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To measure the outcomes and impact of Challenge Cancer 2020.

*We would like to thank all Maine Cancer Foundation grantees who provided information and data related to the grants so that outcomes could be calculated and combined.*

This report was prepared by the research team at Market Decisions Research of Portland, Maine (www.marketdecisions.com).

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**Background**

Starting in 2015, Maine Cancer Foundation (MCF) launched Challenge Cancer 2020, a visionary initiative aimed at reducing Maine’s cancer mortality rate 20% by 2020. The Challenge Cancer 2020 initiative seeks to address this goal through targeted grant-making over the five-year period in several areas, including:

- Transportation and Lodging
- Patient Navigation
- Colorectal Cancer Screening
- Tobacco Prevention
- Lung Cancer Screening
- HPV Vaccinations
- Sun Safety
- General Operations Funding
- Cancer Research
- Genetic Screening

MCF funds projects using evidence-based approaches to cancer prevention that will directly and positively affect the rate of cancer screenings, and/or improve and expedite the treatment process for cancer patients in Maine.

The Muskie School of Public Service at the University of Southern Maine worked closely with MCF to develop an evaluation plan for Challenge Cancer 2020. This plan uses logic models to tie MCF’s grant-making activities with current evidence in the literature, outlines the metrics within each core area to measure the overall value and impact of the initiative, and shows early successes of the Challenge Cancer 2020 initiative.

This outcome analysis and evaluation conducted by Market Decisions Research (MDR) examines MCF’s grant-making activities related to Cancer Challenge 2020. It builds upon the evaluation plan, logic models and process metrics that have been collected and reported previously in Summary of Giving: 2017 Interim Report. The goal of the outcome evaluation is to quantify the short and longer-term outcomes and cost-effectiveness of MCF grant funding.

To accomplish this, MDR used information and data previously reported by grantees as part of their initial grant evaluation. The MDR team also collected new data from MCF grantees to fill in gaps and quantify outcomes. MDR worked closely with MCF to refine and develop outcome metrics for each grant area, to review the information already collected and to identify where gaps exist and to collect additional data needed to calculate outcomes, and to conduct an outcome and cost-effectiveness analysis (where possible). The results of this effort are presented in this report.

**Please note that the data and results presented in this report represent a point in time estimate that covers the period of MCF grants from July 2015 to June 2019. Due to the ongoing nature of how MCF awards grants and the fact that many are still ongoing, more recent grant funding, activities, and outcomes may not be captured in the 2019 reporting cycle.**
Executive Summary

Between July 2015 to June 2019, MCF funded 129 grants, a total of $9,475,281 dollars, to decrease cancer incidence and mortality rates in the state of Maine. MCF has funded grants in the areas of transportation and lodging, patient navigation, tobacco, colorectal cancer screening, lung cancer screening, general operations, HPV vaccination, sun safety, genetic screening, and research. Across these topics, grantees focused on improving cancer patient outcomes, improving cancer screening rates, and cancer prevention. Each grant focused on several specific areas of improvement including collaboration, awareness, infrastructure, training and capacity, and expanding access to care.

Grantees are leveraging MCF funds to increase cancer prevention efforts, increase cancer screening rates, and improve cancer patient outcomes. Their efforts have resulted in the following achievements.

- Patient screening rates for colorectal and lung cancer have increased among grantees working to address these topics.
- Patient navigators connected with a significant number of cancer patients and worked to increase referral follow through and rates for cancer screening.
- Human papillomavirus (HPV) vaccination rates rose significantly among children ages 11 to 13 at participating pediatric practices.
- Tobacco grantees reported a significant number of smokers who quit or who reduced their tobacco use after attending grant-funded programs.
- General operations funding increased organizational capacity, allowed for restructuring and greater focus on programs, and enabled grantees to generate additional funds to support their work through grants and fundraising.
- MCF funding allowed Maine’s largest lung cancer network to grow into a stakeholder coalition addressing patient access, provider education, and improvements in lung cancer screening and care.
- A tobacco prevention media campaign targeting Maine youth ran statewide, strategically reaching Maine youth via digital media platforms with information about the dangers and effects of smoking as well as tobacco companies’ manipulative marketing tactics.
- Several grantees worked to provide sun safety education and much-needed sunscreen to high-risk populations across the state.
- Hospice grantees expanded their services and streamlined their operations to serve more clients each year.

Overall, organizations funded by MCF’s Challenge Cancer 2020 grants have dramatically changed the cancer prevention, detection, and patient support efforts in Maine. Funding distributed to date has brought novel cancer screening and care to practices across the state while expanding access to vulnerable populations including those with limited resources and those at high risk of developing cancer. Each grant category has fulfilled its aim to prevent cancer, increase screening rates, and improve cancer patient outcomes. Funding from MCF has enabled grantees to achieve a considerable amount of progress toward MCF’s Challenge Cancer 2020 goals.
Key Findings

Data represented in key findings represent the percentage of grants where data are available either from the evaluation forms provided to MCF by the grantees or from follow-up requests made by the MDR team.

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Colorectal Cancer Screening

- MCF awarded 19 colorectal cancer screening grants totaling $1,305,431.
- 9,829 additional colorectal cancer screenings were conducted across the state, resulting in an estimated 1,345 life years saved and 121 fewer cancer deaths.
- A total of 23 new staff members (across 12 organizations) were hired to support colorectal cancer screening rates as a result of MCF funding.

Transportation

- MCF awarded 30 transportation grants totaling $840,966.
- Transportation grant awards helped 2,082 Mainers travel to cancer care appointments, resulting in 23,909 additional rides and over 3.2 million miles traveled.

Patient Navigation

- To increase Maine cancer patients’ access to care, MCF awarded 15 patient navigation grants totaling $2,344,480.
- 15 Patient Navigators have been hired and their positions were sustained within their organization after MCF grant funding ended.
- Patient navigation grant awards resulted in 1,969 additional referrals for diagnostic follow-ups and 1,662 patients connected with cancer care resources.

HPV Vaccination

- MCF awarded 2 HPV vaccination grants totaling $356,117.
- This resulted in 496 additional HPV vaccinations and an increase in vaccination rates from 39% to 46% at participating practices among children between the ages of 11 and 13.

Tobacco Prevention and Cessation

- MCF awarded 19 tobacco grants totaling $1,291,828.
- MCF funding resulted in 5,965 tobacco users informed or referred to tobacco prevention and cessation services.
- Grant awards also resulted in 224 smokers who confirmed they successfully quit or reduced their tobacco use.
Youth Tobacco Campaign

- In partnership with the Maine Centers for Disease Control and Prevention and Rinck Advertising, MCF invested **$750,000 over three years to a statewide youth tobacco prevention media campaign**.
- Maine youth were directed to the campaign using a variety of platforms and received messages that provided education about tobacco company marketing tactics, built awareness of the dangers and effects of tobacco use, and empowered youth to reject the manipulative tactics used by tobacco companies.
- Nearly half of Maine teens viewed a “You Are the Target” ad or video in the past year. A quarter of Maine youth tobacco users quit or thought about quitting as a result of the campaign.

Sun Safety

- MCF awarded **4 sun safety grants totaling $109,293**.
- The grant awards resulted in the distribution of **150,000 applications of sunscreen** to help individuals protect their skin against the harmful effects of UV rays.
- **119 dispensers** were distributed across the state.

General Operating Support

- MCF awarded **8 general operating support grants totaling $275,000**.
- MCF’s general operating grants awards increased staff capacity, allowed for restructuring and greater focus on programs, and enabled grantees to generate additional funds through grants and fundraising.

Lung Cancer

- MCF awarded **one lung cancer grant totaling $403,674** to support the development of a statewide coalition to address lung cancer screening in Maine.
- Two learning modules on lung cancer screening were developed and a primary care pilot is underway with five practices at Maine General Medical Center.

Cancer Research

- MCF awarded **5 research grants totaling $1,050,784**.
- The grant awards funded no-cost fluid and tissue access for researchers, a successful PCRI shared decision-making program for lung screening, a telemedicine program, and ongoing EHR database consolidation and a breast cancer diagnostic trial.

Hospice General Operating Funds

- In partnership with the John T. Gorman Foundation, MCF awarded **6 hospice general operations grants totaling $50,000**.
- Hospice grantees expanded their services to more clients, increased marketing and education efforts, hired and trained more volunteers, and developed self-sustaining funding streams to support their organizations.

Genetic Screening

- MCF awarded **1 genetic screening grant totaling $199,891**.
- Approximately 750 Maine oncologists, pathologists, clinical research coordinators, nurses, administrators working in oncology, and other stakeholders have been receiving ongoing
communication and access to web-based resources developed by the Maine Cancer Genetics Initiative to increase provider knowledge and self-efficacy of genetic links to cancer and access to information that may impact treatment options.

- **Two interactive, virtual training sessions** were developed and piloted with oncology nurses and research coordinators in June 2020.

**Miscellaneous**

- MCF awarded an additional **$387,181 to support 14 grants to 9 organizations** for prevention, screening, and patient support programming.