = 92). At the second home visit, 77% of mothers again reported that they had smoked in the past 7 days (n = 77). This number decreased slightly for the next three home visits, to 75% at the third visit (n = 57) and 63% at the fourth visit (n = 40). As for the number of cigarettes smoked in the past week, 89 mothers reported that they had smoked 7.04 (SD = 9.25) cigarettes at the first home visit, 74 mothers reported that they had smoked 5.64 (SD = 5.75) at the second visit, 57 mothers reported 4.45 (SD = 4.82) cigarettes at the third visit and 41 mothers reported 4.07 (SD = 4.92) at the fourth visit.

Additionally, CO levels dropped over the course of time while enrolled in the *House Calls* program. At the first home visit, the mean CO level was 9.51 (SD = 9.87, n = 97) and dropped to 5.65 (SD = 5.39, n = 40) at the fourth home visit. Again, sample size diminishes after the fourth visit, but the number of smoke free days appears to increase.

Did you make any estimates regarding costs deferred, outbreaks averted or deaths prevented?

No

Additional Information:

There were a number of lessons learned during the pilot year of the House Calls project. They included:

1. Reframing the tobacco control message to initially focus on the short-term (stop consuming tobacco during pregnancy) rather than the long term (quit smoking forever) has made hearing the message 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 has 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. This provides an opening for conversation about healthier alternatives.

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.

Future Plans:

This program was begun with sustainability in mind and deliberate integration of the cessation intervention into the ongoing work of PHNs and PHAs has begun. We believe that three factors are strongly contributing to the sustainability of the cessation work by the PHNs and PHAs. The following steps have contributed to this effort: First, documentation of cessation activities has been built into the report forms used regularly by the PHNs and PHAs. This ensures that even when the grant concludes, the forms will act as a reminder and monitor for continuation of the cessation activities. Secondly, the PHNs and PHAs have repeatedly stated that they perceive their cessation activities to be of great value to their clients. This perceived positive value indicates an internalization of the cessation activities by staff in a manner that is consistent with long-term sustainability. Thirdly, there is strong leadership support for the PHNs and PHAs continuing to include cessation activities in their home-visits with clients who smoke.