

Background Reading

Background Reading

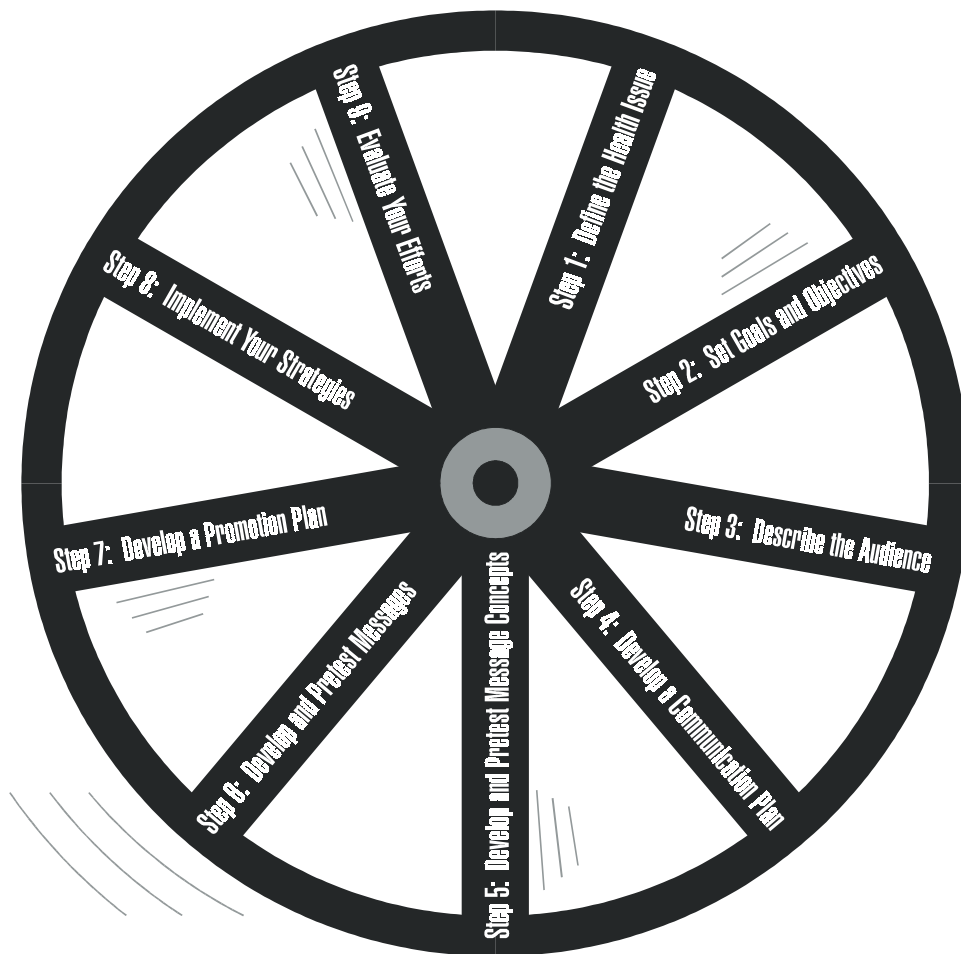
Introduction

Health communication consists of a range of activities intended to increase knowledge, promote positive changes in attitude, and increase screening behavior among the intended audience. In the context of outreach, the overall goal of health communication in the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) is to enroll and screen women for breast and cervical cancer.

This Background Reading section contains a description of the NBCCEDP Health Communication Wheel, which provides a step-by-step process for developing, implementing, and evaluating effective health communication efforts. In addition, several tools that can be used to assess health communication materials are provided.

NBCCEDP Health Communication Wheel

The model below is an adaptation of CDC's Nine-Step Health Communication Model (1993) and the CDCynergy model (1998). This nine-step wheel combines elements of both models into one specifically designed for NBCCEDP.



Step 1: Define the Health Issue (What is the health issue we want to affect?)

Planning for effective health communication efforts begins with a statement of the health issue or problem to be addressed. In this step, consider the following:

- Describe the health issue or problem:
 - What *is* happening with the health issue?
 - What *should be* happening with the health issue?
- Describe its relevance to your organization (internal factors):
 - Do you have organizational support to work on this health issue?
 - Does your organization have
 - Funding to work on this health issue?
 - The authority to work on it?
 - The mandate to work on it?
 - A mission that supports this work?
 - The knowledge, expertise, and technology to work on this health issue?
- Describe its relevance outside the organization (external factors):
 - What effect might social, cultural, and political forces have on your ability to tackle this health issue?
 - Is there demand from the public to tackle this issue?
- Describe the health issue in detail:
 - Who is affected by it?
 - Where is it happening?
 - When is it happening?
 - Are there any trends you notice with the health issue?

Example: Applying This Step to BCCEDP “X”

Note: This example follows a fictional Breast and Cervical Cancer Early Detection Program (BCCEDP) through the health communication process. The example provides a general description of the process. It does not include every detail or every piece of information necessary to develop, implement, and evaluate effect health communication efforts.

- Describe the health issue or problem:

Broadly speaking, the health issue that concerns BCCEDP X is breast and cervical cancer. Because this training is focused on outreach to increase screening, we will define the issue more specifically as enrolling and screening medically underserved women for breast and cervical cancer.

- What *is* happening: Many women in the area are not being screened for breast and cervical cancer. Among the women who are being screened, many are not returning as necessary for rescreening.
- What *should be* happening: All women in the area should be coming back at regular intervals for breast and cervical cancer screening.
- Describe its relevance to your organization (internal factors):
 - BCCEDP X has funding, organizational support, authority, mandate, and mission to enroll, screen, and rescreen medically underserved women for breast and cervical cancer. In fact, providing screening and early detection services is its reason for existence.
 - Paid BCCEDP staff, along with medical advisory boards, coalition members, partners and volunteers, have the knowledge, expertise, and technology to work on this health issue.
- Describe its relevance outside the organization (external factors):
 - Social, cultural, and political forces might have had an impact on BCCEDP X's ability to implement communication activities. For example, workplaces and places of worship may be resistant to working with the BCCEDP to offer recruitment and screening programs. Working to convince these sites and others to work with BCCEDP X will be part of planning this effort.
 - More accessible screening and early detection services are in demand by the public, including breast cancer survivors, activists, and BCCEDP coalition members, among others.
- Describe the problem in detail:
 - Women from all socioeconomic, racial, and ethnic backgrounds in the area currently seek screening and rescreening services less frequently than is recommended. Medically underserved women (e.g., low-income women and uninsured or underinsured women) are screened and rescreened at lower rates than women with higher incomes and adequate insurance.

Step 2: Set Goals and Objectives (What do we want to accomplish?)

Once you have reviewed the need for the health communication effort, it is time to clarify goals and set communication objectives. Writing clear objectives helps set the stage for evaluating the program when it is implemented. In this step, consider the following:

- Your overall reason for health communication efforts (abstract, long term, attainable, not necessarily measurable)
 - What is your “grand reason” for developing a health communication effort?
- The overall objectives for health communication within the program
 - What do you want to affect through this communication effort? Do you want to increase awareness, improve knowledge, change attitudes or beliefs, and/or change behavior? (Keep in mind that BCCEDP objectives must include behavior change—women enrolling and obtaining screening services.)
 - How can you make objectives supportive of and derived from the goals and objectives of your BCCEDP program?
 - To what extent do your objectives reflect a public health framework such as the Healthy People 2000 national health promotion and disease prevention objectives?
 - How can you make your objectives specific, measurable, attainable, realistic, and time bound?
 - How can you make sure that your objectives state the expected results of the communication activity (e.g., how much of *what* outcome is expected from *whom* and by *when*)?
- Contributing factors
 - To what extent do environmental factors, such as clinic locations, road conditions, lack of providers, or lack of transportation, contribute to the health issue?
 - To what extent does biology contribute to the health issue?
 - To what extent does individual behavior contribute to the health issue?
 - To what extent do policies, such as those related to insurance coverage for screening services, contribute to the health issue?
- Other related health communication efforts or interventions
 - Are other organizations already conducting or planning to conduct a communication effort or other intervention on the same topic?
 - How have messages been communicated in the past?
 - Which health communication efforts have been demonstrated to be successful in the past?

- What is the level of knowledge, and what are the attitudes, beliefs, and behaviors related to the health issue in the community?
- Strategy or combination of strategies that can best influence the health issue
 - What contribution can health communication make to the overall program?
 - What other strategies, such as influencing policies, removing environmental barriers (e.g., improving road conditions), or improving health services are needed?

Applying This Step to BCCEDP "X"

- Your overall reason for health communication efforts (abstract, long-term, attainable, not necessarily measurable)
 - BCCEDP X wants to reduce illness and death from breast and cervical cancer among the intended audience(s).
- Overall objectives for health communication within the program
 - BCCEDP X wants to “do it all”—increase awareness, improve knowledge, and change attitudes and beliefs as necessary to affect women’s screening behavior (i.e., the program ultimately wants to enroll and screen women in the intended audience).
 - Objectives that aim to increase screening for breast and cervical cancer are consistent with overall BCCEDP goals and objectives and national guidelines for reducing illness and death from breast and cervical cancer. By the end of a 2-year communication effort:
 - Objective 1: Eighty percent of women in the intended audience will be able to correctly identify that yearly screening for breast and cervical cancer can help find cancers early, when they are most likely to be treated successfully.
 - Objective 2: BCCEDP X will increase its enrollment of members of the intended audience by 25 percent.
 - Objective 3: Ninety percent of women who are already enrolled in BCCEDP X will return for routine rescreening at the appropriate intervals.
- Factors that contribute to the health issue
 - Environmental factors that contribute to low screening rates include inconvenient clinic hours, lack of culturally appropriate services, and high public transportation expenses.
 - Biology can play a role in a woman’s risk for breast cancer: approximately 5 to 10 percent of women with breast cancer have a hereditary (inherited) form

of the disease.¹ In addition, age, a family history of breast cancer (in a mother, sister, or daughter), a personal history of breast cancer or benign (noncancerous) breast disease, early first menstrual period, and late menopause (“change of life”) are also associated with a higher risk for breast cancer.²

- Individual behavior
 - Women’s individual screening behavior—whether or not they follow the recommended guidelines for breast and cervical cancer for their age group—may have a huge impact on early detection and treatment of breast and cervical cancers. (This is the behavior that most concerns BCCEDPs.)
 - Sexual behavior can play a role in a woman’s risk for cervical cancer: human papillomaviruses, the sexually transmitted viruses that cause genital warts, are associated with cervical cancer.³
 - Cigarette smoking is associated with the development of and deaths from cervical cancer.⁴
- As noted in Step 1, women in the area served by BCCEDP X who are uninsured or underinsured are screened and rescreened at lower rates than are women with adequate insurance. Women who have inadequate insurance are the primary clients of BCCEDP X.
- Other related health communication efforts or interventions
 - Several local organizations have used health communication as a way to encourage women to be screened for breast and cervical cancer. There are no campaigns currently being planned or implemented.
 - One organization’s health communication effort involved radio, television, and print advertisements. This expensive campaign involved factual messages delivered by a white man in a lab coat who identified himself as a doctor and encouraged women to get a mammogram or Pap test. The organization planning the effort did not clearly identify the target audience nor did they pretest concepts or messages with members of the community—largely African American, Hispanic/Latino, and Vietnamese American. In addition, the advertisements did not provide specific telephone numbers for additional information, such as provider locations. At its completion, this health communication effort did not significantly increase the number of women seeking or receiving screening services in the area.

¹ National Cancer Institute. Genetic testing for breast cancer risk: it’s your choice (fact sheet); 1997.

² American Cancer Society. Breast cancer—overview; 1998.

³ National Cancer Institute. Human papillomaviruses and cancer (fact sheet); 1998.

⁴ National Cancer Institute. Questions and answers about cigarette smoking and cancer (fact sheet); 1998.

- In contrast to the previous example, another organization’s health communication effort involved one-on-one education by community health workers, group education sessions in places of worship and worksites, and fliers placed in laundromats, social service agencies, and other community locations. Concepts and messages were pretested with the intended audience: uninsured or underinsured African American and Vietnamese American women ages 50 to 64. In addition, all messages included phone numbers that were staffed by English and Vietnamese speakers who answered questions and offered referrals to local providers. This effort was very successful in improving women’s knowledge about breast and cervical cancer and in influencing their intentions to seek out screening services. (Long-term evaluation is planned to see if the communication effort actually influenced screening behavior.)
- Two years ago, the State health department collaborated with a local cancer organization to study the knowledge, attitudes, and beliefs of women age 50 and older about cancer. (This study did not divide up information about participants by race/ethnicity or insurance coverage.) The study provided the following information related to breast and cervical cancer:
 - Sixty-five percent of respondents did not know that women should have mammograms and Pap tests every year.
 - Sixty-three percent of respondents agreed or strongly agreed that they were scared to get a mammogram or Pap test because of the possibility of finding out that they have cancer.
 - Fifty-nine percent of respondents agreed or strongly agreed that they were too busy taking care of their families to get a mammogram or Pap test.
 - Thirty-two percent of respondents believed that detecting breast cancer early *would not* improve the chances of treating it successfully.
 - Twenty-eight percent of respondents believed that mammograms could cause cancer.
- Strategy or combination of strategies that can best influence the health issue
 - Health communication can be used to help influence knowledge, attitudes, and behavior related to screening for breast and cervical cancer.
 - Other strategies, such as improving access to provider sites and clinics, are needed to help increase screening rates. Access may be improved in a number of ways: increasing transportation options, offering mobile mammography services, expanding clinic hours, ensuring culturally sensitive services in provider sites and clinics, and so forth.

Step 3: Describe the Audience (Who do we want to reach?)

Any effective health communication effort is based on a thorough understanding of the intended audience—the specific group of people you want to reach and influence with your message. Given the diverse interests, needs, concerns, and priorities among different segments of the public, few messages are appropriate for everyone included in “the general public.” Careful audience analysis will help you develop relevant messages and materials and identify the channels most likely to reach and influence your audiences. Trying to reach everyone with one message or concept may dilute your communication activity so that it appeals to few rather than many people.

In this step, you will “segment” and prioritize your audience. The goal of audience segmentation is to identify the largest possible groups of people (among those affected by the issue) that share common traits that affect the way they respond to the health issue or problem. For some issues and messages, it may be sufficient to segment by physical characteristics (e.g., exposure to health risks) and demographic and cultural characteristics (e.g., age, gender, race) alone; for others, it may be appropriate to consider characteristics such as behaviors (e.g., smoking habits, exercise patterns), communication channels used (e.g., specific radio stations, magazines), and psychological characteristics (e.g., attitudes, values, opinions). Consider the following:

- Ways to describe and divide up the group(s) in the area served by your program
 - What physical characteristics, such as environmental exposures and family histories, are shared among groups?
 - What demographic and cultural characteristics, such as age, gender, race, ethnicity, literacy levels, and media habits are shared among groups?
 - What behavioral characteristics, such as history of cancer screening, are shared among groups?
 - What psychosocial characteristics, such as attitudes about health and health care, feelings about cancer, and cultural beliefs, are shared among groups?
 - What levels of knowledge about the health issue are shared among groups?
- Your program’s priorities for selecting the intended audience
 - What guidance does your program’s overall goals, objectives, mandates, and funding provide about selecting the intended audience?
 - Will you concentrate on certain groups based on
 - The overall size of the population (e.g., the largest group(s) will receive the most attention)?
 - Vulnerability to the health problem (e.g., the group(s) most affected by the health issue will receive the most attention)?

- Ease of reaching the population (e.g., the group(s) that have well-established social networks and are easiest to reach through traditional or established means will receive the most attention)?
- The population’s responsiveness or readiness to change behavior (e.g., the group(s) with a good “track record” of having responded in the past to health communication campaigns will receive the most attention)?
- Politics (e.g., the group(s) with strong advocacy will receive the most attention)?
- An opportunity to build on or “piggyback” existing efforts to reach the group(s)?
- Primary audiences vs. secondary audiences
 - Who will be the primary audience—the group(s) you wish to affect in some way (e.g., women ages 50 to 64, uninsured or underinsured, of a particular racial or ethnic group)?
 - Who will be your secondary audience—the group(s) that have influence on your primary audience (e.g., health care providers, family members of the intended audience, social service agencies)?

Example: BCCEDP “X”

- Ways to describe and divide up the group(s) in the area served by your program
 - The area served by BCCEDP X includes people of several races, ethnicities, and cultures, different educational and literacy levels, and a variety of media habits. Because the primary intended audience for the program is already established by mandate, however, information about the general makeup of the geographic area will not be detailed here. (See below for intended audience.)
- Your program’s priorities for selecting the intended audience
 - BCCEDP X’s intended audience, as established by State X’s overall health plan, is underinsured or uninsured African American and Hispanic/Latina women ages 50 to 64. The selection of this intended audience was originally based upon the overall size of different populations, the extent to which racial/ethnic groups were affected by breast and cervical cancer, and the extent to which various racial/ethnic groups were insured.
- Primary audiences vs. secondary audiences
 - See above for primary audiences.
 - Secondary audiences will include family members of the intended audience, social service agencies, places of worship, community-based organizations that work with the three communities, and health care providers.

Step 4: Develop a Communication Plan (What will we do? How will we do it?)

Once you have identified the intended audience(s), it is time to set specific audience objectives. These objectives should support the objectives of the overall communication effort that you describe in Step 2. The objectives set in this step are specific to your intended audiences. They also specify what is to be accomplished through each part or activity of the communication effort.

- Audience-specific communication objectives for the primary and secondary audiences
 - What do you want to affect through this communication effort? Do you want to increase awareness, improve knowledge, change attitudes or beliefs, and/or change behaviors?
 - How can you make objectives supportive of and derived from the goals and objectives of your BCCEDP program?
 - How can you make your objectives specific, measurable, attainable, realistic, and time bound?
 - How can you make sure that your objectives state the expected results of the communication activity (e.g., how much of *what* outcome is expected from *whom* by *when*)?

Once you have set audience-specific objectives, it is time to choose channels and settings that will be most effective in reaching the intended audiences. A wide range of communication channels can be used, ranging from interpersonal channels (e.g., outreach workers, provider/patient interactions, case manager/client education) to small-group or organizational channels (e.g., worksites, places of worship, community-based organizations) to mass media (e.g., TV, radio, newspapers, outdoor advertising, fliers, brochures, organization newsletters). Selecting channels is a crucial planning decision that affects how effectively and efficiently your health messages will reach your intended audiences.

Using several different but appropriate channels takes advantage of the unique strengths of each channel and minimizes the risk that a single channel will “miss” a large part of the intended audience. A good mix of channels increases the opportunities for the intended audience to be exposed to the message a sufficient number of times to absorb and remember it. Consider the following:

- Channel selection
 - From which sources do members of the intended audience seek or receive news, other information, and entertainment (i.e., which channels are most likely to be credible and accessible to the intended audience)?
 - What are the timeline and budget for your communication activities? Placement of articles in magazines often requires lead time of several months, whereas a video news release can be distributed and aired during the same afternoon. Production of a

television public service announcement (PSA) can cost many thousands of dollars, whereas a live-announcer radio script can be produced at little expense.

Settings are the actual places in which communication activities are delivered, including clinic waiting rooms or examination rooms, laundromats, beauty shops, and homes, among others.

Consider the following:

- Setting selection
 - Where can you reach the intended audience when they are attentive and open to your communication effort?
 - Where can potential partners help you reach the intended audience?

Activities are methods for delivering communication through the chosen channels. For example, two health communication activities that can be delivered through interpersonal channels are one-on-one counseling and peer education delivered by community health workers. Through small-group or organizational channels, activities may include group educational sessions in the workplace or in places of worship. Examples of activities delivered through mass media channels include radio PSAs, billboards, and television PSAs.

Because activities need to help you reach your goals and objectives, they need to be chosen based on their demonstrated effectiveness. Planners can look to literature reviews, evaluation results, and past experience to help select activities that are most likely to be effective.

- Activity selection
 - What activities are most likely to help you achieve your goals and objectives?
 - What activities are likely to have no negative effects on the intended audience?
 - Which activities can be used in combination with other activities?
 - What resources do you have and need?
 - What other agencies work with and have established trust and credibility with the intended audience?

Example: BCCEDP "X"

- Audience-specific communication objectives for the primary and secondary audiences by the end of this 2-year communication effort include:
 - Objective 1: Eighty percent of underinsured or uninsured African American and Hispanic/Latina women enrolled in BCCEDP will be able to correctly identify that yearly screening for breast and cervical cancer can help find cancers early, when they are most likely to be treated successfully.
 - Objective 2: BCCEDP X will increase its enrollment of underinsured or uninsured African American and Hispanic/Latina women ages 50 to 64 by 25 percent.

- Objective 3: Ninety percent of women who are already enrolled in BCCEDP X will return for routine rescreening at the appropriate intervals.
- Channel selection
 - BCCEDP X worked with community-based organizations and places of worship to find out appropriate channels for reaching members of the intended audience. Some of the sources from which members of the intended audience seek or receive news, other information, and entertainment are as follows:
 - Many African American women seek and receive news and entertainment from two local radio stations, local and national newspapers, and local and national television stations. Visiting is common among friends and family members, and many women play bingo on a regular basis. In addition, many women in the African American community attend area churches and a local mosque.
 - Many Hispanic/Latina women seek and receive news and entertainment from a Spanish-language local radio station, newspaper, and a television station that broadcasts nationally. Women who are comfortable with English may seek information and entertainment from English-language sources such as newspapers, televisions, and radio. Visiting is common among friends and family members. In addition, many women in the Hispanic/Latina community attend area churches.
 - Implementation of the communication activity will be completed within 2 years. Short-term evaluation (see Step 9) will begin after implementation. The budget for this communication effort will determine, in part, activity selection (e.g., a PSA on a national Spanish-language TV station would be too expensive).
- Setting selection
 - African American women: homes, places of worship, and beauty parlors and other businesses
 - Hispanic/Latina women: homes, churches, and clinics
- Activity selection
 - African American women:
 - Community health workers, who will be recruited and trained in conjunction with a local community-based organization
 - Group education delivered in places of worship
 - Radio PSA
 - Posters with tear-off BCCEDP contact information in beauty parlors, bingo halls, and local businesses

- Hispanic/Latina Women:
 - Community health workers to be recruited and trained in conjunction with a local community-based organization
 - Group education delivered in places of worship
 - Print PSAs in Spanish-language newspapers
 - Radio PSA on the local Spanish-language radio station
 - Training for providers to encourage screening among their patients

Step 5: Develop and Pretest Message Concepts (What do we want to say?)

Once channels, settings, and activities have been selected, it is time to begin thinking about messages to be delivered through chosen activities. A crucial step in creating effective health communication efforts is determining what message ideas or concepts have the best chance of “hitting home” and influencing the intended audience. This process begins with using formative research and pretesting.

Literature reviews, focus groups, and intercept interviews are examples of formative research tools that can be very helpful in identifying key message concepts. For example, research indicates that message concepts related to personal susceptibility and recommendations from physicians are effective. Consider the following:

- Information needs of the intended audience
 - What is the intended audience’s awareness of the health issue or problem?
 - Have they ever thought about the health issue?
 - What myths or misinformation do they hold?
 - What are their cultural belief systems about the health issue (e.g., what do they believe causes the health problem and what do they think can be done to prevent, diagnose, and treat it)?
 - To what extent do they think that they might be affected by the health issue (i.e., do they think they are vulnerable or susceptible to the problem)?
 - To what extent are they practicing the desired behavior?
 - If the intended audience is already practicing the desired behavior, but not on a regular basis, do they need reinforcement to continuing practicing the behavior?
- Relevance to the intended audience
 - What situations (e.g., family reunions, church picnics, community festivals) are familiar to the intended audience?
 - What works best with the intended audience for changing the factors that lead to the health issue or problem?
 - What health benefits (e.g., remaining healthy for the sake of one’s family, avoiding death) would motivate the intended audience?
 - What cultural or social norms (e.g., protecting one’s family, being part of the community, seeing everything in life as connected, holding special respect for elders) would motivate the intended audience?
 - What things might keep the intended audience from adopting the desired health behavior (e.g., inconvenience, fear, negative experiences in health care settings)?

- Accuracy of the message
 - Is there agreement among scientists about what the message should be (e.g., cancer screening recommendations)? If not, how will you handle the lack of consensus?
 - What are the key points that need to be made about the health issue or problem? For example, yearly mammograms are recommended for women age 50 and older.

Concepts are ideas or themes behind messages you will eventually write; they are not actual messages. For example, one concept that may be appropriate for women in the age served by BCCEDPs is emphasizing the women’s role within the family: protecting her health is good for her *and* the family. In writing concepts, consider the following:

- Writing concepts
 - What does a literature review tell you about the concepts that work well for your intended audience?
 - How can you fit the concept to the channel(s) you have chosen? For example, TV and radio are excellent choices to get across brief, simple, motivational concepts and messages. Interpersonal and small-group/organizational channels, such as community health workers and group educational sessions in workplaces, lend themselves better to more complex concepts and messages.
 - How can you use all of the above—information needs, cultural relevance, channels selected, and message accuracy—to make a first attempt at writing a concept?
 - How can you make your concept
 - Easy to understand?
 - Attention getting?
 - Credible?
 - Culturally appropriate?

Pretesting helps determine whether one concept works better for the intended audience than another and which concepts should eventually be developed into specific messages. The general approach to pretesting concepts is to share them with members of the intended audience and gauge their reactions. Is the concept easy to understand, attention getting, credible, and culturally appropriate?

Focus groups and intercept interviews are two of the most common pretesting methods. Focus groups are structured, planned discussion groups that are designed to collect opinions from members of the intended audience. They are led by a facilitator or moderator who is trained to draw the most information possible from the group. In focus groups, participants learn about the concepts and give feedback. Intercept interviews are commonly used in market research and are simple to conduct. Individuals appearing to fit predetermined criteria are approached in public places such as grocery stores, shopping malls, and sports arenas. These predetermined criteria may include age, race or ethnicity, and gender, among others.

For both focus groups and intercept interviews, it is important to develop a screener—a set of questions that the recruiter asks of all potential participants. These questions should help determine if someone is a member of the intended audience. They may be given a brief explanation and then asked for an opinion of the concept(s).

For example, if your intended audience is African American women ages 50 to 64 who do not have health insurance, you would want to ask questions that identify race/ethnicity, age, and insurance status before proceeding with an intercept interview or inviting someone to participate in a focus group. In pretesting message concepts, consider the following:

- Pretesting message concepts
 - What pretesting methods will you use?
 - How will you make sure that people participating in your intercept interviews, and/or focus groups are members of the intended audience?
 - What questions will you include in the moderator guide to help determine whether the concepts are relevant to pretest participants?

Example: BCCEDP “X”

- Information needs were determined by one-on-one interviews with members of the intended audience. Although there was variation among individuals within each community, selected overall results related to breast cancer were as follows:
 - African American women had a high level of awareness about breast cancer. The majority felt that they were at risk; 55 percent had ever had a mammogram. Only 18 percent reported having a mammogram 2 years in a row.
 - Hispanic/Latina women had a low level of awareness about breast cancer, and therefore did not think of themselves at risk. Only 10 percent had ever had a mammogram.
- Relevance to the intended audience was determined from selected results based on literature review, one-on-one interviews, and discussion with community-based organizations that work with that audience.
 - African American women
 - Familiar situations include family reunions, bingo, and church teas.
 - One successful approach encourages women to seek screening services by emphasizing the women’s special role as elders in the community. It is important for the whole community that they stay healthy. Also, as elders, they will set the example for other women in the community.
 - To be successful, communication efforts need to address mistrust of health care settings based on previous bad experiences such as

experimentation on African Americans within the health care system (e.g., the Tuskegee Syphilis Study).

- Hispanic/Latina women
 - Familiar situations include family get-togethers and Christmas celebrations, and talking with other women in local stores (e.g., grocery stores).
 - One successful approach to encourage women to seek screening services is to emphasize the importance of women's role within the family and the importance of staying healthy for one's family. Another approach encourages men to speak with female partners and family members about screening.
 - To be successful, communication efforts need to address fear of governmental agencies (e.g., some Hispanic/Latina women without U.S. citizenship may be hesitant to seek services from a health department for fear of deportation).
- Accuracy of the message
 - There is clear agreement among scientists about screening guidelines for women in the intended audience. Yearly mammograms and Pap tests are recommended for women age 50 and older.
- Writing concepts
 - Concepts for messages delivered by community health workers can include more detail than those delivered through radio public service announcements (PSAs), which can be more detailed than those delivered on posters.
 - The following are examples of two of the concepts that were written for the intended audience:
 - Poster for African American women: A picture of an African American family of several generations, including several women in their 50s, at a reunion. The poster would get across the concept of respect for elders within the African American community.
 - Radio PSA for Hispanic/Latina women: Your family needs you. Take care of yourself by getting a mammogram (message to be delivered by a Hispanic/Latino celebrity).
- Pretesting message concepts
 - Concepts for the poster for African American women were pretested using intercept interviews.
 - First, all potential participants answered screener questions to make sure they were members of the intended audience. One example of a screener question was “Are you between the ages of 50 and 64?” People who

answered “no” to *any* of the screener questions were thanked for their time and the interview ended.

- People who answered “yes” to *all* of the screener questions were given a brief explanation about the poster and asked intercept interview questions. One example of an intercept interview question was “What do you like or dislike about the idea of showing a family reunion on the poster?”
- Concepts for the radio PSA for Hispanic/Latina women were pretested using focus groups.
 - First, all potential participants answered screener questions to make sure they were members of the intended audience. One example of a screener question was “Do you consider yourself to be either Hispanic or Latina?” People who answered “no” to *any* of the screener questions were thanked for their time and the interview ended.
 - People who answered “yes” to *all* of the screener questions were invited to participate in a focus group. One example of a focus group question was “How would you react to the idea that getting a mammogram will help you stay healthy for your family?”

Step 6: Develop and Pretest Messages (How do we want to say it?)

Crafting specific messages is possible once you have determined which message concepts are most relevant to your communication goals and objectives, and meaningful to the intended audience. Each concept can be developed into several different messages. In writing messages, consider the following:

- Writing messages
 - How can you apply what you learn in pretesting message concepts?
 - Which concepts are most relevant to your communication goals and objectives *and* motivational to members of the intended audience?
 - What will make the message culturally and linguistically relevant to the intended audience?
 - What will be the tone and style of the message?
 - What will be the type of appeal used in the message? For example, will you appeal to the intended audience's logic? Try to reduce the intended audience's fear about screening? Try to create a sense of empowerment among the intended audience?
 - How can you tailor messages for each channel, setting, and activity through which they will be delivered?
 - Who will review messages before they are pretested (e.g., how can you enlist the help of colleagues or people who work with the intended audience)?
 - How can you develop a review checklist that addresses the following questions?
 - Are written messages at a reading level that is appropriate for the intended audience?
 - Is the word choice appropriate for the intended audience?

Once you have created specific messages, it is important to pretest them with the intended audience. Pretesting at this point in message development helps determine whether the messages and formats are appropriate, understandable, attention getting, credible, and relevant and have the desired effect (e.g., motivating members of the intended audience to call for a screening appointment).

Pretesting is conducted while materials are in draft form to allow changes to the messages or materials without great expense. As with message concepts, focus groups and intercept interviews are two of the most common pretesting methods. (See Handout #7, Step 5, for a more detailed description of focus groups and intercept interviews.) In pretesting messages, consider the following:

- Pretesting
 - Which pretesting methods will you use?
 - How will you make sure that people participating in your intercept interviews, and/or focus groups are members of the intended audience?
 - What question will you ask to address the following points, which will help determine whether the concepts are relevant to pretest participants?
 - Are messages understandable and relevant?
 - Are messages in a format and style appropriate for the intended audience?
 - Do messages incorporate the cultural norms of the audience?
 - Is word choice appropriate for the intended audience?
 - How will you revise your messages based on the results of the pretest before proceeding with “finished” products?

Example: BCCEDP “X”

- Writing messages
 - African American women
 - Because the concepts were well received in pretesting, they will be developed into messages.
 - Pictures should look like members of the intended audience.
 - The style will be clear and direct (straight to the point).
 - The message will try to create a sense of empowerment among the intended audience by addressing the special status of elders.
 - The message was reviewed by several BCCEDP colleagues and staff at a local community-based organization that works with the African American community. Reviewers provided feedback on a checklist about reading level and word choice.
 - Hispanic/Latina women
 - Pretest participants felt that the message for the radio public service announcement (PSA) should be delivered by a “regular” person rather than a celebrity.
 - The message will appeal to women’s sense of responsibility towards their family as a way to encourage screening.
 - The message was reviewed by several BCCEDP colleagues and staff at a local community-based organization that works with the Hispanic/Latino community. Reviewers provided feedback on a checklist about reading level and word choice.

- Pretesting
 - Because the methods for pretesting concepts seemed to work well with the intended audience, the same methods were used for testing messages. Intercept interviews were conducted for the poster for African American women. Focus groups were assembled for the radio PSA for Hispanic/Latina women. Pretesting questions were revised to gather specific information about messages.
 - Several revisions were made to messages and format. Selected changes included
 - Adding a kente cloth border to the poster and showing a wider range of ages of African American women; and
 - Revising the wording of the message on the radio PSA for Hispanic/Latina women and using an announcer with a more “generic” accent (i.e., one that would not sound specifically Mexican or Puerto Rican).

Step 7. Develop a Promotion Plan (How do we get it used?)

Developing a sound promotion plan for a communication activity is critical to ensure that it reaches its intended audiences.

Most effective health communication efforts include much more than delivery of a single product through a single channel. Imagine a single brochure distributed to public health clinics or a single public service announcement (PSA) offered to TV stations. Other communication components might include public relations activities (e.g., interviews on TV and radio talk shows) to draw attention to the communication message. They might involve networking with partners working with your program (e.g., places of worship, beauty salons, and coalitions). They might involve media advocacy at several levels to support changes in the public health environment (e.g., insurance reimbursement for mammograms).

In developing a promotion plan, consider the following:

- Developing a promotion plan
 - How can you make the promotion plan consistent with the communication objectives and the overall program goals?
 - How “do-able” is the promotion plan (i.e., is it within your ability to carry out)?
 - How can you use more than one channel and activity to deliver messages?
 - What other communication components, such as press conferences, other special kickoff functions, and visits to newspaper editorial boards, can be used?
 - How can you identify and enlist the help of “gatekeepers” or secondary audiences who will be of assistance in endorsing and promoting your messages?
 - How will you make sure that the plan includes all of the following necessary elements?
 - Description of the intended audience
 - Description of the channels, settings, and activities to be used
 - Description of how materials and information will be distributed (e.g., telephone hotlines, product distribution centers)
 - Description of how materials will be stored and tracked
 - Description of roles and responsibilities for personnel who will be responsible for different aspects of the communication effort
 - Timetable for carrying out communication activities

Two important activities should occur during the promotion planning step. They are

1. Packaging of materials to ensure their best use by primary and secondary intended audience members; and
 2. Pilot testing of one or more components of the total communication effort to answer critical promotion and distribution questions before full-scale implementation (e.g., how many telephone calls can be expected in response to a toll-free number in a TV PSA).
- Packaging and pilot testing
 - How can materials be packaged to ensure best use by the primary and secondary audiences?
 - How will you orient partners to the plan?
 - How will you pilot test activities to get an idea of anticipated response (e.g., how many telephone calls to an information hotline might a radio PSA generate)?
 - What preparations will you make to meet the anticipated response?

Example: BCCEDP “X”

Note: The remaining examples will focus only on the activities designed for African American women.

- Developing a promotion plan
 - As noted in Step 4, several communication channels and activities were used. (Steps 5 to 8 focused on only one activity—a poster with tear-off contact information.)
 - Kickoff functions included a reception with food for staff of community-based organizations and leaders—including religious leaders—in the African American community.
 - Many of the attendees had been at an earlier meeting to discuss suggestions for promoting activities. Based on that meeting, a promotion plan was developed that included the following:
 - A description of the intended audience: underinsured or uninsured African American women ages 50 to 64.
 - A description of the channels, settings, and activities to be used: Community health workers, group education delivered in places of worship, a radio PSA, and a poster with tear-off BCCEDP contact information displayed in churches, beauty parlors, bingo halls, and local businesses.
 - A description of how materials and information are to be distributed: BCCEDP X will be responsible for storing, distributing, and tracking

materials with the help of a form that lists date, number of materials distributed, and name/organization to which materials are sent.

- A detailed list of roles and responsibilities within the BCCEDP and partnering organizations.
- A timetable for carrying out remaining communication activities.
- Packaging and pilot testing
 - Packaging was determined at the meeting prior to the kickoff reception. Partnering organizations determined, for example, that posters should be packaged in groups of 25 so that organizations would have enough to distribute to various sites in the community.
 - Partners were oriented to the plan by a followup conference call.
 - Activities were piloted in selected sites for 2 weeks. For example, posters were displayed at 10 locations. All callers were asked where they heard about the BCCEDP, and responses were recorded. The number of women who called because of the poster was averaged and then multiplied by the number of posters to be distributed. This provided a rough estimate of anticipated response.
 - Based on anticipated response, BCCEDP X decided that they needed to install another phone line to answer callers' questions and schedule appointments, and that they would utilize volunteers to help staff members answer phones. In addition, another case manager was hired to help enroll and educate women, and to help ensure that women would return for routine rescreening.

Step 8: Implement Your Strategies (Let's do it!)

Careful planning and pretesting throughout the communication development process set the stage for action. Communication activities take place through all appropriate media and organizational channels, timed to support other elements of the overall program (e.g., support services, community outreach efforts). In this step, consider the following:

- Implementation
 - How can you ensure that partners and “gatekeepers” (secondary audiences) have enough materials?
 - How can you establish processes to deliver materials and information quickly?

During implementation, process evaluation is needed to determine whether mass media and organizational gatekeepers are actively participating in the communication activities, whether messages and materials are reaching intended audiences, and whether the overall activity is proceeding on time, on strategy, and within budget.

Process evaluation can also provide measures of message dissemination and exposure, using techniques and services such as clipping services, public service monitoring reports, “bounceback” cards, surveys, and measures of calls to hotlines or changes in inventory.

- Process evaluation
 - How can you measure the following?
 - Where and when the messages are broadcast, published, and delivered?
 - The level of participation of gatekeepers?
 - The level of satisfaction of gatekeepers?
 - How frequently the intended audiences are being exposed to the messages?
 - Who will be responsible for each part of the process evaluation?
 - How will you revise your promotion plan based on ongoing process evaluation results?

Example: BCCEDP “X”

- Implementation
 - Partnering organizations were provided with materials based on the numbers they requested and were given a number to call if they needed more materials. In addition, a BCCEDP X staff member was given the responsibility of calling each partnering organization monthly for the duration of the communication effort to check on progress and see if assistance or additional materials were needed.

- Process evaluation
 - Process evaluation information was gathered using the following processes:
 - Number of times the radio PSA was aired was determined through contact with the radio stations.
 - Each community health worker kept a log of the number of women and family members reached.
 - Educators turned in a one-page sheet each time they delivered an educational session in a place of worship. Information recorded the number of participants, sex, and racial/ethnic makeup. In addition, participants were encouraged to fill out feedback forms at the end of the sessions to rate the impact on their intentions to seek screening services.
 - Gatekeepers kept a log of posters distributed. By visiting distribution locations monthly, they were also able to record the number of tear-off sheets with BCCEDP X contact information that were taken.
 - The level of satisfaction of gatekeepers was measured through written surveys and phone interviews 6 months after implementation began.
 - BCCEDP X continued to ask all callers about how they heard about the program. Responses were recorded and analyzed on a monthly basis.
 - BCCEDP staff members were assigned specific process evaluation tasks.
 - The following changes were made based on ongoing process evaluation:
 - Clinics and providers were contacted and asked to play the stations that aired radio PSAs most frequently in their waiting rooms.
 - Community health workers suggested changes to their log to make it easier and faster to use, and changes were made accordingly.
 - Changes were made to the guidelines for delivering group education sessions in places of worship; these included shortening the sessions, clarifying information, and creating a version that was more culturally appropriate for the Islamic community.
 - Because tear-off sheets were being taken off posters most often from laundromats and beauty parlors, BCCEDP staff located additional laundromats and beauty parlors in which to put posters.
 - At their request, gatekeepers were provided with an informational training so they could answer basic questions about BCCEDP X services and screening procedures.

Step 9: Evaluate Your Efforts (How well did we do?)

Whereas the purpose of process evaluation is to measure how well your messages, materials, and activities were implemented and received by your intended audiences, the goal of short-term evaluation is to measure the effects of the communication activity on the intended audiences. For most programs, the focus of short-term evaluation will be on the extent to which your communication efforts were successful in enrolling women for breast and cervical cancer screening within a short (e.g., 3 months) period of time.

Note: Some evaluations may also cover long-term effects, such as changes in illness and death related to breast and cervical cancer. However, this type of long-term evaluation usually will not be the focus of a BCCEDP's evaluation efforts.

This phase of evaluation typically is the most difficult and most costly. Moreover, especially in a comprehensive prevention program, it can be difficult to separate the effects of health communication from the effects of other program elements. For these reasons, many programs will benefit from working with outside paid or volunteer consultants, such as university researchers, graduate students, and others who have experience evaluating health programs.

In this step, consider the following:

- Short-term evaluation
 - How will you make your evaluation plan consistent with the communication objectives and overall program goals?
 - How will you include the following in your evaluation plan?
 - What type of data you will collect and how you will collect them?
 - How will you show the effect of the messages on the intended audience?
 - What types of analysis will be done?
 - How will you measure the cost of the communication effort relative to the benefits?
 - What might be important reasons to evaluate separately the effects of health communication and the effects of other parts of the program?
 - How can you measure unexpected aspects or effects—positive or negative—of your health communication activities and what the effects might be?
 - Who will be responsible for each part of the outcome evaluation?
 - How will you disseminate your evaluation results?
 - For whom must reports be written about your communication efforts?
 - Who else might benefit from your experience?

- How might you share information with them?
- What lessons learned need to be considered in planning future communication efforts?

Example: BCCEDP “X”

- Short-term evaluation
 - Short-term evaluation was conducted with the help of a professor and two graduate students from a local university. It was determined that the evaluation would focus on the extent to which the communication activities met the objectives written in Step 4.
 - The evaluation plan included the following information:
 - Data collection through a combination of written surveys and one-to-one interviews with women who have been screened and report that they were visited by community health workers, participated in group education sessions at places of worship, listened to the radio, visited places displaying posters, and ultimately enrolled in BCCEDP X

Questions will gather information about knowledge, attitudes, and beliefs about cancer risks and screening, intentions to be screened, and the degree to which communication activities were the reason that women actually enrolled in the BCCEDP

 - How data will be analyzed (by university professor and students):
Written comments grouped according to theme; yes/no and opinion questions to be analyzed statistically
 - Roles and responsibilities of each person contributing to the evaluation
 - Evaluation results were disseminated through a report to the State BCCEDP, all BCCEDP X staff and volunteers, and all partnering organizations. The report included a brief summary of results, a section of more detailed results presented in bullet points, two simple charts, and a “lesson learned” section, which detailed points to consider in planning future communication efforts. Results related to objectives for African American women by the end of this 2-year communication effort included the following:
 - Objective 1: Seventy-six percent of underinsured or uninsured African American women ages 50 to 64 were able to correctly identify that yearly screening for breast and cervical cancer can help find cancers early, when they are most likely to be treated successfully.
 - Objective 2: BCCEDP X increased its enrollment of underinsured or uninsured African American women ages 50 to 64 by 33 percent.
 - Objective 3: Still under evaluation, as the rescreening rate needs to be tracked over time.

**Tools for Developing and Pretesting
Cancer Communication Messages**

Note: To follow are six tools for developing and pretesting messages. While some are geared specifically for print materials, others can be used for audio and video messages, as well.

Differences Between Skilled and Limited Readers

| Skilled Readers | Limited Readers | To Improve Learning and Understanding, You Can |
|--|--|---|
| Interpret meaning of words; can infer meaning from words given in context. | Take words literally, e.g., feeling blue may mean “looking blue” not “feeling down.” Words such as “Pap” and “mammogram” may be confusing. | Explain the meaning of words. Do not assume. Ask for verification. Check out understanding with intended audience members. Use glossaries. |
| Read with fluency. | Read slowly and miss the meaning. Long sentences provide little meaning because words will be forgotten. | Use common words and short sentences. Get to the main point. Keep it simple. Less is more. |
| Look up uncommon words. | Skip over uncommon words. | Change to a common word or explain by an example. Define difficult words or substitute easier-to-understand words. |
| Grasp the context. | Miss the context. | Explain context first, and use visuals. Help the reader make the connection to his/her own life or situation. |
| Are persistent in their reading endeavors. | Tire quickly. | Use short paragraphs. Make layout look easy to read. Modify format to allow for breathing space. Make reading meaningful and relevant. Employ design techniques that are appealing, attractive, understandable, and motivating. |

Adapted from Doak et al. 1995, 1996.

Rapid Estimate of Adult Literacy in Medicine

The Rapid Estimate of Adult Literacy in Medicine (REALM) is a screening instrument to assess an adult's ability to read common medical words and lay terms for body parts and illnesses. It is designed to assist medical professionals in estimating a person's literacy level so that the appropriate level of education materials or oral instructions can be used. The test takes 2 to 3 minutes to administer and score.

Directions:

1. Give the person a laminated copy of the REALM Worksheet (on the next page) and score answers on an unlaminated copy that is attached to a clipboard. Hold the clipboard at an angle so that she is not distracted by your scoring procedure.

Say:

“Please read as many words as you can from this list. Begin with the first word on List 1 and read aloud. When you come to a word you cannot read, do the best you can or say ‘blank’ and go on to the next word.”

2. If the person takes more than 5 seconds on a word, say “blank” and point to the next word, if necessary, to move the patient along. If she begins to miss every word, have her pronounce only known words.
3. Count as an error any word not attempted or mispronounced. Score by marking a plus (+) after each correct word, a check (✓) after each mispronounced word, and a minus (-) after words not attempted. Count as correct any self-corrected word.
4. Count the number of correct words for each list and record the numbers in the “score” box. Total the numbers and match the total score with its grade equivalent in the table on page 44.

REALM Worksheet

Terry Davis, Ph.D. • Michael Crouch, M.D. • Sandy Long, Ph.D.

Patient Name/Subject # _____ Date of Birth _____

Reading Level _____ Grade Completed _____

Date _____ Clinic _____ Examiner _____

| List 1 | List 2 | List 3 |
|----------------|--------------------|--------------------|
| fat _____ | fatigue _____ | allergic _____ |
| flu _____ | pelvic _____ | menstrual _____ |
| pill _____ | jaundice _____ | testicle _____ |
| dose _____ | infection _____ | colitis _____ |
| eye _____ | exercise _____ | emergency _____ |
| stress _____ | behavior _____ | medication _____ |
| smear _____ | prescription _____ | occupation _____ |
| nerves _____ | notify _____ | sexually _____ |
| germs _____ | gallbladder _____ | alcoholism _____ |
| meals _____ | calories _____ | irritation _____ |
| disease _____ | depression _____ | constipation _____ |
| cancer _____ | miscarriage _____ | gonorrhea _____ |
| caffeine _____ | pregnancy _____ | inflammatory _____ |
| attack _____ | arthritis _____ | diabetes _____ |
| kidney _____ | nutrition _____ | hepatitis _____ |
| hormones _____ | menopause _____ | antibiotics _____ |
| herpes _____ | appendix _____ | diagnosis _____ |
| seizure _____ | abnormal _____ | potassium _____ |
| bowel _____ | syphilis _____ | anemia _____ |
| asthma _____ | hemorrhoids _____ | obesity _____ |
| rectal _____ | nausea _____ | osteoporosis _____ |
| incest _____ | directed _____ | impetigo _____ |

| Score | |
|-----------|-------|
| List 1 | _____ |
| List 2 | _____ |
| List 3 | _____ |
| Raw Score | _____ |

Adapted and reprinted with permission from Davis et al., 1993. "REALM" Copyright 1993.

Grade Equivalent for REALM Scoring

| Raw Score | Grade Range |
|------------------|---|
| 0-18 | 3rd Grade and Below— Will not be able to read most low-literacy materials; will need repeated oral instructions, materials composed primarily of illustrations, or audio or video tapes |
| 19-44 | 4th to 6th Grade— Will need low-literacy materials; may not be able to read prescription labels |
| 45-60 | 7th to 8th Grade— Will struggle with most health education materials; will not be offended by low-literacy materials |
| 61-66 | High School— Will be able to read most health education materials |

Assessment of Printed Materials Worksheet

Directions:

Assess your printed materials using the following tool. Use the rating scale of 1 to 4 for each item in a major category.

1 = poor, 2 = fair, 3 = good, 4 = very good, N/A = not applicable

For each category, give an overall category rating of (+) *effective* or (-) *not effective*, (X) *unsure*

Name of medium (brochure/flier/poster, etc.): _____

Author: _____

Intended audience: _____

Cost/availability: _____

| Category/Criteria | Rating 1 to 4 | Overall Rating | | |
|--|------------------|----------------|-----|-----|
| | | (+) | (-) | (X) |
| Format/Layout <i>Is the overall format style appealing/understandable?</i> | | | | |
| Organizational style | | | | |
| White space | | | | |
| Margins | | | | |
| Grouping of elements | | | | |
| Use of headers/advance organizers | | | | |
| Type <i>Is the type size/style going to work with my intended group?</i> | | | | |
| Size | | | | |
| Style | | | | |
| Spacing | | | | |
| Verbal Content <i>Is the information accurate, easy to understand, and meaningful?</i> | | | | |
| Clarity | | | | |
| Quantity | | | | |
| Relevancy to intended group (e.g., age, gender, ethnicity) | | | | |
| Use of active voice | | | | |

| Category/Criteria | Rating 1 to 4 | Overall Rating | | |
|---|------------------|----------------|-----|-----|
| | | (+) | (-) | (X) |
| Readability level/difficulty | | | | |
| Accuracy | | | | |
| Visual Content <i>Are the visuals supportive to the text and are they relevant?</i> | | | | |
| Tone/mood | | | | |
| Clarity | | | | |
| Cueing | | | | |
| Relevancy to intended group (i.e., age, gender, ethnicity) | | | | |
| Currency | | | | |
| Accuracy | | | | |
| Detail | | | | |
| Esthetic Quality <i>Is this a publication that is likely to be looked at?</i> | | | | |
| Attractiveness | | | | |
| Color | | | | |
| Quality of production space for notes, glossary, personalized instructions | | | | |

Comments:

Overall, based on your scoring of 1 to 4 and an evaluation of its effectiveness with the intended group, how would you rate this educational tool? Circle one:

- 1 = poor:** Probably won't work with my intended audience. I would probably never use it.
- 2 = fair:** Has a low likelihood of success with my intended group. I would use it rarely and only in combination with other sources.
- 3 = good:** Has a good likelihood of being suitable and relevant for about half of my intended audience. I would use it sometimes.
- 4 = very good:** Has a high likelihood of being suitable and relevant for most of my intended audience. I would most definitely use it!

How To Test for Readability

The SMOG Readability Formula *

To calculate the SMOG reading grade level, begin with the entire written work that is being assessed, and follow these four steps:

1. Count off 10 consecutive sentences near the beginning, in the middle, and near the end of the text.
2. From this sample of 30 sentences, circle all of the words containing three or more syllables (polysyllabic), including repetitions of the same word, and total the number of words circled.
3. Estimate the square root of the total number of polysyllabic words counted. This is done by finding the nearest perfect square, and taking its square root.
4. Finally, add a constant of three to the square root. This number gives the SMOG grade or the reading grade level that a person must have reached if he or she is to fully understand the text being assessed.

A few additional guidelines will help to clarify these directions:

- A sentence is defined as a string of words punctuated with a period (.), an exclamation point (!), or a question mark (?).

- Hyphenated words are considered as one word.
- Numbers that are written out should also be considered, and if in numeric form in the text, they should be pronounced to determine whether they are polysyllabic.
- Proper nouns, whether polysyllabic, should be counted, too.
- Abbreviations should be read as unabbreviated to determine whether they are polysyllabic.

Not all pamphlets, factsheets, or other printed materials contain 30 sentences. To test a text that has fewer than 30 sentences:

1. Count all the polysyllabic words in the text.
2. Count the number of sentences.
3. Find the average number of polysyllabic words per sentence as follows:

$$\text{average} = \frac{\text{Total \# of polysyllabic words}}{\text{Total \# of sentences}}$$

4. Multiply that average by the number of sentences *short of 30*.
5. Add that figure on to the total number of polysyllabic words.
6. Find the square root and add the constant of 3.

*Excerpted from U.S. Department of Health and Human Resources, National Institutes of Health, National Cancer Institute, Office of Cancer Communications. Making health communication programs work. 1992; pp. 77-79.

Glossary of Terms Worksheet

Instructions

In talking with your colleagues, what are the most commonly used words in your setting? Begin to develop a glossary of words, and try to find words that can be substituted. Choose words that are more familiar to the intended audience, are more culturally appropriate, or have fewer syllables. Do not simplify words if doing so changes the meaning. You also may spell out some words phonetically for ease of understanding.

Difficult Word

- cervix
- examination
- mammogram
- opportunity
- palpation for breast lumps

- carcinoma
- detection

Easier Word

- opening of the womb
- test
- x-ray picture of breast
- chance
- using your fingers to touch and press the breast to check for lumps
- cancer
- found

Write down other commonly used words. Verify the meaning and understanding of the words with peers and with intended audience members.

| | |
|-------|-------|
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |

Learner Verification Exercise

Purpose

- To pretest the effectiveness of the message.
- To help reveal ineffective information in early phases of development.
- To act as a quality assurance measure.

Instructions

Based on the message you wish to convey, think of questions to ask members of an intended audience that address each of the components listed below.

| Component | Description | Questions to ask |
|---------------|--|---|
| Attraction | Readers should be attracted to the health message. | _____ _____ _____ |
| Comprehension | Readers should be able to summarize the main points of the cancer message. | _____ _____ _____ |
| Self-Efficacy | Readers need to feel that they can do/act on the message. | _____ _____ _____ |
| Acceptance | Readers need to think that the information is culturally relevant to them, and “speaks to” their race/ethnicity, age, gender, cultural values, physical abilities, and beliefs about health. | _____ _____ _____ _____ _____ _____ _____ |
| Persuasion | Readers need to feel that this instruction is significant for them, and that acting on the message will have benefits for them. | _____ _____ _____ _____ _____ |