Interventions to Improve Cancer Screening Opportunities in the Workplace
Peggy A. Hannon, PhD, MPH, Jeffrey R. Harris, MD

Introduction
The Guide to Community Preventive Services (the Community Guide) provides an arsenal of evidence-based intervention strategies to improve cancer screening.1 The challenge for health promotion practitioners using the Community Guide is to (1) transform these intervention strategies into specific intervention programs and (2) implement these programs in settings that may or may not match the settings in which the interventions were originally tested. Several resources are available to help practitioners find and adapt specific intervention programs, such as the National Cancer Institute’s Research Tested Intervention Programs (RTIPs)2 and Using What Works.3 However, fewer resources are available to help practitioners think broadly about the various settings in which these programs could be implemented. This commentary offers guidance on implementing the Community Guide’s new cancer screening recommendations in the workplace.1

The workplace is an important setting for cancer screening interventions. In March 2008, 63% of the non-institutionalized adult population (145,969,000 adults) in the U.S. was employed4; therefore, large proportions of the age-eligible, average-risk populations for breast, cervical, and colorectal cancer screening can be reached via the workplace. Employers are motivated to improve cancer screening because they recognize the effect of cancer on their bottom lines via healthcare costs, productivity losses, and other causes.5,6

To mitigate the effects of cancer and other chronic diseases on the workplace, employers are increasingly implementing workplace health promotion efforts.7 Although these efforts historically focused on lifestyle behaviors such as nutrition, physical activity, and tobacco use, there is growing national interest in the workplace as a site for promoting the use of clinical preventive services, particularly for improving cancer screening. For example, the CEO Roundtable on Cancer, Inc., with support from the American Cancer Society, accredits and recognizes employers that implement best practices aimed at increasing cancer screening and other cancer-preventive behaviors through its CEO Cancer Gold Standard program (www.cancergoldstandard.org). C-Change, the national cancer prevention and control consortium, commissioned an analysis by Milliman that points out the relatively high cost effectiveness of cancer screening from an employer perspective.8 The National Committee for Quality Assurance is currently developing accreditation standards for providers of workplace health promotion services and is including cancer screening among these standards.9

All of the latest cancer screening intervention recommendations from the Community Guide1 can be implemented in the workplace via four important avenues: health insurance benefits, workplace policies, workplace programs, and workplace communications. Health insurance affects workers’ access to and use of preventive care, including cancer screening. Employers offer health insurance benefits to 158 million workers and their dependents, including 59% of workers.10 Workplace policies also can improve employees’ access to cancer screening. Workplace programs offer workers relatively easy access to and social support for cancer screening. Workplace communications can improve knowledge and shape beliefs, attitudes, and perceived norms about cancer screening, and about the health insurance benefits, policies, and programs aimed at improving screening.

Applying Cancer Screening Intervention Strategies to the Workplace

Table 1 summarizes examples of how each of the cancer screening interventions recommended in the Community Guide1 as having sufficient or strong evidence can be applied to and implemented in the workplace. Below, we offer more-detailed descriptions of how to apply these interventions via insurance benefits and workplace policies, programs, and communications.

Increasing Community Demand
Client reminders can be applied in the workplace in several ways. Many insurers have the capacity to send client reminders, and employers can include member reminders for cancer screening as an explicit component of insurance contracts. Many workplaces use health risk appraisals (HRAs), either via their insurers or an independent vendor.11 Most HRAs assess cancer screening status and give feedback about whether
screening is needed. Hence, employers can work with their insurer or vendor to ensure that their HRA assesses screening and provides screening reminders as well as information about benefits coverage or other resources for screening.

Workplaces communicate with employees frequently via a variety of channels, and these communication channels can be used to distribute cancer screening **small media**. Common workplace communication channels include e-mail blasts, websites, payroll stuffers, memos, posters, and bulletin boards. Health promotion practitioners can aid workplaces in finding or creating cancer screening small media that are appropriate for distribution via the channels they use.

Insurers and HRA vendors can provide **one-on-one education** to clients via telephone coaching following HRA. Workplaces can also promote to their employees free services such as the Cancer Information Service hotline (cis.nci.nih.gov/about/about.html), which provides information specialists who can answer questions about cancer-related topics including screening.

### Increasing Community Access

Workplaces can **reduce structural barriers** to screening by providing mammography screening and distributing fecal occult blood testing (FOBT) kits on-site. Another barrier that workers face to obtaining mammography and Pap tests, as well as endoscopy for colorectal cancer screening, is taking time off from work to get screened. Workplace policies that allow employees time to seek preventive care with no penalty would decrease both the structural barriers and the out-of-pocket costs (lost wages) that prevent some workers from getting screened.

| Table 1. Examples of workplace approaches to implementing recommended cancer screening interventions |
| --- | --- | --- | --- | --- |
| **Intervention** | **Benefits** | **Policies** | **Programs** | **Communications** |
| **INCREASING COMMUNITY DEMAND** | Require insurers to send age-appropriate reminders to all enrolled workers | Conduct annual HRAs that include cancer screening measurement and feedback | Conduct annual workplace communication campaigns coinciding with national campaigns (e.g., promoting colorectal cancer screening in March) | |
| Client reminders |  | |  | |
| **Small media** |  |  | Distribute cancer screening small media via workplace communication channels | |
| **One-on-one education** | Bring health educators to the worksite to provide on-site education about cancer screening |  |  | |
| **INCREASING COMMUNITY ACCESS** | Create policy allowing for time off for recommended cancer screenings | Bring cancer screening to the worksite (mammography vans, distribution of FOBT kits) |  | |
| Reducing structural barriers | Reduce or eliminate co-pays, co-insurance, and deductibles for recommended cancer screenings | Create policy allowing for paid time off for recommended cancer screenings | Reduce or eliminate cost of on-site screening opportunities | |
| Reducing out-of-pocket costs | Require insurers to report utilization of cancer screening | Include provider assessment and feedback in insurance contract | Promote free or low-cost screening services for un/underinsured workers, such as the National Breast and Cervical Cancer Early Detection Program | |
| **INCREASING PROVIDER DELIVERY AND REFERRAL** | Require insurers to report utilization of cancer screening | Include provider assessment and feedback in insurance contract |  | |
| Provider assessment and feedback |  |  |  | |

FOBT, fecal occult blood test; HRA, health risk appraisals
Workplaces can also reduce out-of-pocket costs via insurance benefit design (reducing or ideally eliminating copays, co-insurance, and deductibles for cancer screening), and workplace-based programs (for example, providing free FOBT kits at the worksite or subsidizing costs to use an on-site mammography van). For workplaces with low-wage workers and/or uninsured workers, workplace communications that promote free federal and state-based screening programs, such as the National Breast and Cervical Cancer Early Detection Program, also can help reduce workers’ out-of-pocket costs.

Increasing Provider Delivery and Referral

Workplaces can require that insurers conduct provider assessment and feedback by adding this to their insurance contracts. For example, Pay for Performance programs can measure individual physicians’ delivery of cancer screening, give them feedback, and offer rewards for high performance.

Implementing Cancer Screening Interventions in the Workplace

With the exception of on-site screening, most of these intervention strategies have not been implemented and evaluated in workplace settings. The authors, in partnership with the American Cancer Society, are currently testing Workplace Solutions, a workplace intervention that includes the intervention strategies described above. Finding the best way to implement these cancer screening interventions in the workplace is, and will be, challenging, especially as “workplace” describes a broad universe of types of environments and levels of resources.

Key characteristics of workplaces determine what types of cancer screening interventions are possible to implement, and which interventions are most likely to succeed. For example, size (number of employees) is a useful predictor of the presence of health insurance benefits, coverage of preventive care, employer power to change benefit design, presence of health promotion programs, and presence of dedicated human resources and wellness staff. Most employers, regardless of size, offer health insurance to their full-time workers and dependents, but larger employers are more likely to do so. Larger employers also are much more likely to self-insure for the cost of their workers’ health care, and this allows them to choose the design of the health insurance benefits they offer. Larger size is also associated with greater offerings of workplace health promotion programs. And larger employers are more likely to have staff dedicated to human resources and to workplace health promotion, giving them greater capacity to implement and maintain cancer screening interventions.

Although large employers, by virtue of their size, visibility, and strength in the marketplace, are primary targets for cancer screening interventions and attractive clients for health promotion vendors, smaller employers employ most workers. Because of their limited resources, smaller employers are unlikely to offer extensive workplace cancer screening interventions. As small employers are too numerous to be approached one by one, intermediaries, such as chambers of commerce and insurance brokers, are important channels to reach them.

Employers in low-wage industries offer a specific opportunity to reach uninsured workers and their dependents. Work with these employers can include promoting publicly available services, such as state- and federally-funded breast and cervical cancer screening programs.

Employers are a demanding audience. Health promotion practitioners approaching workplaces need to be prepared to make the business case for workplace-based cancer screening promotion. There is a solid business case for the workplace to promote cancer screening, and the Community Guide’s evidence-based intervention strategies to increase cancer screening are clearly applicable to the workplace. Yet employers will want to implement cancer screening interventions only if they are aware of and agree with the business case that increased cancer screening among workers and dependents offers good value and increases productivity, recruitment, and retention.16,17

Employers also need to see an increase in cancer screening utilization by their employees to be motivated to maintain cancer screening interventions. Health promotion practitioners working with employers should evaluate their interventions using effective evaluation techniques that include continuously tracking intervention delivery and employee participation in programs, including use of cancer screening; making mid-course corrections as needed; and sharing evaluation findings with employers. Solid evaluations of workplace-based cancer screening interventions that are published in peer-reviewed journals will broaden the array of evidence-based interventions available.

The workplace provides an ideal setting to disseminate evidence-based cancer screening interventions. But there are still many cancer screening intervention strategies with insufficient evidence to recommend for or against them. The workplace also offers an excellent setting to test promising approaches.

This publication was supported in part by the Centers for Disease Control and Prevention and the National Cancer Institute through the Cancer Prevention and Control Research Network, a network within the CDC’s Prevention Research Centers Program (Grant I-U48-DP-000050), and the CDC Office of Public Health Research through its Centers of Excellence in Health Marketing and Health Communication program (Grant 5-P01-CD000249-02). The authors thank Patricia Lichiello for helpful comments on this paper.
No financial disclosures were reported by the authors of this paper.

References

Did you know?
You can search 400 top medical and health sciences journals online, including MEDLINE. Visit www.ajpm-online.net today to see what’s new online!