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13. ABSTRACT (Maximum 200 words) <b>Purpose:</b> To examine the features of primary care which promote regular breast cancer screening for under-served minority women. <b>Scope:</b> This study investigates features of the primary care process which are associated with higher rates of breast cancer screening for minority women, using an existing data-set of 2600 multi-ethnic persons from New York City.(Year 1) Building on these analyses, additional features of primary care delivery systems which promote regular screening for women in Washington D.C. will be examined via focus groups (Year 1) and a survey (Years 2-3) of women from four local primary care clinics in wards 1 and 2. Finally, in conjunction with patient and provider representatives from these clinics, an intervention will be developed (Year 4) to increase regular screening by clinical breast exam (CBE) and mammography which will be implemented in the future under separate funding. <b>Major Findings:</b> Analyses of New York City multiethnic data and a manuscript summarizing the findings were completed during the first year. The manuscript is in press at the <i>American Journal of Public Health</i> . The analyses assessed a "process of care" measure, patient-physician communication, as it relates to use of cancer screening among the multi-ethnic population. A particular aspect of communication, acculturation, was significantly related to the adjusted probability of being screened with CBE and mammograms for Hispanic women. The abstract summarizing this work was submitted to the Society of General Internal Medicine's annual meeting. In addition, three focus groups were completed with women from the primary care clinics. The focus groups resulted in rich qualitative data on the women's perceptions of breast cancer screening in the primary care setting. Focus group data were analyzed and summarized. The findings will contribute in year 2 to development of the survey which will be conducted in the four clinics to assess minority women's perceptions of barriers to and promoters of regular breast cancer screening in the primary care setting.			
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FOREWORD

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Aun S. O'Malley 8/17/98  
PI - Signature Date

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## **1.0 Introduction**

The overall goal of this study is to describe the components of primary care associated with adherence to regular breast cancer screening among low-income minority women. The proposed study is pursuing this goal by investigating features of the primary care structure and process<sup>1,2</sup> which are associated with breast cancer screening for minority women via: 1) analysis of an existing data-set of 2,600 multi-ethnic minority persons in New York City (NYC). Building on this, 2.) additional features of primary care delivery systems which promote regular breast cancer screening for under-served minority women are being examined in four Washington D.C. primary care clinics. This Washington D.C. based phase includes a.) a qualitative component (focus groups) and b.) a quantitative component (survey). Finally, in conjunction with patient and provider representatives from local primary care clinics, an intervention will be developed to increase regular screening by CBE and mammography which will be implemented in the future under separate funding.

The following is an account of the progress made in the first year toward meeting the objectives specified for the study "Primary Care and Regular Breast Cancer Screening for Under-Served Minority Women," funded by the Department of the Army as a Career Development Award. The progress report is organized by the original grant's specific aims.

### **The Specific Aims of the study are as follows:**

1. To investigate features of the primary care system which are associated with higher rates of breast cancer screening for minority women, using an existing data-set of 2,600 Caribbean-, Haitian- and U.S.-born blacks, and Puerto Rican, Dominican, Columbian, and Ecuadorian Hispanics living in NYC.
2. To conduct additional examinations of the features of primary care delivery systems which promote regular breast cancer screening for under-served minority women in four Washington D.C. primary care clinics.
  - a. To conduct a focus group of the D.C. clinic patients and providers about perceived barriers to getting regular screening within their primary care systems. (These focus groups will include members of the advisory boards from the primary care clinics).
  - b. Using focus group input and preliminary analyses from Aim 1, we will develop a survey focused on features of primary care systems and regular screening.
  - c. To administer the survey to 516 women in four primary care clinics to probe their perceived barriers to regular screening and their breast cancer screening practices.
  - d. To provide feedback on the survey results to the primary care clinic advisory board representatives.
3. To develop, in conjunction with the patient and provider representatives from the four primary care clinics, a primary care intervention to increase regular screening by

CBE and mammography which could be implemented in the future under separate funding.

**2.0 Progress Report August 1, 1997-August 1, 1998**

The following table summarizes how the proposal achieves the career development goals as outlined in the original proposal :

Develop Research Agenda	Strengthen Methodological Knowledge Base	Learn about design and implementation interventions
<p><b>PHASE I (Year 1)</b></p> <ol style="list-style-type: none"> <li>1. Analysis of multi-ethnic data for features of primary care associated with breast cancer screening</li> <li>2. Conduct focus groups from primary care clinics to identify barriers to regular screening</li> </ol>	<p><b>PHASE II (Years 2-3)</b></p> <ol style="list-style-type: none"> <li>1. Develop survey to assess additional features of primary care which promote regular screening in Washington D.C. primary care clinics</li> <li>2. Conduct survey and analyze data</li> <li>3. Develop predictive models of regular screening</li> </ol>	<p><b>PHASE III (Year 4)</b></p> <ol style="list-style-type: none"> <li>1. Provide clinics with feedback on findings</li> <li>2. Develop intervention to promote regular screening in primary care setting</li> <li>3. Submit grant for future funding to conduct trial</li> </ol>
<p><b>Coursework:</b></p> <ol style="list-style-type: none"> <li>1. Survey design</li> <li>2. Cultural aspects of cancer prevention in minority populations</li> </ol>	<p><b>Coursework:</b></p> <ol style="list-style-type: none"> <li>1. Research design</li> <li>2. Epidemiology of breast cancer</li> <li>3. Randomized controlled trials</li> </ol>	<p><b>Coursework:</b></p> <ol style="list-style-type: none"> <li>1. Program evaluation</li> <li>2. Breast cancer outcomes research</li> </ol>

**Body:**

**2.1 Analysis of New York City Multi-Ethnic Dataset:**

*Specific aim 1. To investigate features of the primary care system which are associated with higher rates of breast cancer screening for minority women, using an existing dataset of 2,600 (men and women) Caribbean-, Haitian- and U.S.-born blacks, and Puerto Rican, Dominican, Columbian, and Ecuadorian Hispanics living in NYC.*

During months 1-5 of the first year, variables to assess features of primary care which are associated with higher rates of breast cancer screening for women, were constructed using the NYC multi-ethnic data set, and models that assessed the question were developed. Analyses of multiethnic data and a manuscript summarizing the results, were completed during months 6-11. Information gained from analyses of multiethnic data helped to inform the content of the moderator guides used for the focus groups conducted during months 8-10 of year 1.

The first part of phase I (year 1) was spent exploring the relationship between features of primary care and utilization of clinical breast exams and mammograms in an existing data-set which includes 1420 multi-ethnic women from New York City. The interviewer-administered telephone survey included questions on age, gender, socioeconomic status, health status, ethnicity, education, knowledge, attitudes and beliefs and use of cancer screening services. Part of the set of variables on access to care included measures of features of the process of care; for example, aspects of patient-physician communication which are influenced by factors such as language and acculturation. To this end, the P.I. investigated whether acculturation was associated with the receipt of clinical breast exams and mammograms among Colombian, Ecuadorian, Dominican and Puerto Rican women, ages 18-74 in New York City, 1992. This bilingual, targeted random-digit dial telephone survey included 908 Hispanic women from a population-based quota sample.

Outcome measures included "ever" and "recent" use of clinical breast exams and mammograms. Multivariate logistic regression models assessed the effect of acculturation on screening use. The results in brief were as follows: Among respondents qualifying for the survey based on age and ethnicity, the refusal rate was 2.1%. Higher acculturated women had significantly higher odds of ever and recently receiving a clinical breast exam ( $p \leq 0.01$ ) and of ever ( $p \leq 0.01$ ) and recently ( $p \leq 0.05$ ) receiving a mammogram, than less acculturated women, controlling for demographic, socioeconomic, and health system characteristics, and for cancer attitudes and beliefs. For all screening measures, there was a linear increase in the adjusted probability of being screened as a function of acculturation.

The following table and figure present the findings from the multivariate logistic regression models assessing the role of acculturation and use of clinical breast exams and mammograms among the NYC Hispanic women. (Please see manuscript in appendix for rest of report.)

**Table 4. Acculturation and Adjusted Odds<sup>^</sup> of Breast Cancer Screening Among Hispanic Sample, New York City, 1992.**

	Odds Ratio (95% Confidence Interval)			
	Clinical Breast Exam Ever	Recent*	Ever	Mammogram Recent*
<b>Acculturation**</b> (continuous scale)	1.82 <sup>++</sup> (1.30-2.60)	1.35 <sup>++</sup> (1.07-1.71)	1.59 <sup>++</sup> (1.17-2.17)	1.34 <sup>+</sup> (1.01-1.79)
<b>Type of Site</b>				
Private Doctor's Office	1.25 (0.60-2.49)	0.84 (0.48-1.44)	1.11 (0.54-2.21)	1.13 (0.57-2.21)
Hospital Outpatient Dept.	1.53 (0.66-3.54)	1.24 (0.65-2.35)	4.00 <sup>++</sup> (1.58-10.7)	3.40 <sup>++</sup> (1.48-8.02)
Public Health Clinic	1.55 (0.59-4.28)	0.97 (0.47-2.04)	1.82 (0.66-5.28)	1.33 (0.52-3.47)
HMO	1.47 (0.59-3.79)	1.30 (0.64-2.66)	2.02 (0.82-5.15)	1.69 (0.73-3.99)
ER	I	I	I	I
No Site	0.56 (0.27-1.13)	0.43 <sup>++</sup> (0.23-0.77)	0.56 (0.25-1.21)	0.56 (0.26-1.22)
<b>Education</b>				
Less than 12 years	I	I	I	I
12-15 years	1.24 (0.76-2.04)	1.39 (0.96-2.02)	1.12 (0.69-1.83)	1.11 (0.70-1.79)
≥ 16 years	1.86 (0.82-4.71)	1.90 <sup>+</sup> (1.05-3.59)	1.25 (0.55-3.10)	0.89 (0.41-1.98)
<b>Age</b>				
20-44 years	I	I	N/A	N/A
45-54 years	1.48 (0.85-2.62)	0.68 (0.33-1.32)	I	I
55-64 years	3.20 <sup>++</sup> (1.66-6.35)	1.25 (0.61-2.49)	1.71 <sup>+</sup> (1.06-2.80)	1.45 (0.81-2.59)
≥ 65 years	1.16 (0.60-2.25)	0.66 (0.31-1.34)	1.17 (0.66-2.07)	1.03 (0.54-1.95)
<b>Insurance</b>				
Private	1.62 (0.92-2.86)	2.10 <sup>++</sup> (1.36-3.24)	1.75 <sup>+</sup> (1.00-3.07)	1.49 (0.87-2.57)
Public Only	2.55 <sup>++</sup> (1.47-4.49)	2.26 <sup>++</sup> (1.47-3.51)	2.47 <sup>++</sup> (1.38-4.47)	1.74 <sup>+</sup> (1.01-3.03)
Uninsured	I	I	I	I
<b>Income</b>				
<\$20,000.	0.78 (0.41-1.45)	0.70 (0.43-1.10)	0.77 (0.40-1.47)	0.56 (0.30-1.04)
≥ \$20,000.	I	I	I	I
Refused/Don't Know	0.90 (0.44-1.82)	0.79 (0.47-1.32)	1.01 (0.51-2.00)	0.49 <sup>+</sup> (0.25-0.94)

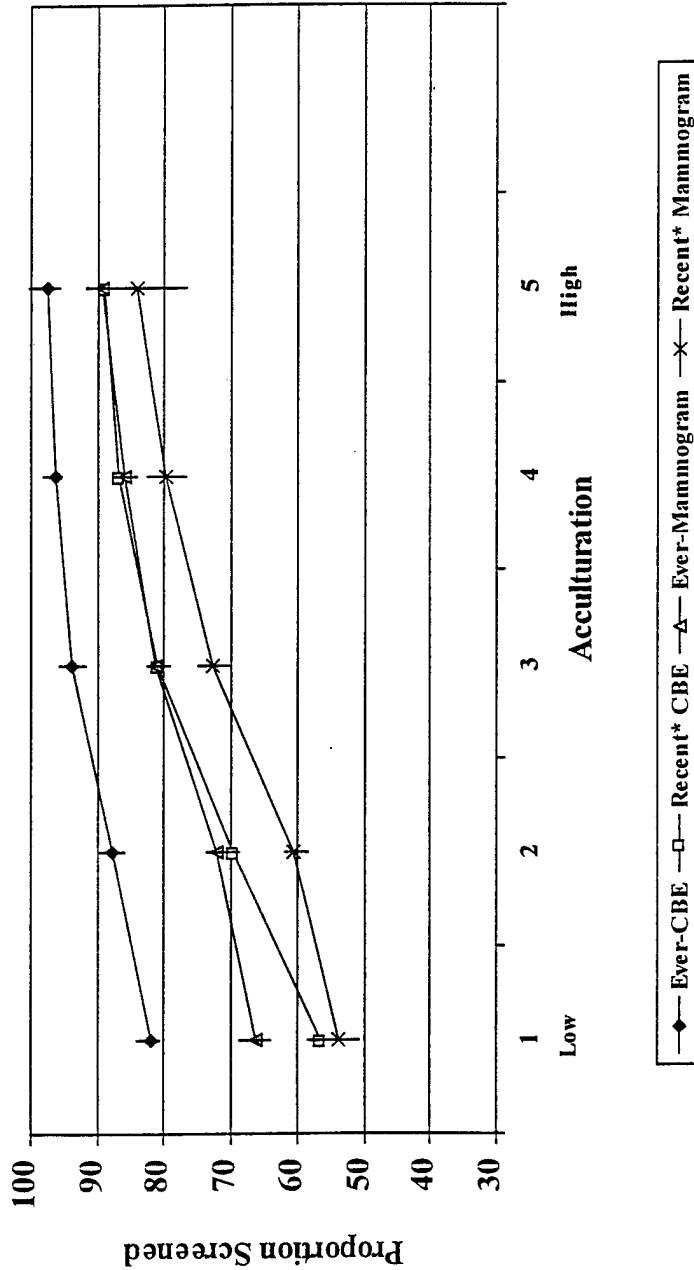
†Only statistically significant variables from the final model are shown.

<sup>^</sup>All odds ratios are adjusted for acculturation, type of site of care/usual source of care, education, age, ethnicity, insurance status, marital status, health status, cancer anxiety score, cancer hopelessness score, cancer concern score, and income.

\* "Recent" was defined according to 1992 American Cancer Society guidelines as follows: for clinical breast exam, every year for women older than 40 years and every 3 years or less for women aged 20-40 years; and for mammogram, every 2 years or less for women aged 45 and over. (40-44 year olds excluded due to quota sample structure).

\*\* Acculturation is continuously scaled from 1 (least acculturated) to 5 (most acculturated). Odds ratios for this variable indicate increase in odds of screening per unit increase in the acculturation scale.  
+ p ≤ .05    ++ p ≤ .01    I=reference group

Figure 1. Adjusted Proportions\*\* (and 95% Confidence Limits) of Women Screened by Acculturation Score\*\*\*



\* | " Indicates the 95% confidence limits for that adjusted proportion.

\*\* "Recent" was defined according to 1992 American Cancer Society guidelines as follows: for clinical breast exam, every year for women older than 40 years and every 3 years or less for women aged 20-40 years; and for mammogram, every 2 years or less for women aged 45 and over.

\*\*\* Adjusted proportions of women screened are calculated from the logit function based on the multivariate logistic regression models (table 3) which adjust for: acculturation, type of site/usual site of care, education, age, ethnicity, insurance, marital status, health status, cancer anxiety, hopelessness and concern scales, and income.

\*\*\* Adjusted proportion screened was calculated from the logit function at each of the five categories of acculturation.

One of the conclusions from this analysis is that Neighborhood and health system interventions to increase screening among Hispanic women should target the less acculturated. The manuscript resulting from this work is included in the Appendix, section Ia. This manuscript was submitted to the American Journal of Public Health and the P.I. just received notice of its final acceptance. Included in the Appendix is the letter from AJPH, section Ib.

The P.I. continues to analyze this New York City multi-ethnic dataset to investigate the role of other features of primary care process in receipt of breast cancer screening among low-income minority women.

## 2.2 Focus Groups

*Specific Aim 2. To conduct additional examinations of the features of primary care delivery systems which promote regular breast cancer screening for under-served minority women in four Washington D.C. primary care clinics.*

*a. To conduct a focus group of the D.C. clinic patients and providers about perceived barriers to getting regular screening within their primary care systems.*

The second accomplishment of Year One was to organize, facilitate and conduct focus groups of women who use community clinics as their source of primary care. The goal was to determine what aspects of their primary care clinics (the structure and process of receiving care in those clinics) might play a role in their utilization of recommended breast cancer screening. It is hypothesized that women facing fewer structural and process barriers within the primary care system will be more likely to receive regular screening than women facing more barriers. While prior research has assessed what constitutes primary care,<sup>3</sup> little work has been done to focus on those aspects of primary care which are most relevant to low-income women from medically under-served areas.<sup>4</sup> This is especially relevant to receipt of breast cancer screening if one assumes, as does the P.I., that optimal breast cancer screening, and its diagnosis and follow-up needs to occur in the primary care setting if it is to occur on a regular basis over time.<sup>5</sup>

To this end, focus group discussions were held with patients from three D.C.-based primary care clinics. These three ambulatory clinics provide primary care, including cancer screening services, mainly to high-risk, under-served, minority populations. They were: Zacchaeus Free Clinic, Spanish Catholic Center and Upper Cardozo Health Center, all located in the same region of Washington D.C. Please note that the initial proposal had suggested use of La Clinica Del Pueblo (provides primary care to Spanish-speaking population. However, because of similarities between Spanish Catholic Center and Clinica del Pueblo, and because of administrative burdens currently experienced by the staff of Clinica Del Pueblo, they were not able to participate in the focus groups. For comparability reasons, we decided to include another community clinic which served the same wards as Spanish Catholic Center and Zacchaeus Free Clinic. This addition was Upper Cardozo Health Center, a federally funded community health center (CHC) which receives Public Health-330 funding. We wanted to include a CHC in the panel of clinics providing focus group volunteers because CHCs nationwide have a certain degree of similarity; whereas, privately funded community clinics such as

Zacchaeus Free Clinic and Spanish Catholic Center, vary greatly in their structure, and sources of funding. While the majority of community clinics in the U.S. are privately funded (grants and donations), about 8% do receive federal 330-funding.<sup>6</sup> So for reasons of generalizability, we chose to include this CHC.

Prior to the organization of the focus groups, the clinic directors from the community clinics of interest were involved in a group discussion about barriers faced in doing research in the communities they serve. Then, individual in-depth structured interviews were conducted with primary care clinic directors from each of these three community clinics. Information obtained from these hour-long in-depth interviews was then used to develop a strategy for conducting focus groups of women who used these particular clinics for their health care. (Details in appendix IIa.)

The purpose of the first set of focus groups was to explore the common and unique barriers to and promoters of under-served minority women's use of regular breast cancer screening in the primary care setting. A separate focus group was held for patients of each clinic. Zacchaeus Free Clinic which serves low-income, uninsured predominantly African-American women in D.C. was conducted in English. The focus groups for Spanish Catholic Center and Upper Cardozo Health Center, which serve predominantly Hispanic populations, were conducted in Spanish by a trained Hispanic moderator and a bilingual assistant.

#### Focus-Group Participants:

Women participating in the focus groups were eligible if: They spoke Spanish (for the clinics serving predominantly Hispanic communities) or English (for the clinic serving predominantly an African-American community). Inclusion criteria were: Women over age 40 years, no history of breast cancer, used the clinic for their health care presently or in the past, and ability to give informed consent.

#### Recruitment:

Posters advertising the focus groups (with a phone number to call) were placed throughout the clinics and the clinic staff also mentioned the focus groups to patients. (Sample posters included in appendix.) Volunteers were screened prior to participation by telephone to assure that eligibility requirements were met. Women with a history of breast cancer were not eligible.

#### Conduct of Focus Group Sessions:

A separate focus group was held for each of the community primary care clinics. A total of 16 women participated in the three focus groups. The focus group conducted for the primary care clinic serving a predominantly English speaking low-income African American population was facilitated by a trained independent African-American moderator which extensive experience conducting focus groups in this population. The focus groups held for the two clinics which serve mainly Spanish speaking patients, were conducted in Spanish by a trained and experienced Latin American moderator (female) with experience working in health care in the Latin community in D.C. All focus groups were audio-taped. Notes were taken by the P.I. as well. Focus group tapes were transcribed verbatim. Spanish tapes were first transcribed verbatim and then translated by

the same person who conducted the focus groups. No clinic staff were present at the focus groups. All focus groups were conducted in a safe and neutral community setting, convenient for participants. The sessions lasted approximately two hours.

The English and Spanish moderator guides are included in the Appendix. Prior to any discussion on cancer screening, a series of open-ended questions were asked of focus group participants to elicit their feeling and experiences with primary care at their respective clinics. The questions were:

1. What do you think about the care that you receive at (XYZ) clinic?
2. What are the good things about your care there?
3. What are the bad things about your care?
4. Is there anything about your care that could be improved ?
5. What would keep you from coming to (XYZ) clinic if your needed care or had any type of question about your health?
6. What would be the characteristics of the ideal clinic, that would make you want to go there for your care?
7. Where would this clinic be located?

Then a series of questions focusing on cancer screening were asked. These predominantly concerned breast cancer screening, but also included some questions on cervical, and colorectal cancer screening. These questions were as follows:

CBE:

After defining a clinical breast exam and showing a picture of the procedure the women were asked:

1. How many of you have had this (clinical breast) exam?
2. How do you feel about this breast exam?
3. What was your experience like, getting the breast exam?
4. Have you had this exam anywhere other than (XYZ) clinic?
5. What were your reasons for going to this other site?
6. What would keep you from going to (XYZ) clinic for your breast exams?

Mammogram:

After defining the mammogram and showing a picture of a women receiving a mammogram the women were asked:

1. How many of you have had this test?
2. How do you feel about this test?
3. What would keep you from getting a mammogram?
4. Where did you get this test?
5. Who recommended that you get this test?
6. How do you feel about the way you received your mammogram results?
7. How can we improve the reporting of results?

Audio-tapes of the focus group sessions were transcribed verbatim. Two study team members (ASO and PGO) did extensive review of the transcripts, identifying distinct topics (themes) and then classifying and coding these distinct units of text. These units of text, each applying to a particular aspect of experiences with health care, were then classified to create a taxonomy of important aspects of primary care to cancer screening for low-income minority women in the primary care setting. This classification of topics will be distributed to five persons (two physician-cancer researchers, two physician-health services researchers, and one psychologist-cancer researcher) to obtain further input on the classification. After a series of discussions and revisions of the classification of themes into various domains, a consensus will be reached on a final taxonomy using methods described by prominent qualitative researchers.<sup>7,8</sup>

#### Focus Group Results:

16 women participated in the focus groups. Eight of these were in the two focus groups conducted in Spanish, and the other eight women were in the focus group conducted in English. Their demographics are presented in Table 1:

**Table 1. Demographic characteristics of Focus Group Participants:**

<b>Characteristic</b>	<b>Frequency</b>
<b>Zip code</b>	
20001	7
20002	1
20009	1
20010	1
20011	2
20017	2
20018	1
20036	1
<b>Age</b>	
Mean	46
Median	46
Number over age 50	5 out of 16
<b>Education</b>	
≤ 8 <sup>th</sup> grade	4 (All Hispanic)
9-11 <sup>th</sup> grade	3 (2 Hispanic, 1 African-American)
High school graduate	3 (1 Hispanic, 2 African-American)
Some college	4 (1 Hispanic, 2 African-American, 1 Caucasian)
College graduate	2 (1 Hispanic, 1 African-American)
<b>Marital Status</b>	
Married	3
Single	5
Divorced	4
Widowed	0
Separated	3
Refused	1
<b>Work Status</b>	
Full-time	4
Part-time	5
Retired	1
Work at home	1
Unemployed	5
<b>Time spent providing child care or care to others</b>	
Full-time	
Part-time	4
None	5
Refused	6
	1
<b>Race/Ethnicity</b>	
African-American	7
Hispanic	8
Caucasian	1
<b>Income</b>	
< \$10,000.	10
\$10,000. - \$20,000.	4
> \$20,000.	0
Refused	2

Table 2 lists the important aspects of the usual source of care elicited from women participating in focus groups. The content areas listed here are those raised by the women during focus group discussions about the questions listed above.

**Table 2. Aspects of Primary Care Which were Important to the Women Participating in Focus Groups.**

***Aspects mentioned by all three focus groups (Hispanics and non-Hispanics):***

Concerned Staff  
Personal Attention  
Communication  
Availability of multiple clinical services on-site  
Office hours (Evenings)  
Coordination of clinical and social services  
Satisfaction with clinician's explanations  
Being treated with respect  
Self-esteem issues  
Appropriateness of Triage  
Sensitivity to patient's concerns about symptoms  
Inner city location  
Accessible by public transportation  
Open to all who need care  
Low cost  
No fees  
Short waiting time to get an appointment  
Short wait to be seen once at clinic  
Outreach  
Range of medications on site  
Persistence of Staff in follow-up  
Facility space  
Physical presentation of the clinic  
Clinic serves as an information source on relevant community programs  
Intake/ Needs assessment at the individual level  
Counseling available  
Staffed by Volunteers  
Up-to-date equipment and computers  
Community reputation  
On-going relationship with one's clinician  
Familiarity with staff  
24-hour nurse on-call

Competent staff  
Overall attitude of the staff  
Satisfaction with how staff listens to patient  
Efficiency and reliability of services  
Respect (disrespect)  
Availability of mental health services  
Billing procedures

*Additional aspects of specific concern to Hispanic participants:*

Clinician has patience (Hispanics especially)  
Language of staff (Hispanics)  
Culture of the provider (Hispanics)  
Distrust of clinic within immigrant community (Hispanics)  
Fear of big bills spread among immigrant community (Hispanics)  
Availability of acute care without an appointment (Hispanics)

**Table 3. Comments Elicited from Focus Group Participants on Breast Cancer Screening**

**Clinical Breast Exam:**

Knowledge issues (You don't need to have pain to have cancer)  
 Awareness that Latinos have myths about cancer  
 Fear of pain  
 Fear of finding lump  
 Embarrassment  
 Don't want to be seen naked (Hispanic)  
 Lack of time  
 Belief that CBE is important  
 Denial  
 Discussion with clinician is reassuring  
 Fear of detecting a lump  
 Discomfort with being overweight  
 Discomfort with gender of clinician (prefers female)

**Mammogram:**

Feel no need for a mammogram because: "I do self-exams and have felt no lumps."  
 Can only go weekends because of work schedule  
 Mammogram facility hours  
 All are aware that you can get a mammogram for free, so cost is not a concern  
 T.V. source of information (for African-Americans)  
 Radio and Hispanic newspapers source of information (for Hispanics)  
 Discomfort of the mammogram  
 Fear of false negative  
 Fear of diagnosis of cancer  
 Anxiety while waiting for results  
 Communication-Helpful if mammographer talks you through procedure  
 Sense of risk if family member died of cancer  
 Talking with peers helps to allay fears  
 Knowledge of research is promising for treatment and cure  
 Mother-daughter enabling-daughter encouraged mother to get test  
 Fear of pain of the procedure  
 Prefer to get results by phone (rather than mail) so can ask questions  
 Would like to get general idea of whether mammogram was okay after exam  
 Sense of risk is friend has had cancer  
 Prefer to get letter in Spanish rather than English with results (Hispanic)  
 Prefer to get results in Spanish from a Hispanic doctor

The above aspects of primary care and cancer screening elicited from focus group members will be reviewed independently by four physicians- and one psychologist-researchers. Each will organize the aspects into domains and then the domains will be discussed to come to a final consensus. Overlap between domains important for receipt of primary care and receipt of cancer screening will be noted. These findings will serve as a foundation for the development of a cross-sectional survey to be conducted throughout low-income and medically under-served areas of Washington D.C. to further assess what women see as barriers to and promoters of receipt of primary care, and of cancer screening in the primary care setting.

A summary report of the methodology used to organize and facilitate the focus groups, as well as a synopsis of the results are presented in appendix IIa. Flyers used to advertise the focus groups are contained in appendix IIb.

### **2.3. Coursework**

The P.I. took a course in survey design conducted by Professors Beth J Soldo, PhD and Michael A. Stoto in the Department of Demography at Georgetown University. This course covered sampling and survey design focusing on the personal interview and telephone survey. Knowledge gained from this course will be used to develop the survey of approximately 500 women in Phase II of this study.

The P.I. also pursued a self-guided study of cultural aspects of cancer prevention in minority populations. This included a literature review under the guidance of Dr. Jeanne Mandelblatt (primary mentor) and Dr. Jon Kerner. Information learned from this individual study was very useful in preparation of the manuscript on Acculturation and Breast Cancer Screening found in Appendix I.

The P.I. also took a one day course offered by the Henry Jackson Foundation on grant writing. Information gained from this course will be useful in the third Phase of this project when the P.I. prepares a grant for continuation of this work on breast cancer screening in the form of proposed clinical trial in the primary care setting.

### **2.4. Meetings attended**

The P.I. attended the Society of General Internal Medicine's Annual Meeting and its pre-courses in Chicago in April, 1998. An abstract was submitted to this meeting. (See Appendix III for published abstract from the Journal of General Internal Medicine.)

The P.I. also attended the Association for Health Services Research Annual Meeting in June, 1998 here in Washington, D.C. Numerous sessions on breast cancer prevention research were attended at both meetings.

In addition, the P.I. met on a tri-weekly basis with her primary mentor, Dr. Jeanne Mandelblatt to discuss all phases of the project and its development.

## 2.6 Conclusions:

### *Analysis of Multiethnic NYC Data:*

While past studies on breast cancer screening and acculturation have focused on Mexican Americans in California and the Southwest, this study is unique in its focus on Colombian, Dominican, Puerto Rican and Ecuadorian Hispanics in New York City. For these women, higher acculturation was significantly associated with higher rates of screening by clinical breast exam and mammograms. This relationship held after adjustment for socioeconomic status, health status, demographic and health system characteristics, and cancer attitudes and beliefs. Consistent with previous studies, having insurance remained a major predictor of screening use.

The U.S. Public Health Service already recognizes the importance of language and culture in health promotion programs in areas serving minority populations. It has established a year 2000 goal to "increase to at least 50% the proportion of counties that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations."<sup>9</sup> This study's finding of a strong association between a woman's level of acculturation and whether she receives recommended screening, reinforces acculturation's importance in the delivery of breast cancer screening programs to women in these Northeastern Hispanic subgroups. While the higher acculturated women in this study had screening rates near or above those set for the year 2000, less acculturated women still have a long way to go if they are to achieve those objectives. Given that recency of immigration was associated with screening and was strongly collinear with acculturation, this suggests that targeting programs to barrios with a high proportion of recent immigrants may be a useful way to reach the less acculturated.

### *Focus Groups:*

The focus groups were very successful and well received by the participants who provided us with very rich qualitative information on their use of primary care and breast cancer screening services in the primary care setting. A summary report of the focus groups, as well as a synopsis of the results are presented in appendix IIa.

The P.I. continues to analyze the focus group transcripts with the goal of informing the survey to be developed in phase II. The focus group findings will be submitted for publication as part of one of the final papers which summarize the survey findings.

Overall, year one progressed along the timeline indicated in the original statement of work. The only difference was the completion of additional in-depth interviews with clinic directors as well as additional focus groups. These were done in an effort to obtain as much specific information as possible about the populations served by each of the primary care clinics, and to understand what approach to conduction of the future survey will be most feasible.

***Transition to Phase II, Year 2:***

*Specific Aim 2b. Using focus group input and preliminary analyses from Aim 1, we will develop a survey focused on features of primary care systems and regular screening.*

*2c. To administer the survey to 516 women in four primary care clinics to probe their perceived barriers to regular screening and their breast cancer screening practices.*

*2d. To provide feedback on the survey results to the primary care clinic advisory board representatives.*

Development of the survey has begun. Existing instruments with relevance to the study are being collected and the preliminary survey is being further developed. Months 13-17 will be spent developing and refining the battery of questions to assess women's experiences with obtaining cancer screening in the primary care setting.

During in-depth interviews with the clinic directors, some directors expressed concern that they lack searchable computer and recording systems listing clinic users. They also have expressed concern about patient confidentiality, i.e., if logs of past appointments are used to contact patients without patients' prior permission. The alternative to this, in-person interviews of patients as they come to the waiting rooms of the clinics for their care, will be pursued rather than use of telephone interviews of clinic enrollees. In-person interviewing of women in the waiting rooms would avoid confidentiality conflicts. Most clinics have a private space where personal interviews can be conducted. English speaking interviewers will conduct interviews at the predominantly African American attended primary care sites. Spanish speaking interviewers will conduct the interviews at the predominantly Spanish speaking sites. Bilingual interviewers will conduct interviews at the site which serves a combined English-Spanish speaking population. The clinic attendees will be selected in a random way, example, every third visitor, and approached by the interviewer in the waiting room.

Months 17-19 will be spent piloting the survey in the clinic site which has both English and Spanish speaking patients (Upper Cardozo Community Health Center).

Inclusion criteria for the survey will be:

- Age over 40 years
- English or Spanish Speaking
- No history of Breast cancer

Months 20-22 will be spent refining the survey based on pilot results. During months 23-31, the survey will be conducted with a goal of completing 516 personal interviews. A summary of the focus group and survey findings will be presented to the clinic directors and representatives to provide them with information and to obtain their feedback.

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## 2.8 Appendices

- Appendix I:** Manuscript from NYC multiethnic data  
**II:** Letter of acceptance from AJPH  
**III:** Focus Group Moderator Guide (English and Spanish versions)  
**IV:** Focus Group Flyers Used to Recruit Volunteers  
**V:** Focus Groups Summary Report

MS# 97/1041

## **Acculturation and Breast Cancer Screening for Urban Hispanic Women**

Running head: Acculturation and Breast Cancer Screening

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**Word Counts:**

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Text = 3253  
4 tables, 1 figure

**Key words:** breast neoplasm, prevention and control, acculturation, ethnicity,  
mammography, breast physical exam, Hispanic

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## **Abstract**

### **Acculturation and Breast Cancer Screening for Urban Hispanic Women**

**Objectives.** We investigate whether acculturation is associated with the receipt of clinical breast exams and mammograms among Colombian, Ecuadorian, Dominican and Puerto Rican women, ages 18-74 in New York City, 1992.

**Methods.** A bilingual, targeted random-digit dial telephone survey of 908 Hispanic women from a population-based quota sample. Outcome measures include "ever" and "recent" use of clinical breast exams and mammograms. Multivariate logistic regression models assess the effect of acculturation on screening use.

**Results.** Among respondents qualifying for the survey based on age and ethnicity, the refusal rate was 2.1%. Higher acculturated women had significantly higher odds of ever and recently receiving a clinical breast exam ( $p \leq 0.01$ ) and of ever ( $p \leq 0.01$ ) and recently ( $p \leq 0.05$ ) receiving a mammogram, than less acculturated women, controlling for demographic, socioeconomic, and health system characteristics, and for cancer attitudes and beliefs. For all screening measures, there was a linear increase in the adjusted probability of being screened as a function of acculturation.

**Conclusions.** Neighborhood and health system interventions to increase screening among Hispanic women should target the less acculturated.

Word Count = 177

## Background

Despite having lower incidence rates than white non-Hispanics, when Hispanic women develop breast cancer, they are more likely to die of their disease.<sup>1-6</sup> This mortality differential is, in part, related to being diagnosed at a later stage of breast cancer than white non-Hispanics, even after adjustment for socioeconomic status and duration of symptoms.<sup>2,7-8</sup> This stage differential is likely related to differential screening use.<sup>6,9-11</sup>

Socioeconomic status, and having health insurance, a usual source of care, and a physician recommendation for screening all predict screening use in non-Hispanic and Hispanic women.<sup>11-16</sup> Another factor which may influence breast cancer screening use by Hispanics is acculturation.<sup>17-22</sup> Acculturation has been defined as "the psychosocial adaptation of persons from their culture of origin to a new or host cultural environment."<sup>23</sup> For immigrants from non-English speaking countries, acculturation includes the choice of language in daily life.<sup>24</sup>

Prior studies of the role of acculturation in breast cancer screening largely focused on Hispanics as a whole, and have had mixed findings.<sup>17-21</sup> When ethnic subgroups have been identified, the focus has been on Mexican Americans, and to a lesser extent on Cubans and Puerto Ricans, in California and the Southwest.<sup>17-21</sup> The ethnic composition of New York City's 1,737,927 Hispanics differs from that of the Southwestern United States; in 1990 the 4 largest ethnic subgroups were: Puerto Rican (49.5%), Dominican (19.1%), Colombian (5%) and Ecuadorian (4.5%).<sup>25</sup> Among these Northeastern Hispanics, the issue of acculturation and breast cancer screening has received little attention. The purpose of this study is to assess the extent to which acculturation plays a role in the use of recommended clinical breast exams and mammograms among these four groups.

## Methods

**Survey Design and Sampling:** This study was part of a larger study of cancer prevention and control needs of Caribbean-, Haitian- and U.S.-born blacks, and Puerto Rican, Dominican, Colombian, and Ecuadorian Hispanics living in New York City (NYC) in 1992.<sup>15,26</sup> The four Hispanic subgroups consisted of 908 women who are the focus of this study. These four subgroups comprised the largest subgroups of Hispanics in NYC based on census data available at the time of the survey.<sup>25,27</sup>

This study used a quota sample to identify 50 women from each of four age groups: 18-44, 45-54, 55-64, and 65-74 years, in each of four Hispanic groups, for a total goal of 800 women. Due to administrative oversight unrelated to sample characteristics, Dominicans ages 18-44 were inadvertently over sampled. Since the quota sample was chosen to provide groups with similar age distributions, it enabled acquisition of adequate numbers of respondents of all ages for each ethnic group.<sup>28</sup>

Comparison of this quota sample's characteristics with an area-probability sample, the Census Current Population Survey (CPS) during the same time period, suggests that our sample is comparable to the weighted probability sample of NYC Hispanics on several demographic parameters unrelated to the quota sampling framework.<sup>29</sup>

The study sample was selected from the telephone exchanges for all five boroughs of NYC. Both list and random-digit dial sampling techniques were used to ensure coverage of households with unlisted numbers and members of the four ethnic groups. Targeting procedures employing census data, zip codes and telephone exchanges were used to locate low-count ethnic groups clustering in specific neighborhoods.

**Data Collection:** Community leaders reflecting the cultural backgrounds of the study population were extensively involved in the study design and survey promotion. The instrument was developed using existing national survey items,<sup>20,30-36</sup> and modified for use in the target populations. New items were also designed and validated. The survey content areas were then reviewed by focus groups and community advisors from the multi-ethnic communities. Spanish versions of the survey were pilot tested, and validated through standard translation and back-translation. Respondents could choose either Spanish or English for the interview. All data were collected via computer assisted telephone interview (CATI) from May to October of 1992.

**Measures:**

**Dependent Variables: Use of Cancer Screening Services**

Utilization of clinical breast exams (CBE) and mammograms were the outcome measures. Two dichotomous variables were defined for each of the screening procedures. The first determined whether the respondent had ever had the exam. She was asked: "Have you ever had a mammogram?" and, "Have you ever had a breast physical exam by a doctor, nurse or medical assistant?" A definition of the screening test was provided for the respondent prior to questions on utilization.

The second outcome variable measured whether the woman had recently been screened based on her age and adherence to 1992 American Cancer Society (ACS) guidelines for routine screening.<sup>37</sup> She was asked, "When did you have your last mammogram?" and "About how long has it been since you had a breast physical exam by a doctor, nurse or medical assistant?" ( $\leq 1$ , 1-2, 2-3, or  $>3$  years). "Recent" was defined according to 1992 ACS guidelines as follows: for CBE,

every year for women older than 40 years, and every 3 years or less for women aged 20-40 years; and for mammogram, every 2 years or less for women aged 45 years and over. 40-44 year olds were excluded from mammogram analyses due to quota sample structure. An age-related screening “rigor” variable was also included, reflecting the fact that the quota ages included groups of women with differing periodicity of screening recommendations.

### **Independent variables:**

Since language is an important component of modifiable aspects of the process<sup>38-39</sup> of breast cancer screening, we chose to focus on linguistic aspects of acculturation. Other indicators of acculturation were available, (recency of immigration: proportion of life spent in mainland U.S., age of immigration to U.S., whether respondent was first or second generation; and, language of interview), however, these were not included in our acculturation scale or multivariate models because they were highly correlated and displayed strong multicollinearity with the acculturation scale.<sup>40</sup>

Our acculturation measure was a continuous variable based on a 12-item scale. These items were drawn from a 26-item acculturation scale developed by Burnam et al.,<sup>23</sup> and later validated in this shortened form in a NYC Hispanic population by Epstein et al.<sup>24</sup> This scale was reliable in our sample (Cronbach alpha = 0.93). The 12 items asked about language and media (TV, radio, books, magazines, newspapers) use in a variety of situations (work, home, neighborhood, shopping) and with different people (including spouses or partners, children, parents and friends). For each item, the five response options were: 1= “only Spanish,” 2= “mostly Spanish,” 3= “Spanish and English,” 4= “mostly English,” and 5= “only English.” (Appendix available from authors). Acculturation level was calculated as a mean score of these 12 items, (1=least acculturated to 5=most

acculturated).<sup>23</sup> For ease of understanding, in tables 1-3 the acculturation score was dichotomized (score  $\leq 2.5$ , vs.  $> 2.5$ ) into "lower" and "higher," with the top third of women being "higher" acculturated. In table 4, (multivariate models) the acculturation score was continuous.

Controlling variables included: sociodemographics (age, education, marital status, income, employment), health status (self-assessed 5-item measure, ranging from poor to excellent), site of care, presence of a usual source of care, insurance (uninsured, public insurance only i.e., Medicare or Medicaid, or private insurance), and cancer attitudes and beliefs.<sup>8,11,41-48</sup> (Table 2) Since approximately 30% of the respondents refused to provide data on income, this variable was included in the multivariate analyses by keeping the refusals as a separate dummy variable.

Cancer attitudes were measured with the Cancer Attitudes Scale.<sup>26,49</sup> This scale includes an anxiety sub-scale (six items, Kuder-Richardson-20 = .57) and a hopelessness sub-scale (eight items Kuder Richardson-20 =0.65). Perceived risk for developing cancer was measured with two items ( $r=.70$ ); and, concern about cancer was measured with two items ( $r=.72$ ).<sup>26</sup>

### **Analysis**

Bivariate analyses were done to assess relationships among categorical variables. Statistical significance in cross-tabulations was evaluated with the chi-square statistic. We tested for interaction between acculturation (dichotomized) and several potential effect modifiers with respect to screening utilization: education, insurance status, income, and health status.<sup>47</sup> Among women who chose to do the interview in Spanish, an additional test for interaction between acculturation and language of the provider was done. No significant interactions were found between acculturation and income, insurance, or health status in predicting screening use. There was a tendency for education to modify acculturation's effect on screening; however, estimates for these

interaction terms were highly unstable in the multivariate logistic regressions and were not included in the final models.

Stepwise logistic regression models assessed the effect of acculturation and controlling variables on each of the cancer screening outcomes. Variables which had at least one significant dummy (alpha level for stepwise regression=.20) were included in the final model. All models exhibited goodness of fit by the Hosmer-Lemeshow test.<sup>50</sup>

The parameter estimates from the final multivariate logistic regression models were then entered into the logit function to calculate the adjusted probabilities of screening for each of the five levels of acculturation.<sup>51</sup> An additional model was created for the subgroup which completed the interview in Spanish (N=726). This model was the same as the overall final logistic regression model for the entire group (N=907) with the addition (one at a time) of variables on language and its importance in the health care setting (Whether the physician spoke Spanish, Importance of doctor speaking Spanish, Importance of someone in the clinic speaking Spanish). All analyses were done in SAS.<sup>52</sup>

## Results

Overall, 908 Hispanic women completed the survey. The overall response rate was 62.3% (includes calls made to identify homes of persons of the ethnic and age groups of interest). Among women qualifying based on age and ethnicity, the refusal rate for completed surveys was 2.1%.

Table 1 presents the personal characteristics of the specific Hispanic subgroups. Dominicans tended to be younger and to have lower incomes. A greater percentage of Puerto Ricans than the other groups came to the mainland U.S. by age 16 years. Puerto Ricans were also more likely than the other groups to use English for the interview and to have some form of health insurance.

Table 2 presents subgroups of lower and higher acculturated women, based on their acculturation scores, by selected characteristics. The characteristics presented in this table were highly correlated with acculturation (proportion of life in U.S., age at immigration) or were significant predictors of screening utilization in the final multivariate models (age, education, insurance, income, type of site of care/usual source of care).

Having higher acculturation, a usual source of care, higher income, health insurance, immigrating to the U.S. before the age of 16 years, spending a greater proportion of one's life in the U.S., and use of English for the interview, were each statistically significantly associated in univariate analyses with greater receipt of ever and recent CBE and mammograms. (Table 3)

The final multivariate logistic regression models (table 4) showed that women who were more highly acculturated were significantly more likely to have ever and recently obtained a clinical breast exam, ( $p \leq 0.01$ ) and to have ever ( $p \leq .01$ ) and recently ( $p \leq .05$ ) received a mammogram than less acculturated women, controlling for the other covariates.

The mean adjusted probabilities of screening as a function acculturation are shown in Figure

1. For all tests, there is a linear increase in the adjusted probability of screening as one goes from least to most acculturated.

Of the 908 Hispanic women interviewed, 726 chose to conduct the interview in Spanish. These 726 women were asked whether the doctor at their usual site of care spoke Spanish, and about the importance of either their doctor or other personnel in the clinical setting speaking Spanish. While 89% of lower acculturated women felt it was important that their doctor speak Spanish, only 49% of higher acculturated women felt this was important ( $p=.001$ ). Similar proportions of lower and higher acculturated women felt it was important that someone in the clinic speak Spanish (89% vs. 51% respectively;  $p<.001$ ). Surprisingly, among this subset of women, having a primary care doctor who spoke Spanish was not significantly associated with higher odds of receipt of ever or recent CBE or mammograms. (Data not shown)

## Discussion

While past studies on breast cancer screening and acculturation have focused on Mexican Americans in California and the Southwest, this study is unique in its focus on Colombian, Dominican, Puerto Rican and Ecuadorian Hispanics in New York City. For these women, higher acculturation was significantly associated with higher rates of screening by clinical breast exam and mammograms. This relationship held after adjustment for socioeconomic status, health status, demographic and health system characteristics, and cancer attitudes and beliefs. Consistent with previous studies, having insurance remained a major predictor of screening use.<sup>16</sup>

Previous studies on breast cancer screening and acculturation have been conflicting. Some found no statistically significant effect of acculturation on screening utilization,<sup>17-19,22,53</sup> while, others did.<sup>20-21</sup> The studies<sup>17-19,22</sup> which found no significant effect all used a broad measure of acculturation which included not only language use, but also social patterns/family values, or ethnic identification. One of the studies which found a significant association between acculturation and screening, used a measure which included language, ethnic identification and birthplace,<sup>20</sup> and, the other used only the language chosen for the interview.<sup>21</sup>

Placing our results in the context of these prior conflicting findings is complicated by controversy in determining: 1) how to best measure acculturation, and 2) the conceptual framework within which acculturation operates. With respect to the first area, some criticize the use of language alone as an inadequate measure of acculturation; they contend that the extent to which one has adopted core values of the host culture should be included.<sup>54</sup> Others argue that language preference is the best measure of cultural integration.<sup>55-57</sup> Many now view language as a "reliable shorthand measure" of acculturation because it accounts for the greatest portion of variance of acculturation

scales and is valid.<sup>58-59</sup> We chose to focus on the linguistic aspects of acculturation because of their relevance to interventions targeting the delivery of health care.

Measures of acculturation that focus on language use have another advantage over broader measures of acculturation: one can establish that language use is associated with the screening behavior. With mixed acculturation measures, components unrelated to the behavior of interest could lower the association of language use and health behavior, perhaps explaining the prior inconsistent findings in studies of acculturation and health practices of Hispanic adults.<sup>23-24,60</sup>

The second area of controversy is the conceptual framework within which acculturation operates. Limited proficiency in English is associated with socioeconomic factors known to be related to decreased utilization of health care.<sup>21,61</sup> Without controlling for these factors, acculturation may simply act as a proxy for socioeconomic status.<sup>54</sup> Our inclusion of socioeconomic indicators (income, education, work status) in the multivariate models reduces this risk.

Also complicating this conceptual framework is the issue of how language influences health care use. Some see language as a communication barrier between provider and patient,<sup>62</sup> while others emphasize the effect of language on screening practices as an access factor.<sup>20</sup> Viewing language acquisition as merely an "access factor" may be an oversimplification. Language affects perceptions, cognitive structure and self-expression,<sup>63-66</sup> which may impact how Hispanic women interact with providers. Thus, it is likely that language operates on both levels, and that some combination of its effects contributes to the likelihood of a woman obtaining recommended screening.

As an example of language's complex role: we found that among the subset of women in

our sample who chose to be interviewed in Spanish, and who were the least acculturated, having a clinic doctor or someone in the clinic who spoke Spanish was not predictive of screening utilization. One potential implication of this finding is that simply introducing translators or Spanish speakers into the clinic, without addressing women's level of acculturation, may not be sufficient to change behavior. It might be necessary for example, to also involve trained lay health workers from cultural backgrounds similar to the target population.<sup>67</sup>

Further community and practice-based research is needed to evaluate the effectiveness of tailoring cancer screening messages to the acculturation level of the women being served. Further study would also help to address whether having a provider with a common language or cultural orientation, can lead to improved screening rates for this population.

Several caveats should be considered in interpreting our data, including: potential selection bias, use of self-report, and potential lack of generalizability to persons without telephones or living in rural areas. Those participating in the sample may differ systematically from the non-participants; for example, respondents may be more likely to have had screening. We do not have data on the non-participants. However, our refusal rate, among those known to be eligible for the study, was low (2.1%).

Use of screening services in this study was determined by self-report. Since the women received care from a variety of settings in NYC, validation of self-reports through medical record review was not practical. Several studies have established that self-reporting usually overestimates the prevalence of screening.<sup>68-71</sup> Characteristics which might influence the validity of self-reports, such as acculturation, education and socioeconomic status, have been controlled for in analyses which assess the sample as a whole.

The rates of receipt of CBE and mammogram in our 1992 study seem high relative to commonly cited, but older, national rates, most of which are based on data from 1987 and earlier. However, our screening rates are consistent with more recent local studies<sup>35</sup> and with Behavioral Risk Factor Surveillance System data from the same time period. For instance, a CDC study of this data from 39 states,<sup>72</sup> found age-adjusted proportions of women aged 40 years and older who received a (recent) mammogram in the preceding 2 years to range from 43.8% to 65.2% in 1989, and from 63% to 79.7% in 1995.

While the vast majority of Hispanic New York State residents resided in NYC at the time of the survey,<sup>27</sup> the data may not generalize to Hispanic women living in, or migrating to, rural settings. In 1992, 79% of Hispanic households in NYC had a telephone.<sup>73</sup> The alternative to telephone interviews, i.e. personal interviews, are difficult to achieve in the economically depressed areas of NYC where many of the target populations reside, due to concern for security on the part of respondents. Furthermore, in-person screening for quota samples is extremely inefficient. Despite this limitation, the quota sample is broadly representative of those members of ethnic groups living in the targeted areas.

An upward trend in screening use among Hispanic women, compared to older data, is reflected in our and other recent studies.<sup>16, 68, 74</sup> However, data from this same time period still show that Anglos more frequently report recent mammography use (79%)<sup>16</sup> than either Mexican Americans (61%)<sup>16</sup> or our sample (52%) of Hispanic women. The same is true of recent CBE nationally (66% Anglos vs. 59% Hispanic women).<sup>74</sup> In our sample, recent CBE rates were slightly higher (68%), especially among the higher acculturated.

The U.S. Public Health Service already recognizes the importance of language and culture

in health promotion programs in areas serving minority populations. It has established a year 2000 goal to "increase to at least 50% the proportion of counties that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations."<sup>9</sup> This study's finding of a strong association between a woman's level of acculturation and whether she receives recommended screening, reinforces acculturation's importance in the delivery of breast cancer screening programs to women in these Northeastern Hispanic subgroups. While the higher acculturated women in this study had screening rates near or above those set for the year 2000, less acculturated women still have a long way to go if they are to achieve those objectives. Given that recency of immigration was associated with screening and was strongly collinear with acculturation, this suggests that targeting programs to barrios with a high proportion of recent immigrants may be a useful way to reach the less acculturated.

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**Table 1. Characteristics of the Sample of Hispanic Women, New York City, 1992. (N=908)**

Characteristics	Ethnicity				p
	Colombian % (n=202)	Dominican % (n=308)	Ecuadorian % (n=151)	Puerto Rican % (n=247)	
<b>Age</b>					
18-44	31.2	50.7	34.4	37.3	
45-54	24.7	16.6	32.5	20.7	
55-64	25.3	16.6	22.5	21.1	
65 +	18.8	16.2	10.6	21.1	.001
<b>Education</b>					
<12 yrs	40.6	51.6	45.7	46.1	
12-15 yrs	45.5	37.6	46.4	40.9	
college graduate	13.9	10.7	7.9	13.0	.161
<b>Marital Status</b>					
Married	45.5	41.2	53.0	36.4	
Single	54.5	58.7	45.7	62.7	.008
<b>Household Income</b>					
< \$20,000.	38.6	49.0	37.1	35.2	
≥ \$20,000.	26.2	22.4	25.2	38.1	
Refused/Don't know	35.1	28.6	37.6	26.7	.001
<b>Health Status</b>					
Excellent-Very Good	32.7	33.1	37.1	32.8	
Good	33.2	23.4	28.5	32.0	
Fair-Poor	30.2	39.6	33.8	31.6	.321
<b>Age at Immigration to US</b>					
≤ 16 yrs old	9.4	18.2	7.3	53.9	
> 16 yrs old	90.6	81.8	92.7	46.1	.001
<b>Interview language chosen</b>					
English	9.4	14.0	8.6	42.1	
Spanish	90.6	86.0	91.4	57.9	.001
<b>Acculturation</b>					
Lower	75.7	76.9	77.5	37.8	
Higher	24.3	23.1	22.5	62.2	.001
<b>Employment Status</b>					
Unpaid	43.1	52.6	36.4	39.3	
Retired	12.9	15.3	15.9	17.8	
Part-time	14.4	5.2	7.3	6.9	
Full-time	29.2	26.3	39.1	35.2	.001
<b>Insurance</b>					
Uninsured	35.6	26.0	36.4	8.1	
Medicaid/Medicare only	22.8	43.2	27.8	40.5	
Private	39.1	28.6	33.1	49.0	.001
<b>Has a Usual Source of Care</b>	80.7	80.5	82.8	90.7	.006

**Table 2. Selected Characteristics of Hispanic Sample by Acculturation Level, New York City, 1992.**

Characteristics	Acculturation		p
	Lower %	Higher %	
<b>Total Number of Women (N=907)†</b>	307	600	
<b>Age (years)</b>			
18-44 (N=362)	32.0	55.4	
45-54 (N=201)	23.2	20.2	
55-64 (N=188)	23.5	15.3	
≥ 65 (N=156)	21.3	9.1	.001
<b>Education</b>			
<12 yrs (N=424)	58.8	23.1	
12-15 yrs (N=379)	33.2	58.6	
≥ 16 yrs (N=104)	8.0	18.3	.001
<b>Income</b>			
< \$20,000	46.7	30.0	
≥ \$20,000	16.0	51.1	
Refused/Don't Know	37.3	18.9	.001
<b>Type of Usual Site of care</b>			
Private doctor's office	39.4	45.4	
Hospital Outpatient Dept.	15.6	14.8	
Public Health Clinic	8.1	6.3	
HMO	10.8	8.6	
ER	8.9	9.5	
No Site	17.1	15.4	.525
<b>Insurance Status</b>			
Private Insurance (N=337)	25.3	60.3	
Only Medicare or Medicaid (N=321)	41.7	23.1	
Uninsured (N=227)	30.2	15.0	.001
<b>Proportion of Life Spent in Mainland US</b>			
Has spent less than a quarter of life in US (N=343)	37.5	9.9	
Has spent 26-50% of life in US (N=317)	43.2	20.2	
Has spent 51%-75% of life in US (N=181)	16.4	27.8	
Has spent more than 75% of life in US (N=53)	2.8	42.1	.001
<b>Age at Immigration to Mainland US</b>			
Before age 16 (N=218)	8.3	54.7	
After age 16 (N=689)	91.7	45.3	.001

† When the rows for each characteristic do not add up to N=907, the missing are due to "don't know/refusals" to that particular survey item. There were no significant differences in the no. of high and low acculturated women in the "don't know, refused" categories for any variable, except income.

Table 3. Percentage of Hispanic Women Screened According to Demographic, Socioeconomic, Acculturative and Health System Characteristics. (Unadjusted Percentages)

	Utilization			
	Clinical Breast Exam		Mammogram	
	Ever % (n=888)	Recent* % (n=882)	Ever % (n=542)	Recent* % (n=524)
<b>Total Sample</b>	86.3%	68.1%	71.6%	62.0%
<b>Demographic Characteristics</b>				
<b>Age</b>				
18-44	85.3	77.8	----	----
45-54	85.1	59.2	66.7	58.5
55-64	90.9	68.5	74.7	66.5
≥65	84.5	58.1 <sup>+</sup>	74.2	61.2
<b>Ethnicity</b>				
Colombian	87.9	66.3	73.4	62.7
Dominican	80.5	64.7	66.9	53.4
Ecuadorian	85.3	69.6	68.4	62.5
Puerto Rican	92.6 <sup>++</sup>	72.9	76.6	69.9 <sup>+</sup>
<b>Marital Status</b>				
Married	86.1	70.0	68.2	61.3
Single, Divorced, Widowed	86.5	66.7	73.6	62.2 <sup>+</sup>
<b>Socioeconomic Characteristics</b>				
<b>Education</b>				
<12 yrs	83.2	59.2	69.3	59.3
12-15 yrs	88.0	74.4	73.7	66.3
College graduate	92.4 <sup>+</sup>	81.7 <sup>++</sup>	78.0	65.8
<b>Household Income</b>				
< \$20,000.	83.9	63.9	68.6	60.2
≥ \$20,000.	92.0	81.8	78.4	77.6
Refused/Don't know	84.2 <sup>++</sup>	61.3 <sup>++</sup>	71.1	55.7 <sup>++</sup>
<b>Employment Status</b>				
Unpaid	87.8	65.4	69.3	59.2
Retired	84.1	61.2	75.5	61.9
Part-time	87.5	70.4	67.4	61.9
Full-time	88.6	74.8 <sup>-</sup>	72.5	66.4
<b>Insurance</b>				
Uninsured	77.5	53.4	53.4	45.4
Medicaid/Medicare only	88.2	68.0	77.5	63.7
Private	91.0 <sup>++</sup>	78.3 <sup>++</sup>	76.3	70.3 <sup>++</sup>

<b>Health/ Health System Characteristics</b>				
<b>Health Status</b>				
Excellent-VG	87.8	70.5	69.4	62.9
Good	86.9	70.8	74.8	66.7
Fair-Poor	83.3	62.0 <sup>+</sup>	71.0	58.6
<b>Has a Usual Source of Care</b>				
Yes	88.7	71.5	75.4	65.8
No	73.6 <sup>++</sup>	50.7 <sup>++</sup>	48.7 <sup>++</sup>	39.5 <sup>++</sup>
<b>Type of Usual Site of Care</b>				
Private Doctor's Office	89.5	69.8	71.7	62.9
Emergency Room	87.7	72.8	71.1	59.1
Hospital Outpatient Dept.	89.6	75.0	88.6	80.5
Public Health Clinic	87.9	69.7	77.8	62.8
HMO/Large Health Center	88.8	75.0	80.0 <sup>+</sup>	69.5 <sup>+</sup>
<b>Acculturation</b>				
<b>Language preferred for interview</b>				
English	95.8	86.1	81.0	75.9
Spanish	84.0 <sup>++</sup>	64.0 <sup>++</sup>	70.4	60.4 <sup>+</sup>
<b>Age at Immigration to US</b>				
≤ 16 yrs old	93.1	80.5	83.3	74.3
> 16 yrs old	84.3 <sup>++</sup>	64.5 <sup>++</sup>	69.8 <sup>+</sup>	60.1 <sup>+</sup>
<b>Proportion of Life in Mainland U.S.</b>				
≤ 25%	76.4	59.0	60.0	51.9
26-50%	87.5	69.1	72.7	61.9
51-75%	90.6	67.4	76.3	67.7
>75%	98.1	84.6	87.1	80.6
Born in Mainland U.S.	95.0 <sup>++</sup>	87.3 <sup>++</sup>	81.2 <sup>++</sup>	71.4 <sup>+</sup>
<b>Acculturation (Scale)~</b>				
Higher acculturated	94.5	80.8	79.4	73.4
Lower acculturated	82.2 <sup>++</sup>	62.0 <sup>++</sup>	68.9 <sup>+</sup>	58.3 <sup>++</sup>
<b>Cancer Attitudes and Beliefs</b>				
<b>Cancer Anxiety Scale</b>				
High	84.6	66.0	70.6	61.1
Low	88.4	70.8	73.1	63.6
<b>Cancer Hopelessness Scale</b>				
High	84.3	64.3	70.1	69.2
Low	91.8 <sup>++</sup>	78.9 <sup>++</sup>	76.9	57.7 <sup>++</sup>
<b>Concern about Cancer</b>				
High	87.5	72.9	71.9	64.8
Low	85.3	64.4 <sup>++</sup>	71.4	60.0
<b>Perceived Risk of Cancer</b>				
High	86.3	70.3	71.4	62.2
Low	86.2	65.7	71.8	61.9

Mean acculturation score for ever-CBE vs. never CBE: 2.2 vs 1.7<sup>+</sup>; recent-CBE vs. nonrecent CBE: 2.3 vs. 1.8<sup>+</sup>; ever-mammogram vs. never mammogram 2.0 vs. 1.7<sup>+</sup>; Recent mammogram vs. nonrecent mammogram: 2.1 vs. 1.8<sup>+</sup>

+  $p \leq .05$  for the group (cell)    ++  $p \leq .01$  for the group (cell)

\* "Recent" was defined according to 1992 American Cancer Society guidelines as follows: for clinical breast exam, every year for women older than 40 years and  $\leq 3$  years for women aged 20-40 years; and for mammogram,  $\leq 2$  years for women 45 years and older. (Hence, total numbers of women do not add up to 908.)

--- indicate not applicable

Table 4. Acculturation and Adjusted Odds<sup>^</sup> of Breast Cancer Screening Among Hispanic Sample, New York City, 1992.

Odds Ratio (95% Confidence Interval)

	Clinical Breast Exam		Mammogram	
	Ever	Recent*	Ever	Recent*
Acculturation** (continuous scale)	1.82 <sup>++</sup> (1.30-2.60)	1.35 <sup>++</sup> (1.07-1.71)	1.59 <sup>++</sup> (1.17-2.17)	1.34 <sup>+</sup> (1.01-1.79)
Type of Site				
Private Doctor's Office	1.25 (0.60-2.49)	0.84 (0.48-1.44)	1.11 (0.54-2.21)	1.13 (0.57-2.21)
Hospital Outpatient Dept.	1.53 (0.66-3.54)	1.24 (0.65-2.35)	4.00 <sup>++</sup> (1.58-10.7)	3.40 <sup>++</sup> (1.48-8.02)
Public Health Clinic	1.55 (0.59-4.28)	0.97 (0.47-2.04)	1.82 (0.66-5.28)	1.33 (0.52-3.47)
HMO	1.47 (0.59-3.79)	1.30 (0.64-2.66)	2.02 (0.82-5.15)	1.69 (0.73-3.99)
ER	1	1	1	1
No Site	0.56 (0.27-1.13)	0.43 <sup>++</sup> (0.23-0.77)	0.56 (0.25-1.21)	0.56 (0.26-1.22)
Education				
Less than 12 years	1	1	1	1
12-15 years	1.24 (0.76-2.04)	1.39 (0.96-2.02)	1.12 (0.69-1.83)	1.11 (0.70-1.79)
≥ 16 years	1.86 (0.82-4.71)	1.90 <sup>+</sup> (1.05-3.59)	1.25 (0.55-3.10)	0.89 (0.41-1.98)
Age				
20-44 years	1	1	N/A	N/A
45-54 years	1.48 (0.85-2.62)	0.68 (0.33-1.32)	1	1
55-64 years	3.20 <sup>++</sup> (1.66-6.35)	1.25 (0.61-2.49)	1.71 <sup>+</sup> (1.06-2.80)	1.45 (0.81-2.59)
≥ 65 years	1.16 (0.60-2.25)	0.66 (0.31-1.34)	1.17 (0.66-2.07)	1.03 (0.54-1.95)
Insurance				
Private	1.62 (0.92-2.86)	2.10 <sup>++</sup> (1.36-3.24)	1.75 <sup>+</sup> (1.00-3.07)	1.49 (0.87-2.57)
Public Only	2.55 <sup>++</sup> (1.47-4.49)	2.26 <sup>++</sup> (1.47-3.51)	2.47 <sup>++</sup> (1.38-4.47)	1.74 <sup>+</sup> (1.01-3.03)
Uninsured	1	1	1	1
Income				
<\$20,000.	0.78 (0.41-1.45)	0.70 (0.43-1.10)	0.77 (0.40-1.47)	0.56 (0.30-1.04)
≥ \$20,000.	1	1	1	1
Refused/Don't Know	0.90 (0.44-1.82)	0.79 (0.47-1.32)	1.01 (0.51-2.00)	0.49 <sup>+</sup> (0.25-0.94)

† Only statistically significant variables from the final model are shown.

^ All odds ratios are adjusted for acculturation, type of site of care/usual source of care, education, age, ethnicity, insurance status, marital status, health status, cancer anxiety score, cancer hopelessness score, cancer concern score, and income.

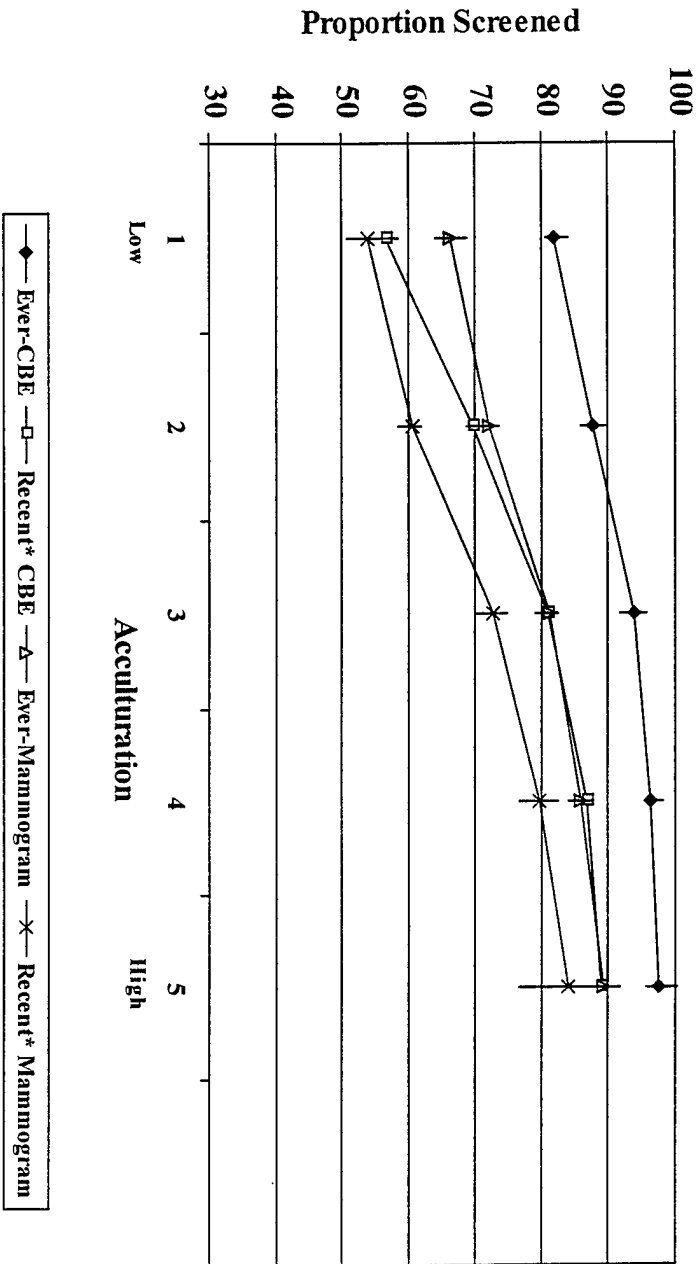
\* "Recent" was defined according to 1992 American Cancer Society guidelines as follows: for clinical breast exam, every year for women older than 40 years and every 3 years or less for women aged 20-40 years; and for mammogram, every 2 years or less for women aged 45 and over. (40-44 year olds excluded due to quota sample structure).

\*\* Acculturation is continuously scaled from 1 (least acculturated) to 5 (most acculturated). Odds ratios for this variable indicate increase in odds of screening per unit increase in the acculturation scale.

+ p ≤ .05    ++ p ≤ .01

1=reference group

Figure 1. Adjusted Proportions\*\* (and 95% Confidence Limits) of Women Screened by Acculturation Score\*\*\*



“†” Indicates the 95% confidence limits for that adjusted proportion.

\*“Recent” was defined according to 1992 American Cancer Society guidelines as follows: for clinical breast exam, every year for women older than 40 years and every 3 years or less for women aged 20-40 years; and for mammogram, every 2 years or less for women aged 45 and over.

\*\* Adjusted proportions of women screened are calculated from the logit function based on the multivariate logistic regression models (table 3) which adjust for: acculturation, type of site/usual site of care, education, age, ethnicity, insurance, marital status, health status, cancer anxiety, hopelessness and concern scales, and income.

\*\*\* Adjusted proportion screened was calculated from the logit function at each of the five categories of acculturation.



# American Public Health Association

1015 Fifteenth Street, N.W. • Washington, D.C. 20005-2605  
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June 18, 1998

Ann S. O'Malley, MD, MPH  
Georgetown University Medical Center  
Dept. of Medicine  
Clinical Economics Research UNit  
2233 Wisconsin Ave., NW - Suite 440  
Washington, DC 20007

RE: 97/1041: "Acculturation and Breast Cancer Screening for Urban Hispanic Women"

Dear Dr. O'Malley:

I am glad to be able to tell you that your submission to the American Journal of Public Health has been accepted in final form for publication as an Article.

Meanwhile, would you please make sure of the following:

If you are using text, tables or figures from published work, obtain written permission from the copyright holder and send it to us as soon as possible.

✓ Check your references (see enclosed sheet).

• Check your abstract and, if necessary, shorten it to comply with the 180-word limit established for Articles. The abstract should be structured under the following headers: objectives, methods, results, and conclusions.

• Sign and have all coauthors sign 1) a cover letter that states they approve the final version, and 2) the enclosed copyright agreement form or, if appropriate, the federal employment statement.

✓ Enclose the final copy of your article on diskette labeled with your name and the manuscript number. Microsoft is the preferred format, but others are acceptable. If you have made further changes to your manuscript, please also include 3 hard copies.

We need to have the copyright agreement returned to APHA within 10 days (and permission within 4 weeks).

Sincerely,

Mary E. Northridge, PhD, MPH, MT  
Interim Editor

PS. Please remember that the results of your paper are embargoed and must not be revealed to the press prior to publication.

cc: Reviewer(s)  
Responsible Editor

*125 Years of Leadership in Public Health*

**MEASURING PATIENT SATISFACTION FOR QUALITY IMPROVEMENT.** LE Harris, RW Swindle, SM Mungai, M Weinberger, WM Tierney. Regenstrief Institute, Indiana University School of Medicine, Roudebush VAMC, Indianapolis, IN.

Health care organizations seek patients' ratings of care for both internal quality improvement and external quality reporting. Unfortunately, a single measure to accomplish both purposes has not been reported. We describe the reliability and validity of a visit-specific patient satisfaction instrument that we designed for both purposes.

We surveyed adult and pediatric patients in five university-affiliated primary care sites serving enrollees of six managed care plans. The instrument, administered by mail with telephone follow-up of non-responders, included the 9-item Medical Outcomes Study Visit-Specific Questionnaire, the 12-item American Board of Internal Medicine Patient Satisfaction Questionnaire, and 11 items developed by our Quality Improvement Committee.

Two-thirds of the adult (1,255/1,286) and pediatric (794/1,296) surveys were returned, with less than 5% data missing on all items. In both samples, principal components factor analysis revealed 4 factors: satisfaction with access (ACC), physician (MD), nurses (RN), and office staff (OFF). In both samples, internal consistency was high (Cronbach's alpha > .85). Using multiple logistic regression, satisfaction with ACC, MD, and OFF were all significant ( $p < .01$ ) predictors of overall satisfaction: satisfaction with RN was significant only for adults ( $p < .001$ ). These findings were observed when controlling for patient demographics, satisfaction with office wait time, whether the visit was with their regular provider, and type of visit. We also detected significant differences across sites, which served as the basis for developing quality improvement strategies. This visit-specific patient satisfaction instrument is 1) reliable and valid in both adult and pediatric samples and 2) capable of identifying areas for quality improvement.

### SPECIAL OR VULNERABLE POPULATIONS

**NAVAJO USE OF NATIVE HEALERS.** C Kim, Y Kwok, and B Muneta, Crownpoint Healthcare Facility, Crownpoint, NM, Indian Health Services Headquarters West, Window Rock AZ.

**Context.** The interaction of Navajo native healers, or medicine men, with conventional medicine has not been researched, although the Indian Health Service provides extensive health care service to this population.

**Objectives.** To determine the prevalence of native healer use, reasons for use, cost of use, and the nature of any conflict with conventional medicine.

**Design.** Survey conducted by two physicians.

**Setting.** Rural Indian Health Service hospital in New Mexico.

**Patients.** Consecutive sample of 300 Navajo patients in ambulatory care clinic.

**Main Outcome Measures.** Prevalence and frequency of native healer use. Demographic characteristics of native healer users. Medical reasons for seeking native healer care. Cost of Native healer care. Conflict with conventional medicine.

**Results.** Sixty-two percent of patients had used native healers in the past, and thirty-nine percent used native healers on a regular basis; users were not distinguishable from non-users by age, education, income, fluency in English, identification of a primary provider, compliance or satisfaction with medical care. Religion did not influence their decision to seek native care unless patients identified themselves as Pentecostal, in which case they tended not to use native healers ( $p < .001$ ). Patients consulted native healers for common medical conditions such as arthritis, depression and anxiety, and diabetes mellitus, as well as "bad luck." Perceived conflict between native healer advice and medical provider advice was rare. Cost was the main barrier to seeking native healer care more often.

**Conclusions.** Native healer use for medical conditions is common and is not limited to any particular age, sex, education level, or income; nor is it correlated with frequency of hospital use, compliance with medical provider instructions, or satisfaction with medical care. Patients are willing to discuss native healer use if asked in a sensitive manner and rarely perceive conflict between native healer and conventional medicine.

**ACCULTURATION AND BREAST CANCER SCREENING FOR URBAN HISPANIC WOMEN.** Ann S. O'Malley, Jon Kerner, Ayah Johnson, Jeanne Mandelblatt, Georgetown University Medical Center, Washington, DC.

**Objectives.** We investigate whether acculturation is associated with the receipt of clinical breast exams and mammograms among Colombian, Ecuadorian, Dominican and Puerto Rican women, ages 18-74 in New York City, 1992.

**Methods.** A bilingual, targeted random-digit dial telephone survey of 908 Hispanic women from a population-based quota sample. Outcome measures include "ever" and "recent" use of clinical breast exams and mammograms. Multivariate logistic regression models assess the effect of acculturation on screening use.

**Results.** Among respondents qualifying for the survey based on age and ethnicity, the refusal rate was 2.1%. Higher acculturated women had significantly higher odds of ever and recently receiving a clinical breast exam, and of ever having had a mammogram, than less acculturated women ( $p \leq .01$  for each), controlling for sociodemographic, and health system characteristics, and for cancer attitudes and beliefs. For all screening measures, there was a linear increase in the adjusted probability of screening as one goes from least to most acculturated.

**Conclusions.** Acculturation is an important factor to consider in attempts to improve breast cancer screening rates among these Hispanic subgroups. These findings suggest that providers consider tailoring their approaches to the acculturation level of the Hispanic women served.

**THE EFFECT OF RACIAL CONCORDANCE BETWEEN PATIENT AND PHYSICIAN ON THE PERCEIVED QUALITY AND ACCESSIBILITY OF HEALTH CARE.** S Saha, M Komaromy, and TD Koepsell, Seattle VAMC and University of Washington, Seattle, WA, and UC San Francisco, San Francisco, CA.

Minority populations in the U.S. have lower access to care, use fewer health services, and express less satisfaction with health care than whites, even with similar health insurance coverage. These disparities may in part be due to racial or cultural barriers between health care providers and patients of different backgrounds. We hypothesized that racial concordance between patient and physician is associated with greater patient satisfaction, greater reported use of preventive care, and greater likelihood of receiving health care that is perceived to be necessary.

We analyzed national data from the Commonwealth Fund 1994 Minority Health Survey. Telephone interviews were conducted with 1114 non-Hispanic whites, 1005 non-Hispanic blacks, 1001 Hispanics, and 626 Asians. Of these, 2587 had a regular physician of known race. In logistic regression analyses adjusting for age, sex, education, health status, insurance type, and primary care site, black individuals with black physicians were more likely than those with other-race physicians to rate their doctors as excellent (OR 2.2, 95% C.I. 1.5-3.3), to report receiving preventive care (OR 1.7, 95% C.I. 1.0-3.0), and to report always receiving care that they felt they needed (OR 2.6, 95% C.I. 1.1-6.0). Hispanic respondents with Hispanic physicians were more likely to be very satisfied with their health care services overall (OR 1.6, 95% C.I. 1.0-2.5). Further adjustment for income, primary language, access barriers, and patients' ability to choose their physician did not substantially change these results. Physician-patient racial concordance among whites and Asians was not significantly associated with any of our response variables.

Our findings reaffirm the role of minority physicians in providing health care for minority populations and the importance of continuing efforts to recruit underrepresented minorities into the medical professions. Further studies aimed at improving our understanding of potential racial and cultural barriers between patients and physicians are warranted.

**PATIENT AND PROVIDER SATISFACTION WITH METHODS OF INTERPRETATION IN A RESIDENTS' AMBULATORY CARE CLINIC.** David Kuo and Mark J. Fagan, Division of General Internal Medicine, Rhode Island Hospital, Brown University School of Medicine, Providence, Rhode Island 02903

**Study Purpose:** A variety of methods of interpretation (MOI) are used to facilitate communication for Spanish-speaking patients, but no published studies have compared attitudes of patients and providers about existing MOI. We sought to determine satisfaction with MOI among patients and providers in a residents' ambulatory care clinic which serves a significant percentage of Spanish-speaking patients.

**Methods:** Based on literature review, we created a survey containing questions about perceptions of MOI used in the outpatient setting; specifically, family or friends, professional interpreters, ad hoc interpreters, telephone language services, and the physician. The survey used Likert scale questions to ask about frequency of use of various MOI, satisfaction with MOI, patient comfort using MOI for sensitive topics, and the perceived importance of various characteristics of MOI. The survey was adapted to use with internal medicine residents and Spanish-speaking patients, and administered in Rhode Island Hospital's general internal medicine clinic over a six week period.

**Results:** 147 patients (96% of those approached) and 49 residents (69.0%) completed the survey. Both groups reported using a variety of MOI, and were most satisfied with professional interpreters (over 90% reporting somewhat or very satisfactory). Patients were significantly more satisfied than residents using family members and friends (85% vs. 56%,  $p < .01$ ). For sensitive issues, patients were most comfortable using physicians who were proficient in the patient's language (98% somewhat or very comfortable). Both groups agreed that accuracy, accessibility, and respect for confidentiality were highly important characteristics of interpreters (>88% somewhat or very important). However, patients gave more importance to the ability of the interpreter to assist them after the physician visit (94% vs. 48%,  $p < .01$ ).

**Conclusions:** There are significant differences between physicians and patients with respect to their satisfaction with various methods of interpretation. These results may help resident clinics improve existing systems to meet the needs of Spanish-speaking patients.

**IMPACT OF CROSS-CULTURAL PHYSICIAN-PATIENT RELATIONSHIP UPON PATIENT CHOICE OF MEDICAL CARE.** RA David and M Desir, Mount Sinai Medical Center, New York N.Y.

**OBJECTIVE:** Cultural and language differences are known to impact upon health care delivery. We undertook a study to define issues which impact upon a patients utilization of treatment options.

**METHODS:** An evaluative instrument was developed in English and Spanish as a ten minute survey. Institutional review board approval was obtained. The survey was randomly distributed in a multi-disciplinary primary care ambulatory medicine site located at Mount Sinai Medical Center.

**RESULTS:** The survey completion rate was 86%. 13 of 15 patients who declined participation stated distrust for the "medical establishment" was their reason, based on racial issues. For categorical data Chi-square analysis was utilized.

38± 11%, ( $P < .05$ ) of patients indicated their physician took into account their unique cultural needs.

61± 11%, ( $P < .05$ ) indicated their physician took into account their emotional needs.

44± 11%, ( $P < .05$ ) of patients indicated that family advice plays a role in their taking their medication.

28± 11%, ( $P < .05$ ) indicated that their religion or a healer played a role.

73± 11%, ( $P < .05$ ) of patients use prayer as alternative treatment.

25± 11%, ( $P < .05$ ) use herbs, plants, or oils without the knowledge of their physician.

52% of women and 26% of men responded that they would be better understood if their physician was of their same gender. 25% of women and 11% of men indicated they would be more likely to follow treatment regimens if their physician was of their same gender.

**CONCLUSIONS:** Clear communication leading to trust in the physician is an essential ingredient for patients decision-making regarding adherence to medical therapy. It is disturbing to find that some patients verbally indicated their distrust for the "medical establishment" and for that reason declined participation in the study. However, it is important to note that even if differences in culture exist most patients indicated that effort to acknowledge this issue can help bridge the gap.

Herbs, plants, oils, religion and prayer rank amongst treatments in which patients participate but did not notify their physician. Patients frequently do not share information about non-prescription treatments.

More female patients indicated that sharing the same gender with their physician improved their communication. This finding is consistent with other studies in which there was no culture or language barrier. It is known to impact negatively upon completion rates of mammograms and Pap smears.

# JGIM

## Journal of General Internal Medicine

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Society of  
General Internal Medicine

*21st Annual Meeting*  
*Chicago, Illinois*  
*April 23-25, 1998*

Promoting the Health of Communities:  
The Role of Primary Care

Program  
Submitted Abstracts and Clinical Vignettes

# thirtuesday . . . 1997-98

05: ann.o'malley.md.mph

Ann O'Malley is a Research Assistant Professor in Georgetown's Clinical Economics Research Unit, where she completed her fellowship in primary care research in 1996. Dr. O'Malley completed residency training in preventive medicine and public health at the University of Maryland Medical Center. She also completed an internship in pediatrics at Georgetown University Medical Center.

Dr. O'Malley's research has focused on continuity of care and delivery of preventive health services to women, children, and underserved minority populations. She has recently published articles on cervical and breast cancer screening in a multiethnic population, delivery of ambulatory services to children in community health centers, and preventive counseling for low back pain. She currently serves as principal investigator in a study of primary care and regular breast cancer screening among underserved minority women.

## Acculturation and Use of Breast Cancer Screening among Urban Hispanic Women

JANUARY 20 1998 — 8:00 TO 9:00 A.M. — HARVEY CONFERENCE ROOM — 5 PHC — BY THE CLINICAL ECONOMICS RESEARCH UNIT  
WWW.DML.GEORGETOWN.EDU/DEPTS/MEDICINE/CERU — FOR THE DIVISION OF GENERAL INTERNAL MEDICINE — GEORGETOWN UNIVERSITY

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**Focus Group Discussion Guide**  
**Women's Health**  
**Saturday, March 21, 1998 (10am-noon)**

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**Objective:** To explore women's feelings and experiences with the health care and cancer screening at Zacchaeus clinic.

**Introduction:**

Hello. My name is \_\_\_\_\_ and this is \_\_\_\_\_. Welcome to this discussion about women's health issues. We are grateful that you have decided to share your time with us today. This discussion will take about two hours.

**Purpose:** We'd like to hear your opinions and experiences about your health care. Please feel free to speak openly here. We do not work for Zacchaeus clinic. We do not work for the government or for any agency. We are working on a women's health project. Our goal is to learn how your health care needs can be better met.

Your comments are completely confidential and will never be tied to your name. With your permission, we will be taping this discussion to help us to remember the points raised today.

Introduce the Letter of consent

Also introduce that at end of session will hand out a short list of questions which we will read through together.

Say that they will be receive \$20 at the end of session.

(Ask permission to be tape-recorded.)

Please speak up, not only so that we can hear your comments, but also so that your voices can be picked up by the recorder.

Please speak one at a time.

First name introductions. (stress confidentiality).

There are no right or wrong answers to any of the questions that we raise today.

Negative comments are just as important as positive comments. Please feel free to voice your true feelings and experiences.

Are there any questions before we begin?

## **I. EXPERIENCES WITH PRIMARY CARE AT ZACCHAEUS**

1. What do you think about the medical care that you receive at Zacchaeus clinic?

**Probe:** Tell us about the good things about your medical care.

**Probe:** Tell us about the bad things about your medical care.

**Probe:** What could be better about your medical care?

2. What keeps you from getting seen by a doctor or nurse at Zacchaeus for care when you feel sick or have questions about your health?

(Follow leads)

3. What are characteristics of a health care clinic that make it more likely that you will come to get routine check ups?

**(Probe:** If they don't understand this question, say for example: personnel at the clinic, characteristics of the clinic itself, the nurses or doctors at the clinic, location of the clinic, reputation of the clinic, etc.)

5

## II. BREAST CANCER SCREENING

4. As you may know, a breast physical exam is when the breast is felt for lumps by a doctor, nurse or other medical assistant. (Show poster)

4a. How many of you have ever had one?

4b. How do you feel about breast exams?

5. If you've had this breast physical exam in the past, was it done at Zacchaeus or some other place?

**Probe:** What place?

6. What were the reasons for going to this other place?

7. What keeps you from getting seen by a doctor or nurse at Zacchaeus for breast exams?

8. A mammogram is an X-ray taken of the breasts by a machine that presses the breast flat. It is not a chest X-ray like you would have for pneumonia. This X-ray takes a picture to check for early breast cancer. (Show poster)

8a. How many of you have ever had one?

8b. What types of things might keep you from getting a mammogram?

8c. How do you feel about mammograms?

9. When you have had a mammogram in the past, how did you find out about your results?

10. How satisfied were you with how these results were given to you?

11. How can this reporting of the results to you be improved?

(Follow leads)

### **III. CERVICAL CANCER SCREENING**

12. A pap smear or a cervical smear is a test in which the doctor examines the female internal organs by taking a swab of the cervix and sending a cell sample to the lab. (Show poster)

13. How many of you have ever had one?

14. How do you feel about pap smears?

15. If you've had this test in the past, was it done at Zacchaeus or some other place?

**Probe:** What place?

16. What were the reasons for going to this other place?

17. What might keep you from getting a pap smear?

#### **IV. COLON CANCER SCREENING**

18. Looking for hidden blood in the stool is used to test for colon cancer. This blood cannot be seen with the naked eye. This test sometimes involves the doctor or nurse in the clinic doing a rectal exam. This test can also be done at home. You would put a small amount of your stool on the test card that your doctor or nurse gives you. Then you send in these cards to the doctor who looks for hidden blood. This is a test for possible colon cancer.

(Show hemoccult card)

18a. Have you ever had this test?

19. How do you feel about this test for blood in the stool?

20. What might keep you from having this test done in the clinic?

21. If you've had this test in the past, was it done at Zacchaeus or some other place?

**Probe:** What place?

22. What were the reasons for going to this other place?

23. What might keep you from doing such a test at home if your doctor or nurse has given you these cards?

## **V. 10 minute break**

\_\_\_\_\_ and I are going to meet for 10 minutes now while you take a short break. After that break, we would like to clarify a few points with you before we end today. Please help yourself to refreshments at this time.

## **VI. CLOSING (Allow 20 minutes for this section)**

Get feedback on consensus summary comments, and clarify confusing points.

Read consent form with women and have them sign. Also, give them form on demographic information, read with them and have them fill out.

Thank you very much for your participation today. We appreciate being able to have this discussion with you. We now have important information which we can use to try to improve health care programs for women. Does anyone have any other comments or suggestions that they would like to make?

**Grupos de Enfoque / Guia para el moderador**  
**Salud de la Mujer**  
**Sabado, 23 de Mayo de 1998 (10am-12:00pm)**

**Objetivo:** Explorar las experiencias de la mujer respecto al cuidado de la salud y a los exámenes del cáncer en el Upper Cardozo.

**Introducción:**

Buenos dias. Mi nombre es Nhora y ella es LaVeda. Bienvenidas a esta discusión sobre la salud de la mujer. Agradecemos que ustedes hayan decidido compartir su tiempo con nosotras hoy. Está discusión durará aproximadamente dos horas.

**Propósito:** Nos gustaría escuchar sus opiniones y experiencias sobre el cuidado de la salud. Por favor sientanse libres de hablar abiertamente. Nosotros no trabajamos para el gobierno ni para ninguna agencia del gobierno, solamente somos científicos preocupados por la salud de la mujer. Nuestra meta es aprender como el cuidado de su salud se puede mejorar.

Sus comentarios son completamente confidenciales y nunca estarán atados a su nombre. Con su autorización, vamos a grabar está discusión para ayudarnos a recordar los puntos discutidos hoy.

(Pida permiso para grabar)

Por favor hablen en voz alta, no sólo para que nosotras escuchemos sus comentarios, sino también para que su voz pueda ser grabada.

Por favor tome su turno en hablar.

Introducción de los nombres. (remarcar confidencialidad)

No hay respuestas malas o buenas sobre lo que hablemos hoy. Tanto los comentarios negativos como los comentarios positivos son importantes. Por favor siéntanse libres para expresar sus verdaderas experiencias.

Tienen alguna pregunta antes de comenzar.

## **I. Experiencias con cuidados primarios en el Upper Cardozo**

1. Qué piensan ustedes sobre los servicios médicos que reciben en el Upper Cardozo?

**Probe:** Díganos sobre las cosas buenas del servicio médico.

**Probe:** Díganos sobre las cosas malas del servicio médico.

**Probe:** Cómo se podrían mejorar los servicios médicos?

2. Qué razones las previenen para que vayan al Upper Cardozo y las examine un doctor o una enfermera cuando se sienten mal o cuando tiene preguntas sobre su salud?

3. Qué características creen ustedes que debe tener una clínica para que ustedes se animen a hacerse exámenes médicos rutinarios?

**(Probe:** Si el grupo no entiende esta pregunta, diga por ejemplo: el personal de la clínica, y las características de la clínica, las enfermeras o doctores en la clínica, la localización y reputación de la clínica. etc.)

-El personal de la clínica

-El local, el equipo

-Los servicios ofrecidos

-La organización del lugar

-Las comodidades y administración

-La relación con los doctores

-La relación con otros miembros del personal

-Qué tan difícil es llegar a la clínica?

-Existen problemas que los doctores y enfermeras reconocen?

-Como se manejan los problemas de salud?

-Cuál es el seguimiento cuando hay problemas?

-Las citas para exámenes de rutina tales como exámenes de prevención se pueden conseguir en el término de una semana.

-Cuánto tiempo toma conseguir estas citas?

-Cuánto tiempo espera regularmente en la sala de espera?

-Por qué una persona decide ir al Upper Cardozo en vez de ir por ejemplo a la Clínica del Pueblo? (sólo queremos saber cuántas veces una mujer tiene que ir y regresar de un sitio a otro y cuáles son los factores por los que se inclinan a ir de a un sitio y no a otro)

## II. Exámenes del Cáncer del Seno

4. Como ustedes ya saben, un exámen físico del seno es cuando se examina el seno para chequear si hay abultamientos. Este examen lo hace un doctor, enfermera, o asistente médico. (mostrar el cartel)

4a. Cuántas de ustedes han tenido uno de estos exámenes?

4b. Qué opinan ustedes sobre los exámenes del seno?

5. Si ustedes han tenido este examen, en dónde lo tuvieron? En el Upper Cardozo o en otro lugar?

**Probe:** Qué lugar?

6. Cuáles fueron las razones para ir a este otro lugar?

7. Qué les detiene, hacerse ver por un doctor o enfermera en el Upper Cardozo para un exámen del seno?

8. Una mamografía es una radiografía del seno por una máquina que presiona los senos. Esta no es una radiografía del pecho como la que le tomarían si usted tuviera neumonia. Esta radiografía toma una foto para detectar cancer del seno. (mostrar cartel)

8a. Cuántas de ustedes han tenido una?

8b. Qué cosas pueden prevenirla para hacerse una mamografía?

8c. Qué piensan ustedes sobre las mamografías?

9. Cuando ustedes se hicieron el exámen del seno, cómo se enteraron de los resultados.

10. Qué tan satisfechas estuvieron con estos resultados?

11. Cómo se pueden mejorar los reportes de los resultados?

### III. Exámenes del Cáncer Cervical

12. Un papanicolau o exámen cervical es en donde el doctor examina los organos internos femeninos tomando una muestra en la cavidad cervical. La muestra de células se envia al laboratorio para ser examinada.

13. Cuántas de ustedes han tenido uno?

14. Qué piensan ustedes sobre el papanicolau?

15. Si ustedes se han hecho este exámen en el pasado, lo hicieron en el Upper Cardozo en algún otro lugar.

**Probe:** Qué lugar?

16. Cuáles fueron las razones para ir a otro lugar.

17. Qué las detiene a ustedes a no hacerse un papnicolau?

#### IV. Exámen del Colón:

18. Chequear por sangre en las heces fecales se usa para detectar cáncer del Colón debido a que esta sangre no puede ser detectada a simple vista. Este exámen a veces requiere que el doctor o enfermera de la clinica haga un examen del recto. El examen de las heces se puede hacer en la casa, se coloca un poco de heces en una tarjeta que su doctor o enfermera le dan, luego se le envia al doctor para que sea examinada.

(Muestre la tarjeta)

18a. Se han hecho ustedes este exámen alguna vez?

19. Qué piensan ustedes sobre el exámen de las heces?

20. Qué les detiene a ustedes no hacerse este exámen en la clínica?

21. Si ustedes se han hecho este exámen en el pasado, lo hicieron en el Upper Cardozo o en otro lugar?

**Probe:** Qué lugar?

22. Cuáles fueron las razones para ir a otro lugar?

23. Qué cosas les detendrian hacerse este examen en la casa si su doctor o enfermera les dieran las tarjetas.

10 minutos de descanso

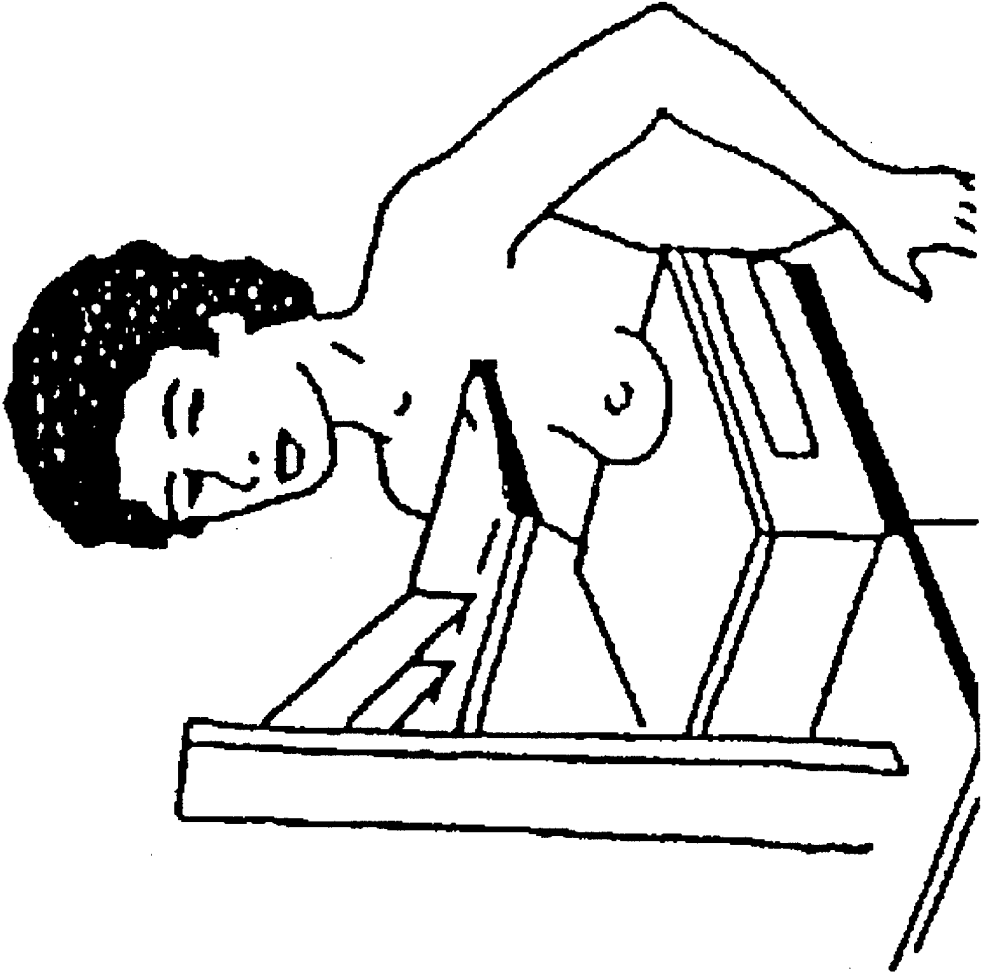
\_\_\_\_\_ y yo vamos a hablar por 10 minutos mientras ustedes toman un descanso. Despues del descanso, nos gustaria aclarar algunos puntos con ustedes antes de terminar. Por favor sirvanse un refresco.

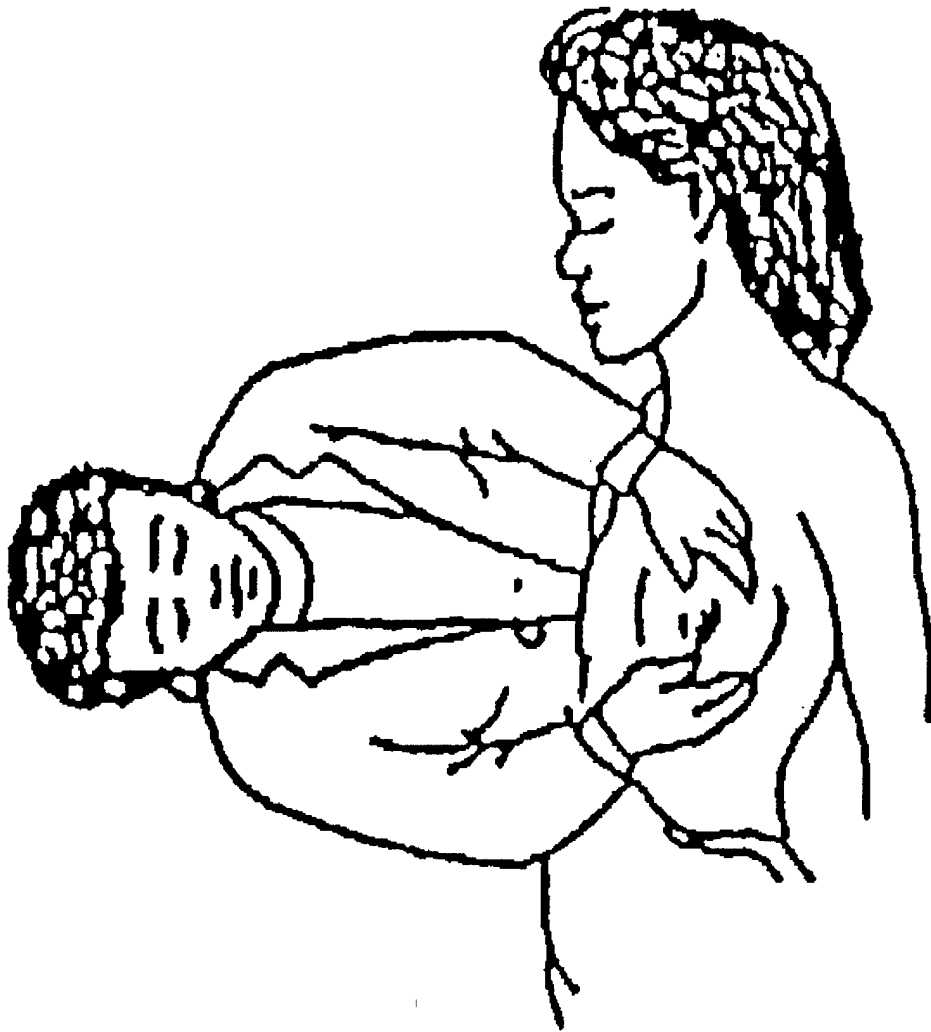
## **V. Fin de la discusión**

Obtenga información sobre los comentarios y temas no claros.

Lea la forma de consentimiento con las mujeres y haga que la firmen. Distribuya las formas sobre información demográfica. Léala con ellas y haga que la llenen.

Muchas gracias por su participación hoy. Agradecemos haber tenido esta oportunidad de tener esta conversación con ustedes. Ahora tenemos información muy importante que podemos usar para tratar de mejorar los programas de salud para la mujer. Alguién tiene alguna pregunta, sugerencias o comentarios?





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cómo la mujer toma decisiones sobre su salud!

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a Lillian

la discusión se llevará a cabo el día sábado, el 23 de mayo  
de las diez de la mañana al mediodia

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## Focus Group Summary Report

### Primary Care and Regular Breast Cancer Screening Among Under-served Minority Women

**Abstract:** Regular cancer screening for women, especially low-income women, ideally occurs in the primary care setting. Women living in economic poverty have increased barriers to getting screened, including lack of health insurance, lack of a usual source of care, lack of a physician recommendation for screening, and low-income. For cancer screening to occur on a regular basis with adequate counseling and follow-up, it ideally would occur in the primary care setting. Given the lack of private physicians in many low-income areas, and the lack of adequate health insurance coverage among low-income persons, the primary care setting most commonly available to urban women in medically under-served areas, is the community health clinic. This includes community health centers, (about 8% of community clinics nationwide are federally funded community health centers) and other community clinics funded by grants and private contributions (90%) of community clinics. Often, these community clinics specialize in working with vulnerable persons living in poverty. While operating in this challenging environment, community health clinics successfully promote use of preventive and primary care. This qualitative study attempts to determine which specific aspects of primary care, received in the community clinic setting, are most important to low-income urban women. Then, barriers and promoters of the use of cancer screening services by these women in their actual community-based primary care settings are identified. In-depth interviews of community clinic directors and subsequent focus groups of community clinic attendees are conducted for three Washington D.C. community clinics serving low-income women residing in medically under-served neighborhoods. Findings from this qualitative study will be serve as the foundation for a future cross-sectional study of low-income women throughout the District of Columbia to identify in a quantitative manner aspects of primary care which are most relevant to them and the role that these aspects of primary care play in enabling them to obtain regular cancer screening.

**Objective: To determine: 1.) Aspects of primary care which are important to low-income women. 2.) Barriers and promoters of use of cancer screening services by these women in their primary care settings.**

#### Methods:

##### Study Design:

In-depth interviews, focus groups, and content analysis of the transcripts were used to identify aspects of primary care, and of cancer screening in the primary care setting that are important to low-income women. A taxonomy was created to identify groups of issues which low-income women identified as important in the receipt of primary care and cancer screening. These findings will serve as a foundation for the development of a cross-sectional survey to be conducted throughout low-income and

medically under-served areas of Washington D.C. to further assess what women see as barriers to and promoters of receipt of primary care, and of cancer screening in the primary care setting.

#### Selection of Community Clinics:

Three clinics were selected because of their location within two of the poorest wards of Washington D.C. and because they were located in medically underserved communities. A variety of clinics serving the two largest "minority" populations in D.C., African-American and Hispanic populations, were chosen. One of these clinics which met the above criteria was further chosen because of its designation as a community health center (CHC) which receives Public Health Act 330 funding. It is one of the only two 330-funded primary care community health centers in the District of Columbia. This CHC serves both Hispanics and African-American populations. The other two community clinics serve persons from the same wards as the CHC, but are funded primarily through grants and private sources. One serves predominantly an uninsured African-American population, and the other serves a predominantly Spanish-speaking Hispanic population. These two sites do not receive 330 funding.

#### In-depth interview:

First, clinic directors from three community clinics located in two wards of D.C. were involved in a group discussion about barriers faced in doing research in the communities they serve. Then, individual in-depth structured interviews were conducted with primary care clinic directors from each of these three community clinics serving low-income populations in medically under-served areas of Washington D.C. Information obtained from these in-depth interviews, which lasted approximately one hour, was then used to develop a strategy for conducting focus groups of women who used these particular clinics for their health care.

#### In-depth Interview Participants:

The group interview and in-depth interviews done with clinic directors consisted of clinicians (nurses and physicians) who were responsible for directing the administrative and clinical services provided by their particular community based clinic. All clinics had the goal of providing primary care to persons residing in D.C. who were either uninsured or who had Medicaid. All clinic directors also had substantial clinical responsibilities.

#### Focus-Group Participants:

Women participating in the focus groups were eligible if: They spoke Spanish (for the clinics serving predominantly Hispanic communities) or English (for the clinic serving predominantly an African-American community). Women had to be over 40 years of age, had to have used the clinic for their health care presently or in the past, and had to be able to give informed consent.

#### Recruitment:

Posters advertising the focus groups (with a phone number to call) were placed throughout the clinics and the clinic staff also mentioned the focus groups to patients. Volunteers were screened prior to participation by telephone to assure that eligibility requirements were met. Women with a history of breast cancer were not eligible. Participants were reimbursed with \$20 cash for their time and with breakfast.

#### Conduct of Focus Group Sessions:

A separate focus group was held for each of the community primary care clinics. A total of 16 women participated in the three focus groups. The focus group conducted for the primary care clinic serving a predominantly English speaking low-income African American population was facilitated by a trained independent African-American moderator which extensive experience conducting focus groups in this population. The focus groups held for the two clinics which serve mainly Spanish speaking patients, were conducted in Spanish by a trained and experienced Latin American moderator (female) with experience working in health care in the Latin community in D.C. All focus groups were audio-taped and notes were taken by the author as well. Focus group tapes were transcribed verbatim. Spanish tapes were first transcribed verbatim and then translated by the same person who conducted the focus groups. No clinic staff were present at the focus groups. All focus groups were conducted in a safe and neutral community setting, convenient for participants. The sessions lasted approximately two hours.

Prior to any discussion on cancer screening, a series of open-ended questions were asked of focus group participants to elicit their feeling and experiences with primary care at their respective clinics. The questions were:

1. What do you think about the care that you receive at (XYZ) clinic?
2. What are the good things about your care there?
3. What are the bad things about your care?
4. Is there anything about your care that could be improved ?
5. What would keep you from coming to (XYZ) clinic if your needed care or had any type of question about your health?
6. What would be the characteristics of the ideal clinic, that would make you want to go there for your care?
7. Where would this clinic be located?

Then a series of questions focusing on cancer screening were asked. These predominantly concerned breast cancer screening, but also included some questions on cervical, and colorectal cancer screening. These questions were as follows:

CBE:

After defining a clinical breast exam and showing a picture of the procedure the women were asked:

1. How many of you have had this (clinical breast) exam?
2. How do you feel about this breast exam?

3. What was your experience like, getting the breast exam?
4. Have you had this exam anywhere other than (XYZ) clinic?
5. What were your reasons for going to this other site?
6. What would keep you from going to (XYZ) clinic for your breast exams?

Mammogram:

After defining the mammogram and showing a picture of a women receiving a mammogram the women were asked:

1. How many of you have had this test?
2. How do you feel about this test?
3. What would keep you from getting a mammogram?
4. Where did you get this test?
5. Who recommended that you get this test?
6. How do you feel about the way you received your mammogram results?
7. How can we improve the reporting of results?

Pap smear:

After defining the test, the women were asked:

1. How many of you have had a pap smear?
2. How do you feel about this test?
3. How many of you have had this test done at (XYZ) clinic?
4. What are reasons for getting this test done somewhere other than (XYZ) clinic?
5. What would keep you from getting a pap smear?

Fecal occult blood test for colon cancer:

After defining the test, the women were asked:

1. How many of you have had this test?
2. How do you feel about this test?
3. How many of you have had this test done at (XYZ) clinic?
4. What would keep you from getting this test?

Development of Taxonomy:

Audio-tapes of the focus group sessions were transcribed verbatim. Two study team members (ASO and PGO) did extensive review of the transcripts, identifying distinct topics (themes) and then classifying and coding these distinct units of text. These units of text, each applying to a particular aspect of experiences with health care, were then classified to create a taxonomy of aspects of primary care and cancer screening in the primary care setting. This classification of topics was then distributed to five persons (two physician-cancer researchers, two physician-health services researchers, and one psychologist-cancer researcher) to obtain further input on the classification. After a series of discussions and revisions of the classification of themes into various domains, a consensus will be reached on a final taxonomy.

Results:

16 women participated in the focus groups. Eight of these were in the two focus groups conducted in Spanish, and the other eight women were in the focus group conducted in English. Their demographics are presented in Table 1:

Table 1. Demographic characteristics of Focus Group Participants:

<b>Zip code</b>	
20001	7
20002	1
20009	1
20010	1
20011	2
20017	2
20018	1
20036	1
<b>Age</b>	
Mean	46
Median	46
Number over age 50	5 out of 16
<b>Education</b>	
≤ 8 <sup>th</sup> grade	4 (All Hispanic)
9-11 <sup>th</sup> grade	3 (2 Hispanic, 1 African-American)
High school graduate	3 (1 Hispanic, 2 African-American)
Some college	4 (1 Hispanic, 2 African-American, 1 Caucasian)
College graduate	2 (1 Hispanic, 1 African-American)
<b>Marital Status</b>	
Married	3
Single	5
Divorced	4
Widowed	0
Separated	3
Refused	1
<b>Work Status</b>	
Full-time	4
Part-time	5
Retired	1
Work at home	1
Unemployed	5
<b>Time spent providing child care or care to others</b>	
Full-time	4
Part-time	5
None	6
Refused	1

<b>Race/Ethnicity</b>	
African-American	7
Hispanic	8
Caucasian	1
<b>Income</b>	
< \$10,000.	10
\$10,000. - \$20,000.	4
> \$20,000.	0
Refused	2

Table 2 lists those aspects of the usual source of care elicited from women participating in focus groups. The content areas listed here are those raised by the women during focus group discussions about the questions listed above.

Table 2. Aspects of Primary Care Which were Important to the Women Participating in Focus Groups.

Aspects mentioned by all three focus groups (Hispanics and non-Hispanics):

- Concerned Staff
- Personal Attention
- Communication
- Availability of multiple clinical services on-site
- Office hours (Evenings)
- Coordination of clinical and social services
- Satisfaction with clinician's explanations
- Being treated with respect
- Self-esteem issues
- Appropriateness of Triage
- Sensitivity to patient's concerns about symptoms
- Inner city location
- Accessible by public transportation
- Open to all who need care
- Low cost
- No fees
- Short waiting time to get an appointment
- Short wait to be seen once at clinic
- Outreach
- Range of medications on site
- Persistence of Staff in follow-up
- Facility space
- Physical presentation of the clinic
- Clinic serves as an information source on relevant community programs
- Intake/ Needs assessment at the individual level
- Counseling available
- Staffed by Volunteers
- Up-to-date equipment and computers
- Community reputation
- On-going relationship with one's clinician
- Familiarity with staff
- 24-hour nurse on-call
- Competent staff
- Overall attitude of the staff
- Satisfaction with how staff listens to patient

Efficiency and reliability of services  
Respect (disrespect)  
Availability of mental health services  
Billing procedures

Additional aspects of specific concern to Hispanic participants:

Clinician has patience (Hispanics especially)  
Language of staff (Hispanics)  
Culture of the provider (Hispanics)  
Distrust of clinic within immigrant community (Hispanics)  
Fear of big bills spread among immigrant community (Hispanics)  
Availability of acute care without an appointment (Hispanics)

Table 3. Comments Elicited from Focus Group Participants on Cancer Screening

CBE:

Knowledge issues (You don't need to have pain to have cancer)  
Awareness that Latinos have myths about cancer  
Fear of pain  
Fear of finding lump  
Embarrassment  
Don't want to be seen naked (Hispanic)  
Lack of time  
Belief that CBE is important  
Denial  
Discussion with clinician is reassuring  
Fear of detecting a lump  
Discomfort with being overweight  
Discomfort with gender of clinician (prefers female)

Mammogram:

Feel no need for a mammogram because: "I do self-exams and have felt no lumps."  
Can only go weekends because of work schedule  
Mammogram facility hours  
All are aware that you can get a mammogram for free, so cost is not a concern  
T.V. source of information (for African-Americans)  
Radio and Hispanic newspapers source of information (for Hispanics)  
Discomfort of the mammogram  
Fear of false negative  
Fear of diagnosis of cancer  
Anxiety while waiting for results  
Communication-Helpful if mammographer talks you through procedure  
Sense of risk if family member died of cancer  
Talking with peers helps to allay fears  
Knowledge of research is promising for treatment and cure  
Mother-daughter enabling-daughter encouraged mother to get test  
Fear of pain of the procedure  
Prefer to get results by phone (rather than mail) so can ask questions  
Would like to get general idea of whether mammogram was okay after exam  
Sense of risk is friend has had cancer  
Prefer to get letter in Spanish rather than English with results (Hispanic)  
Prefer to get results in Spanish from a Hispanic doctor

### Cervical Cancer Screening:

Fear

Discomfort of the speculum and swab, stirrups, light

Misbeliefs about causes of cervical cancer

Knowledge questions about hormone replacement therapy and cervical cancer

Concern over false negatives

Test done elsewhere because of convenience and it was free

Prefer that test is done by doctor she knows (longitudinality)

Respect-teaching hospital treats you like a specimen

Lack of female doctor

Big cost for test

Distrust of American doctors

### Fecal Occult Blood Testing

Saw ad at local pharmacy

Prefer to do it at home

Lack of knowledge about test

Fear that the test hurts (if done via rectal exam)

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The above aspects of primary care and cancer screening elicited from focus group members will be reviewed independently by four physicians- and one psychologist-researchers. Each will organize the aspects into domains and then the domains will be discussed to come to a final consensus. Overlap between domains important for receipt of primary care and receipt of cancer screening will be noted. . These findings will serve as a foundation for the development of a cross-sectional survey to be conducted throughout low-income and medically under-served areas of Washington D.C. to further assess what women see as barriers to and promoters of receipt of primary care, and of cancer screening in the primary care setting.

### Summary of Findings from In-depth interviews with clinic directors:

The three clinics involved all serve low-income, mostly minority populations.

Zacchaeus Free Clinic serves those without insurance who live in D.C. Most of their clients come from zip code areas 20001, 20005, 20009. Patients are not billed. The clinic receives its funding from private sources (60% individual donations and 40% foundations). The majority of patients are between the ages of 35 and 60 years. Approximately 90% of their patients are English speakers. The vast majority of clients see Zacchaeus Free Clinic as their main source of care. The clinical staff is entirely volunteer, with the exception of the director. All clinicians are either from the

community or are residents from Georgetown and George Washington University Hospitals. The clinical staff includes licensed nurse practitioners and rotating medical students. Cancer prevention services offered at the clinic include: clinical breast exams, fecal occult blood testing, and pap smears. Women are given referrals to Columbia Hospital or Greater South-East for mammograms. All preventive utilization is (theoretically) recorded on a sheet in the patient's chart which lists preventive testing and dates performed.

Spanish Catholic Center cares largely for Hispanic persons who are uninsured or who have Medicaid/Medicare. Most clients come from zip codes 20009 and 20010. The majority of clients are between 35 and 80 years old. Spanish Catholic Center is funded privately through the archdiocese and grants. They receive no federal funding. Most of the patients who go to SCC use it as their usual source of care, with some exchange between SCC and Clinica del Pueblo which also serves Spanish speakers in the same area. The clinic is staffed by one nurse practitioner, 2 nurses, 1 lab assistant, 1 gynecologist, 1 cardiologist and rotating family practice residents from Georgetown Hospital. All clinicians are volunteer except for the residents. CBE, pap smears and fecal occult blood tests are done routinely at SCC. Women are referred to Columbia Hospital for their mammograms. A cancer prevention program, "Celebremos la Vida" run by a foundation in Virginia, provides mammograms to many of SCC's clients as well.

Upper Cardozo is a community health center which receives 330 funding. (CHC) It's clients come predominantly from wards 1 and 2; however, like the other 2 clinics anyone in D.C. is eligible for care there. About 60-70% of adult clients are Latino and 30-40% are African American. Patients are charged on a sliding fee scale. There is some movement of patients between Spanish Catholic Center, Clinica del Pueblo and Upper Cardozo. CBE, pap smears and fecal occult blood testing are all done at the clinic. Women are referred out for mammograms to either Columbia Hospital for Women, or to the George Washington Mobile Mammography Van which comes on-site. Insured patients are referred to private sites for their mammograms. A preventive services sheet in the chart (theoretically) tracks preventive services utilization. All staff are paid. Clinicians include family practitioners, internist, physician assistants and nurse practitioners.