

# Program Evaluation

Year 2 Report: 2018 – 2019



## Missouri Comprehensive Cancer Control Program

September 2019

**Title:** Missouri Comprehensive Cancer Control Program (CCCP) Year 2 Evaluation Report

**Description:** This report includes the status of the evaluation projects and results, if available, for Year 2 (2018-2019) of the Missouri Comprehensive Cancer Control Program cooperative agreement.

**Audience:** U.S. Centers for Disease Control and Prevention (CDC), Section for Community Health Services and Initiatives, Section for Women’s Health, Section for Epidemiology and Public Health Practice and members of the Missouri Cancer Consortium.

**Grant Support:** Funded by a cooperative agreement between the Missouri Department of Health and Senior Services and the Centers for Disease Control and Prevention Number 5 NU58DP006299-02-00.

**Suggested Citation:** Missouri Department of Health and Senior Services. Missouri Comprehensive Cancer Control Program Year 2 Evaluation Report. Jefferson City, MO: Division of Community and Public Health.

#### **ACKNOWLEDGEMENTS**

This document is the result of collaborative efforts between the Section for Community Health Services and Initiatives, Section for Women’s Health, and the Section of Epidemiology for Public Health Practice of the Missouri Department of Health and Senior Services.

#### **AUTHORS**

**Philomina Gwanfogbe, MSPH, CHHC, PhD**, Epidemiology Specialist, Section of Epidemiology for Public Health Practice, Missouri Department of Health and Senior Services

**Sherri Homan, RN, FNP, PhD**, Public Health Epidemiologist, Section of Epidemiology for Public Health Practice, Missouri Department of Health and Senior Services

**Erin Miller, PhD**, Lead Chronic Disease Epidemiologist, Section of Epidemiology for Public Health Practice, Missouri Department of Health and Senior Services

#### **SPECIAL ACKNOWLEDGEMENTS**

**Erin Corum**, Health Educator, Comprehensive Cancer Control Program, Section for Community Health Services and Initiatives, Missouri Department of Health and Senior Services

**Venkata Garikapaty**, Section Administrator, Section of Epidemiology for Public Health Practice, Missouri Department of Health and Senior Services

**Laura Kliethermes**, Program Manager, Comprehensive Cancer Control Program, Section for Community Health Services and Initiatives, Missouri Department of Health and Senior Services

## **Contacts**

Philomina Gwanfogbe, MSPH, CHHC, PhD  
Epidemiology Specialist, Office of Epidemiology  
Section of Epidemiology for Public Health Practice  
Missouri Department of Health and Senior Services  
PO Box 570  
Jefferson City, MO 65102-0570  
573.526.4021  
[Philomina.Gwanfogbe@health.mo.gov](mailto:Philomina.Gwanfogbe@health.mo.gov)

Laura Kliethermes  
Program Manager, Comprehensive Cancer Control Program  
Bureau of Cancer and Chronic Disease Control  
Section for Community Health Services and Initiatives  
Missouri Department of Health and Senior Services  
PO Box 570  
Jefferson City, MO 65102-0570  
573.522.2848  
[Laura.Kliethermes@health.mo.gov](mailto:Laura.Kliethermes@health.mo.gov)

### **Missouri Department of Health and Senior Services**

**An EO/AA employer: Services provided on a nondiscriminatory basis. Individuals who are deaf, hard-of-hearing, or have a speech disability can dial 711 or 1-800-735-2966.**

**Table of Contents**

Missouri Cancer Consortium: Strategic Planning and Member Engagement..... 1

Market Research on Smoking Cessation..... 3

Tobacco Cessation in Missouri..... 4

Missouri Colorectal Cancer Roundtable..... 7

Federally Qualified Health Centers to Increase Colorectal Cancer Screening Rates..... 8

Cancer Survivorship..... 10

Interventions to Improve DHSS Cancer Prevention and Control Activities..... 12

Prostate Cancer White Paper..... 13

Data Requests, Reports and Publications..... 14

References..... 16

**Tables**

1. Types of Organizations Represented by Missouri Cancer Consortium Members ..... 2

2. Lung / Bronchus Cancer Incidence and Mortality, 2012-2016..... 3

3. Analytics for Amanda's Tips Targeted Display Ads..... 5

4. Analytics for Amanda's Tips and "Sheyda" Campaign YouTube TrueView Ads..... 5

5. Analytics for Amanda's Tips and "Sheyda" Campaign Facebook Ads..... 6

**Figures**

1. Number of Medicaid Participants Using Counseling and/or Pharmacotherapy, Missouri, 2011-2017..... 6

2. Smoking during Pregnancy, U.S. and MO, 1990-2017..... 7

**Attachments**

- 1. Missouri Cancer Consortium Implementation Guide Strategic Planning Presentation
- 2. Missouri Cancer Consortium Annual Satisfaction Survey Report Presentation

# **I. Missouri Cancer Consortium: Strategic Planning and Member Engagement**

## **Introduction**

The Missouri Cancer Consortium (MCC) is a statewide coalition tasked with the overarching goal of reducing the human and economic burden of cancer on Missourians through the promotion of collaborative, innovative and effective programs and policies. The Comprehensive Cancer Control Program (CCCP) works to re-engage existing members/organizations and engage new members to achieve geographic and specialty diversity. By building and sustaining the MCC, the CCCP is providing a strong collaborative foundation for activities that support the ultimate goal of reducing the burden of cancer in Missouri. In Year 2, evaluation of the MCC continues to focus on membership and the activities designed to sharpen the focus of MCC activities.

The MCC held a strategic planning session in April of 2019. Prior to this meeting, surveys were conducted to assess membership satisfaction and engagement in order to provide information that would guide this strategic planning meeting. This approach allowed the MCC to select priorities, suggest structural changes, and to engage existing members in an effort to increase the effectiveness of the MCC in implementing the Missouri Cancer Action Plan (MCAP).

## **Primary Evaluation Questions**

1. Is there a strong and effective MCC partnership?
2. Are MCC members engaged in the work of the partnership?
3. Are workgroups actively implementing the Missouri Cancer Action Plan (MCAP)?
4. Is the MCC membership growing in number and diversity of representation?
5. What factors affect (positively or negatively) partnership capacity and sustainability?

## **Methodology**

Surveys to assess MCC membership satisfaction were distributed annually from 2015 to 2018. In March 2019, a separate survey was conducted by OpenHealth, a strategic planning firm, to assess member engagement. The survey was distributed to MCC members ahead of a facilitated strategic planning meeting to which the entire Consortium was invited.

OpenHealth was contracted and funded by the Missouri Department of Health and Senior Services' (DHSS) CCCP to guide the MCC in selecting priorities for MCC focus in the coming year. Consultants from OpenHealth met regularly with the MCC Executive Committee leading up to a strategic planning session that was held on April 25, 2019 with the MCC membership. In this meeting, Consortium members selected priorities, discussed member engagement and DHSS's role in the Consortium, determined the capacity of the MCC and suggested structural changes in an effort to increase the Consortium's effectiveness (Attachment 1).

## **Results**

MCC membership has continued to grow, increasing 25% between 2017 and 2019 (Table 1). In addition, members represented 63 organizations – an increase of 12 additional organizations since 2017.

Results and trends from the 2015-2017 membership satisfaction surveys were compiled and a presentation titled *Missouri Cancer Consortium Annual Satisfaction Survey Reports* (Attachment 2)

was presented at a meeting of the full MCC membership on October 18, 2018. The results indicated that there was strong agreement that the Consortium’s vision and mission are clear, and that progress is being made toward MCC objectives.

The results of the survey also indicated that there were areas where the MCC could be improved, including better communication among Consortium members and from Consortium leadership, greater promotion of the cancer plan, and increased diversity of MCC membership.

The results of the engagement survey were used by OpenHealth to guide strategic planning efforts in the April 2019 meeting (results summary in Attachment 1). The engagement survey began the process of refining priorities, defining criteria for prioritizing activities such as addressing health disparities and meeting significant unmet needs, and prioritizing current cancer plan objectives.

Accomplishments identified during the strategic planning meeting included establishing partnerships and fostering collaboration, expanding outreach and awareness, and establishing the Missouri Colorectal Cancer Roundtable.

The top priorities identified were increasing colorectal and breast cancer screenings, increasing the HPV vaccination rate, and improving the quality of life of cancer survivors. These priorities will become new priority workgroups of the MCC. Organizational structure changes were also discussed to better meet organizational and community needs.

**Summary and Comments**

The membership surveys and strategic planning session show that the coalition has a strong, engaged partnership of a small number of registered members. The CRC and HPV workgroups are actively implementing the MCAP and moving the MCC forward.

Table 1: Types of Organizations Represented by MCC Members

Membership Representation	2017	2018	2019
State Public Health	14	15	17
National Partners	4	4	4
Health Systems & Cancer Centers	11	12	17
Primary Care Association & FQHCs	1	3	3
Local Public Health Agencies	5	4	5
Non-Profit Organizations & Community Groups	23	24	22
Academia & Research	2	5	5
Associations	12	12	15
Commercial Insurance	3	3	6
<b>Total Members</b>	<b>75</b>	<b>82</b>	<b>94</b>

**II. Market Research on Smoking Cessation**

**Introduction**

In Missouri, the rates for both the incidence and mortality of lung / bronchus cancer are significantly higher compared to the U.S (Table 2).<sup>1</sup> The CCCP program has built a strong collaboration with Missouri’s Comprehensive Tobacco Control Program (CTCP) to drive targeted interventions that will reduce smoking rates in Missouri. In Years 1 and 2, the Comprehensive Cancer Control Program (CCCP) and the Comprehensive Tobacco Control Program (CTCP)

worked with a public relations vendor to conduct market research among Missouri’s MO HealthNet (Medicaid) recipients who smoke.

MO HealthNet recipients were identified as a target population because smoking prevalence among adult participants was 50.2% in 2016 compared to the state prevalence of 19.4% (2018) and the U.S. prevalence of 16.1% (2018).<sup>2,3</sup>

Table 2. Lung / Bronchus Cancer Incidence and Mortality, 2012-2016

	Incidence Rate	95% Confidence Intervals	Mortality Rate	95% Confidence Intervals
Missouri	72.9	72.0 – 73.8	52.6	51.9 – 53.4
U.S.	59.2	59.1 – 59.4	41.9	41.8 – 42.0

Rates are per 100,000 population

The goal of this project was to launch an evidence-based campaign to reduce the prevalence of smoking among Medicaid recipients and, in the long-term, reduce lung cancer incidence and mortality in the state. In addition, this initiative aimed to increase utilization of tobacco cessation health care benefits and reduce out-of-pocket costs for cessation medication and counseling.

**Primary Evaluation Questions**

1. Was a target population identified?
2. How was the market research conducted?
3. What was the result of the market research?
4. What messages and media strategies were implemented?

**Methodology**

Building upon the research conducted in Year 1, the public relations vendor provided creative development for media campaign activation. The research and media campaign was shared with stakeholders recruited from the Missouri Department of Social Services’ MO HealthNet (Medicaid) Division (managed care, pharmacy, behavioral health providers) and Missouri Department of Mental Health’s Community Mental Health Center Healthcare Home Program, as well as representatives of Tobacco Free Missouri and other health system partners. These entities, as well as the MCC and other organizations that represent disparate populations, reviewed campaign materials for cultural relevance to improve reach to the target populations. The group disseminated the materials and assisted in the development of additional resources to promote cessation among high tobacco users and disparate populations.

**Results**

Market research was completed, feedback was integrated, and two intervention strategies were selected to be implemented (see Section III for further details on the implementation of these campaigns). The first campaign selected was Amanda’s Tips, an evidence-based intervention from The Centers for Disease Control and Prevention's (CDC’s) "Tips from Former Smokers" campaign. For the Amanda’s Tips campaign, women age 18-44 years were chosen as a target audience. The second intervention selected was The Missouri Tobacco Quitline Testimonial “Sheyda”. This campaign focused on the story of a local former smoker, Sheyda. The target audience was identified, generally, as adults aged 18-54.

## Summary and Comments

Despite increases in smoking cessation services offered by Medicaid providers, rates of smoking are still high among MO HealthNet recipients. As an extension of the research in Year 1, Missouri was able to successfully recruit stakeholders in the development and launch of two smoking cessation campaigns.

## III. Tobacco Cessation: Target Media Campaigns

### Introduction

Two media campaigns were developed through a collaboration between the CCCP, CTCP, a public relations vendor and other stakeholders as part of Missouri's effort to reduce smoking rates among priority populations. The goals of the tobacco cessation campaigns were to decrease the prevalence of smoking among MO HealthNet recipients, promote quitting during pregnancy, and increase awareness and utilization of the Missouri Tobacco Quitline.

### Primary Evaluation Questions

1. Was a public relations vendor successfully contracted for the campaign launch?
2. Were analytics collected to gauge the success of each campaign?
3. Was there an increase in the utilization of tobacco cessation health care benefits or reduction in out-of-pocket costs for cessation medications only, cessation counseling only, or both?
4. Were the campaigns creative, innovative, and successful?

### Methodology

The CCCP, CTCP, and stakeholders identified two campaigns as creative in the use of imagery and themes and innovative in the multi-faceted approach that used targeted display, social media (i.e. Facebook) and YouTube TrueView ads to reach the target audience. A public relations firm, Hubbard Interactive, a division of Hubbard Broadcasting, was contracted to conduct both campaigns. The Amanda's Tips campaign was launched in March 2019 and ran through April 2019. The campaign employed all three advertisement strategies: Targeted display, YouTube, and Facebook. The analytics for the campaign were set up to be reported by non-Medicaid as well as Medicaid counties. Women aged 18 to 44 years were the target audience. The "Sheyda" campaign was launched in and through June 2019. The analytics were set up for general viewers with a target age of 18 to 54 years; however, this campaign was only featured on YouTube and Facebook.



### Results

Analytics for both campaigns were collected in the form of impressions, views, view rates, clicks, and click-through rates. Impressions are the number of times the ad is displayed. Clicks are the number of times a user clicked to view the content, or impressions, that resulted in a click.<sup>4</sup> A click-through-rate (CTR) is the number of clicks divided by the number of impressions. It is commonly used to measure the success of an online advertising campaign for a particular website as



well as the effectiveness of email campaigns. If a pay-per-click, or PPC, ad had 1,000 impressions and 1 click that is a 0.1% CTR. For YouTube TrueView Ads, the number of views records how many times a viewer watched at least 30 seconds of your advertisement, and the view rate is the number of views divided by the number of impressions. As a metric, CTR and view rate tells you how relevant searchers have found an ad to be, but optimal values can vary based on the platform.

### **Targeted Display Ads**

Targeted display ads were only used in the Amanda’s Tips campaign, and analytics are presented in Table 3. This campaign reached over 5 million impressions exceeding the campaigns goal by 38,687 impressions for Medicaid and by 22,776 impressions for non-Medicaid participants. A total of 1,964 and 5,687 clicks were completed by Medicaid and non-Medicaid participants, respectively. The campaign had an overall CTR of 0.08% for Medicaid participants and a CTR of 0.23% for non-Medicaid participants.

Table 3. Analytics for Amanda's Tips Targeted Display Ads

<b>Analytics</b>	<b>Medicaid</b>	<b>Non-Medicaid</b>
Goal For Impressions	2,500,000	2,500,000
Impressions	2,538,687	2,522,776
Clicks	1,964	5,687
Click-Through Rate	0.08%	0.23%

### **YouTube TrueView Ads**

Analytics for both campaigns are presented in Table 4. The Amanda’s tips campaign exceed its monthly viewing goal by 7,941 views, while the “Sheyda” campaign exceeded its stretch goal by 37,687 views. View rates for both campaigns range from 42% to 45%, which exceeds the typical view rate range of 20% to 30%.

According to Hubbard Broadcasting, the national benchmark for a YouTube CTR is 0.29%. At 0.43%, the “Sheyda” campaign CTR was 1.5 times the national benchmark of 0.29% cited in the report. Views for non-Medicaid participants of the Amanda’s Tips campaign also exceeded this benchmark.

Table 4. Analytics for Amanda's Tips and “Sheyda” Campaign YouTube True View Ads

<b>Campaigns</b>	<b>Amanda's Tips</b>		<b>“Sheyda”</b>
<b>Analytics</b>	<b>Medicaid</b>	<b>Non-Medicaid</b>	<b>Total Viewers</b>
Goal For Views	56,250	56,250	46,067 - 62,091
Views	61,461	69,401	99,778
View Rate	45.12%	41.58%	45.42%
Clicks	335	558	944
Click-Through Rate	0.25%	0.33%	0.43%
Impressions	136,213	166,905	219,670

### **Social Media Ads (Facebook)**

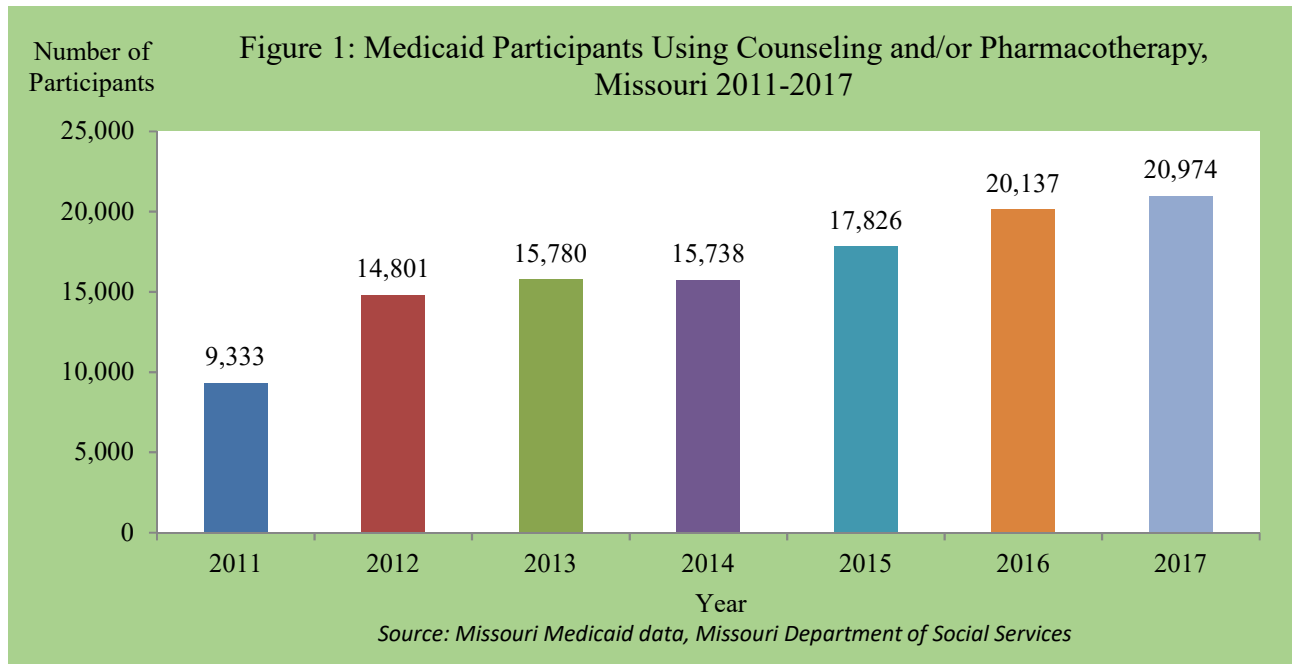
Two static ads ran throughout the Amanda’s Tips campaign, while three video ads were run during the “Sheyda” campaign ran three video ads throughout the campaign. Analytics for both campaigns are presented in Table 5. The social media ads on Facebook delivered 1.2 million (Sheyda), almost 1.8 million (Amanda’s Tips – Medicaid), and greater than 2 million (Amanda’s Tips – Non-Medicaid) impressions. At 134,000, the “Sheyda” campaign had the greatest number of post engagements (likes, comments, shares).

The evaluation team continues to track relevant smoking metrics for Missouri; however, data for 2018 and 2019 are not currently available. It should be noted that, between 2011 and 2017, the number of providers who offered tobacco cessation services to Medicaid

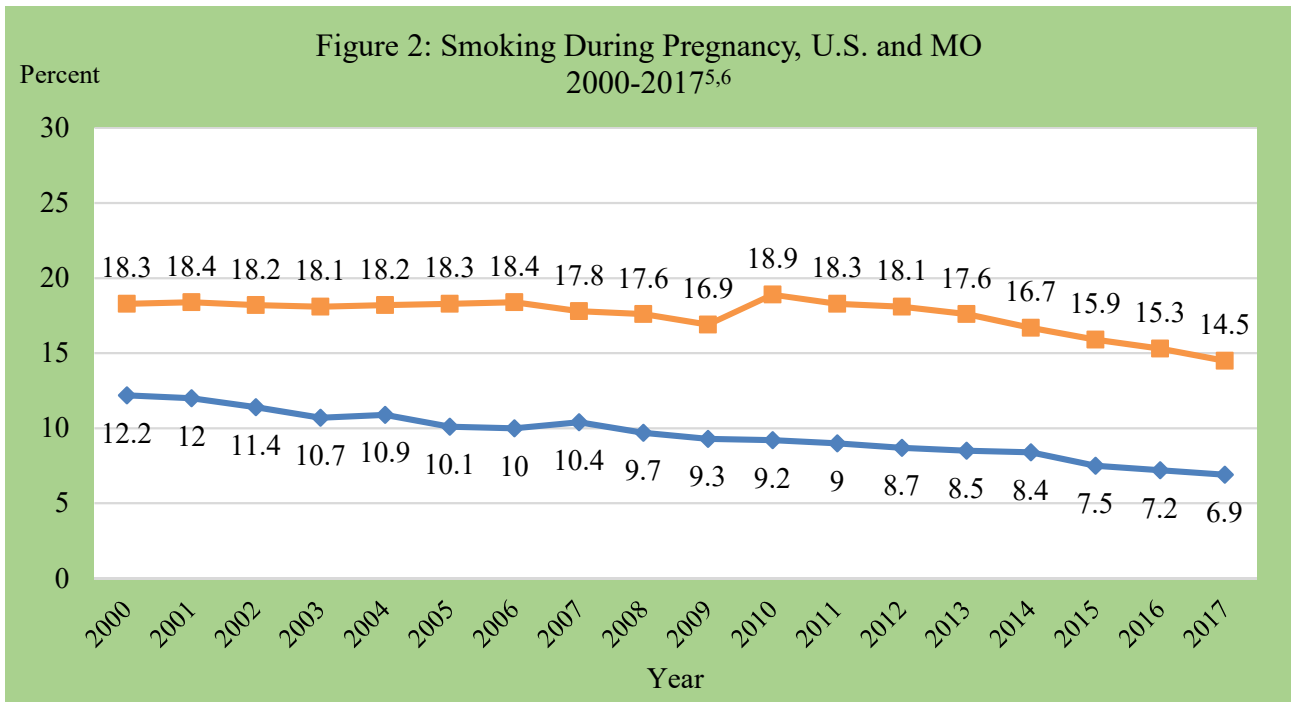
participants increased 8.1% annually.<sup>5</sup> In addition, there has been a steady increase in the utilization of tobacco cessation benefits by MO HealthNet recipients (Figure 1).

Table 5. Analytics for Amanda's Tips and "Sheyda" Campaign Facebook Ads

Campaigns Analytics	Amanda's Tips		"Sheyda"
	Medicaid	Non-Medicaid	Total Users
Unique Users	99,256	1,019,863	733,281
Clicks	5,582	4,809	5,654
Post-engagements	5,881	5,092	134,000
Impressions	~1,800,000	>2,000,000	1,200,000



The Amanda's Tips campaign targeted women aged 18-44 in response to high rates of Missouri women who smoke during pregnancy. Although smoking during pregnancy has declined (Figure 1),<sup>6,7</sup> prevalence in Missouri in 2016 (15.3%), is more than double the prevalence in the U.S. (7.2%). However, among the Medicaid participants, 757 pregnant women utilized counseling and pharmacotherapy during 2011-2017. A recently updated Missouri DHSS report by Noaman Kayani (2019) showed the number of pregnant female callers increased fourfold in 2017 (237) from 2011.<sup>5</sup> Interestingly, the average number of pregnant participants during 2011-2015 was about 61 but recently, during 2016-2017, the average number of pregnant participants was 226 (about four times higher). This was due to a policy change by Missouri Medicaid when they opened up pharmacotherapy and counseling benefits starting July 15, 2015 and began offering group counseling in July 2016.<sup>5</sup>



**Summary and Comments**

The contractors had a very successful campaign with both Medicaid and non-Medicaid participants meeting more views than the campaign goal in all targeted, social media, and YouTube TrueView ads. The campaigns were evidence-based, creative, and innovative. Media analytics suggest that both campaigns reached a broad audience, and Facebook post-engagements suggest that viewers were engaging in the material. The evaluation team will continue to track relevant smoking and lung / bronchus cancer data to determine the success of our interventions and collaborations with the CTCP.

**IV. Missouri Colorectal Cancer Roundtable**

**Introduction**

A resource designed to support partners in better understanding the motivations, attitudes, and barriers of key unscreened populations, market-research tested messages, new findings, new population profiles and message delivery insights was discussed by the Missouri Colorectal Cancer Roundtable (MCCRT). These resources and information will better inform efforts of diverse stakeholders working to increase colorectal cancer (CRC) screening rates to 80% in every community by 2020.

**Primary Evaluation Questions**

1. What was the purpose of the watch party?
2. What is a community?
3. Why communities?
4. What would focusing on communities bring?

## **Methodology**

The MCCRT held a meeting on March 7, 2019 to discuss how to be involved and collaborate on improving cancer screening in Missouri. Participants joined a watch party where the National Signature Event hosted by the National Colorectal Cancer Roundtable (NCCRT), Fight Colorectal Cancer (Fight CRC), the American Cancer Society (ACS), Mayo Clinic, Exact Sciences, and UPS was broadcast live online for participants to view remotely.

## **Results**

1. The purpose of the watch party was to celebrate national achievements and outstanding contribution to date and provide new emphasis on focusing on key communities to reach an 80% CRC-screening rate.
2. Community is defined as a location, racial and ethnic community, patient population served by a health care system, workforce, or other variation specific to needs and priorities and having diverse stakeholders within a community working together to increase cancer screening.
3. It was observed that there are still many communities with lower CRC screening rates – rural communities, certain racial ethnic communities, and low-income communities, among others.
4. By focusing on reaching a screening rate of 80% in every community, work will continue to reduce screening barriers.

## **Summary and Comments**

Partnerships were leveraged to enable the implementation of referral systems and financial assistance between hospitals and clinics for services.

## **V. Federally Qualified Health Centers' (FQHCs) Colorectal Cancer Screening Rates**

### **Introduction**

The purpose of this project was to increase colorectal cancer screening rates in the southeast portion of Missouri where colorectal cancer rates and chronic disease risk factors are high by partnering with federally qualified health centers (FQHCs) through a contract with the Missouri Primary Care Association (MPCA).

### **Primary Evaluation Questions**

1. How many formal partnerships were established with FQHCs?
2. What geographic area or counties are targeted in this project?
3. Did MPCA practice coaches use provider assessment and feedback to increase service delivery by health care providers?
4. Did MPCA practice coaches/FQHCs initiate or improve the use of provider reminder and feedback systems to improve screening rates?
5. Did MPCA practice coaches/FQHCs initiate or improve the use of patient reminders to improve screening rates?
6. What types of small media were utilized?
7. Did MPCA practice coaches inventory barriers to screening as perceived by FQHC staff and patients?
8. Did MPCA practice coaches develop strategies to overcome identified barriers?

## 9. Did CRC screening rates increase for the participating FQHCs?

### **Methodology**

MPCA works with FQHCs in Missouri to provide a patient-visit planning tool called Data Reporting Visualization System (DRVS). DRVS is a tool that extracts data from electronic health records that can be used to assist in identifying and treating health risks and conditions.

Participating health centers' electronic medical records (EMR) were directly connected to a population health platform. Every night, data were pulled from the EMR and clinical data elements were utilized to calculate standardized metrics, in this occurrence National Quality Forum (NQF) 0034, to produce colorectal cancer screening rates. Reports were accessible through the platform and could be exported, if needed. The NQF is committed to helping our nation achieve better and affordable care, and improving the overall health of Americans.<sup>8</sup> The NQF promotes patient protections and healthcare quality through measurement and public reporting.

### **Results**

1. Partnerships were established with four community health centers in the southeast portion of Missouri where colorectal cancer rates and chronic disease risk factors are high – Cross Trails Medical Center, Southeast Missouri Health Network, Missouri Ozarks Community Health, and Missouri Highlands Health Care.
2. The following counties in Southeast and South Central Missouri were targeted: Bollinger, Cape Girardeau, Douglas, Ozark, Perry, Stoddard, Texas, and Wright.
3. Technical assistance was provided by MPCA who sub-contracted to provide assistance, monitor contracts, and assess program effectiveness. MPCA provided clinical data reports and scorecards to help providers better understand their progress on specific measures, including colorectal cancer screenings. They also held meetings with each provider on a regular basis to educate staff on the importance of colorectal cancer screening, measure progress, and discuss successes and challenges.
4. Provider reminder and recall systems were implemented to increase colorectal cancer screening rates. One facility implemented a pop-up reminder in patients' charts while another chose to add the reminder to the provider's pre-visit planning report. Other strategies implemented included automated reminder calls to patients and clinic staff education on approaching and discussing fecal immunochemical (FIT) testing with patients.
5. Approaches to improving patient reminders included the creation of a computerized log that enabled nurses to call patients with a reminder to return for their FIT test. For one health care center, the director of nursing pulled a list of all patients who were in need of a colorectal cancer screening and/or a FIT test in 2018. The nurse then worked with providers from each clinic to refer patients for colonoscopy or administer FIT tests. Other approaches included working with the EMR system (Athena) to implement patient campaigns and reminders, which included various types of small media (see 6, below).
6. Types of small media used were radio advertisements, colored flyers, posters, handouts, Facebook ads, and postage paid post cards. Colored flyers containing information about the importance of screening, screening methods, and colon cancer statistics were placed in waiting rooms, exam rooms and other locations throughout the clinics. Posters and handouts were distributed within clinics and communities to promote specific cancer awareness months and cancer screenings. Postage paid post cards were sent to patients with educational information about colorectal cancer screenings.

7. As part of the technical assistance provided to participating FQHCs, MPCA discussed barriers to increasing rates of colorectal cancer screenings in each facility. Patient barriers included issues ranged from inconvenient appointment times and transportation issues to health literacy reducing the ability of the patient to read or understand flyers and brochures. Cost was often mentioned with specific emphasis on unwillingness to addressing testing at the beginning of the year when deductibles or out-of-pocket costs have not been met. Cost was also mentioned as a structural barrier by some health centers who were unwilling to find partners who would work with sliding scale fees. Other barriers included limited staff time to review charts or place flags as well as the possibility of long waiting times for appointments and inconvenient distances between patients and providers.
8. The following are some of the strategies implemented by providers to overcome barriers to screening. Drawings were held at the community health centers for gift cards that were intended to help with transportation costs or other expenses. Case managers worked closely with patients to schedule appointments and transportation if needed. Nurses educated patients on the colonoscopy procedure and provided instruction on how to do the fecal occult blood tests (FOBTs). Providers spent more time one-on-one with patients explaining the screenings and finding out what some of the barriers are that keep patients from getting recommended screenings. Managers worked with patients on scheduling appointment times that are more convenient for them. Community health workers were utilized to provide patients with education on the importance of screening and to schedule transportation to appointments. Cologuard tests, stool-based DNA tests that can detect colon cancer, were mailed to patients' homes, thus eliminating the transportation barrier to screening. Some providers reached out to multiple entities to inquire if they would be willing to perform colonoscopies for a few of the patients on a sliding fee scale to help mitigate cost barriers.
9. Aggregate data of participating community health centers show that colorectal cancer screening rates increased from 42% in June 2018 to 48% in May 2019 – a 14.3% overall increase. An increase of two percentage points from the first (44%) to the second (46%) quarter, and a gain of one percentage point in the third (47%) and fourth (48%) quarters each was achieved.

### **Summary and Comments**

The colorectal cancer-screening rate increased overall by 14.3% during the year. The CCCP will continue to work with two of the 4 FQHCs to further address barriers and identify approaches that resulted in increase rates of colorectal cancer screening with the goal of duplicating these efforts based on lessons learned and best practices statewide. The results of these efforts will be used to inform future CCCP activities and develop projects to reduce barriers to colorectal cancer screening that can be scaled to multiple providers across the state.

## **VI. Survivorship**

### **Introduction**

Chronic diseases such as cancer, heart disease, or diabetes are among the leading causes of death and disability in the United States. In Missouri, approximately 1 in 3 reported being diagnosed with a chronic disease in 2017—1 out of 4 reported living with two or more chronic diseases.<sup>2</sup> In year 2, the CCCP focused on activities that would help Missourians manage existing chronic diseases and better understand how to make healthy choices that would improve quality of life and reduce the risk of developing additional chronic diseases. Missouri's Heart Disease and Diabetes Prevention

(DHD) program has worked with community colleges throughout Missouri to develop and teach the core CHW curriculum as well as to place the newly trained CHWs for better chronic disease control outcomes. The CCCP explored the possibility of adding a module on cancer survivorship care to the CHW curriculum. In addition, they continued to provide support for the Annual National Cancer Survivors Day Celebration that provides resources and education to attendees.

### **Primary Evaluation Questions**

1. Did CCCP, in collaboration with DHD, develop or identify existing on-line training modules to address cancer survivorship issues and other cancer specific topics for the Community Health Worker (CHW)?
2. What was the reach and goal of the National Cancer Survivors Day Celebration?

### **Methodology**

The CCCP team worked with the DHD team to determine the feasibility of using an existing cancer survivorship module for CHW training. It was determined that the best option was to develop a new training module. A vendor was contracted for the development of this module.

The CCCP contributed an \$1800 sponsorship in support of the Annual National Cancer Survivors Day Celebration. Key Information Sheets were also distributed at this event to recruit new members for the Missouri Cancer Consortium (MCC).

### **Results**

In Years 1 and 2, the CCCP collaborated with the DHD Program on the development of a cancer survivorship module. A vendor was contracted to develop the new module; however, monitoring of the vendor illustrated that the results of the collaboration would not meet the standards of the CCCP and MCC. As a new vendor could not be secured before the end of the funding period, the CCCP team decided to terminate the current contract and refocus their efforts in a new direction. This approach included a comprehensive review and redesign of the existing Missouri CCCP website. The new website includes information on cancer screening and prevention for a wide range of users including patients and CHWs. There is also easy to find and print information on cancer screening recommendations and other relevant resources. See Section IX on publications for more information and a link to the newly designed website.

The CCCP provided support for the 34th Annual National Cancer Survivors Day Celebration, an event held in Kansas City, MO on June 2, 2019. This event, organized by Gilda's Club Kansas City, was attended by more than 390 cancer survivors and their caregivers. The National Cancer Survivors Day Celebration raises awareness of challenges cancer survivors face and provides them with resources and education on lifestyle and behavioral changes to improve quality of life. Unfortunately, the distribution of Key Information Sheets was not successful in recruiting new members for the MCC.

### **Summary and Comments**

The CCCP was successful in supporting activities that provide knowledge and resources for addressing cancer survivor care needs, specifically, and chronic disease prevention in general. The new website contains information on cancer screening and care for multiple levels of interest in a format that is easy to locate and user friendly. In addition, support provided to the Annual National Cancer Survivors Day Celebration helps to ensure the success of the event and, subsequently, the

distribution of resources and education materials on cancer survivorship and healthy lifestyle choices. While the CCCP is always interested in providing access to survivorship care training, the team has decided to review the viability of successfully integrating a cancer survivorship module into CHW trainings before revisiting that approach in future years.

## **VII. Interventions to Improve DHSS Cancer Prevention and Control Activities**

### **Introduction**

In Year 1, an environmental scan and gap analysis of 43 DHSS programs identified areas of policy and prevention that could be addressed to improve cancer prevention, support early detection efforts, address the needs of cancer survivors, and promote health equity. In Year 2, Missouri's CCCP leadership team built upon the work of the Year 1 environmental scan to create next-steps activities that will contribute to Missouri's efforts in cancer control.

### **Primary Evaluation Questions**

1. What projects could be done in-kind or with little funding that would have an impact on cancer control?

### **Methodology**

A leadership team consisting of managers of CCCP, MCR, SMHW and OOE convened to identify a discrete set of projects that could be completed within the grant year. Results of the Year 1 analysis were distributed to members for discussion. The parameters for these activities were that they could be completed within the grant year, could be done in-kind or with little funding, and that each would address a gap identified by the analysis. The team developed three projects to enhance DHSS cancer prevention and control activities.

### **Results**

Three interventions were developed, or selected, to improve DHSS cancer prevention and control activities based on the DHSS environmental scan. These interventions included:

1. forming a Prostate Cancer Action Team consisting of MCC members and other stakeholders to improve prostate cancer screening decision-making and survivorship.
2. developing on-hold messaging to promote colorectal cancer screening. The following on-hold message was deployed at DHSS:

MARCH IS COLORECTAL CANCER AWARENESS MONTH. AMONG CANCERS THAT AFFECT BOTH MEN AND WOMEN, COLORECTAL CANCER IS THE SECOND LEADING CANCER KILLER IN THE U.S. – BUT IT DOESN'T HAVE TO BE. COLON CANCER CAN BE PREVENTED. SCREENING FOR COLORECTAL CANCER BEGINNING AT AGE 50 SAVES LIVES! TALK TO YOUR HEALTH CARE PROVIDER TODAY ABOUT WHICH SCREENING TEST IS RIGHT FOR YOU.

3. improving reporting to the Missouri Cancer Registry for leukemia, lymphoma, and breast and prostate cancers.

### **Summary and Comments**



The Prostate Cancer Action Team was formed by active members of the MCC with prostate cancer prevention, screening, and survivorship interests. The team meets monthly, and these meetings have resulted in requests for health information interventions for African-American men as well as a prostate cancer white paper (see Section VIII).

The CCCP, in collaboration with DHSS's Office of Public Information developed on-hold messaging that promoted colorectal cancer screening. This message activated in 2019 during the month of March.

The Missouri Cancer Registry is working to identify priority areas that would improve reporting for leukemia, lymphoma, and breast and prostate cancers as a priority.

Partnerships and collaborations, such as those described here, continue to be a primary strength of the CCCP in addressing cancer control in Missouri.

## **VIII. Prostate Cancer White Paper**

### **Introduction**

The Prostate Cancer Action Team was formed by the leadership team as a result of the environmental scan and subsequent identification of activities needed to improve DHSS cancer prevention and control activities. The Prostate Cancer Action Team requested a white paper to provide an overview of prostate cancer incidence, prevalence, prevention, and mortality in Missouri, and a summary of prostate cancer screening guidelines. The action team specifically identified the need for more information on health interventions for African-American men. In addition to this priority, comparisons to Healthy People, risk factors, symptoms, treatment, and survivorship were also included.

### **Primary Evaluation Questions**

1. What are the current screening recommendations for prostate cancer?
2. What is the prevalence of prostate cancer screening in Missouri?
3. What are the latest advances in prostate cancer prevention and screening?

### **Methodology**

Staff of the Office of Epidemiology (OOE) conducted a literature review on prostate cancer, reviewed the latest cancer data, and created an addendum regarding health information interventions for African-American men.

### **Results**

The results of the white paper demonstrated that for men aged 55 to 69 years, the decision to undergo periodic prostate-specific antigen (PSA)-based screening for prostate cancer should be an individual one. Before deciding whether to be screened, men should have an opportunity to discuss the potential benefits and harms of screening with their clinician and to incorporate their values and preferences in the decision. Screening offers a small potential benefit of reducing the chance of death from prostate cancer in some men. However, many men will experience potential harms of screening, including false-positive results that require additional testing and possible prostate biopsy; over-diagnosis and overtreatment; and treatment complications, such as incontinence and

erectile dysfunction. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening. The USPSTF recommends against PSA-based screening for prostate cancer in men 70 years and older.<sup>9</sup>

In 2016, men age 40 and older, 43.2% had a PSA test within the past two years, an increase from 16.9% in 2014.<sup>10,11</sup> Out of the 43.2% that had a PSA test within the past two years, 41.9% were African-American and 45.0% were white; 64.3% in the 65+ age group and 61.0% in the 60-64 age groups; 51.0% among college graduates and 47.0% among some post high schools; and 48.1% among individuals with \$35,000-49,999 income and 47.0% among individuals with \$50,000+ income. There were no statistically significant differences between each group.

Debate continues regarding the risks and benefits of prostate cancer screening. Although risk factors such as age, race, and family history cannot be controlled, there are some things that can be done to lower a person's risk of developing prostate cancer such as maintaining a healthy body weight, increasing physical activity and eating a healthy diet. There is no absolute prostate cancer prevention strategy, but evidence suggests that diet does play a key role. As such, doctors recommend that men with an average risk of prostate cancer make choices that benefit their overall health if they are interested in prostate cancer prevention.

### **Summary and Comments**

The prostate cancer white paper that includes health information interventions for African-American men is completed and approved. It has been posted to the DHSS cancer website at <https://health.mo.gov/living/healthcondiseases/chronic/cancer/pdf/prostate-white-paper.pdf>.

There is need for continuous research to:

- determine an effective screening method to detect asymptomatic cancer;
- clarify other therapies under investigation; and
- improve the evidence of prostate cancer prevention.

## **IX. Data Requests, Reports, and Publications**

The Office of Epidemiology (OOE) and CCCP produced and/or published the following results:

- Campaign to Increase Breast and Cervical Cancer Screening in McDonald County, Missouri: Evaluation Report and presentation at MCC meeting on October 18, 2018- Completed
- The CCCP, working with OOE, Missouri Cancer Registry (MCR), Show Me Healthy Women (SMHW) program, Office of Social and Economic Data Analysis (OSED) and MO HealthNet continues to publish information on women participating in MO HealthNet (Medicaid) diagnosed with breast or cervical cancer. Study topics include differences in the stage of diagnoses, the time interval between diagnosis and treatment and receipt of guideline-recommended treatments between African Americans and whites and between rural and urban residents, and cost data. The manuscript titled Breast Cancer Population Screening Program

Results in Early Detection and Reduced Treatment and Health Care Costs for Medicaid, *Journal of Public Health Management and Practice*, 2019 was developed.

The below requests for data were submitted and completed by the OOE:

- The University of Kansas Cancer Center Catchment Committee requested cancer incidence and mortality for 8 cancers (breast, prostate, colorectal, lung, uterus, liver, melanoma, and HPV associated cancers) for 18 Missouri counties – Completed
- The University of Missouri requested the incidence and hospitalization rates for tobacco-related cancers by health insurance/pay source – Completed
- The Prostate Cancer Action Team requested a literature review on interventions to reach African-American men regarding informed decision-making for prostate cancer screening - Completed

The CCCP has a web presence that includes general information about cancer that can be found at [www.health.mo.gov/cancer](http://www.health.mo.gov/cancer). Information aimed at increasing knowledge of community health workers, patient navigators, seniors, and all Missourians on cancer screening and prevention for each of the top six incidence and mortality cancers in Missouri (lung/trachea/bronchus; colon/rectum/anus; pancreas; female breast; prostate; or bladder) was developed and placed on this newly designed DHSS website focused on cancer. Missourians can easily find and print information on when to begin screening, how often to screen, and how to reduce the risk of developing these cancers.

## References

---

- <sup>1</sup> National Cancer Institute and Centers for Disease Control and Prevention. State Cancer Profiles. Retrieved August 5, 2019, from <https://www.statecancerprofiles.cancer.gov/index.html>
- <sup>2</sup> Missouri Department of Health and Senior Services. Behavioral Risk Factor Surveillance System. Jefferson City, MO: Division of Community and Public Health, Office of Epidemiology.
- <sup>3</sup> Centers for Disease Control and Prevention. Current cigarette smoking among adults---United States, 2017. Morbidity and Mortality Weekly Report 2018;67(44):1225-32. Retrieved August 5, 2019, from [https://www.cdc.gov/mmwr/volumes/67/wr/mm6744a2.htm?s\\_cid=mm6744a2\\_w](https://www.cdc.gov/mmwr/volumes/67/wr/mm6744a2.htm?s_cid=mm6744a2_w)
- <sup>4</sup> What Is Click-Through Rate & Why CTR Is Important Retrieved July 26, 2019, from <https://www.searchenginejournal.com/ppc-guide/click-through-rate-ctr/>
- <sup>5</sup> Kayani N, Homan S. The Use of Tobacco Cessation Services by Medicaid Participants in Missouri, 2011-2017, Missouri Department of Health and Senior Services. September 2019.
- <sup>6</sup> Missouri Department of Health and Senior Services. Missouri Public Health Information Management System. Birth MICA. Retrieved September 23, 2019, from <https://healthapps.dhss.mo.gov/MoPhims/MOPHIMSHome>
- <sup>7</sup> United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2007-2017, on CDC WONDER Online Database, October 2018. Retrieved September 23, 2019 from <http://wonder.cdc.gov/natality-current.html>.
- <sup>8</sup> National Quality Forum. Retrieved August 7, 2019, from [https://www.qualityforum.org/what\\_we\\_do.aspx](https://www.qualityforum.org/what_we_do.aspx)
- <sup>9</sup> United States Preventive Services Task Force. Final Recommendation Statement Prostate Cancer: Screening. Retrieved July 17, 2019, from <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/prostate-cancer-screening1>
- <sup>10</sup> Missouri Department of Health and Senior Services. Data and Statistical Reports. Retrieved July 17, 2019, from [https://health.mo.gov/data/brfss/2016\\_BRFSS\\_Key\\_Findings\\_Report.pdf](https://health.mo.gov/data/brfss/2016_BRFSS_Key_Findings_Report.pdf)
- <sup>11</sup> Center for Disease Control and Prevention. BRFSS Prevalence and Trends Data. Retrieved August 21, 2019, from <https://www.cdc.gov/brfss/brfssprevalence/index.html>