

**Cancer Center Supplement to Partner with Comprehensive Cancer Control Coalitions to Study Implementation of Evidence-based Interventions**

**Alvin J. Siteman Cancer Center**

**Catchment Area**

Siteman Cancer Center's (SCC) catchment includes 82 counties across Missouri and Illinois, with a total population of nearly 5 million. 21.4% of the population in the SCC catchment are minorities, and 40% have a high school diploma or below. About half of the population in our catchment are over the age of 40, and 16% are over the age of 65. 3.6% of our catchment population are immigrants. 14% self-report as disabled, and 14% live below 100% of the federal poverty line.



**Public Health Focus**

The cancer burden for the SCC catchment area is significantly greater than the US average. State cancer profiles (2012–2016) indicate that incidence and mortality for lung, colorectal, breast, and prostate cancers in the region all exceed national averages. Breast cancer incidence rates are rising in the state of Missouri, particularly among women under the age of 65. While rural counties have lower breast cancer incidence, the breast cancer mortality rate is higher compared to urban counties.

**At a Glance**

The Mammograms Across Missouri team identified significant challenges in mammography access across our state, including a lack of mammography facilities in many rural counties with the highest rates of breast cancer mortality. Counties with mammography facilities were experiencing challenges, and those with mammography over an hour away were even more severely impacted. This collaboration was established to improve access to screening in rural communities through evidence-based interventions, patient navigation, and mobile mammography.

**Collaborators**

The Mammograms Across Missouri project extends SCC's partnership with the Missouri Cancer Consortium and the Missouri Department of Health and Senior Services Comprehensive Cancer Control Program. Other project team members include Gateway to Hope, American Cancer Society, United Healthcare, Anthem Blue Cross Blue Shield, KU Medical Center, University of Missouri, Missouri Primary Care Association, and multiple Federally Qualified Health Centers from across the state.



## The Approach

During the pandemic, partners began to share boots-on-the-ground experiences regarding mammography hesitancy and delays in screening within facilities and mammography vans across our state. The mission of this proposal is to proactively improve access to screening in communities where breast cancer mortality rates are highest through partnerships that encourage better collaboration and trust in the health care system.

Gateway to Hope and Siteman Cancer Center are established partners and both participated in the development of this project through our respective roles in the Missouri Cancer Consortium Breast Cancer Work Group. Our primary objective for this project is to conduct a detailed needs assessment by interviewing mammography providers to assess presence and need for patient navigation, Show Me Healthy Women services, and mobile mammography resources. Based on the results of this needs assessment, we will implement and expand the evidence-based interventions, patient navigation, and mobile mammography within 10 target counties in Missouri in collaboration with health systems, providers, state agencies, and community partners.

### Sustainability Plans

We hope that developing this infrastructure and awareness of resources integrated into local primary care and health departments will provide a foundation to expand additional cancer prevention and screening services, including colorectal and cervical cancer screening and HPV vaccinations, all of which are among the lowest rates in the United States. Through our interviews, we realize that for rural counties, it is not strictly a capacity issue. It is also a question of patient education and demand for services, including primary care.



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**Healthcare is complicated. But it doesn't have to be. Getting a mammogram should be simple — and it CAN be, when doctors, communities, and leaders work together.**  
 — Mammograms Across Missouri Charter Document  
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## Implementation Guidance

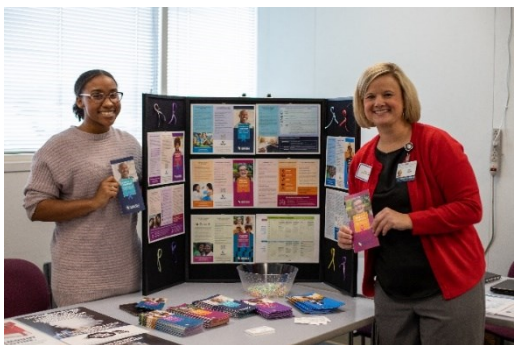
**Mammography providers want clarity regarding screening recommendations. Provider education is critical to the success of these efforts.**

During interviews, one of the major themes that our team identified is the lack of alignment between screening recommendations from one provider to the next. Some recommend women begin screening at age 40, while others say age 45. Some recommend annual mammograms, while others recommend mammograms every other year. Clinical breast exams may or may not be part of the appointment. If these recommendations are so disparate from one location to the next, provider education and alignment is a critical first step toward our goals. Information is often siloed, so it may be challenging to ensure navigation is consistent across multiple staff and personnel.



**Patients are disconnected from health care in general, and preventative care is simply not a priority for many rural Missourians. Patient education about the value of preventative care and screening is an important first step for engaging patients.**

Following the pandemic, providers are still over-extended and have frequently mentioned “no shows” as being one of the primary challenges they face in providing mammography services. Whether mammography facilities are on-site or mobile, more than half of appointments are missed in many of these facilities. This trend is not unique to mammograms, though. Many patients in rural communities are disconnected from primary care and often seek out medical appointments only for emergency care. Rather than focusing our messaging on mammography, interviewees agreed that it may be more impactful to focus on health care and wellness visits in general, rather than mammography alone.



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**Consistency is key. If we had the mammogram van visit more often, in the same place, the patients would get used to it and would be more likely to use it. Hopefully we move into that in the future, a more predictable pattern.**

**Cost and the buy-in to do it. Those are the main barriers (to mammography) for our patients.**

**It would be wonderful to be able to offer services every day, on site, right there, while you have the patients. That would be ideal. But the cost...**

**I think lack of education is a big deal.**

**I think for most patients, it’s a question of what you don’t know won’t hurt you. But it does.**

**I know that with our screenings, if someone refuses (a mammogram), it doesn’t count as being done, but it does take it off the list so we don’t ask again. We miss those patients until we see them the next year. If they come back.**

**Transportation, lack of cell phone service, or not enough cell phone minutes. Those are our patients’ biggest barriers.**

**— Mammography providers providing feedback regarding barriers for rural patients**

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Mammograms Across Missouri



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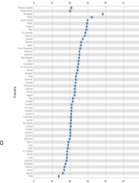
**BACKGROUND:** Breast cancer incidence is rising in Missouri. While incidence is lower in rural counties, mortality is significantly higher. Annual mammography can significantly reduce mortality, but many women begin mammography later than recommended or do not have mammograms at recommended intervals.  
**PURPOSE:** Partnering with the Missouri Comprehensive Cancer Control Program and Missouri Cancer Consortium, Siteman Cancer Center's COE seeks to improve access to screening in rural communities through evidence-based interventions, patient navigation, and mobile mammography.  
**METHODS:** The Mammograms Across Missouri workgroup identified 10 target counties with high breast cancer mortality and low mammography rates. We identified 10 community partners, key stakeholders, and mammography providers in the target counties. In collaboration with partners, we will conduct interviews with stakeholders at clinics in each of the target counties.  
**RESULTS:** In collaboration with community partners, specifically Gateway to Hope, an interview guide was developed to assess the presence and acceptability of activities of interest include patient navigation for mammography, use of mobile mammography, integration and use of the Show Me Healthy Women program, and dissemination of community/patient education on cancer screening. Interviews are being conducted with key informants for these counties, and results of these surveys are being used to develop an implementation action plan.  
**DISCUSSION:** This collaboration supports the Missouri Cancer Plan goal of increasing the percentage of women receiving regular breast screening, while building strong partnerships with key stakeholders across Missouri. Through this collaboration, we will gain an appreciation of the unique challenges faced by communities in the context of cancer screening, improve our understanding of the organizational capacity of federally qualified health centers and Show Me Healthy Women providers to address the urgent need for cancer screenings, and connect stakeholders to existing resources.

Missouri ranks 18<sup>th</sup> in the United States for the highest breast cancer incidence. Breast cancer incidence rates are rising in Missouri, particularly among women under the age of 65.

Age-Adjusted Rate (per 100k)	All Women	Black / African American	White	<50	<65
Missouri	130.51	136.31	129.91	46.71	85.91
U.S.	125.91	124.41	126.91	45.11	82.61

**Goal:** Ensure all Missourians, especially individuals at higher risk due to social determinants, have access to high-quality screening, genetic counseling, and clinical services for early detection and diagnosis of cancer.

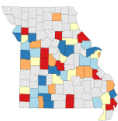
**Objectives:**  
 Increase the percentage of women who receive regular breast cancer screening based on nationally recognized guidelines.  
 Increase informed decision-making about and access to genetic testing and counseling among moderate- and high-risk individuals.  
 Increase insurance coverage and benefits that provide adequate/comprehensive access to evidence-based early detection services/technologies.



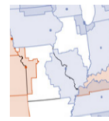
Rate of Annual Mammography for Counties with Highest Breast Cancer Mortality

Target County	RUCG	% annual mammography
Barton	7	43%
Carter	1	42%
Howell	7	33%
Missi	6	45%
New Madrid	7	38%
Newton	3	41%
Polk	4	41%
Platte	6	38%
St. Francois	4	39%
Stoddard	6	38%
Missouri		69%
U.S.		73%

Breast Cancer Deaths (2014-2018)



Many of these counties fall outside of any existing catchment.



According to the CDC, the majority of women who utilized DMHW screening services fell within the 50-64 age range, the same group with rising breast cancer incidence. Thus, increasing access and awareness of DMHW services within the target counties will be an effective strategy to reduce late-stage diagnosis and improve outcomes.



Funding: FY21 Administrative Supplements for the NCI P30 Cancer Center Support Grants

Find Out More

Siteman Cancer Center has spent 20 years building community relationships, providing clinical services, and conducting community-based and health disparities research throughout the region. The Community Outreach and Engagement (COE) component builds on this foundation to sustain partnerships and ensure that all cancer patients and communities can benefit from clinical and scientific advances using SCC's science-to-community conduit through nimble, timely, and comprehensive translation of research to practice.

This project was funded through an administrative supplement from the National Cancer Institute to the Alvin J. Siteman Cancer Center (3P30CA091842-20W1)

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<https://siteman.wustl.edu/prevention/community-outreach-and-engagement>

Cancer Center Supplement to Partner with Comprehensive Cancer Control Coalitions to Study Implementation of Evidence-based Interventions

National Cancer Institute (NCI)-Designated Cancer Centers' community outreach and engagement (COE) efforts should span all cancer center programs, including basic, clinical, translational, and population research. The FY21 COE supplement is designed to increase COE activities and partnerships among center staff and comprehensive cancer control coalitions. The long-term goal is to build greater connections between cancer centers and state, Tribe, territory, and Pacific Island Jurisdiction-level coalitions that will lead to smoother translation of center research findings and products into use in clinical and community settings.

To learn more, visit us at: <https://cancercontrol.cancer.gov/research-emphasis/supplement/coe>