



Every cancer. Every life.



Evidence-Based Interventions

2024 Cancer Screening and Prevention Quality Improvement Projects

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**Interventions are
best when done in
combination**



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Evidence-Based Intervention Resources

- [ACS Quality Improvement Implementation Manual](#)
- [Community Guide](#)
- [Evidence Based Interventions – video](#)
- [NCI Evidence-Based Cancer Control](#)
- [RE-AIM](#)
- [Roundtables](#)

Group Patient Education

Breast

Group education conveys information on indications for, benefits of, and ways to overcome barriers to screening with the goal of informing, encouraging, and motivating participants to seek recommended screening. Group education is usually conducted by health professionals or by trained lay people who use presentations or other teaching aids in a lecture or interactive format, and often incorporate role modeling or other methods. Group education can be given to a variety of groups, in different settings, and by different types of educators with different backgrounds and styles.

One-on-One Patient Education

Breast
Cervical
Colorectal
Lung
HPV Vaccination

One-on-one education delivers information to individuals about indications for, benefits of, and ways to overcome barriers to cancer screening or HPV vaccination with the goal of informing, encouraging and motivating them to seek recommended screening. These messages are delivered by healthcare workers or other health professionals, lay health advisors, or volunteers, and are conducted by telephone or in person in medical, community, worksite, or household settings.

These messages can be untailed to address the overall target population or tailored with the intent to reach one specific person, based on characteristics unique to that person, related to the outcome of interest, and derived from an individual assessment. One-on-one education is often accompanied by supporting materials delivered via small media (e.g., brochures), and may also involve patient reminders.

Patient Incentives*

**Insufficient evidence is needed for health system partner;; however, health plan partners often use incentives for HPV vaccination*

Patient incentives are small, non-coercive rewards (e.g., cash or coupons) that aim to motivate people to seek colorectal cancer screening for themselves or to encourage others (e.g, family members, close friends) to seek screening. Incentives are distinct from interventions designed to improve access to services (e.g., transportation, childcare, reducing patient out-of-pocket costs).

Patient Reminders/Recall

Breast
Cervical
Colorectal
Lung
HPV Vaccination

Patient reminders are written (letter, postcard, email, text) or telephone messages (including automated messages) advising people that they are due for screening or vaccination. Patient reminders may be enhanced by one or more of the following:

- Follow up printed or telephone reminders
- Additional text or discussion with information about indications for, benefits of, and ways to overcome barriers to screening.
- Assistance in scheduling appointments

These interventions can be untailed to address the overall target population or tailored with the intent to reach on specific person, based on characteristics unique to that person, related to the outcome of interest, and derived from an individual assessment

Small Media

Breast
Cervical
Colorectal
HPV Vaccination

Small Media include videos and printed materials such as letters, brochures, and newsletters. These materials can be used to inform and motivate people to be screened for cancer. They can provide information and tailored to specific individuals or targeted to general audiences.

Professional Education

Breast Screening
Colorectal Screening
Lung Screening
HPV Vaccination

Provider education used alone aims to increase providers' knowledge and change their attitudes about screening and vaccination. Information may be shared through written materials, videos, lectures, continuing medical education programs, computer-assisted instruction, or distance-based training.

Provider Assessment and Feedback

Breast
Cervical
Colorectal
Lung
HPV Vaccination

Provider assessment and feedback interventions both evaluate provider performance in delivering or offering screening or vaccination to patients (assessment) and present providers with information about their performance in providing screening or vaccination services (feedback). Feedback may describe the performance of a group of providers (e.g., mean performance for a practice) or an individual provider, and may be compared with a goal or standard.

Provider Incentives*

**Insufficient evidence is needed for health system partner; however, health plan partners often use incentives for HPV vaccination*

Provider incentives are direct or indirect rewards intended to motivate providers to perform cancer screening or make appropriate referral for their patients to receive these services. Rewards are often monetary, but can also include non-monetary incentives (e.g., continuing medical education credit). Because some form of assessment is needed to determine whether providers receive rewards, an assessment component may be included in the intervention.

Provider Reminders/ Recall

Breast
Cervical
Colorectal
Lung
HPV Vaccination

Reminders inform health care providers it is time for a patient's cancer screening or vaccination (called a "reminder") or that the patient is overdue for screening or vaccination (called a "recall"). The reminders can be provided in different ways, such as in patient charts or by e-mail.

Standing Orders

HPV Vaccination
Lung Screening*

**Standing orders for Tobacco Use History and Eligibility Assessment*

When providing HPV vaccination, standing orders authorize nurses, pharmacists, and other healthcare providers where allowed by state law, to assess a patient's immunization status and administer vaccinations according to a protocol approved by an institution, physician, or other authorized provider. Standing orders can be established for the administration of one or more specific vaccines to patients in healthcare settings such as clinics, hospitals, pharmacies, and long-term care facilities. In settings that require attending provider signatures for all orders, standing order protocols allow assessment and vaccination in advance of the provider signature.

When considering lung cancer screening, standing orders authorize healthcare providers to assess tobacco use history and patient eligibility of a low-dose computed tomography (LDCT) screening.



Interventions to Increase Community Access to Screening and Vaccination Care

Community Health Workers

Breast
Cervical
Colorectal

Community Health Workers (CHWs) are trained frontline health workers who serve as a bridge between communities and healthcare systems. They are from, or have a close understanding of, the community served. They often receive on-the-job training and work without professional titles. Organizations may hire CHWs or recruit volunteers to act in this role. CHWs may work alone or as part of an intervention team that includes other healthcare professionals.**

Patient Navigation

Breast
Cervical
Colorectal
Lung

Patient navigation in the cancer care setting refers to individualized assistance offered to patients, families, and caregivers to help overcome healthcare system barriers and facilitate timely access to quality health and psychosocial care from pre-diagnosis through all phases of the cancer experience. Patient navigation services advance health equity when implemented among populations who often have lower screening rates. With timely and appropriate follow-up care and treatment, patient navigation services improve health for these groups.

Reduce Barriers

Breast
Cervical
Colorectal
Lung
HPV Vaccination

Structural barriers are non-economic burdens or obstacles that make it difficult for people to access cancer screening. Interventions designed to reduce these barriers may facilitate access to cancer screening services by:

- Reducing time or distance between service delivery settings and target populations
- Modifying hours of service to meet patient needs
- Offering services in alternative or non-clinical settings (e.g., mobile mammography vans at worksites or in residential communities)
- Eliminating or simplifying administrative procedures and other obstacles (e.g., scheduling assistance, transportation, dependent care, translation services, limiting the number of clinic visits)

Reduce Out-of-Pocket Costs

Breast
Colorectal
Lung

Interventions to reduce patient out-of-pocket costs attempt to minimize or remove economic barriers that make it difficult for patients to access cancer screening services. Costs can be reduced through a variety of approaches, including vouchers, reimbursements, reduction in co-pays, or adjustments in federal or state insurance coverage. Efforts to reduce patient costs may be combined with measures to provide patient education, information about program availability, or measures to reduce structural barriers.

Shared Decision Making

Lung

Providers play a key role in determining the eligibility of patients for lung cancer screening, ensuring patients understand the benefits and harms of lung cancer screening and working with patients to make decisions about screening that are consistent with the patients' values. Shared decision-making is a communication process in which practitioners discuss options and work collaboratively with patients toward preference-based decisions.**

Intervention	Community Preventative Services Task Force Finding			Cochrane Database Systematic Review	American Thoracic Society and American Lung Association
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Intervention	Breast Cancer	Cervical Cancer	Colorectal Cancer	HPV Vaccination	Lung Cancer
Multicomponent Interventions	<u>Recommended</u>	<u>Recommended</u>	<u>Recommended</u>	Recommended	Recommended

PATIENT-ORIENTED INTERVENTIONS

Intervention	Breast Cancer	Cervical Cancer	Colorectal Cancer	HPV Vaccination	Lung Cancer
Patient Incentives	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	Potential positive effect, but grade of evidence low ¹	Insufficient Evidence
Patient Reminders	<u>Recommended</u>	<u>Recommended</u>	<u>Recommended</u>	Recommended ⁷	Recommended
Group Education	<u>Recommended</u>	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	Cochrane Database Systematic Review cited evidence for health education, but not necessarily in group setting ⁴	Recommended
Mass Media	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	Insufficient evidence	Insufficient Evidence
One-on-One Education	<u>Recommended</u>	<u>Recommended</u>	<u>Recommended</u>	Recommended: Strong provider recommendation	Recommended
Small Media	<u>Recommended</u>	<u>Recommended</u>	<u>Recommended</u>	Recommended	Insufficient Evidence

PROVIDER-ORIENTED INTERVENTIONS

Intervention	Breast Cancer	Cervical Cancer	Colorectal Cancer	HPV Vaccination	Lung Cancer
Provider Assessment and Feedback	<u>Recommended</u>	<u>Recommended</u>	<u>Recommended</u>	Recommended	Insufficient Evidence
Provider Incentives	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	Insufficient Evidence	Insufficient Evidence
Provider Reminder and Recall Systems	<u>Recommended</u>	<u>Recommended</u>	<u>Recommended</u>	Recommended, as part of multicomponent ⁵	Recommended

INTERVENTIONS TO INCREASE ACCESS TO CARE

Intervention	Breast Cancer	Cervical Cancer	Colorectal Cancer	HPV Vaccination	Lung Cancer
Promoting Informed Decision Making for Cancer Screening		Insufficient Evidence		N/A for HPV vaccination	Recommended
Interventions Engaging Patient Navigation and Community Health Workers⁶	<u>Recommended</u>	<u>Recommended</u>	<u>Recommended</u>	Insufficient Evidence	Patient Navigation Recommended
Reducing Structural Barriers	<u>Recommended</u>	<u>Insufficient Evidence</u>	<u>Recommended</u>	Insufficient Evidence	Recommended
Reducing Patient Out-of-Pocket Costs	<u>Recommended</u>	<u>Insufficient Evidence</u>	<u>Insufficient Evidence</u>	Insufficient Evidence	Recommended

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7. Suh CA. (2012). Effectiveness and Net Cost of Reminder/Recall for Adolescent Immunizations. Pediatrics, 129(6) = increase in adolescent vax with reminders; <https://pubmed.ncbi.nlm.nih.gov/25438965/> = same overall, as above, but differentiated by type of R/R; <https://pubmed.ncbi.nlm.nih.gov/25438965/> = reminder letters increased series completion