Using patient navigation to impact distrust in the health care system

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Background

- Patient navigation programs have been shown to reduce disparities in access to cancer screenings across different populations.
- In an effort to eliminate disparities in mammography screening rates and decrease breast cancer incidence and mortality in our region, we created the Penn Medicine Breast Health Initiative (PBHI) in 2014.
- The PBHI provides free breast cancer screening and diagnostic services to women who are un- and underinsured in the Philadelphia area. The program outreaches and engages this population in breast cancer screening by providing breast cancer education, mammography scheduling support, transportation to screening and language interpreters.
- PBHI has a network of partnerships with 15 diverse organizations in medically underserved areas.

Objectives

1. To determine if participation in a Breast Cancer Screening Patient Navigation Program decreases Health Care System Distrust among an un- and under-insured population in the Philadelphia area.

Methods

- **Data sources/ study setting:** 90 racially and ethnically diverse, uninsured women ages 26-71 in the Philadelphia area were contacted before and after receiving services from a Breast Cancer Screening Patient Navigation Program from 4/8/2016 to 10/20/2017.
- **Study design:** We administered via telephone a questionnaire to measure distrust using the Health Care System Distrust (HCSD) Scale. Women answered the 9 question HCSD Scale before enrolling in the Navigation program and up to one week after the end of their participation in the program.
- **Data collection/extraction:** Pre/post test scores from the HCSD scale were coded and summed to give a range of 9-45 total distrust score.
- **Analysis** was done by running a multiple linear regression using STATA.
- The 9 question HCSD scale was divided into two sections that measured Technical Competence & Values Congruence
- Variables that we adjusted for included race, ethnicity, age, education, use of interpreter, Navigation Index and CAT scan result.

Results

<table>
<thead>
<tr>
<th>Demographics (n=90)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Education (Less than HS)</td>
<td>30% (27)</td>
</tr>
<tr>
<td>Use of Interpreter</td>
<td>64% (58)</td>
</tr>
<tr>
<td>Race/Ethnicity: Black</td>
<td>29% (26)</td>
</tr>
<tr>
<td>Race/Ethnicity: Hispanic</td>
<td>29% (26)</td>
</tr>
<tr>
<td>Race/Ethnicity: Other</td>
<td>27% (24)</td>
</tr>
<tr>
<td>Race/Ethnicity: White</td>
<td>16% (14)</td>
</tr>
<tr>
<td>CAT BRADS category 4 or greater</td>
<td>7% (6)</td>
</tr>
</tbody>
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- The mean difference in HCSD score of the population was -2.02 with a median of -2, a range of -24 to 10 and a S.D of 5.95.
- An unadjusted t-test shows there was a significant decrease of 2.02 points (p=0.03) in HCSD scores.
- After adjusting for age, race, ethnicity, education, use of interpreter, Navigation Index and mammography results, **HCSD scores decreased by 5.13 points (p = 0.044)** for uninsured women who had a **suspicious CAT result** after receiving services from a Patient Navigation Program.

Conclusions

- HCSD was significantly impacted by a breast cancer screening navigation program in uninsured women in the Philadelphia area among women who had a suspicious mammogram result only.
- This is one of the first studies that shows patient navigation decreases HCSD.
- Women with a suspicious mammogram result had more encounters with the navigator and with the navigation program as a whole. This implies that either the number, quality, and/or context of navigation influences trust.

Policy Implications

- The recent cut in ObamaCare’s public health funding, puts critical public health and prevention programs, such as the PBHI, and the people they serve at risk.
- Transforming the level of HCSD may improve personal and public health by increasing access and utilization of preventive health services, such as breast cancer screenings.

Funding

- Abramson Cancer Center
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