POPULATIONS AT RISK ACROSS THE LIFESPAN: PROGRAM EVALUATIONS

Promoting Community Practitioners' Use of Evidence-Based Approaches to Increase Breast Cancer Screening

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ABSTRACT Many women do not get mammography screenings at the intervals recommended for early detection and treatment of breast cancer. The *Guide to Community Preventive Services* (Community Guide) recommends a range of evidence-based strategies to improve mammography rates. However, nurses and others working in community-based settings make only limited use of these strategies. We report on a dissemination intervention that partnered the University of North Carolina with the Susan G. Komen Triangle Affiliate to disseminate Community Guide breast cancer screening strategies to community organizations. The intervention was guided by social marketing and diffusion of innovation theory and was designed to provide evidence and support via Komen's existing relationships with grantee organizations. The present study reports the findings from a formative evaluation of the intervention, which included a content analysis of 46 grant applications pre- and post intervention and focus groups with 20 grant recipients.

Key words: cancer prevention and control, diffusion of innovations, dissemination, evaluation, evidence-based practice, social marketing.

Current guidelines recommend that women at average risk for breast cancer get an annual screening mammogram starting at age 40 (American Cancer Society, 2012) or a biannual mammogram starting at age 50 (U.S. Preventive Services Task Force [USPSTF], 2009). Yet many women do not get recommended screenings, particularly women who are hard to reach due to rural location, minority culture/ethnicity, low income, or disability (Smith et al., 2011). The *Guide to Community Preventive Services* (Community Guide [CG]) has synthesized research on the most effective ways to improve mammography rates and recommends a range of evidence-based strategies, which they disseminate via the Internet and print publications (Baron

et al., 2008, 2010; Sabatino et al., 2008). Examples of recommended strategies include reducing financial barriers to breast cancer screening and diagnosis and providing one-to-one education. A recent survey of community practitioners engaged in cancer control planning found that only 43% were familiar with, and only 28% had used, the CG (Hannon et al., 2010). A critical need, therefore, exists for interventions that more actively disseminate CG strategies and support the use of those strategies in practice. Of particular importance are interventions that disseminate CG strategies to the community organizations that serve those populations that are hardest to reach, such as health departments, federally qualified health

centers, and nonprofit service and advocacy organizations.

We report on an intervention that disseminated CG breast cancer screening strategies to community organizations. The dissemination intervention partnered the University of North Carolina with the Susan G. Komen for the Cure Triangle Affiliate (Triangle Affiliate), a philanthropic organization that funds up to 25 community organizations each year to improve breast cancer screening and care among underserved women in North Carolina. The present study reports the findings from a formative evaluation of the intervention.

Background

Breast cancer is the leading cause of cancer among women in the US (U.S. Cancer Statistics Working Group, 2012). Mammography screening can detect cancer earlier, resulting in earlier treatment and reduced mortality (USPSTF, 2009). Yet many women do not get recommended screenings, particularly underserved populations who may be at higher risk of breast cancer and are typically hardest to reach (Smith et al., 2011). Community organizations that serve low income, disabled, racial/ethnic minority, or rural populations can play a central role in accessing these underserved women (Behringer, Lofton, & Knight, 2010; Wilson, Lavis, Travers, & Rourke, 2010). A need, therefore, exists for interventions that promote community organizations' use of evidence-based programs and strategies.

Public health nurses and other community-based practitioners increasingly are encouraged to use evidence-based programs and strategies. *Evidence-based programs* provide a prescribed set of intervention activities that have been tested and found to be effective over one or more research studies (e.g., those disseminated by the Cancer Control PLANET's Research Tested Interventions Program; Rabin, Brownson, Haire-Joshu, Kreuter, & Weaver, 2008). The Witness Project, for example, is an evidence-based program that one group of researchers developed to increase rural African American women's participation in breast and cervical cancer screenings. The culturally informed program includes an 8-hr training curriculum for lay health advisors who then present educational sessions in community settings. *Evidence-based strategies* provide broad recommendations for

intervening and are derived from systematic reviews of the literature that integrate findings from multiple research studies (e.g., those disseminated by the CG; Leeman, Sommers, Leung, & Ammerman, 2011). For example, based on an analysis of 17 research studies, the CG recommends using tailored small media (e.g., videos, letters, brochures, and newsletters) as a strategy to inform and motivate people to be screened for breast cancer. The CG provides little additional guidance on how small media should be designed or delivered.

Most community-based dissemination research studies to date have focused on replicating evidence-based programs (e.g., Kelly et al., 2000; Rabin et al., 2010). Although evidence-based programs offer an effective approach in some settings, they may require more resources than are available in many community organizations, which often have small staffs and limited capacity and serve populations different from those reached by the original research study (Lipsey, 2005; Veniegas, Kao, Rosales, & Arellanes, 2009). Evidence-based programs may also limit community organizations' ability to build on their greatest strength, their practice-based knowledge and experience working with hard to reach populations (Wilson et al., 2010). Because evidence-based programs prescribe a set of activities, nurses and others working in community settings are limited in their ability to draw on their practice-based knowledge to revise or augment them.

As compared with evidence-based programs, evidence-based strategies may more readily adapt to different levels of capacity and incorporate practice-based knowledge. Evidence-based strategies also offer the advantage of drawing on a larger body of research, which often encompasses greater diversity of delivery format, participants, and settings. They, therefore, may have greater generalizability across contexts than do evidence-based programs (Lipsey, 2005). Despite their potential value, few studies have tested dissemination to promote the adoption and implementation of evidence-based strategies (Perrier, Mrklas, Lavis, & Straus, 2011). This may, in part, be due to the distinct challenges to using evidence-based strategies, which offer broad recommendations on "what to do" and little guidance on "how to" do it (Leeman et al., 2011). An additional challenge is the near absence of metrics for assessing the extent or

fidelity with which evidence-based strategies are implemented.

The dissemination intervention

The University of North Carolina and the Triangle Affiliate developed a dissemination intervention to promote community organizations' use of CG strategies. The dissemination intervention was guided by a framework that integrates social marketing and diffusion of innovations theory and builds on prior push/pull/capacity-building models (Fig. 1) (Dear- ing & Kreuter, 2010; Kreuter & Bernhardt, 2009; Orleans, Barker, Kaufman, & Marx, 2000). The dissemination intervention included three main components: (1) the university marketed (i.e., pushed) tailored guidance on CG strategies to the Triangle Affiliates' network of current and potential grantees; (2) the Triangle Affiliate generated demand (i.e., pull) for CG strategies by specifying that grant applications must include evidence-based approaches (strategies or programs); and (3) the Triangle Affili- ate and university staff then provided a 1-day training and ongoing technical assistance to build organization and individual capacity to use evi- dence-based approaches. Members of the network of Triangle Affiliate-funded organizations also pro- vided support to each other. Table 1 summarizes

components of the dissemination intervention, which was implemented in 2009.

The training component of the dissemination intervention was delivered during an annual 6-hr grant-writing workshop sponsored by the Triangle Affiliate. Participants were representatives (nurses, health educators, program managers) from organiza- tions that intended to apply for the 2010–2011 grant funding cycle (departments of public health, feder- ally qualified health centers, nonprofit service/advocacy organizations). Training objectives included defining “evidence-based,” describing CG guide strategies for breast cancer, introducing other sources for evidence-based approaches, and discuss- ing ways to integrate evidence into program plans. Summary descriptions of CG strategies and sources of other evidence-based approaches were distributed at the workshop and via the Affiliate's website. Tech- nical assistance was provided through in-person, phone, and email consultations with university staff. Training and technical assistance guided partici- pants in selecting, implementing, and evaluating evi- dence-based approaches. The large majority of grant applicants ($n = 25$ of 29, 86%) sent a representative to the 1-day training.

Methods

We did a content analysis of grant applications before and after the dissemination intervention (2009 and 2010) and focus groups with grant recipients at the end of the grant funding cycle (spring, 2011) to address the following research questions:

- Were organizations more likely to include CG strategies in their applications for funding after the dissemination intervention than before and which strategies did they include?
- What were participants' attitudes toward research-based evidence, including CG strate- gies?
- How did participants select and implement CG strategies?
- What aspects of the dissemination intervention did participants find most helpful?

Qualitative methods are often used in formative evaluation as they are well suited to exploring par- ticipants' interpretation, understanding, and experi- ence of an intervention (Mason, 2002). The study

Figure 1. Intervention Framework

TABLE 1. *Dissemination Intervention*

Components of the intervention
A new requirement that applications for funding include evidence-based approaches
A one-page, double-sided summary of Community Guide strategies for breast cancer screening
A one-page, double-sided summary of other Web-based sources of evidence-based approaches (e.g., RTIPs)
A 1-day training
Phone consultations as needed with university staff experienced in evidence-based and community-based breast cancer screening interventions

was approved by the University of North Carolina Institutional Review Board.

Sample

We analyzed 46 of 57 grant applications submitted to the Triangle Affiliate in 2009 and 2010; 22 applications (2009) prior to and 24 (2010) following the intervention. We excluded 11 applications that proposed postdiagnosis rather than screening projects.

In 2010, the Triangle Affiliate awarded \$1.18 million in funding to 22 organizations. As detailed in Table 2, these included both health care and nonprofit service and advocacy organizations. We conducted focus groups with representatives from organizations funded to do breast cancer screening projects. We invited to focus groups those staff members from each organization who were directly involved in planning or implementing the funded project; 20 individuals from 14 organizations participated. Most participants had either at least a bachelor's ($n = 5$) or master's degree ($n = 9$) and most had worked for their current organization for at least 3 years ($n = 12$). Written consent was obtained from all participants, and they were offered a \$50 incentive to thank them for their time.

Content analysis of grant applications

We did a directed content analysis (Hsieh & Shannon, 2005) of grant applications to assess whether organizations included more CG strategies in their applications after the dissemination intervention than before. The research team developed and

piloted a scheme to code the strategies proposed, whether they referenced the CG, and whether they were consistent with CG strategies. Two research assistants independently applied the coding scheme to code a total of 330 strategies and had a high level of agreement, assigning the same codes to 324 of the strategies (98.2%).

Focus groups with grant recipients

In April 2011, we conducted three focus groups that were moderated by two members of the research team (AS, RT) who have extensive experience conducting interview research and were not involved in delivering the dissemination intervention (Krueger & Casey, 2009). One of the moderators conducted the interviews while the second observed and asked additional, clarifying questions as indicated. A third member of the team observed and took notes. The moderators followed an interview guide that asked participants structured, open-ended questions about (1) their response to the requirement that they include an evidence-based approach in their applications; (2) their experience selecting, adapting, and implementing evidence-based approaches; (3) what aspects of the dissemination intervention were and were not helpful; and (4) what additional support they needed.

Focus groups were audiotaped and transcribed verbatim. A member of the research team checked each transcript against the audiotape to ensure accuracy. Four members of the team read all transcripts, identified themes, and then met to review and agree upon the themes that would guide coding (Miles & Huberman, 1994). Two members of the team (JL, RT) then coded transcripts according to the identified themes. Coding discrepancies were reconciled by consensus.

Results

Content analysis of grant applications:

Inclusion of CG strategies

Following the intervention, the number of applicants directly referencing the CG in their grant applications increased from 1 to 10 (4.5% vs. 41.7% of applicants). As detailed in Table 3, the number of strategies applicants included that were consistent with CG strategies also increased, with

TABLE 2. *Triangle Affiliate-Funded Organizations, 2010*

Type of Organization	Number funded
Publicly funded health care	
Department of Public Health	5
Federally Qualified Health Center	3
Hospital/health care system	2
Nonprofit health care	
Health center/clinic	2
Hospital/health care system	2
Nonprofit working with organizations serving individuals with disabilities	1
Nonprofit service/advocacy	
African American serving	1
Latino serving	3
Low-income serving	2
Other	1

TABLE 3. *Applicants' Inclusion of Community Guide (CG) Strategies*

CG Strategies	2009 grants (n = 22) n (%)	2010 grants (n = 24) n (%)
Reducing out-of-pocket costs for screening or diagnostic services (e.g., mammograms, biopsy)	17(77)	20(83)
One-on-one education	7(32)	16(67)
Small media (e.g., tailored brochures)	12(55)	19(79)
Mass media	6(27)	6(25)
Reducing structural barriers	21(95)	24(100)
Patient navigation (scheduling assistance, etc.)	14(64)	18(75)
Transportation assistance	7(32)	12(50)
Nontraditional hours	3(14)	4(17)
Translation services (translators and/or translated materials)	12(55)	16(67)
Client reminders	6(27)	11(46)

particularly large increases in the inclusion of one-to-one education (an increase from 7 to 15 applications) and client reminders (an increase from 6 to 11 applications). Surprisingly, applicants were also more likely to propose strategies that the CG identified as having “insufficient evidence,” such as client incentives (increased from 1 [5%] to 4 [17%]).

Focus groups—participants' attitudes toward research evidence

Participants' perceptions of their ability to use evidence-based approaches varied. Participants had widely divergent responses to the new requirement that they include evidence-based approaches in their funding applications. For some participants, the requirement was “daunting.” For other participants, the requirement was consistent with prevailing expectations within their organizations and was therefore not problematic. In the words of one individual, “We receive lots of federal funds and state funding, and so you're held to that expectation that you're using the evidence-based programming.”

In all three focus groups, participants acknowledged their willingness to include evidence-based approaches in their grant applications if that was what was required to get funding. One participant said, “We need this funding. Our community needs it, so whatever you're telling me I need to do, I'm

going to fall in line and do it. If you want me to tap dance, I'll tap dance.”

Participants placed greater value on their practice experience than on evidence from research. Participants in all three focus groups expressed the belief that people working in the field know what works, and the credibility of research evidence depends on the extent to which it matches their practice knowledge. For example, one participant noted, “I think I'd be concerned that it [requirement to use evidence-based approaches] could restrict you on what you want to do or what you feel like is the right thing to do if there's something they're saying is not evidence based but it works.”

Participants viewed evidence from research with varying degrees of skepticism. They talked about the lack of fit between research evidence and the populations they served, whether they were women with disabilities, with low literacy levels, or of Latino or African American descent. They often found that research was neither current nor reliable, noting that “research lags practice, in general, because it takes more time.” They also spoke with emotion about the immediate needs of their clients and how the importance of research pales in comparison. They were particularly concerned about ensuring that women with a positive diagnosis received the care they needed. As one participant noted, “You end up feeling so responsible—you have your patient going through multiple systems and they can get lost anywhere.” When asked about the experience of implementing evidence-based strategies, one participant talked about being “overwhelmed, not only emotional, psychologically” by trying to find follow-up care for those women who receive a positive diagnosis.

How participants selected and implemented CG strategies

Few participants talked about responding to the requirement to use evidence-based approaches as a process of adopting and implementing distinct, new initiatives. The majority instead talked about adding strategies to existing programs that functioned within complex systems of funders and providers. For example, one participant reported that they added one-to-one education to already occurring group education programs in churches.

Change occurs within a complex system of funders and partners. Increasing women's participation in mammography screening is a multistep process that involves creatively integrating multiple funding sources and partners to educate, motivate, screen, diagnose, and treat women. Participants saw partnering relationships as essential to delivering the multiple components required to increase breast cancer screening rates. Participants specifically identified the need for partnerships between smaller and larger organizations—the former often has greater access to hard-to-reach women whereas the latter has greater capacity and experience with evidence-based approaches. As one representative of a small organization said,

Those efforts come from partnerships because we've never done it [evidence-based approaches] before. And institutions are big. Community projects are small... So it's almost like a big family. We make money together. We put our money together, and we make it work, so we can survive and get our goals accomplished.

Rather than adopting new initiatives, organizations added strategies to existing practice. Across focus groups, participants talked about building on the foundation of their current programs and practice knowledge. Rather than starting with evidence-based strategies and building their practice around them, participants talked about starting with practice first. Participants also talked about keeping strategies that the CG had identified as having insufficient evidence. They kept them because they perceived that they worked and then also incorporated recommended CG strategies. In the words of one participant,

...group educational sessions, which is something we've done, so we kept that. It's not like we got rid of that. But we kept that because it's something that's worked for us. And then a staff person would meet with people individually afterward. And so I feel like we ended up adding a different component because of the CG. But we were still doing something that was not 100% successful, but it's something that has worked for us.

Participants selected intervention strategies based on their ability to collect the data needed to track their effects. Participants encountered numerous challenges in their efforts to

collect data to evaluate the effects of their programs and were reluctant to divert resources from service provision to evaluation. Therefore, the availability of appropriate evaluation data was one of the criteria they used to select evidence-based approaches. A participant who partnered with multiple service/advocacy organizations said, "And we looked at their database, which was one of the reasons we picked certain interventions, 'What do you already track' so that we know how can we add some new tracking columns."

Participants' perceptions of the dissemination intervention

Participants found the following components of the intervention to be most helpful: the brief summary of CG strategies for breast cancer screening, the training, the consultations, and being part of the Triangle Affiliate grantee network. Participants referred to the brief written summary of CG strategies as "the bible." They talked about how the brief summary combined with the training enabled them to match their practice to the CG strategies. This, in turn, led to a feeling of pride and decreased anxiety as they realized that their current practice was already largely evidence-based,

Well, I remember when we heard the word evidence-based and I think I got a little bit stressed because I was like, okay, well what does this mean? And then when we sat in on the grantee workshop and ... so we were thrilled because we're like, "Oh, we're already doing this." We just didn't know that they were evidence-based. So, kind of relieved, but then we were able to kind of formalize some of the things a little bit more as well.

One participant summed up her appreciation for the intervention as follows,

So, I think that the tone that they [Triangle Affiliate] send out about, "We'll work with you. If you have a problem, talk to other Komen grantees," and ... that they have the staff that are knowledgeable about the research and the subject areas and the connections to have academic channels, that that's pretty unique ... I think it's been one of the most positive and long-term relationships.

Participants wanted more materials that are ready to use with their populations and affordable, especially small media (e.g., flyers). Participants noted a need for ready-to-use small media that pictured the populations they served (e.g., women

with disabilities and from different ethnicities), presented information in different languages and at different literacy levels, and were current with the latest clinical recommendations. Participants also wanted more tools and assistance with evaluation. In the words of one participant, “evaluation is ... more scary to me than evidenced-based programs.”

Discussion

The dissemination intervention appears to have functioned as posited by the study’s conceptual framework (Fig. 1). Participants verified that the Triangle Affiliate’s mandate to include evidence-based approaches in grant applications motivated them to include them. The effect of the mandate is further evidenced by grantees’ increased use of CG strategies in grant applications following the intervention. Participants also confirmed that they drew on the information marketed by the university and Triangle Affiliate to identify CG strategies. Participants further reported that the intervention improved their attitudes toward and capacity to use evidence-based approaches. Grantees particularly appreciated the presentation of CG strategies in a two-page summary format. This finding is consistent with previous research findings that nurses and others working in public health were overwhelmed by the quantity, language, and format of evidence reports and preferred short, clear summaries (Armstrong, Waters, Crockett, & Keleher, 2007; Higgins et al., 2011; LaPelle, Luckmann, Simpson, & Martin, 2006). By creating diverse networks of grantees, the Triangle Affiliate was able to capitalize on the strengths of different types of organizations. Smaller organizations contributed their ability to reach underserved women whereas larger organizations contributed their experience with evidence-based practice.

The findings support the value of CG strategies to community organization efforts to increase the use of evidence-based approaches to breast cancer screening. Participants’ positive response to CG strategies is noteworthy given this and other studies’ findings that individuals working in community settings often are skeptical about the relevance of research evidence to their contexts and populations (Armstrong et al., 2007; Bowen, Erickson, Martens, & Crockett, 2009; Veniegas et al., 2009).

Participants valued CG strategies because they were congruent with their knowledge of what works and because they could readily adapt them to existing practice. Although most were initially skeptical about the relevance and utility of research evidence to their practice, the requirement that they use evidence-based approaches coupled with brief training, handouts, and technical assistance led many to try a CG strategy. Through positive experiences using CG strategies, participants developed more favorable attitudes toward using research evidence in practice.

Because they are less prescriptive than evidence-based programs, CG strategies allowed participants greater leeway in honoring and incorporating their practice knowledge and adapting strategies within existing practice. In other words, using a CG strategy did not require an either/or choice between the evidence-based approach and existing programs, partnerships, or practice knowledge. As a result, participants could accommodate strategies to the full range of funding streams and partners that work together to deliver the multiple steps involved in breast cancer screening and follow-up.

Despite its advantages in honoring practice knowledge, the malleability of evidence-based strategies has potential disadvantages as compared with the more prescriptive approach employed by evidence-based programs (Lipsey, 2005). More prescriptive approaches may, in theory, promote implementation fidelity and, thereby, increase the likelihood that an evidence-based approach will approximate the effects achieved in research studies (McKleroy et al., 2006). We did not prescribe what participants could and could not do and, not surprisingly, participants continued to use strategies that were not supported by the evidence. However, by taking a nonprescriptive approach to dissemination, we began to overcome participants’ resistance to research evidence and, in the process, increased their self-confidence and enthusiasm for using evidence-based approaches. As community-based clinicians’ and practitioners’ capacities evolve overtime, we plan to further refine the intervention so that we can progressively increase the use of evidence-based approaches in practice.

Based on study findings, we are revising the intervention to include population-specific exemplars of CG strategies for breast cancer screening. We are also incorporating more guidance on

evaluation to address findings that practitioners had limited experience with evaluation and at times selected strategies based on the ease of collecting the data needed to evaluate them. Our findings are consistent with other studies that have found that community practitioners want more help identifying practical approaches to evaluation (Higgins et al., 2011). Further research is needed to assess the revised version of the intervention.

This study assessed participants' grant applications and perceptions, but did not assess what they actually did in practice. Therefore, further research also is needed to assess the extent to which the intervention influences the actual quality and extent of CG strategy implementation and, ultimately, community organizations' impact on breast cancer screening, early detection, morbidity, and mortality.

Findings from this study begin to describe how community organizations use CG strategies to promote breast cancer screening and the types of supports that are most helpful at promoting their adoption and implementation of those strategies in practice. Public health nurses can play a role in promoting the use of breast cancer screening strategies in health departments, federally qualified health centers, and the other community organizations where they work.

References

- American Cancer Society. (2012). *American Cancer Society guidelines for the early detection of cancer*. Retrieved September 10, 2012, from <http://www.cancer.org/Healthy/FindCancerEarly/CancerScreeningGuidelines/american-cancer-society-guidelines-for-the-early-detection-of-cancer>
- Armstrong, R., Waters, E., Crockett, B., & Keleher, H. (2007). The nature of evidence resources and knowledge translation for health promotion practitioners. *Health Promotion International*, 22(3), 254–260.
- Baron, R. C., Melillo, S., Rimer, B. K., Coates, R. J., Kerner, J., Habarta, N., et al. (2010). 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*, 38, 110–117.
- Baron, R. C., Rimer, B. K., Breslow, R. A., Coates, R. J., Kerner, J., Melillo, S., et al. (2008). Client-directed interventions to increase community demand for breast, cervical, and colorectal cancer screening: a systematic review. *American Journal of Preventive Medicine*, 35, S34–S55.
- Behringer, B., Lofton, S., & Knight, M. L. (2010). Models for local implementation of comprehensive cancer control: Meeting local cancer control needs through community collaboration. *Cancer Causes and Control*, 21, 1995–2004.
- Bowen, S., Erickson, T., Martens, P. J., & Crockett, S. (2009). More than “using research”: The real challenges in promoting evidence-informed decision-making. *Healthcare Policy*, 4, 87–102.
- Dearing, J. W., & Kreuter, M. W. (2010). Designing for diffusion: How can we increase uptake of cancer communication innovations? *Patient Education & Counseling*, 81, S100–S110.
- Hannon, P. A., Fernandez, M. E., Williams, R. S., Mullen, P. D., Escoffery, C., Kreuter, M. W., et al. (2010). Cancer control planners' perceptions and use of evidence-based programs. *Journal of Public Health Management & Practice*, 16, E1–E8.
- Higgins, J. W., Strange, K., Scarr, J., Pennock, M., Barr, V., Yew, A., et al. (2011). “It’s a feel. That’s what a lot of our evidence would consist of”: Public health practitioners' perspectives on evidence. *Evaluation & the Health Professions*, 34, 278–296.
- Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288.
- Kelly, J. A., Somlai, A. M., DiFranceisco, W. J., Otto-Salaj, L. L., McAuliffe, T. L., Hackl, K. L., et al. (2000). Bridging the gap between the science and service of HIV prevention: Transferring effective research-based HIV prevention interventions to community AIDS service providers. *American Journal of Public Health*, 90, 1082–1088.
- Kreuter, M. W., & Bernhardt, J. M. (2009). Reframing the dissemination challenge: A marketing and distribution perspective. *American Journal of Public Health*, 99, 2123–2127.
- Krueger, R. A., & Casey, M. A. (2009). *Focus groups: A practical guide for applied research* (4th ed.). Thousand Oaks, CA: Sage.
- LaPelle, N. R., Luckmann, R., Simpson, E. H., & Martin, E. R. (2006). Identifying strategies to improve access to credible and relevant infor-

- mation for public health professionals: A qualitative study. *BMC Public Health*, 6, 89.
- Leeman, J., Sommers, J., Leung, M. M., & Ammerman, A. (2011). Disseminating evidence from research and practice: A model for selecting evidence to guide obesity prevention. *Journal of Public Health Management & Practice*, 17, 133–140.
- Lipsey, M. W. (2005). The challenges of interpreting research for use by practitioners: Comments on the latest products from the Task Force on Community Preventive Services. *American Journal of Preventive Medicine*, 28(2 Suppl 1), 1–3.
- Mason, J. (2002). *Qualitative researching* (2nd ed.). London, UK: Sage.
- McKleroy, V. S., Galbraith, J. S., Cummings, B., Jones, P., Harshbarger, C., Collins, C., et al. (2006). Adapting evidence-based behavioral interventions to new settings and target populations. *AIDS Education and Prevention*, 18, 59–73.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- U.S. Cancer Statistics Working Group. (2012). *United States Cancer Statistics: 1999–2008 Incidence and Mortality Web-based Report*. Atlanta, GA: Department of Health and Human Services, Centers for Disease Control and Prevention, and National Cancer Institute. Retrieved February 26, 2013, from <http://www.cdc.gov/uscs>.
- Orleans, C. T., Barker, D. C., Kaufman, N. J., & Marx, J. F. (2000). Helping pregnant smokers quit: Meeting the challenge in the next decade. *Tobacco Control*, 9, iii6–iii11.
- Perrier, L., Mrklas, K., Lavis, J. N., & Straus, S. E. (2011). Interventions encouraging the use of systematic reviews by health policymakers and managers: A systematic review. *Implementation Science*, 6, 43.
- Rabin, B. A., Brownson, R. C., Haire-Joshu, D., Kreuter, M. W., & Weaver, N. L. (2008). A glossary for dissemination and implementation research in health. *Journal of Public Health Management & Practice*, 14, 117–123.
- Rabin, B. A., Nehl, E., Elliott, T., Deshpande, A. D., Brownson, R. C., & Glanz, K. (2010). Individual and setting level predictors of the implementation of a skin cancer prevention program: A multilevel analysis. *Implementation Science*, 5, 40.
- Sabatino, S. A., Habarta, N., Baron, R. C., Coates, R. J., Rimer, B. K., Kerner, J., et al. (2008). Interventions to increase recommendation and delivery of screening for breast, cervical, and colorectal cancers by healthcare providers: Systematic reviews of provider assessment and feedback and provider incentives. *American Journal of Preventive Medicine*, 35(Suppl. 1), S67–S74.
- Smith, R. A., Cokkinides, V., Brooks, D., Saslow, D., Shah, M., & Brawley, O. W. (2011). Cancer screening in the United States, 2011: A review of current American Cancer Society guidelines and issues in cancer screening. *CA: A Cancer Journal for Clinicians*, 61, 8–30.
- U.S. Preventive Services Task Force (USPSTF). (2009). *Screening for breast cancer*. Retrieved May 24, 2011, from <http://www.uspreventiveservicestaskforce.org/uspstf/uspsbrca.htm>.
- Veniegas, R. C., Kao, U. H., Rosales, R., & Arellanes, M. (2009). HIV prevention technology transfer: Challenges and strategies in the real world. *American Journal of Public Health*, 99, S124–S130.
- Wilson, M. G., Lavis, J. N., Travers, R., & Rourke, S. B. (2010). Community-based knowledge transfer and exchange: Helping community-based organizations link research to action. *Implementation Science*, 5, 33.

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