

*Women's Health  
Mobile Clinic Outreach Program  
May 2002—June 2009*

## **Executive Report**

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*Bringing preventive screenings and health education  
to “at risk” women in Los Angeles County  
for seven years.*



## INTRODUCTION

**This Executive Report details the key program components, findings and lessons learned from the Office of Women’s Health Mobile Clinic Outreach Program. As a record of the success and challenges of the program, this report documents the program goals and objectives, the processes implemented, and results from this seven year program. The report will serve as a resource for agencies attempting to develop a health outreach program targeting low-income uninsured communities in Los Angeles County or a program that utilizes a mobile van to deliver health services.**

### Health of Women in Los Angeles County

**Significant health disparities by race/ethnicity, poverty level and insurance status are apparent among women in Los Angeles County.** One in 5 women overall consider their health to be only poor or fair, however the percentage is higher among Latinas (27%), uninsured women (27%) and women with household incomes less than 100% federal poverty level (34%). In addition, women in Los Angeles face numerous difficulties in accessing medical care. Among uninsured women, 70% report difficulty accessing medical care when needed and 41% have no regular source of care. Rates of receipt of preventive services are significantly lower among uninsured women compared to privately insured women and women on Medi-Cal. (*Health Indicators for Women in Los Angeles County: Highlighting Disparities by Ethnicity and Poverty Level*, February 2010)

### Need for Innovative Delivery of Preventive Services

To address the health of underserved ethnic women in Los Angeles County, the Office of Women’s Health (OWH) launched the Mobile Clinic Outreach Program in May 2002. **The program addressed three important dimensions of health: access to health care, cultural competency and prevention.** Through the innovative method of service delivery that utilized a mobile clinic, barriers such as transportation, childcare and long wait times in an overburdened health care system were overcome. In addition, the program focused on language and cultural differences as important factors in the diverse Los Angeles population.



## PROGRAM DESCRIPTION

### Program Goals and Objectives

The primary goal of the Mobile Clinic Outreach Program was to:

**Improve the health of underserved women in Los Angeles County, especially ‘at-risk’, low-income, uninsured women through improved health care access, increased utilization of preventive services and increased awareness of the importance of prevention.**

Specific program objectives included:

1. Improve access to health care
  - Overcome barriers to care such as lack of health insurance, cost, transportation and childcare
  - Provide care in a culturally and linguistically appropriate manner
  - Establish a regular source of care for women requiring ongoing health care
2. Increase utilization of preventive services
  - Detect dormant disease at an early and preventable stage
3. Increase awareness of the importance of prevention
  - Identify potential modifiable risk factors for disease
  - Provide education on healthy lifestyles and recommended screening tests

## Target Population

The **'at-risk' women in Los Angeles County were the target population for the Mobile Clinic Outreach Program.** This population was defined as:

- Uninsured women and women living at less than 200% of the federal poverty level
- Women living in underserved areas such as health districts where there had been County clinic closures
- Women ages 40 to 64 years, not yet diagnosed with disease, as these women had the most difficulty accessing services and were at high risk for developing preventable chronic diseases
- Recent immigrants given their limited knowledge of where to access health care services
- Six specific ethnic groups based on the multilingual capacity of OWH: African American, Armenian, Chinese, Korean, Latina and Vietnamese.

## Service Delivery

The clinical service provided by the Mobile Clinic Outreach Program was a **preventive screening assessment** including:

- Blood pressure measurement for Hypertension
- Blood tests for High Cholesterol and Diabetes
- Height and weight measurement for Body Mass Index calculation
- Clinical breast exam
- Pelvic exam
- Pap test for cervical cancer screening

**Referral for mammography** was made for all women 40 years of age and older that required it. In many cases, the OWH

partnered with a mammography unit that provided this service at the same mobile clinic visit. In addition, health education was provided with distribution of written materials in the primary language of the client.

**A primary focus of the program was to provide services in a culturally and linguistically appropriate manner.** To this end, staff for each event was matched to the ethnicity of the target population. Multilingual staff at OWH served as community liaisons interacting with clients prior to the event to schedule appointments and obtain key patient information. At the event, staff interviewed participating clients to record their basic medical history and provided interpreter assistance to clinical staff as needed. In addition, OWH was able to rely on an extensive list of multicultural, multilingual providers from the County of Los Angeles that served in the capacity of a nurse, educator or clinician at the events.

**Follow up for all women seen on the mobile clinic was conducted by clinical staff at the OWH.** Urgent referrals were made directly from the mobile clinic for women with highly abnormal results. For all other detected abnormalities, follow-up appointments were scheduled within county and community clinics with the intent of establishing a medical home for these women. Test results and information on the follow-up appointment was mailed to the client with a letter in their preferred language. An in-language written satisfaction survey was distributed within one week of the mobile clinic visit.

## Role of Partnering Agencies

The involvement of community-based organizations was vital to the success of the Mobile Clinic Outreach Program. Over the years, the OWH had built a network of **400 community partners consisting of clinical, educational and advocacy**

## *Participating Partners*

A Su Salud · AFTRA · Alhambra True Light Presbyterian Church · American Diabetes Association · Armenian American Nurses Association · Armenian Brotherhood Bible Church · Armenian Relief Society · Asian Pacific Health Corps at UCLA · Office of Former Assemblywoman Carol Liu · Beach Cities Health District · Bear Institute · Berendo Street Baptist Church · Bethel Presbyterian Church · Bible Enrichment Fellowship International Church · Bienestar · Charles R. Drew University · Chicana Service Action Center · Child Care Information Service · Chinese Evangelical Free Church · CHIRLA · Christ Lutheran Church · City of Santa Clarita Community Center · Coalition of Mental Health Professionals · Community Conservancy International · Compton Career Link Worksource Center · Office of Former Congresswoman Hilda Solis · Crystal Stairs · Curtis Tucker Health Center · Downey First Church · East LA Community Corp · El Proyecto del Barrio · Esperanza Community Housing Corp. · Ethiopian Christian Fellowship Church · Family Service Center at Baldwin Park · Fiesta de la Salud Markets · Filipino American Service Group, Inc (FASGI) · Frente Indigena de Organizaciones Binacionales · Full Gospel Los Angeles Church · General Consulates of: Belize, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua & Peru · Glendale Memorial Cancer Center · Glory Christian Fellowship International · Good Shepherd Presbyterian Church · GUIA · Hacienda La Puente Head Start Pre-School Program · HealthCare Partners Medical Group · Herald Community Center · Hispanic Broadcasters Corporation · Hispanic Outreach Task Force · Hsi Lai Temple · Hubert H. Humphrey Comprehensive Health Center · Huntington Hotel · Imperial Elementary School · Jackie Robinson American Legion Post Unit 252 · John H. Niemes Elementary School · KJLH Radio · Korean Church of North · Los Angeles Korean Resource Center · Kwan-Yin Meditation Temple · La Casa Community Center · LA Korean Methodist Church · Leimert Park Village Farmers Market · Lennox Middle School · Los Angeles American Asian Lions Club · Los Angeles Christian Presbyterian Church · Los Angeles County Commission for Women · Los Angeles County Department of Public Health · Los Angeles Hanmi Presbyterian Church · Los Angeles County Sheriff's Clergy Council · Los Angeles Unified School District · Maranatha Community Church · Mini Twelve Step House, Inc · Monrovia Health Center · New Creation Christian Faith Center · New Hope Chapel · Northam Elementary School · Pace Elementary School · Padres Contra el Cancer · Patterns · Penuel Missionary Baptist Church · Pico Union Housing Corp · Pilossyan Medical Center · Pomona Unified School District Family Resource Center · Providence Holy Cross Medical Center · Rapid Care Urgent Care Center · San Gabriel Unified School District Family Resource Center · San Pablo Catholic Church · SHIELDS For Families · Simply Fresh Fruit · Solutions Family Resource Center · South Central LAMP Office of Former Speaker of the Assembly Karen Bass · St. Basil's Catholic Church · St. Christopher Korean Catholic Church · St. Francis Medical Center · St. Joseph Catholic Church · St. Lorenzo Ruiz Catholic Church · St. Mary Elizabeth Korean Catholic Center · St. Odilia School · St. Thomas Aquinas Church · Stepping Stones Recovery Home · The Children's Clinic · The Coalition of Mental Health Professionals · The Lighthouse Mission Church · Torrance Health Center · Union Evangelical Church · Valley Community Clinic · Valley Hanaro Church · Village Health Foundation, Inc · Wat Thai Buddhist Temple · Weingart YMCA · West Adams Church of Christ · West Presbyterian Church of America · Whittier Narrows Buddha's Birthday Celebration Committee · WIC Program · World Agape Mission Church · Young Nak Presbyterian Church.

Thank you to the Los Angeles County Department of Health Services, Long Beach Comprehensive Health Center for lending the mobile van

**agencies** that work within their communities to improve the health of women.

The partnering agencies played many key roles in the program. They identified the sites and/or events where the mobile clinic could provide services. In addition, the partnering agency was responsible for publicizing the event and identifying specific women that met the target population criteria for the program.

### Venues

The venues or sites where the Mobile Clinic Outreach Program provided services were **chosen in partnership with the community based organizations** and by what was culturally appropriate for the population targeted for the event.

For example, health fairs were used to target Latinas and African American women. Religious institutes such as churches were frequent venues for, Korean and Armenian populations. Festivals such as Buddha’s birthday celebration were attended to reach Chinese and Vietnamese women.

Community agencies such as the Armenian Relief Society, Korean Resource Center, Herald Community Center and Crystal Stairs also served as venues for events.

Last, partnerships with corporations such as CVS and Fiesta de la Salud Markets resulted in the mobile clinic participating in a large number of health fairs being organized in areas of need.

## MODIFICATIONS TO PROGRAM

In the summer of 2005, **a thorough process evaluation of the program was conducted with the goal to determine if the program could be improved.** Several key program changes were implemented based on the outcomes of the evaluation. One important drawback of service delivery was that results for the cholesterol and diabetes screen were not available immediately. Therefore, women were notified of their results through phone/mail but did not have the opportunity to discuss their results with the clinical provider on the mobile clinic.

To address this concern, **point-of-care testing was introduced.** This involved using a portable machine to immediately obtain results for the cholesterol and diabetes screen, which could then be conveyed to the client at the time of testing. It also provided



an opportunity to strengthen the health education component of the program so specific tailored health messages were being provided to women that they could act on. An algorithm was developed to allow health care providers to

tailor their education to the screening results for each individual. **Verbal health education and written materials could be provided that focused on the health concerns identified for each client.**

One of the goals of the program was **to detect dormant disease.** A more structured methodology was instituted to refer women already diagnosed with disease directly into primary care and to **reserve services through the Mobile Clinic Outreach Program for those that had not yet been diagnosed.**

## PROGRAM RESULTS

Data collected from clients in the Mobile Clinic Outreach Program was examined with the specific research aims of:

1. Demonstrating that the target population was reached
2. Evaluating the prevalence of newly diagnosed preventable disease in an underserved population
3. Describing disparities in disease prevalence based on demographics and access to care.

### Population Served

From May 2002 to June 2009 the **Mobile Clinic Outreach Program served 5,106 women.** The women ranged from age 17 to 88 years and the mean age was 48.6 years. Over 85% of the clients were foreign born, with Mexico, Korea, China/Hong Kong/Taiwan and Central America the most common regions of birth, and 79% preferred a language other than English.

**Table 1 provides details of the ethnicity of clients.** The majority of clients were Latina (46%) and Asian (34%)

TABLE 1—ETHNICITY

Ethnicity	N (%)
African-American	515 (10.1%)
Armenian	341 (6.7%)
Asian	1,754 (34.4%)
Chinese/Taiwanese	651 (12.7%)
Korean	907 (17.8%)
Pacific Islander	2 (<0.1%)
Other	194 (3.8%)
Caucasian	134 (2.6%)
Latina	2,342 (45.9%)
Mexican	1,620 (31.7%)
Central American	606 (11.9%)
South American	84 (1.6%)
Caribbean	17 (0.3%)
Other	15 (0.3%)
Native American/Alaskan Native	2 (<0.1%)
Other	18 (0.4%)

**TABLE 2—SCREENING HISTORY**

	Previous Receipt of Preventive Screenings		
	Blood Pressure	Cholesterol	Diabetes
< 1 year	33.4%	20.1 %	20.9%
1-2 years	32.6%	34.5%	33.5%
2-5 years	22.6%	25.0%	24.9%
>5 years	7.0%	8.9%	8.7%
Never	4.3%	11.4%	12.0%

followed by African-American (10%). Over half of the clients were married or in common law arrangements (60%), 23% were single and 17% were divorced, widowed or separated. Almost 95% of the women were living at less than 133% of the federal poverty level and 96% reported being uninsured. Only 2% of the women reported being privately insured and 2% were receiving Medi-Cal or Medicare benefits. Less than 20% reported having a regular source of care and about 40% reported not seeing a physician in the last 2 years. **Previous receipt of blood**

**pressure, cholesterol and diabetes screenings for the clients is summarized in Table 2.**

In addition, 38% of the women reported that their last Pap test was 3 or more years ago or never, and 53%



**TABLE 3—OUTCOMES**

	High Blood Pressure	High Cholesterol	Low HDL	Diabetes	Overweight and Obesity	Abnormal Pap test	Abnormal Breast Exam	Abnormal GYN exam
<b>Overall</b>	18.2%	20.5%	18.7%	10.8%	59.8%	5.3%	3.4%	11.3%
<b>African-American</b>	<b>26.9%</b>	18.9%	13.9%	<b>14.3%</b>	74.7%	7.1%	2.1%	<b>17.8%</b>
<b>Armenian</b>	21.1%	<b>34.9%</b>	14.5%	8.1%	71.2%	5.1%	1.4%	6.7%
<b>Asian</b>								
<b>Chinese</b>	13.2%	15.2%	10.9%	9.6%	22.3%	3.5%	3.3%	14.8%
<b>Korean</b>	20.3%	18.4%	13.5%	8.6%	26.4%	3.8%	2.2%	9.4%
<b>Caucasian</b>	16.5%	16.4%	13.7%	4.2%	51.2%	5.7%	2.2%	7.0%
<b>Latina</b>								
<b>Mexican</b>	15.3%	18.7%	23.1%	10.8%	<b>80.2%</b>	5.2%	4.2%	10.6%
<b>Central American</b>	18.1%	<b>26.1%</b>	<b>24.3%</b>	<b>14.9%</b>	<b>80.2%</b>	<b>8.7%</b>	4.9%	10.6%
<b>South American</b>	13.3%	19.8%	33.9%	3.8%	61.7%	5.6%*	2.8%*	12.5%

of women 40 years and older reported their last mammogram was 2 or more years ago or never.

**Health Risk Factors**

A health history was obtained from clients that **focused on the key risk factors for chronic diseases including heart disease.** About 45% of the women were post-menopausal. Only 2 % of the women had a personal history of heart disease but 16% had a family history of heart disease. Almost 10% of women were current smokers and 8% were past users. Over 45% of the women were minimally active or sedentary and 80% of women did not meet guidelines for consuming five or more servings of fruits and vegetables per day. Last, almost three-fourths reported medium to high stress levels in their daily lives.

**Results of Screening Tests**

Overall for those women screened, about 18% were found to have high blood pressure, a third of which met criteria for stage 2 or 3 hypertension. Over 20% of the women were found to have abnormally high cholesterol (>240 mg/dl) and another 16% were found to have borderline high cholesterol (200-240 mg/dl). HDL measurements were abnormally low for 19% of the women. An abnormal diabetes test was found in 11% of women receiving screening. Most significantly, 60% of the women were overweight or obese.

Pap test results indicated 5% of women had an abnormal Pap test including one squamous cell carcinoma, one adenocarcinoma and 28 high grade lesions. About 11% of women were found to have an abnormal gynecological exam with enlarged uterus, cervical polyps or cervical lesions as the most common abnormalities. Clinical breast exams detected abnormalities in 3% of women examined.

Screening results were examined by ethnicity to identify disparities in disease prevalence. Table 3 (page 5) summarizes the outcomes overall and by ethnicity. African American women had significantly higher rates of high blood pressure at 27%, diabetes at 14% and abnormal gynecological exams at 18%. Rates of high cholesterol were considerably higher among Armenian women at 35% compared to 21% overall. Central American women were found to have several poor outcomes with the highest rates of diabetes (15%), low HDL (24%) and abnormal Pap tests (9%). Mexican and Central American women had the highest rates of overweight and obesity (80%).

### Satisfaction Survey

A satisfaction survey, mailed to each client within 1 week of their visit to the mobile clinic, consisted of 10 questions assessing the quality of their experiences with the program on a 5 point Likert Scale. The responses to the questions were scored as follows: no response=0, strongly disagree=1, disagree=2, no opinion=3, agree=4, strongly agree=5. An average score was calculated for each question, and a total score was calculated for each survey by summing the values from each of the 10 questions.

A total of 1,447 satisfaction surveys were completed and returned for a response rate of 28%. Results from the survey are shown in Table 4. The average score for each survey question was very high, equivalent to strongly agree or agree on the Likert Scale. Almost 40% of clients responded strongly agree to all 10 questions and only 1.4% of surveys had an average overall satisfaction score of 3.0 or less.

**TABLE 4—SATISFACTION SURVEY**

MOBILE CLINIC SATISFACTION SURVEY QUESTIONS	Average Score
I found the location of the mobile clinic site convenient	4.56
The mobile clinic was clean	4.60
The staff on the mobile clinic was courteous	4.71
The staff on the mobile clinic was knowledgeable and professional	4.63
All my questions were answered	4.54
I was given health education materials in the language of my choice	4.49
I was told an approximate time when test results would be received	4.32
I would return to the mobile clinic for health care next year, if offered	4.71
The materials I was given were helpful	4.44
I was satisfied with the mobile clinic services	4.71
<b>Average Overall Satisfaction Score</b>	<b>4.57</b>



## CONCLUSION

### Goals Met

**The Mobile Clinic Outreach Program successfully utilized an innovative and patient centered method to deliver preventive services to ‘at risk’ women in Los Angeles County for over seven years.** The target population was reached with 95% of women served reporting household incomes at less than 133% of the federal poverty level and 96% being uninsured. Over 80% of the women were 40 years of age and older and 40% had reported not seeing a physician in the last 2 years. Almost 80% of women reported a preferred language other than English and 86% were foreign-born, supporting the need of addressing language and cultural issues among this population.

**Significant disease was detected** among the ‘at risk’ population with over 1,000 cases of hypertension, 953 cases of high cholesterol, 502 cases of diabetes, and 30 cases of high grade dysplasia or cervical cancer identified. These cases for the most part represent dormant disease among women with no known previous history of the medical condition. **Follow up appointments were made, and tailored education was provided** to women with these detected conditions as well as to the nearly 60% of women found to be overweight or obese and 10% that were current smokers.



### Strengths

The Mobile Clinic Outreach Program clearly **increased access to health care for high-risk women.** By providing services at no cost, in easily accessible venues with culturally and linguistically appropriate care, many of the health care access barriers that low-income uninsured women of color face were overcome. In addition, the mobile clinic served as the first step into ongoing health care for women found to have disease. Linking those women to a regular source of care by making a follow-up appointment served as a key step in improving their health care access.

A key strength of the Mobile Clinic Outreach Program was **building grassroots connections with underserved**

**communities to better understand their needs.** The relationships established with the community continue to serve as the foundation for the outreach that OWH conducts.

By providing screenings for key health conditions that contribute to the major disease burden for women in Los Angeles County, the Mobile Clinic Outreach Program was able to identify disease at an early stage when intervention can make a powerful impact. **Early detection and treatment can save thousands of dollars spent in treating late stage disease and complications.** Education focused on healthy lifestyles and individual health assessments, as provided through this program, are also a key component of health promotion and well-being.

### Challenges

Given the multiple competing needs of public health, it is important to strive to make the best use of the public dollar. This includes targeting those most in need, using evidence based methods in program development and implementation, and focusing on making lasting changes. Detecting disease even at an early potentially preventable stage, is important, but not enough. **The challenge lies in moving from increased awareness and knowledge to health behavior change** that will ensure a long term healthier outcome.

It is important to take into consideration the extensive administration and coordination required to address the wide-ranging needs of communities in Los Angeles County. **Meeting the cultural and linguistic needs of the community requires assembling a diverse clinical and administrative team.**

Perhaps the most important challenge specific to this program is **maintaining a mobile unit.** There are numerous expenses to consider, foremost of which is the cost of the unit itself and depreciation. Loaning or borrowing a unit may help alleviate that cost but other expenses in the upkeep of a mobile unit including parking, maintenance and supplies are unavoidable.

**In conclusion, the Mobile Clinic Outreach Program represents a unique program that successfully provided culturally competent preventive services to low-income uninsured women of color in Los Angeles County by overcoming barriers in health care access. In partnership with community-based organizations, the most vulnerable women were reached and significant dormant disease was detected. Findings of ethnic differences in disease distribution offer further opportunity for innovative program development to reduce health disparities and increase health equity among women in Los Angeles County.**



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