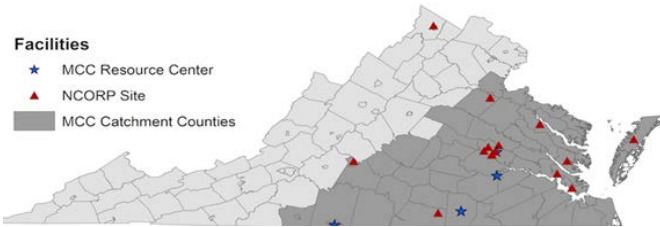


Community Outreach and Engagement Virginia Commonwealth University Massey Cancer Center



Catchment Area

The Virginia Commonwealth University Massey Cancer Center (MCC) is a safety-net, NCI-designated cancer center, providing cutting-edge cancer care to historically underserved communities in Virginia (VA). The MCC catchment area includes 66 contiguous counties and cities (hereafter referred to as localities) in the central, eastern, and southern areas of VA. These 66 localities are home to approximately 4 million racially, ethnically, geographically, and socioeconomically diverse individuals, of which 41 percent identify as racial/ethnic minorities (including 28 percent Black, 7 percent Latinx). Given that this catchment area includes 16 of VA’s 20 majority-minority counties and 12 of VA’s 21 very rural localities, this catchment area comprises the majority of VA’s Black (72%) and rural population (59%). This catchment area is also home to a third of VA’s uninsured individuals.^{i,ii} Not surprisingly, cancer incidence and mortality rates in the MCC catchment area are higher than in the United States and among the highest in VA, predominantly driven by higher incidence for breast, lung, and prostate cancers and higher mortality for breast and lung cancers. Uniquely, MCC is home to one of 14 minority/underserved NCI Community Oncology Research Programs (one of two in the mid-Atlantic region), which adds urgency to the opportunity of meaningfully engaging with highly diverse communities. This project aimed to

help bridge the divide between COE, community stakeholders, and basic scientists.

Community Engagement Focus

MCC’s pillar goal is to infuse community engagement in all MCC endeavors, including prioritizing and promoting cancer education and screening, facilitating catchment area relevant research, and promoting diversity in clinical trials to ultimately eliminate cancer health disparities. MCC’s COE



Community-to-Bench Model. Cyclical feedback between research, clinicians, and community relies upon 3 foundational principles.

activities are cohesively integrated under the thematic framework of the Community-to-Bench Model (CBM).ⁱⁱⁱ This CBM approach advocates for absolute integration of community intelligence into research via cyclical engagement, across three fundamental pillars: (1) community in-reach, (2) data democracy, and (3) flipped research. The focal pillar for this supplement is the integration of external (community partners) and internal (MCC members) intelligence to co-inform and co-direct scientific inquiry and drive the research agenda.

At a Glance

This project addressed the challenge of “in-reach”—the knowledge transfer and feedback among and between basic scientists and the community. Specifically, the project focused on connecting the two most distal groups:

basic scientists from the cancer biology program and community members from within MCC's catchment area. Project aims were to:

Aim 1: Assess readiness and identify shared priorities of both Cancer Biology (CB) scientists and community stakeholders to inform the COE Champions Initiative.

Aim 2: Implement the COE Champion in-reach curriculum to educate and prepare the cohort of cancer biology researchers to engage and communicate their research to community members.

Collaborators

Cancer Biology Program: With 76 active members, the CB program utilizes a transdisciplinary scientific environment to support collaborative interactions, increase opportunities to leverage new scientific concepts, and inform the development of therapeutic approaches to curb cancers predominant in the MCC Catchment Area.

COE Champions: the COE team developed a cross-programmatic team of interested MCC members (COE Champions) to increase among peer MCC members and understanding of COE as a fundamental part of MCC as well as to facilitate community-MCC member liaisons.

Community Partners: (referred to as “Neighbors”)

The Petersburg Wellness Consortium (PWC) is a coalition of community residents and professionals working together to address health disparities in Petersburg with strong and direct ties to our COE leadership.^{iv,v} This long-term engagement history was leveraged to develop an expanded partnership with the MCC and COE.

Pathways-VA, Inc. is a nonprofit organization serving the community of Petersburg through programs for youth, free clinical services, and financial opportunities. Pathways has been a community-engaged research partner with Principle Investigators since 2013.

The Brunswick Health Ambassadors are a group of rural community residents and leaders prioritizing and addressing the health concerns (e.g., men's health, colorectal cancer) of their community. MCC has a long history of partnership with the Brunswick Health Ambassadors.

The Approach

We employed a mixed-methods approach of qualitative and survey data collection. Steps included:

(1) CB pre-assessment survey and internal video curriculum development; (2) community partner presentations by CB **awareness** champions, followed by neighbor feedback; (3) curriculum delivery to CB champions, and delivery/discussion of neighbor feedback with CB champions; (4) a second round of CB community presentations, neighbor feedback, assessment of change, and pilot evaluation.

Team: An interdisciplinary team of investigators with training and complimentary expertise in cancer disparities and/or health equity, behavioral science, cancer epidemiology, and health services research.

CB Champions: Four CB researchers participated in this pilot cohort. Each CB researcher independently developed short (pitch-style) presentations. Each was partnered with one to two community members who provided them with key neighborhood information (e.g., who would be in the audience, what prior work the group has been engaged in) to inform their community discussion and provided extensive feedback about the presentation as part of the convened focus group.

CB Member Survey: COE readiness across CB members (n=54) was assessed via a 33-item, five-point Likert scale questionnaire that adapted nine domains from the Community-engaged Dissemination and Implementation framework.

Neighbors pre/post-assessments: Multiple-choice pre/post-surveys were used to assess the perceived level of scientific comprehension, research interest/readiness, perceived relevance, and integration of content as it relates to their lived context. Assessments were given immediately before and after the champion presentations.

Semi-structured hybrid focus groups with neighbors and CB research presenter post interviews: Six to eight volunteers participated in semi-structured qualitative focus group discussions to assess their self-efficacy in communicating with scientists, their ability to communicate cancer-related concerns to scientists, their satisfaction and acceptability of the CB researchers presentations, and feedback on ways that the COE team may engage the CB researchers about improving their communication and presentations skills to a non-scientific audience.

COE study coordinators conducted one-on-one semi-structured interviews with the CB researchers to assess their perceptions of their research relevance, value, and usefulness relative to the community's issues and needs, as well as overall impressions of the interaction.

“

**I like his tone. He wasn't demeaning.
I felt like I could have coffee with him.**

Focus group participant on what they liked about

”

Analysis and curriculum development: Focus group data were analyzed to elicit common themes pertaining to the community's perceptions of basic science and scientists. This information, coupled with pre/post data, guided the implementation and refinement of the “COE 101” curriculum.

COE 101 curriculum: Following insights from gathered data, we refined COE 101, a short course available to all basic scientists at MCC interested in better communicating their science to lay audiences, and in aligning their research with community needs. Available online, this asynchronous course consists of three, four-to-six-minute independent modules describing the VCU Massey catchment area within the context of cancer, providing general information on what is community engagement, community-based participatory research, and its relevance to cancer health equity, as well as contextualizing VCU's relationship and commitment to its surrounding communities, and availability of evidence-based communication tools.

Implementation Guidance

Dissemination and Implementation Tips

Most basic scientists were new to COE. Thus, they were unfamiliar with how best to engage community members in their research or how to communicate their science to community members. Champions need clear, specific examples on how to incorporate the community into their research. Reviewing community feedback and participating in one-on-one conversations are examples of how to operationalize interactions. Additional materials (e.g., scripts) will be developed to accompany the videos.

The community was highly engaged in the process and had a strong desire to be informed at each step of the project. They also wanted to understand how their input would help shape the program. We will continue to engage the community by offering further opportunities for conversation with cancer center scientists.

Sustainability Approach

The MCC COE office is charged with the sustainability of INREACH. The office is composed of three divisions: Catchment Area Data Alignment, Community Engaged Research, and Outreach and Engagement. The COE office will assist in setting up future talks, expanding COE opportunities for cancer biologists, and linking cancer biologists with MCC's Community Advisory Council.

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ⁱⁱⁱ Tossas, K.Y., Watson, K.S., Colditz, G.A., Thomas, C.R., Steward, J.H., Winn, R.A. "Advocating for a

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^v 11. Mosavel, M., Winship, J., Liggins, V., Cox, T., Roberts, M., & Jones, D.S., Community-Based Participatory Research and Sustainability: The Petersburg Wellness Consortium. *Journal of Community Engagement and Scholarship* 2019, 11 (2). <https://digitalcommons.northgeorgia.edu/jces/vol11/iss2/7>

Find Out More

Virginia Commonwealth University Massey Cancer Center <https://www.masseycancercenter.org/>

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<https://www.masseycancercenter.org/research/research-members/massey-member-directory/massey-research-member-detail?id=2811>

Community outreach and engagement (COE) activities across the translational research continuum

National Cancer Institute (NCI)-designated cancer centers' COE efforts should span all cancer center programs, including basic, clinical, translational, and population research. In FY20, NCI issued a call for Cancer Center Administrative Supplements to support COE activities that focus on either basic science or the translation of evidence-based interventions into community practice. The long-term goal of the supplement initiative is to build capacity for cancer centers' COE programs to adapt and implement evidence-based programs and successfully collaborate with cancer center investigators across research programs and in partnership with community members. To learn more, visit us at:

<https://cancercontrol.cancer.gov/research-emphasis/coe>