

Estimating Mammography Program Use

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Melia Haile] Welcome to this edition of *PCD Sound Bites*. I'm your host, Melia Haile. Approximately one in eight women will be diagnosed with breast cancer at some point in their lives. Regular screenings may find breast, cervical, and other cancers early, when treatment is most likely to work. Programs that provide cancer screening for women and educate them about the importance of regular screenings, are a vital part of cancer prevention and detection. Joining me by phone is Calla Holzhauser, a graduate student at South Dakota State University and winner of PCD's 2018 Student Research Paper Contest in the graduate category. Her winning research estimates the number of women in South Dakota who will participate in a free breast cancer screening program from 2017 through 2022. Today, we'll be discussing the details of this research. Thank you for joining me, Calla.

[Calla Holzhauser] Thank you for having me.

[Melia Haile] Calla, tell us about your study.

[Calla Holzhauser] As you mentioned, All Women Count is a free cancer screening program operated by the South Dakota Department of Health, but it's part of a national breast and cervical cancer early detection program. It offers free breast and cervical cancer screenings to qualifying women. My research involved forecasting the number of women who would receive a mammogram through the program in the next five years for counties in South Dakota. I used data from past years of the program and compared this with demographic factors for the counties... the population, percent living in poverty, and the median income. I then used a model to group the counties together and estimated the number of women who would use the program in each county for breast cancer screening.

[Melia Haile] What led you to this type of research?

[Calla Holzhauser] My degree is in statistics and I'm required to do a research project for it. I wanted a topic which would have a positive impact—one that related to an important cause. So I decided to focus on public health and medicine. My advisor was familiar with the All Women Count Program and knew about the data they'd collected, and I thought it was a perfect opportunity.

[Melia Haile] Tell us about your results.

[Calla Holzhauser] So, the overall trend in South Dakota has seen a decrease in participation since about 2012. We did notice a few small counties that are seeing an increase in participation, and further analysis would need to be done as to why they're seeing an increase. Maybe there's more advertising being directed to those counties, or a new clinic opened up and so it's able to serve more people, questions like that.

[Melia Haile] Why is forecasting research so important?

[Calla Holzhauser] It's important so that programs which may have limited funding can allocate their resources to have the most impact. Forecasting research gives programs important guidance about who will and how many will use their services. It can remove a lot of guess work that programs have to resort to when determining how to use resources. This will also help programs identify gaps in their operations which leaves populations underserved.

[Melia Haile] Wonderful. How can programs like All Women Count be used to help increase screening rates?

[Calla Holzhauser] All Women Count and programs like it remove the cost barrier some women face if they do not have insurance or cannot afford the copays. On average, a mammogram costs around \$100 for an uninsured woman. All Women Count covers many of the women who find mammograms otherwise unaffordable. As with most cancers, early detection of breast cancer is key to increased survival.

[Melia Haile] Do you have suggestions for others interested in expanding upon this area of research?

[Calla Holzhauser] I think a further research question that would be interesting to answer is other factors that could affect participation. So, for example, South Dakota is very rural, and so looking at how a proximity to a screening center influences how many people participate. If someone's needing to drive 30, 60 miles for a mammogram, maybe they're less likely to get one than if someone only has to drive, say, five miles.

[Melia Haile] Thank you so much, Calla. You can read her study, "Forecasting Participants in the All Women Count! Mammography Program," online at [cdc.gov/pcd](https://www.cdc.gov/pcd).

The findings and conclusions in this report are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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