

Leveraging the Tobacco Master Settlement Agreement
to Fight Cancer in Georgia:

5 Actions to Save More Lives



A REPORT PREPARED BY:

GEORGIA
core CENTER *for* ONCOLOGY
RESEARCH & EDUCATION

The work of many

The publisher of this report is the Georgia Center for Oncology Research and Education (Georgia CORE), a nonprofit working to improve the quality of care for cancer patients and quality of life for survivors through innovative public-private partnerships, leadership development and advocacy. But many bright minds and leading organizations played an instrumental role in shaping research and recommendations.

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PERSPECTIVE

Every year, the nation's tobacco companies pay tens of millions of dollars to the State of Georgia. The payments are part of the 1998 Master Settlement Agreement (MSA) between the tobacco industry and 47 U.S. states. Under the agreement, the annual allocations will be made forever.

In Georgia, about 9 percent of these funds goes to programs and initiatives that specifically fight cancer, which is the no. 1 health consequence of tobacco use. This portion of funds has averaged about \$16.5 million a year in recent years, a somewhat small figure considering the enormous challenge of combatting cancer. But since MSA dollars first started flowing into Georgia, organizations have put them to work. An array of activities and achievements have contributed to better prevention, understanding and treatment of cancer across Georgia, particularly in rural Georgia. Some examples:

1. *Cancer Centers of Excellence, which integrate clinical care and research, have grown and developed.* Georgia has several of these, including: Aflac Cancer and Blood Disorders Center at Children's Healthcare of Atlanta, Georgia Cancer Center at Augusta University, Georgia Cancer Center for Excellence at Grady and Winship Cancer Institute at Emory University, the state's first NCI Comprehensive Cancer Center (a high distinction). Moreover, a real culture of collaboration has developed among the state's cancer care providers.
2. *Scientists at Georgia's universities — Clark Atlanta, Georgia Tech, Georgia State, Morehouse School of Medicine, the University of Georgia and others — have advanced knowledge about cancer and how to fight it.* The Distinguished Cancer Clinicians and Scientists within these and other institutions have leveraged MSA funds into millions of dollars of external funding from the National Institutes of Health to develop laboratories and research initiatives focused on cancer.
3. *The number and reach of clinical trials — cutting-edge cancer treatments — have grown from just a few locations to hundreds of trials in community and academic centers within driving distance of most Georgians.* Georgia CORE has made the essential connections that resulted in a strong network of clinical trials.
4. *Five regional cancer coalitions based in Albany, Athens, Columbus, Macon and Rome have brought education, screening and assistance to Georgians in all corners of the state.* The work of these coalitions has been especially helpful to residents who have little or no access to healthcare, and master settlement funds have supported their efforts.

Snapshot: Cancer Clinical Trials in Georgia

- **634** individual cancer clinical trials operating
- Many trials offered at multiple locations (**1,148** total)
- Patients enrolled at **45** sites in **25** cities across the state
- Approximately **25%** of patients enrolled in Georgia's trials are racial/ethnic minorities (compared to **5%** nationwide)

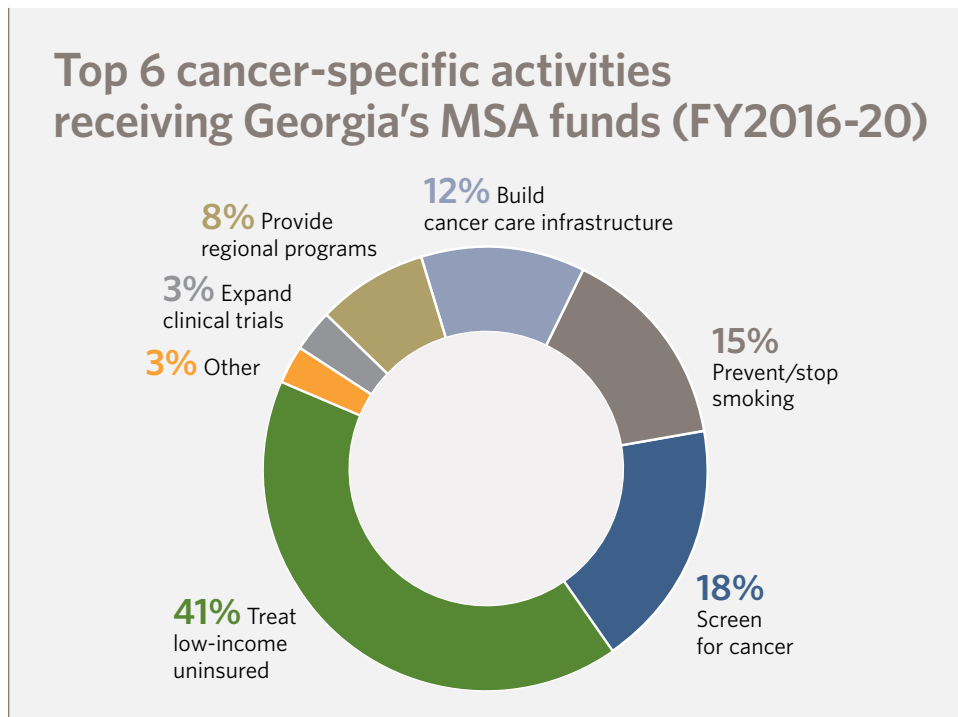
Source: GeorgiaCancerInfo.org, ClinicalTrials.gov (2019)

5. *Our state now has a current and actionable “Georgia Cancer Plan,” the product of 80-plus experts and organizations engaged in the day-to-day fight against cancer. This team, the Georgia Cancer Control Consortium (GC3), works closely with the Georgia Department of Public Health to establish goals, facilitate strategies, monitor outcomes and disseminate results.*

All of this progress is nothing short of extraordinary. Still, an essential question must be asked: If more MSA dollars were to be invested in cancer-related activities across Georgia — to improve outcomes and reduce disparities — which activities would be considered a wise investment?

Georgia CORE convened a panel of experts around that question in sessions facilitated by Georgia State University’s Health Policy Center. We identified five activities with the potential for both deep impact and high return on investment. All five align with the priorities of the Georgia Cancer Plan, and in this report, we present both the recommendations and the rationale for investing in each of those activities in the years ahead.

The State of Georgia has come a long way in improving cancer care. A strong foundation of people and programs is in place. But clearly, more must be done. By directing more master settlement dollars toward the intersection of opportunity and need — and by leveraging areas of strength and success — our state will accelerate its progress to save more lives.



A HIGH-LEVEL VIEW OF CANCER IN GEORGIA

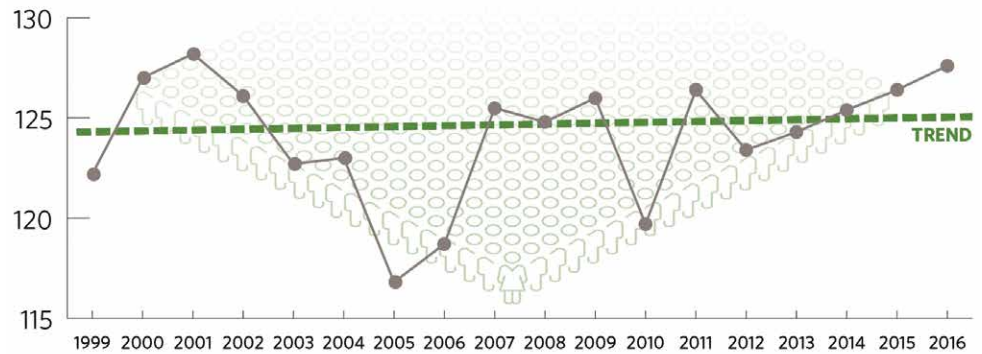
In Georgia, trends regarding the incidence of cancer are mixed.

More than 55,000 Georgians were newly diagnosed with cancer in 2018, according to estimates from the American Cancer Society. That's one new diagnosis every 10 minutes.

New diagnoses of lung, colorectal and prostate cancer are on the decline, while incidence of breast cancer is rising.*

Breast cancer: Trending slightly up

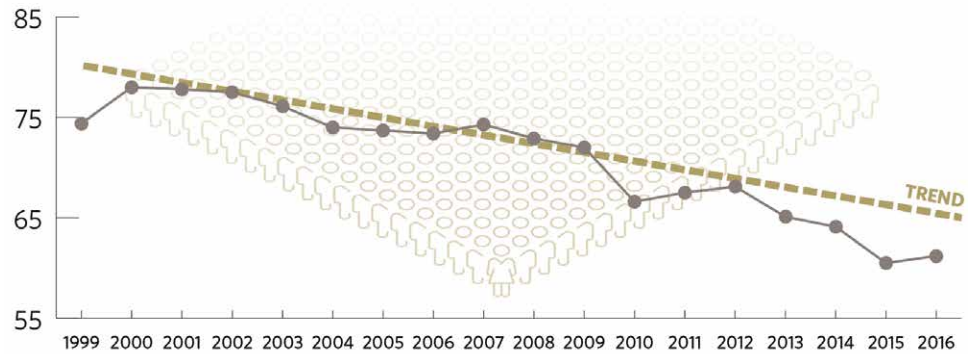
Incidence per 100,000 Georgians



* The rising incidence of breast cancer is believed to be the result of an aging population and increased early detection through screenings, which are on the rise (see page 7).

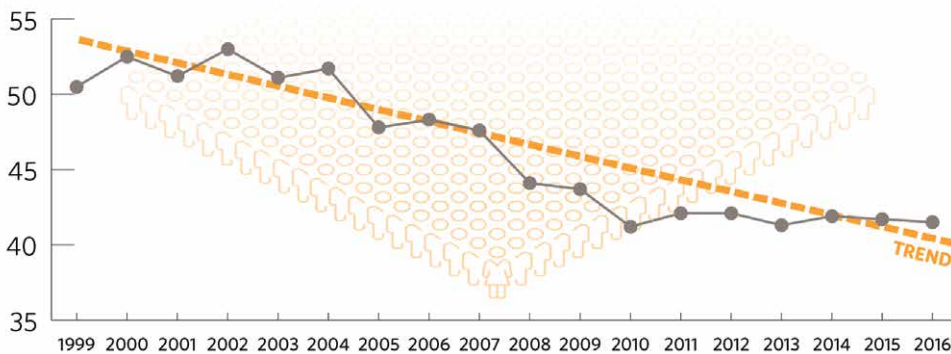
Lung & bronchus cancer: Trending down

Incidence per 100,000 Georgians



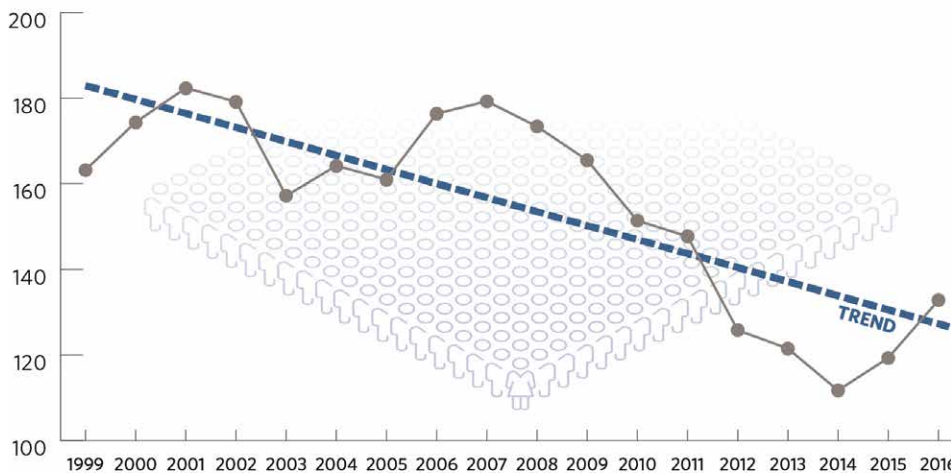
Colorectal cancer: Trending down

Incidence per 100,000 Georgians



Prostate cancer: Trending down

Incidence per 100,000 Georgians



All rates adjusted for age. Chart sources: U.S. Cancer Statistics (CDC and NCI).

How many kinds of cancer are there?

More than 100. But only four of these comprise 47% of all cancers newly diagnosed in the U.S. each year. Here's how many Georgians are estimated to be diagnosed with each of these four cancers this year:

Breast	8,000
Lung & Bronchus	7,070
Prostate	5,400
Colorectal	4,450

Source: American Cancer Society's Cancer Facts & Figures, 2019

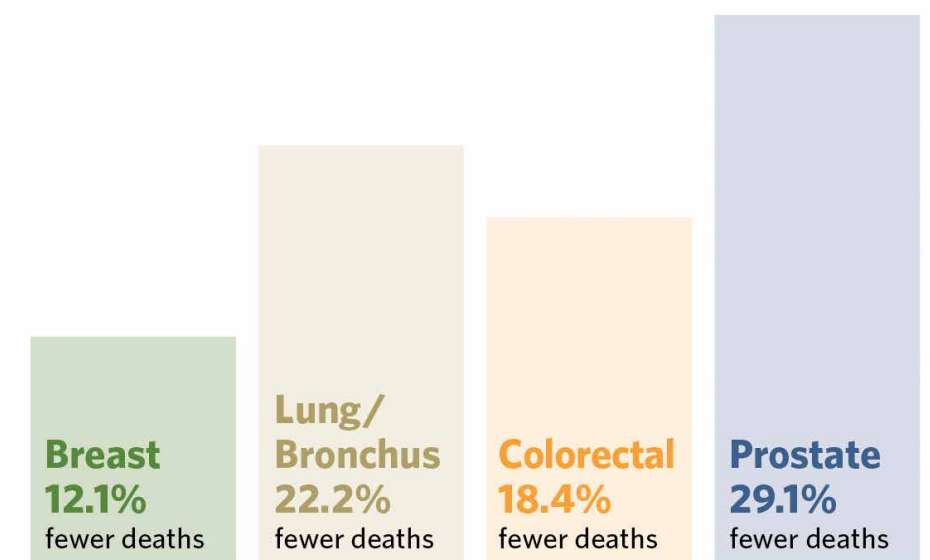
A HIGH-LEVEL VIEW OF CANCER IN GEORGIA (continued)

For the top four cancers, Georgians' rates of incidence and death exceed the national average (except for colorectal cancer deaths).

	Incidence per 100K		Deaths per 100K	
	GA	US	GA	US
Breast cancer (female)	126.4	124.8	21.3	20.3
Lung cancer	60.5	57.5	42.2	40.6
Colorectal cancer	41.7	38.0	15.5	17.0
Prostate cancer	115.2	99.0	21.1	19.0

Source: U.S. Cancer Statistics (CDC and NCI). All numbers reflect 2015 data.

The good news: More Georgians are surviving the 4 leading cancers.



Periods compared: 2001-2005 to 2011-2015.
Source: Georgia Health Policy Center.

But disparities exist: Georgians who are African American are far more likely to die from breast, colorectal and prostate cancer than Georgians who are white.

Death by race

All ages, per 100,000, 1999-2015

	AF-AM	WHITE	HISPANIC
Breast	30.1	22.1	9.3
Lung	48.1	56.3	11.5
Colorectal	22.8	15.6	6.8
Prostate	58.8	21.3	10.2

Source: United States Cancer Statistics (WONDER Online Database)

Georgia is generally faring well in screening for cancer. But there's room to improve.

Screenings for breast cancer are higher than the national average — and close to the goal set by Healthy People 2020, a set of national objectives for improving the health of all Americans.

Rates and Healthy People 2020 Targets for Screening of Breast Cancer

	Screening Rates (% of women age 40+)	
	2016 Rate	Healthy People 2020
United States	77.6%	81.1%
Georgia	79.3%	

Source: Mercer University Center for Evaluation and Applied Research

Screenings for colorectal cancer are higher than the national average — but well short of the Healthy People 2020 goal.

Rates and Healthy People 2020 Targets for Screening of Colorectal Cancer

	Screening Rates (% of adults age 50-75)	
	2016 Rate	Healthy People 2020
United States	63.5%	85%
Georgia	65.4%	

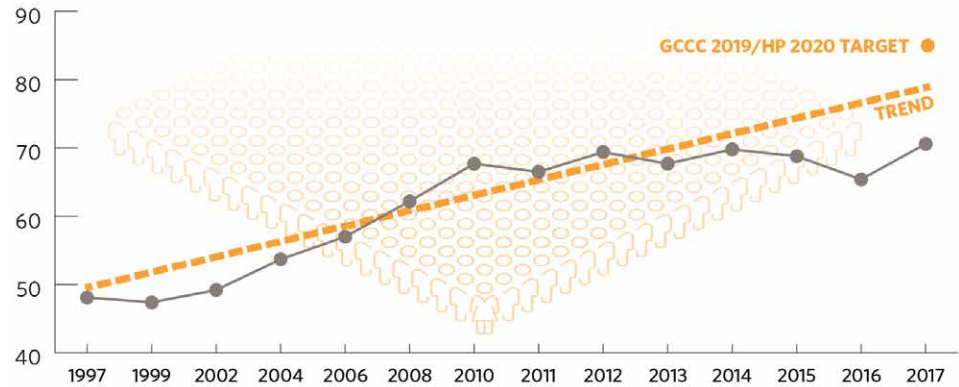
Source: Mercer University Center for Evaluation and Applied Research

A HIGH-LEVEL VIEW OF CANCER IN GEORGIA (continued)

At least screenings for colorectal cancer in Georgia are going in the right direction.

Screenings for colorectal cancer: Trending up

Percentage of Georgians 50+ who had either a colonoscopy or sigmoidoscopy within the last 2 years

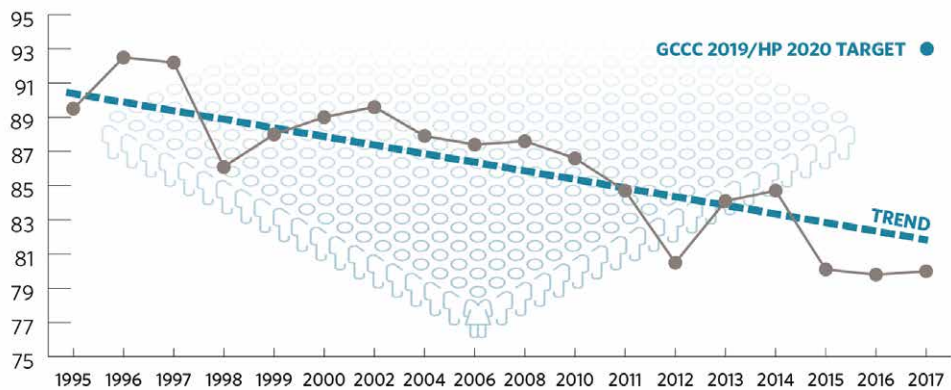


However, screening for cervical cancer is on the decline in Georgia. While cervical cancer is not one of the four major cancers, it will claim the lives of 140 Georgia women in 2019, based on estimates from the American Cancer Society.

Seven out of 10 cases of cervical cancer can be prevented through vaccination against HPV, or human papillomavirus. For the other cases, screening can prevent most forms of cervical cancer — because pre-cancer cells can be identified in PAP smears.

Screenings for cervical cancer: Trending down

Percentage of Georgia women 18+ who had a Pap smear within the last 2 years



Note: Charts reflect all available data, despite gaps in some years. Target point in each chart reflects target of Georgia Cancer Control Consortium (GCCC 2019) and Healthy People 2020 (HP 2020).

5 ACTIONS THAT WOULD SAVE MORE LIVES

If more Master Settlement dollars were directed to cancer-fighting activities, what should be the priorities?

That's the question our experts addressed in sessions facilitated by Georgia State University's Health Policy Center. We identified the following five actions as especially worthy of investment. Each is preventive in nature — because even a simple action can help Georgians better protect their health and potentially avoid costly treatment later. Thus, all five represent a strong return on investment.

The proposed five actions are aligned with the larger set of priorities established by the Georgia Cancer Control Consortium, the chief architects of the Georgia Cancer Plan.

Here are the five actions recommended by Georgia CORE experts:

1 | Screen more Georgians for colorectal cancer.

In the late 1990s, only half of Georgians 50 and older were screened for colorectal cancer. That rate is now 65%, so our state has real momentum in its effort to reach the Healthy People 2020 target goal of 85%. (And to date, 51 Georgia organizations have pledged their support of reaching the goals set by the National Colorectal Cancer Roundtable.)

What makes colorectal cancer screening so urgent is that the disease is now affecting people earlier in life. In the last quarter-century, the number of Americans under the age of 50 diagnosed with colorectal cancer skyrocketed by 51% since 1994, according to the American Cancer Society. Screenings are now recommended for adults beginning at age 45.

If Georgia were to reach its 85% screening goal, a projected 8,800 additional lives would be saved, and healthcare costs would lower by \$1.3 billion (see sidebar). Much of this impact would be felt in the state's rural areas, where screening is less commonplace.

2 | Help more Georgians avoid or beat lung cancer.

While the incidence of lung cancer in Georgia is on the decline, the state still has more diagnoses and deaths than the national average. What makes lung cancer so deadly is that it's often diagnosed late. Thus, the five-year survival rate is a low 18%.

Tobacco use is the primary cause of lung cancer. Tobacco use is also a chronic condition and the no. 1 preventable cause of death in Georgia. More than 11,500 Georgians die from tobacco-related illnesses each year, and tobacco use costs the state nearly \$5 billion in healthcare costs and indirect costs, such as lost wages.

The impact of more screening for colorectal cancer in Georgia

A 2019 analysis from Georgia State University's Health Policy Center revealed just how impactful colorectal cancer screening can be on our state. If Georgia were to reach the national screening goal of 85% of adults between the ages of 50 and 75, the expected benefits would be:

28,598 fewer incidences

8,798 fewer deaths

\$1.3 billion in reduced medical costs

\$2.5 billion in increased social benefit*

**Quality of Life Years x Value or \$2.5 billion in value of quality of life years*

Source: "Economic Impact of Colorectal Cancer Screening in Georgia" (by William Custer), Center for Health Policy Research, Georgia State University 2019

5 ACTIONS THAT WOULD SAVE MORE LIVES (continued)

Getting people to stop using tobacco often requires several different kinds of tactics and approaches. Combination therapy — combining behavioral support with prescribed medication — has proven to be effective in reducing or eliminating tobacco use. So, helping more Georgians access combination therapy to give up tobacco would be effective in reducing incidence of lung cancer.

Screening Georgians at a high risk for lung cancer would save lives and bring an economic benefit of over \$1 billion.

Further, screening a high-risk group of Georgians for lung cancer — people aged 55 to 74 who have a smoking history of 30 pack years or greater* — would improve the likelihood of survival and improve quality of life. An analysis from Georgia State University estimates that 366,444 Georgians fall into this high-risk category. According to that analysis, screening these Georgians would bring:

- more than 14,000 quality-adjusted life years, a measure of disease burden
- an economic benefit to our state of over \$1 billion

**A “pack year” is a clinical measurement of tobacco exposure. A person who has smoked 15 cigarettes a day for 40 years has a 30 pack-year history (15/20 x 40 = 30). 1 pack = 20 cigarettes.*

3 | Address Georgia’s disparity in breast cancer deaths.

In Georgia, women who are white are more likely to be diagnosed with breast cancer — but African-American women who have been diagnosed are more likely to die from the disease. This disparity can be addressed by increasing efforts to screen more African-American Georgians earlier for breast cancer. Follow-ups from those screenings range from taking preventive measures (such as improving diet and physical activity) to increasing access to timely treatment.

Community clinics are key to helping women who have inadequate healthcare coverage. Georgia’s Breast Cancer License Tag program has provided grants to community clinics, which in turn have expanded breast cancer screening (mammograms), education and navigation to treatment for these women, the vast majority of whom are African American. Building on this success — by providing more resources to Georgia’s community clinics — would enable them to use culturally appropriate messages to promote their services and help more women.

One specialized service is genetic screening, testing and counseling for breast (and ovarian) cancer. This involves administering a simple questionnaire to determine whether a woman is at increased risk for having a mutation of genes (called BRCA1 and BRCA2) that are strong predictors of breast and ovarian cancer. If screening shows a likelihood, then testing and counseling would follow.

Georgia CORE and the Georgia Department of Public Health have been building a network across the state to conduct genetic screening of underserved women — and helping those at risk navigate testing and prevention or treatment. This model is highly effective in reaching rural and minority women. It’s also cost effective and has much room to grow.

4 | Protect more African-American Georgia men from prostate cancer.

The evidence says it all: African-American men are 1.6 times more likely to develop prostate cancer than white men — and 2.4 times more likely to die from it, according to the Prostate Cancer Foundation. This disparity is even worse in Georgia: Prostate cancer incidence for African-American Georgians is nearly twice as high as that for white men, and mortality is nearly three times higher.

Evidence is growing that certain biological factors may make low-grade prostate cancer more likely to grow and spread in African-American men. So, it is especially important for African-American men to evaluate screening and treatment options with their physicians.

When prostate cancer is caught early, men have more treatment options and much better outcomes. The challenge is catching it early. It's crucial to encourage more Georgians who are African American to be screened regularly — and to formalize the practice of providing them with the right information to guide decisions on treatment.

A research component would be beneficial in Georgia, too. Current practices that promote screening and informed decision making should be studied, with baseline data set; and after new outreach and counsel have been provided, the effectiveness of these efforts should be measured.

5 | Reverse Georgia's decline in cervical cancer screening.

As noted earlier, cervical cancer is not among the four most prevalent cancers. However, cervical cancer is preventable and, if detected early, highly curable. And powerful tools exist to detect cervical cancer early — or prevent it altogether.

Nearly all cervical cancers are caused by human papillomavirus, or HPV. An HPV test looks for human papillomavirus cells and is recommended for women 30 years of age and older. A vaccine against HPV can prevent future cancers, but vaccination rates remain low. Strategies to measure and improve HPV vaccination rates — particularly for all children under the age of 13 — require engaging providers, health systems and parents in the effort.

Parents play an especially important role: According to evidence-based guidelines, communication with parents should emphasize that HPV vaccination represents cancer prevention, and that it should be a part of other routine vaccinations. The American Cancer Society recommends women age 21 to 65 have the test every three years.

A vaccine against HPV can prevent future cancers. But vaccination rates remain low.

FUNDING THE 5 ACTIONS IN THIS REPORT

Our earlier report, which tracked how Master Settlement dollars have been spent in Georgia, showed a sharp decline in the percentage of annual allocations to cancer-fighting activities.

Over time, a smaller share

Portion of Georgia's MSA funds directed to cancer-specific activities



The need for more cancer screening

All five actions recommended in this report involve some form of screening and preventive measures to reduce future medical costs and improve the health of Georgians. Data shows that the percentage of Master Settlement investment in cancer screening has not kept pace with population growth.

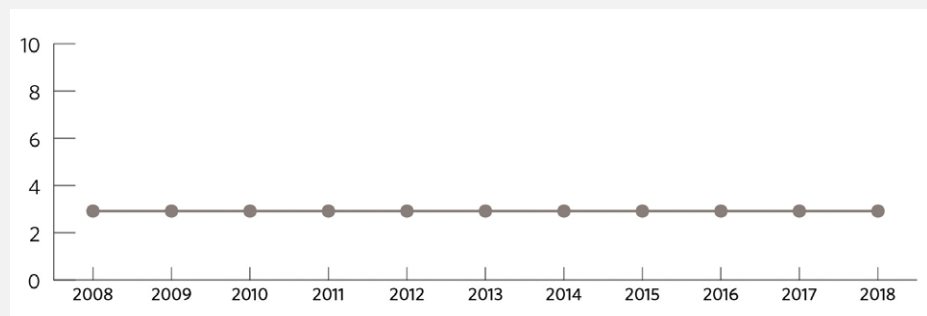
Georgia's resident population between 2008 and 2018 grew by 820,000 people...

+820,000

INCREASE IN GEORGIA'S POPULATION 2008-2018

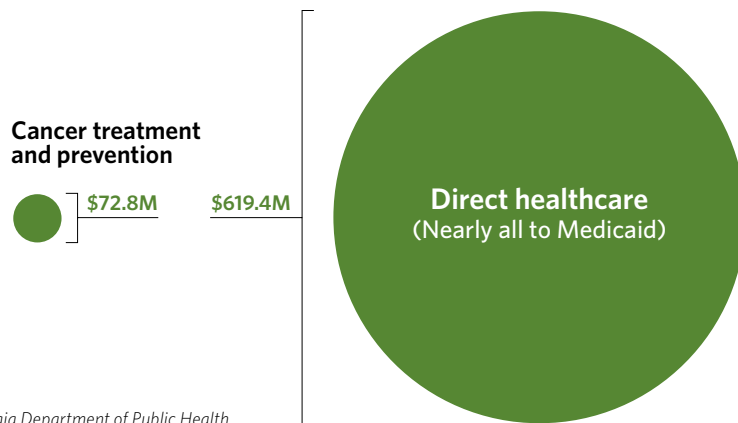
Source: U.S. Census Bureau

...but during those years, Master Settlement funding allocated for cancer screening has flatlined.



Source: Georgia Budget Office

5 years of MSA funding in Georgia, 2015-19



Source: Georgia Department of Public Health

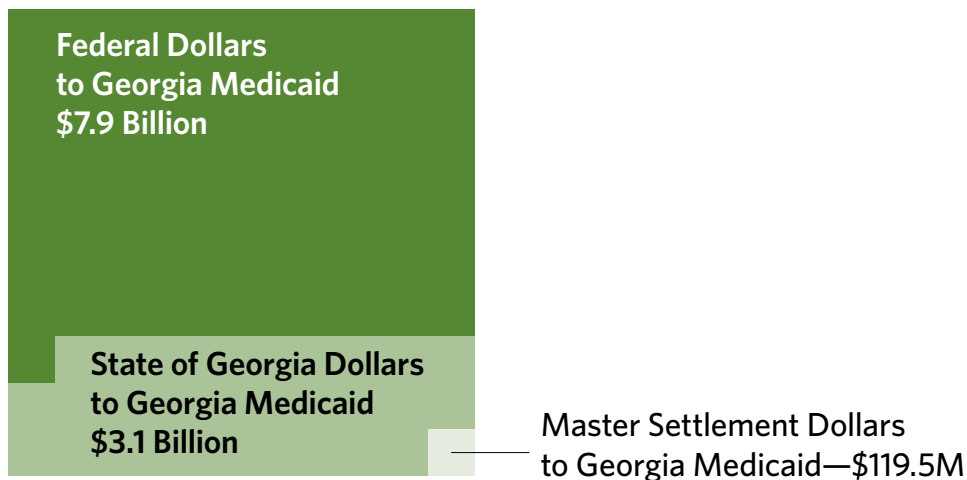
Over the past five years, the funding of these activities from the Master Settlement allocation has remained fairly constant. The lion's share of the annual allocation — 87% — has gone to Georgia's Medicaid program.

In FY 2019, that amounted to \$119.5 million in tobacco settlement money added to Georgia Medicaid.* While that seems a sizable contribution, it represents just 1 percent of all of the state's Medicaid funding.

By redirecting just 10 percent of this Master Settlement funding from Medicaid to cancer-fighting activities — approximately \$12 million — Georgia could initiate several activities to support the five actions proposed here. The loss to Medicaid would be negligible (one-tenth of 1 percent of the total Medicaid budget).

*Source: The Governor's Budget Report, Amended Fiscal Year 2019 and Fiscal Year 2020, Office of Planning and Budget. FY19 State of Georgia dollars to Georgia Medicaid = \$3.1 billion.

FY2019 Money to Medicaid



A POINT OF EMPHASIS



No one escapes cancer entirely. Perhaps you, or someone close to you, is fighting it at this very moment. Or maybe you've confronted the disease in the past and experienced survivorship, either personally or through a loved one.

Even if you haven't, the prospect of cancer entering your life is something you probably think about from time to time. The disease continues to rank among our greatest fears.

Much time, work and money have been invested to address the threat of cancer. Georgia is no exception. As noted in the beginning of this report, the last 30 years have given rise to an impressive portfolio of assets and actions to reduce the burden of cancer on Georgians. Real progress has been made.

Yet Georgia trails the U.S. in some important areas. One is the mortality rate of some of the deadliest cancers. Another is funding the control of tobacco — a summer 2019 report from the American Cancer Society shows the state is well behind its counterparts.

Those affected most by these shortfalls are the underinsured and the medically underserved, many of whom were never able to be screened, and many of whom rely on Georgia Medicaid for treatment.

The state deserves credit for consistently using its annual allotment from the tobacco Master Settlement Agreement to address health-related needs. At the same time, the portion of this allotment used to support cancer-related activities has shrunk to just 9 cents out of every dollar.

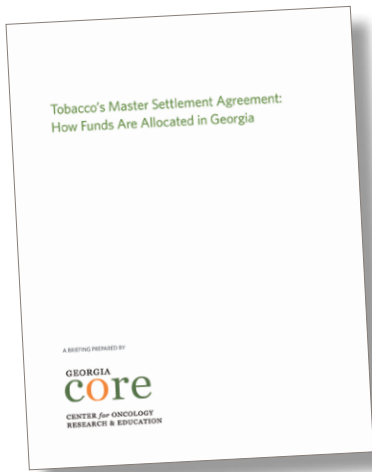
The current picture of need is really a picture of opportunity. Tobacco settlement dollars arrive every year. Georgians at risk for the most common cancers have a better chance of averting or fighting these diseases if they can have access to screening and take preventive action.

Hence, the opportunity: Directing more tobacco settlement funds to help more Georgians catch cancer early — or avoid it altogether — presents a tremendous return on investment. This is especially true in lessening costly treatment for lower-income Georgians who rely on Medicaid to pay for their care. By engaging in more evidence-based activities that support the 5 actions in this report and measuring the outcomes, Georgia can move the needle on cancer.

Such thinking is in line with the larger strategy mapped for our state. The architects of this strategy, the Georgia Cancer Control Consortium, have identified a number of ways to reduce cancer’s appalling impact on Georgians. The 5 actions outlined here live within this blueprint. They are offered as a point of emphasis: That more funds acquired from the leading cause of cancer can be smartly applied to protect more Georgians from cancer.

Simply put, they are actions that will save more lives.

Directing more tobacco settlement funds to help more Georgians catch cancer early — or avoid it altogether — presents a tremendous return on investment.

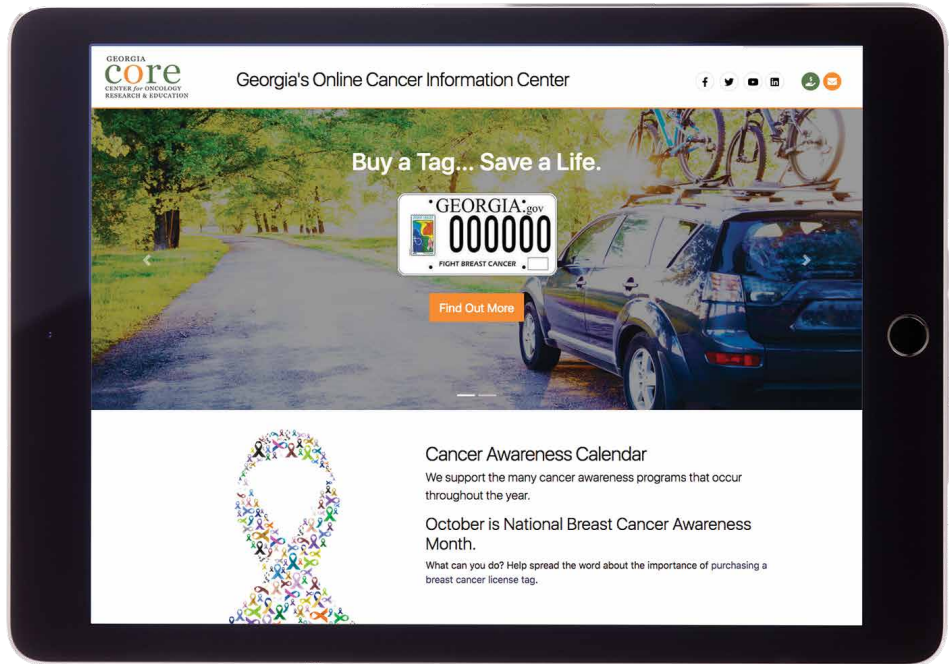


5 Actions to Save More Lives is developed to support data-informed decision making among elected officials, policymakers and healthcare leaders. It is a follow-up to Georgia CORE's January 2019 analysis, *Tobacco's Master Settlement Agreement: How Funds Are Allocated in Georgia*, which provides a 19-year view of the amount and general purpose of MSA allocations to the state.

For more information about either report, contact Georgia CORE by emailing Info@GeorgiaCORE.org or calling 404-523-8735.

Note: All data presented in this report represents the most recently available information at the time of publishing.

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