

Using Text Message Reminders to Increase Mammography Rescreening Among Low-Income, Uninsured Women in Louisiana

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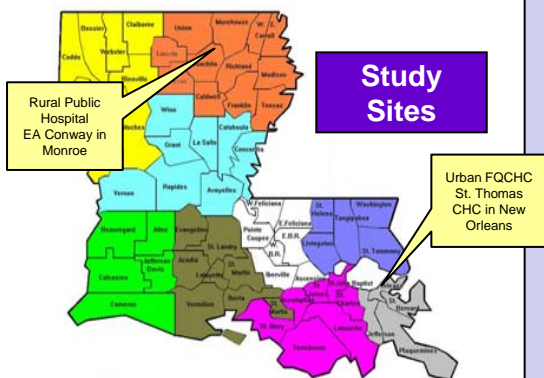


Introduction

Mammography finds breast cancer before it is symptomatic, and repeat screening further improves its ability to find cancer at early stages. Phone and mail reminders have been shown to increase rescreening rates; a literature search found no information on using text messaging.

Methods

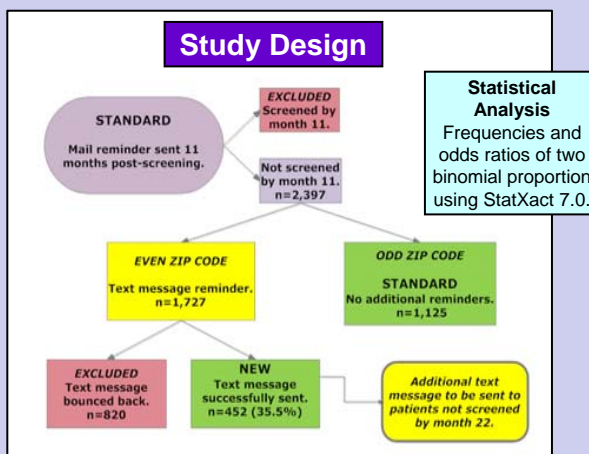
Louisiana Breast and Cervical Health Program (LBCHP) is conducting a text message screening reminder pilot study with program participants at two clinical provider sites. The program serves low-income, uninsured women, aged 40-64.



Study Sites

The two-year study, which began in September 2009, examines adding additional text reminders for annual mammography screening to the program's standard mail reminder system.

Study Design



Statistical Analysis

Frequencies and odds ratios of two binomial proportion using StatXact 7.0.

Participant Characteristics

Characteristic	Total, n (%)	Intervention Group	
		Standard, n (%)	New, n (%)
Total	1,577 (100%)	1,125 (71%)	452 (29%)
Age			
<50	633 (40%)	418 (37%)	215 (48%)
50-64	922 (59%)	690 (61%)	232 (51%)
65+	22 (1%)	17 (2%)	5 (1%)
Ethnicity			
Black	936 (59%)	655 (58%)	281 (62%)
White	591 (38%)	438 (39%)	153 (34%)
Other	50 (3%)	32 (3%)	18 (4%)
Location			
Rural	274 (17%)	205 (18%)	69 (15%)
Urban	1,303 (83%)	920 (82%)	383 (85%)

Mid- Study Results

Results After 1st Text Message Reminder

Characteristic	Odds Ratio	95% C.I.	P
Total	0.985	0.67-1.44	1.00
Age			
<50	1.361	0.50-3.50	0.63
50-64	1.073	0.68-1.65	0.74
65+ ¹	---	---	---
Ethnicity			
Black	1.149	0.71-1.81	0.61
White	0.793	0.36-1.63	0.64
Other ²	---	---	---
Location			
Rural	0.909	0.21-3.08	1.00
Urban	0.978	0.65-1.46	0.99
Black & <50	1.767	0.48-6.29	0.47
Black & 50-64	1.177	0.69-1.98	0.60

¹No members of this age group were rescreened.

²Four (4) women in standard intervention group were rescreened. No women in new intervention group were rescreened.

Discussion

- ❖ Half or more needed subjects recruited for each group: 67% for standard and 47% for new group.³
- ❖ New intervention subjects are more likely to be younger (under 50), and Black.
- ❖ No difference in increased odds of rescreening between the two groups after the 1st text reminder.
- ❖ Greatest positive change is in younger Black women (statistically insignificant).
- ❖ Intervention has the potential to decrease breast cancer mortality inequality since Black women may be more likely to respond to text reminders.
- ❖ As the population ages, more women may respond to text message reminders.
- ❖ Future analysis/studies should look at optimal age categories for text reminders.

³Power analysis at 80% power; 5% significance level, with increase in rescreening rate from 30% to 35%.

