

Breast Cancer Champions: A peer-to-peer education and mobile mammography program improving breast cancer screening rates for women of African heritage

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INTRODUCTION

Nationally, women of African heritage die at higher rates from breast cancer than women of other races or ethnicities.^{1,2} We developed Breast Cancer Champions (BCC), a collaborative and community-driven peer-to-peer education program, which recruited 12 women and deployed them into the community in August 2020 during the height of the COVID-pandemic. BCC aims to improve breast cancer screening rates for women of African heritage in the Twin Cities area and beyond through peer-to-peer education and mobile mammography, which has proven successful in addressing cancer-related health disparities.

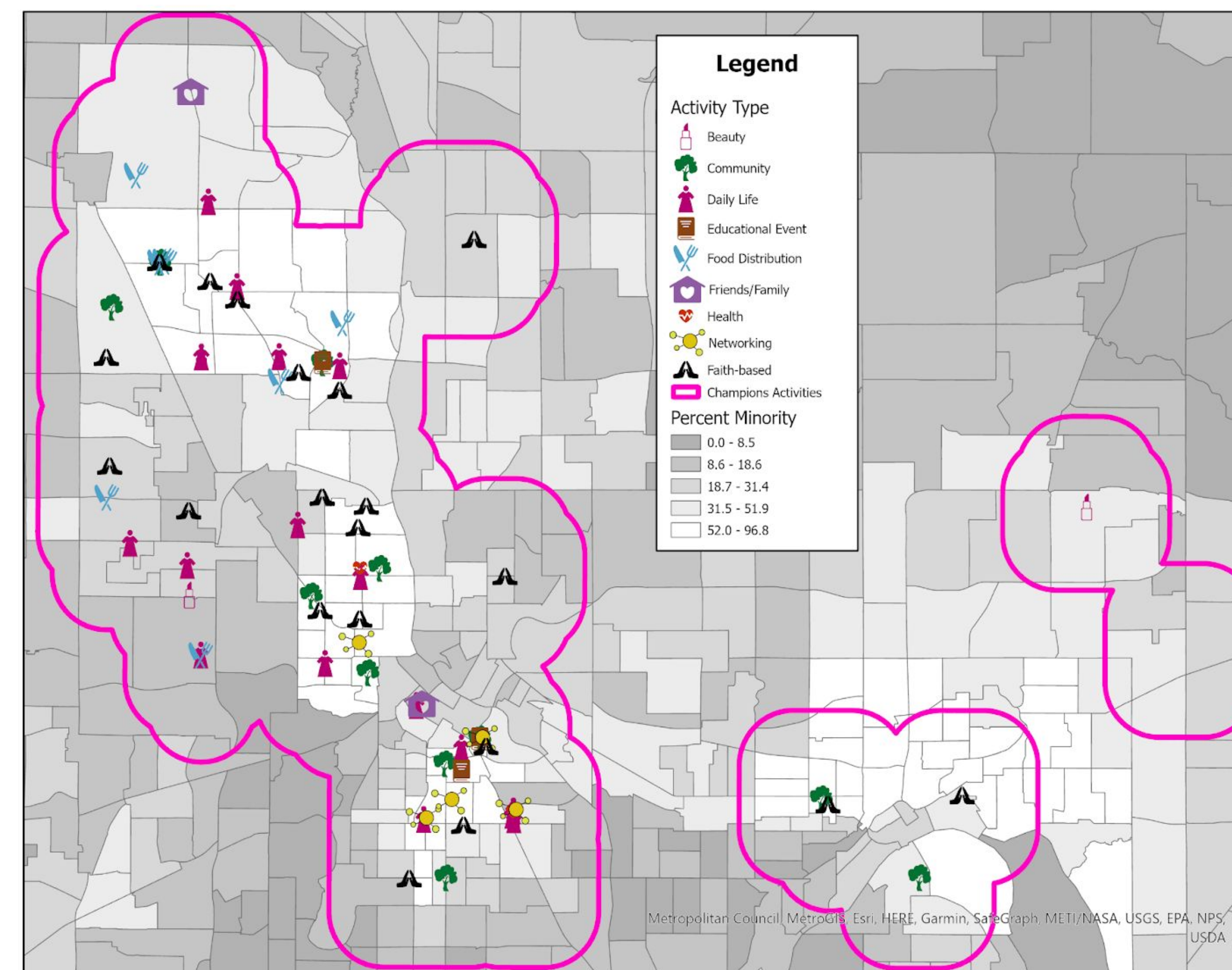
METHODOLOGY

BCC community experts, or “Champions”, are peer-to-peer educators that conduct awareness and screening events in their communities. Champions’ education activities were tracked by bi-weekly check-in calls, which recorded the activity type, location, and the number of participants for each event. We used spatial and statistical analyses to determine the program’s efficacy at increasing screening rates for women within the area of Champion activity versus women outside of their activity area.

RESULTS

Over 15 months, Champions conducted 245 in-person or online activities including 32 mammography events engaging over 2,500 women in their community for screening and education. As a result, more women of African heritage were screened in areas where Champions were active during the intervention period compared to the areas outside of Champion activity in the prior 15 months ($X^2 = 3.0845, p = 0.079$).

CHAMPION'S ACTIVITY AREA



* Pink lines represent the boundary of Champions’ activity and higher minority populations are shown with a lighter shade.

INCREASED SCREENING

Population/ Area	Control Period	Intervention Period
<i>African Heritage (Priority)</i>		
In Area of Champion Activity	360	405
Out Area of Champion Activity	217	197
Proportion in Area of Champion Activity	0.624	0.673
$X^2 = 3.0845, p = 0.079$		

* Screening rates among the priority population significantly increased during the intervention period. Spillover effects also increased screening rates in non-priority populations.

CONCLUSIONS

BCC successes could be attributed to pivoting to online community building when in-person events were restricted and enabling Champions to design and conduct their own events, which integrated education into their normal routine and increased outreach possibilities. A multistakeholder partnership was incredibly beneficial in facilitating screening and education events. We demonstrate improved screening outcomes for women of African heritage associated with an updated peer-to-peer education program.



*Champions conducting educational and screening activities.

REFERENCES

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