

IMPROVING THE PRACTICE OF CANCER SCREENING

HOW YOUR PUBLIC HEALTH AGENCY CAN HELP

SCREENING SAVES LIVES. Detecting cancer early when treatment works best is critical to saving lives. And yet, far too many Americans are not being screened as recommended.

Health systems and public health agencies have a shared goal to increase screening rates and save lives.

SCREENING IS ALSO A KEY MEASURE IN TODAY'S VALUE-BASED CARE MODELS.

As health systems increase the quality, efficiency, and rate of cancer screenings, they also will maximize reimbursements.

Public health agencies can offer resources that improve the practice of screening.

WHAT PUBLIC HEALTH AGENCIES HAVE TO OFFER

For decades, cancer prevention programs have provided screening to uninsured and hard-to-reach populations. With the increase in the number of insured Americans, programs can offer expertise to health systems on reaching various populations with the potential to multiply impact.

EVIDENCE-BASED INTERVENTIONS

A CDC-led task force was established in 1996 to study various disease prevention interventions and determine relative effectiveness, cost, and return on investment. The result is a **comprehensive set of thoroughly studied and tested interventions for a variety of health issues.**

The good news is that tested interventions for increasing the rate and quality of cancer screening already exist.

These are sustainable practices that can be incorporated into everyday workflows and replicated across disease programs to improve return on investment.

Your public health agency also has locally and regionally relevant **interventions, data, and lessons learned.**

Working in partnership, health systems and public health agencies can dramatically increase screening rates and lives saved.



TECHNICAL ASSISTANCE

In addition to information about evidence-based interventions, cancer prevention and control programs can provide technical assistance with implementation, policy and procedure development, data use, service delivery, and education.

We can also share best practices for stakeholder engagement, process improvement, and data management as they relate to building the most efficient and effective disease prevention programs.

STRATEGIC PARTNERSHIPS

Public health agencies have extensive experience working across sectors to advance cancer prevention. Our efforts to improve population-level screening have included partnerships with policymakers, practitioner networks, medical societies, quality-improvement organizations, and other stakeholders. Whether your desire is to gain or share expertise, we can help you engage the right people in the right conversations.

SPOTLIGHT ON CANCER SCREENING AND PREVENTION

Just one example
of how your public
health agency
can help improve
performance

As health systems look to improve the quality and rate of cancer screenings, increase their performance score, and save more lives, public health agencies can help. We offer assistance implementing **evidence-based interventions** developed through decades of experience in this arena.

These include:

- Patient reminders and education to **increase community demand.**

- Provider assessments, feedback, and reminders to **improve delivery.**
- Strategies for reducing structural barriers and out-of-pocket costs to **improve access.**

Your public health agency may also support health systems in meeting requirements for advancing care information and coordination. Talk to your public health agency about how it can help you achieve your goals.

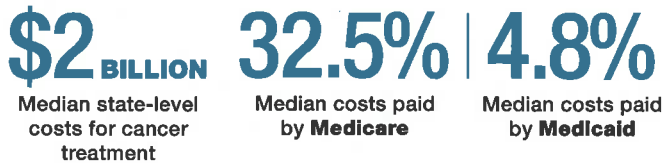
NO TIME FOR GUESSWORK

WHEN IT COMES TO CANCER, EVIDENCE-BASED INTERVENTIONS SAVE LIVES AND DOLLARS.

Public health agencies offer proven strategies for improving the quality and rate of cancer screening. Working with health systems and other partners to implement evidence-based interventions can significantly reduce health care costs and increase lives saved.

CANCER IS COSTLY; STATES PAY THE PRICE¹

In less than 20 years, the total medical cost of cancer in the United States has nearly doubled. All payers feel the impact. States bear much of the cost.



SCREENING NOW SAVES DOLLARS LATER

60 to 89% of the costs of screening pre-Medicare patients (ages 50 to 64) for colorectal cancer would be offset by savings in future Medicare treatment costs.²

CANCER AFFECTS WORKFORCE PRODUCTIVITY



Cancer is one of the **top five most costly diseases** in the United States and leads to substantial work loss.³

6.1
DAYS
Median state-level days lost per year among employed cancer patients

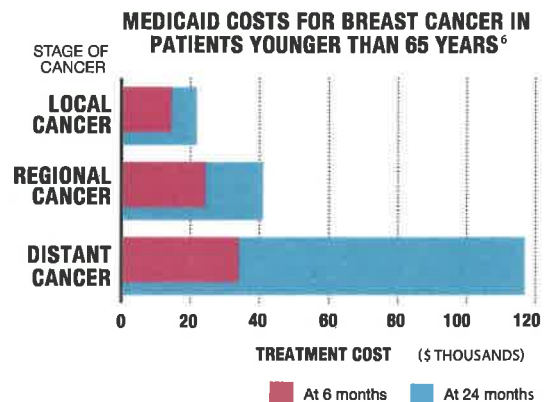
\$115.9
MILLION
Median annual state-level cancer absenteeism costs

EARLY DETECTION REDUCES COSTS

Late-stage cancer requires more expensive treatment. Colon cancer **stage 4** treatment is **three times more expensive** than stage 1 treatment costs.⁴



Additional Medicaid end-of-life costs during **final 4 months** for patients with cancer compared to those without cancer.⁵





EVIDENCE-BASED INTERVENTIONS WORK

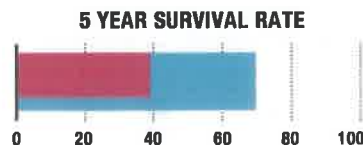
USING MULTIPLE EVIDENCE-BASED INTERVENTIONS INCREASES SCREENING RATES

24% Increase in adults up-to-date with colorectal cancer screening after using patient navigators + client reminders + provider reminders.⁷

Patient navigators at a major urban health system:⁸

- Reduced no-show/cancellation rates by **3%**
- Generated revenue that paid for **2 navigator salaries** after 3.5 months.
- Generated **\$150,000** in additional hospital revenue (per Navigator).

Patient navigators and increased access to screening at an urban hospital center⁹ increased **five-year survival rates in breast cancer** from **39% to 70%**



¹ Tangka FK, Trogdon JG, Ekwueme DU, Guy GP Jr, Nwaise I, Orenstein D. State-level cancer treatment costs: how much and who pays? 2013;119(12):2309-2316. ² Goede SL, Kuntz KM, van Ballegooyen M, Knudsen AB, Lansdorf-Vogelaar I, Tangka FK, Howard DH, Chin J, Zauber AG, Seeff LC. Cost-savings to Medicare from pre-Medicare colorectal cancer screening. *Medical Care* 2015;53(7):630-638. ³ Tangka FK, Trogdon JG, Ekwueme DU, Guy GP Jr, Orenstein D. State-level estimates of cancer-related absenteeism costs. *Journal of Occupational Health and Environmental Medicine* 2013;55(9):1015-1020. ⁴ Birtwistle M, Earnshaw A for Cancer Research UK. Saving lives, averting costs: An analysis of the financial implications of achieving earlier diagnosis of colorectal, lung and ovarian cancer. 2014. ⁵ Tangka FK, Subramanian S, Sabatino SA, Howard DH, Haber S, Hoover S, Richardson LC. End-of-life medical costs of Medicaid cancer patients. *Health Services Research* 2015;50(3):690-709. ⁶ Subramanian S, Trogdon J, Ekwueme DU, Gardner JG, Whitmire JT, Rao C. Cost of breast cancer treatment in Medicaid: implications for state programs providing coverage for low-income women. *Medical Care* 2011;49(1):89-95. ⁷ Joseph DA, Redwood D, DeGroff A, Butler EL. Use of evidence-based interventions to address disparities in colorectal cancer screening. *Morbidity and Mortality Weekly Report Supplement* 2016;65(1):21-28. ⁸ Balderson D, Safavi K. How patient navigation can cut costs and save lives. *Harvard Business Review* 2013. ⁹ Ibid.

Evidence-Based Interventions to Increase Cancer Screening: PROVIDER ASSESSMENT

CONSTRUCTIVE PROVIDER FEEDBACK CAN BOOST CANCER SCREENINGS

Research shows that giving feedback to your providers can increase screenings by 13% for many cancers.¹ Take a close look at provider practices related to referring patients for screening. Provide constructive suggestions to increase appropriate conversations with patients and ordering of tests.



THE BASICS OF ASSESSMENT AND EVALUATION

- Decide how to assess current screening practices by examining individual providers or groups and comparing screening performance to national standards or clinic screening rates.
- Gather data through an electronic health record query, a chart review tool, or a pilot assessment.
- Provide feedback by presenting data in an easy-to-understand graphic or report, summarizing and analyzing results for the clinic as a whole and for individual providers.
- Use findings for improvement, including a written plan for screening rate increases and additional educational opportunities.

ENGAGING YOUR PROVIDERS IN THE PROCESS

An evaluation of how either a provider or a group of providers recommend and refer patients for screening can be a sensitive topic. Some ways to lay the groundwork for success:



- **GET BUY-IN AHEAD OF TIME:** Do an in-service session to remind providers of the health system's policies, including screening eligibility and applicable guidelines, and get input on the assessment and feedback approach. Emphasize the positives around increased appropriate screenings for patients.
- **MOTIVATE PROVIDERS:** Feedback collected during the assessment phase should be presented in a way that encourages providers to take ownership of improving their rates.
- **OFFER CHOICES:** Let providers and staff determine whether they want one-on-one or group feedback. But, only release name-identified results to a provider for the aggregate and for that specific provider, or for his or her clinic compared to others in the health system.
- **MAKE TIME:** Allow time for providers to learn and implement any new processes.
- **PROVIDE RESOURCES:** Find out from your providers what resources or training they need to improve their screening rates. Provider reminders, screening guideline refreshers, updates on new testing procedures, pocket guides, and key messages could be helpful to use with their patients.



THINK ABOUT...

- Identifying someone who will communicate with providers and staff, take ownership of the process, and encourage staff to buy in.
- Possible financial investments to upgrade electronic systems or pay for any needed training.
- Conducting a pilot assessment to see how the process works.
- How often the assessment and feedback should be conducted.
- Monitoring new activities over time and making adjustments as needed.
- Documenting improvements.



Contact your ScreenOutCancer affiliated state, regional, tribal, or territorial cancer prevention program for partnership opportunities including technical assistance on implementing evidence-based interventions:

www.cdc.gov/cancer/nbccedp

www.cdc.gov/cancer/crccp

Evidence-Based Interventions to Increase Cancer Screening: **PROVIDER REMINDERS**

PROVIDERS NEED REMINDERS, TOO

Your clinic can develop systems to alert providers that patients are due for cancer screenings. This practice can increase screening and testing uptake by more than 7%.¹

PROVIDER REMINDER OPTIONS

- **Manual** — Flagging of medical charts using stickers or notations to highlight patients due for a cancer screening.
- **Electronic** — Some electronic health record systems can send screening alerts to providers based on criteria selected.



STEPS TO DEVELOP A PROVIDER REMINDER SYSTEM

- Gain provider and staff buy-in by including them in the planning and implementation process.
- Create a process with proper workflow to ensure:
 - Records are properly flagged.
 - Providers recommend appropriate screenings.
 - Screening tests are ordered.
 - Screening is completed or refused.
 - Refusal or results are documented.

CRITERIA THAT CAN BE USED TO DETERMINE WHICH RECORDS ARE FLAGGED

- Age.
- Sex.
- Date of last screening.
- Risk factors.
- United States Preventative Services Task Force screening guidelines.^{2,3,4}
- Upcoming appointments.



DON'T FORGET TO MONITOR AND ADJUST

- Establish a plan for regular evaluation and tweaking of the system.
- Make sure providers are receiving the reminders.
- Make sure providers are making the referrals or ordering the tests.
- Document and train on any changes in protocol.



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1 - Baron RC, Melillo S, Rimer BK, Coates RJ, Kerner J, Habarta N, Chattopadhyay S, Sabatino SA, Elder R, Leeks KJ; Task Force on Community Preventive Services. Intervention to increase recommendation and delivery of screening for breast, cervical, and colorectal cancers by healthcare providers a systematic review of provider reminders. *American Journal of Preventive Medicine* 2010;38(1):110-7. 2 - Final Update Summary: Colorectal Cancer: Screening. U.S. Preventive Services Task Force. June 2016. 3 - Final Update Summary: Cervical Cancer: Screening. U.S. Preventive Services Task Force. August 2018. 4 - Final Recommendation Statement: Breast Cancer: Screening. U.S. Preventive Services Task Force. May 2019.

Evidence-Based Interventions to Increase Cancer Screening: **CLIENT REMINDERS**

REMINDERS INCREASE UPTAKE OF CANCER SCREENINGS

A gentle prompt can make the difference between getting a screening on the books or a delay in care.

Health systems can boost cancer screenings just by reminding clients that it's time to schedule a screening. Studies show that client reminders increased breast cancer screenings by 12%, and cervical and colorectal screenings by 10%.¹

To set up a written and/or telephone outreach system for clients who are due for a cancer screening, health care providers should consider their options and choose the ones best suited for the clinic and for the clients:

WRITTEN REMINDERS

- Letters.²
- Postcards.
- Email.
- Patient portal messages.



TELEPHONE MESSAGES

- Direct calls.³
- Text messages.
- Automated messages.⁴



Tailor reminders to your audience (see Colon Cancer Screening Communications Guidebook).⁵ Establish criteria for timing and outreach based on U.S. Preventive Services Task Force⁶ screening guidelines as well as:

- Age.
- Sex.
- Date of last screening.
- Active patient status.
- Risk factors.



STEPS TO DEVELOP A CLIENT REMINDER SYSTEM

- Increase buy-in from staff by seeking input through planning and implementation.
- Assess whether your electronic health record system can generate reports on screenings and link them to reminders. Upgrades may be needed.
- Develop the client reminder system and screening referral protocol.
- Develop messages.
- Identify staff who will generate and send client reminders.
- Integrate the reminder protocol into daily workflow.
- Provide training.
- Decide how patient responses will be documented and how to handle undeliverable reminders.

THINK ABOUT...

- Tailoring method of delivery and the message to your clients.
- Whether patient navigation to address patient barriers can enhance efforts.
- Looking into bulk mailing to decrease cost.
- Tracking undeliverable messages and updating the reminder lists.



DON'T FORGET TO MONITOR AND ADJUST

- Establish a plan for regular evaluation and tweaking of the system.
- Make sure patients were identified appropriately and reminders were generated successfully.
- Document and train on any changes in protocol.



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1 - Sabatino SA, Lawrence B, Elder R, Mercer SL, Wilson KM, DeVinney B, Melillo S, Carvalho M, Taplin S, Bastani R, Rimer BK, Vernon SW, Melvin CL, Taylor V, Fernandez M, Glanz K; Community Preventive Services Task Force. Effectiveness of interventions to increase screening for breast, cervical, and colorectal cancers: nine updated systematic reviews for the guide to community preventive services. *American Journal of Preventive Medicine* 2012;43(1):97-118. 2 - To see sample letter visit: tips.cancer.gov/tips/uploads/RTIPS/-RT=-/WHE/DoHHS/NIH/NCI/DCCPS/7488.pdf. 3 - To see sample phone script visit: www.cancer.org/content/dam/cancer-org/cancer-control/en/worksheets/lobt-fit-follow-up-phone-script-average-risk-individuals.pdf. 4 - To see sample transcript of automated telephone message visit: tips.cancer.gov/tips/uploads/RTIPS/-RT=-/WHE/DoHHS/NIH/NCI/DCCPS/6405.pdf. 5 - Colon Cancer Screening Communications Guidebook, visit: nccrt.org/resource/2017-80-2018-communications-guidebook-recommended-messaging-reach-unscreened. 6 - U.S. Preventive Services Task Force screening guidelines, visit: www.uspreventiveservicestaskforce.org/Page/Name/recommendations

Evidence-Based Interventions to Increase Cancer Screening: **REDUCING STRUCTURAL BARRIERS**



OVERCOME OBSTACLES TO CANCER SCREENING

Interventions that remove barriers are proven to increase the number of people who get screened.

Reducing barriers increased breast cancer screenings by 18% and colorectal cancer screenings by 37%.¹

5 WAYS TO MAKE CANCER SCREENING EASIER FOR YOUR CLIENTS

- 1 TRANSPORTATION HELP:** Provide gas cards, bus passes, or taxi or ride-sharing service to clinics. Partner with local organizations that may provide transportation already.
 - **Think about:** Providing a range of options. Pursue low-cost strategies first to improve chances of sustainability.
- 2 FLEXIBLE HOURS:** Open clinics earlier, close later, and provide appointments during lunch hours for patient convenience.
 - **Think about:** Recruiting volunteers to staff extended clinic hours, rotating providers to reduce burnout, and providing funding for longer clinic hours.
- 3 MORE LOCATIONS:** Provide screening at worksites or through mobile mammography vans. Offer neighborhood pick-up locations for stool samples.
 - **Think about:** Developing new partnerships and new resources that may be needed.
- 4 SIMPLIFY PAPERWORK:** Eliminate unnecessary and confusing forms and provide scheduling help, translation services, and patient navigators.
 - **Think about:** Sharing translation staff with other departments or using language phone lines.
- 5 PATIENT NAVIGATION:** Provide support to help patients identify and overcome barriers to cancer screening.
 - **Think about:** Investing resources to operate a successful patient navigation system.



HOW TO START?



Find out what your community needs by talking to your target audience and connecting with local organizations. Reserve resources for individuals who are facing the identified barrier. Use data to determine the level of need for the identified intervention.

Try a pilot project: Start out by implementing a small-scale change designed to boost cancer screenings, using limited resources. Observe and document the changes and tweak the strategy. Document costs to estimate funding to scale up.

SUSTAINABILITY IS KEY, SO IDENTIFY COST-SAVING OPPORTUNITIES, PARTNER WITH LOCAL GROUPS, AND MAKE SURE TO SECURE AND MAINTAIN SUPPORT FROM PUBLIC HEALTH AND COMMUNITY LEADERS.



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