$Table \ I.6.1\ ``Tools"\ typically\ utilized\ for\ communications\ planning\ research.$

Research Method	Description	Pros	Cons	Common Uses
Surveys/Questionnaires (self-administered)	Questionnaires or survey forms are filled out by the respondents themselves. Clarity in question design and instructions for completion are important.			
By mail	Questionnaires or survey forms are sent to potential subjects for them to complete on their own time and mail back to researcher.	 Generalizable results (if sufficiently large, probability sample with high response rate) Can be anonymous (especially useful for highly sensitive topics) Respondents can answer questions when most convenient for them Can collect both program data and personal data (e.g., participant characteristics) Does not require staff time to interact with target population Can be used to access difficult-to-reach populations (e.g., the homebound, rural populations) Can incorporate visual material (e.g., can pre-test prototype materials) 	 Not appropriate for respondents who cannot read or write Low response rate diminishes value of results. May require follow-up by mail or telephone to increase response rate (increases total costs). Respondents may return incomplete questionnaires Limited ability to probe answers Respondents may self-select (potential bias) May take long time to receive sufficient numbers of responses Does not yield reliable assessments of attention-getting ability or recall of message Postage may be very expensive if sample is large 	Obtain baseline data Acquire self-reported information on behaviors, behavioral intentions, attitudes Determine message's reach, attention-getting ability Test knowledge, comprehension

Research Method	Description	Pros	Cons	Common Uses
By handout	Respondents are asked to complete survey at a location frequented by the target population (e.g., during a conference, in a classroom, after viewing an exhibit at a health fair).	 Can more readily improve response rate because there is an opportunity to use faceto-face persuasion tactics Can collect both program data and personal data (e.g., participant characteristics) 	 Not appropriate for respondents who cannot read or write Must be able to reach respondents in person at a central location or a gathering 	 Obtain baseline data Acquire self-reported information on behaviors, behavioral intentions, attitudes Test knowledge, comprehension
By Computerized Self- administered Questionnaires (CSAQ)	A questionnaire is programmed and displayed on a computer screen with respondents keying in their answers. Requires that respondents have access to programmed computers and that they be somewhat familiar and comfortable with using computers.	 Useful for complex questionnaires because complex "skip patterns" can be preprogrammed Can control sequencing of questions Can provide quick summary and/or analysis of results by eliminating the step of data entry from paper questionnaires or interviews 	Not appropriate for audiences who cannot read or those unfamiliar or uncomfortable with computers Requires expensive technical equipment that may not be readily available or may be cumbersome in many settings	Test knowledge, comprehension Acquire self-reported information on behaviors, behavioral intentions, attitudes Pre-test visual material Determine if audience attends to, comprehends, and remembers contents of message.
Surveys/Questionnaires (administered by interviewer)	A trained interviewer asks survey questions of respondents. Allows respondent to ask for clarification and allows interviewer to control question sequence.			

Research Method	Description	Pros	Cons	Common Uses
By telephone	Respondents are contacted via telephone by trained interviewer. Respondents may be selected in advance from a list or contacted randomly (increases generalizability of results).	 Generalizable results (if sufficiently large, probability sample with high response rate) Appropriate for those of lower literacy Interviewer available to clarify questions for respondent and probe answers Decreased likelihood of incomplete questionnaires 	 Requires interviewer training Low response rate diminishes value of results Potential respondents who do not have a phone cannot participate Respondents often hang up if they believe the survey is part of a solicitation call 	Obtain baseline data Determine message's reach, attention-getting ability Acquire self-reported information on behaviors, behavioral intentions, attitudes Test knowledge, comprehension.
By computer-assisted telephone interviewing (CATI) technology	Respondents are contacted via telephone by a trained interviewer who has the questionnaire displayed on a computer terminal. The interviewer enters data directly into the computer.	 Generalizable results (if sufficiently large, probability sample with high response rate) Can program allowable codes for responses which interviewer can use to correct mistakes during interview Can program help menus to assist interviewer Computer controls question sequence, allowing complex "skip patterns" Provides a more efficient means of generating a probability sample 	Considerable development work and lead time are needed before survey implementation Requires much interviewer training Not useful for small samples because the workload costs of CATI exceed the benefits	 Obtain baseline data Test knowledge and comprehension Obtain self-reported information regarding attitudes and behaviors.

Research Method	Description	Pros	Cons	Common Uses
Face-to-face	One-on-one, in-person interview is used to collect information on knowledge, attitudes, and/or behaviors.	Generalizable results (if sufficiently large, probability sample with high response rate) Appropriate for those of lower literacy Useful with difficult-to-reach populations (e.g., homeless, low-literacy) or when target audience cannot be sampled using other data collection methods Interviewer available to clarify questions for respondent and probe answers Decreased likelihood of incomplete questionnaires	Can be more labor intensive than self-administered or telephone data collection Less appropriate for sensitive or threatening questions (respondents may not answer truthfully in person)	Obtain baseline data Determine message's reach, attention-getting ability Acquire self-reported information on behaviors, behavioral intentions, attitudes Test knowledge, comprehension
Central location intercept interviews	Potential respondents are approached in a public area by a trained interviewer and invited to participate in the survey. Usually conducted in a high-traffic area (e.g., mall, student union) or other area frequented by target population. Requires highly structured, pre-determined questions that primarily use multiple-choice or close-ended questions.	 Can connect with harder-to-reach respondents in locations convenient and comfortable for them Can be conducted quickly Cost-effective means of gathering data in relatively short time Increased number of respondents within intended population if appropriate location chosen Larger sample size than focus groups Eliminates group bias that is possible in focus groups 	 Requires interviewer training Quota sample, not probability sample Not appropriate for sensitive issues or potentially threatening questions Cannot easily probe for additional information (too time consuming) 	• Test program messages, materials

Research Method	Description	Pros	Cons	Common Uses
Written responses to requests for information (e.g., diaries, activity logs, anecdotal accounts)	Information is requested in a specific format from individuals implementing a program or from participants themselves. Information may relate to such issues as quality of program components or how components are used by target population.	 Can allow respondents more flexibility in their replies Can enable researchers to receive reports on behavior over time, rather than a "snapshot" 	 Requires considerable effort on respondents' parts Incoming data may be voluminous and challenging to code and compare Not appropriate for respondents who have poor writing 	 Track program implementation Learn what questions program participants had Learn what technical assistance was needed by program staff
Review of existing data (e.g., program registration rolls, grocery store receipt tapes, hospital discharge records)	A structured evaluation of information previously collected by local, state, or national agencies is undertaken. Existing sources of health data (statistics, tracking records, treatment patterns) may be available on the World Wide Web or through government agencies, local or university libraries, health departments, clinics or hospitals, police departments, schools, research or nonprofit organizations. Organizations may collect data not originally intended as health data, but useful nonetheless. Examples include grocery store receipts and event attendance records. Analysis of existing data is useful for all forms of evaluation	Use of existing data means less effort in data collection May be inexpensive if owner of data provides them at little or no cost Possible sources of data are plentiful	Diminished ability to control data points and data collection methods	Conduct needs assessment Track the number of people engaging in a behavior in a given locale (e.g., accessing free mammography screening services, purchasing sunscreen).

Research Method	Description	Pros	Cons	Common Uses
In-depth personal interviews	Qualitative data collection method involves less rigid question structure and interviewing style than quantitative methods.	 Can explore long or complex draft materials Can be effective with those of lower literacy Allows considerable opportunity to probe answers Allows for intensive investigation of individual thought, opinions, and attitudes 	Time consuming Requires level of trust between interviewer and respondent, especially when dealing with sensitive or threatening material Interviewer must be highly skilled in active listening, probing, and other interviewing skills Interviewer must be knowledgeable about and sensitive to a respondent's culture or frame of reference	 Develop concepts or messages Test long or complex draft materials Conduct a needs assessment.
Focus groups	This tool is a qualitative method of data collection wherein a skilled moderator facilitates discussion on a selected topic among 6 to 10 respondents, allowing them to respond spontaneously to the issues raised. Lasts for 60 to 90 minutes per session. For focus group research to be most valuable, the moderator must cover the research topics, establish an environment in which all points of view are welcome, and follow up on unexpected but potentially valuable topics that are raised.			

Research Method	Description	Pros	Cons	Common Uses
Face-to-face	When focus groups are conducted in person, participants and the moderator gather, usually around a table. Observers (members of the research team) sit behind a one-way mirror or unobtrusively back from the table and take notes. Groups may also be recorded by audio- or videotape.	Interaction in the group can help elicit in-depth thought and discussion Considerable opportunity to probe answers Can yield richer data than surveys about the complexities of audience's thinking and behavior In-person groups give moderator more opportunity to read nonverbal cues and use nonverbal cues to control the flow of discussion than in telephone focus groups Rapport can be fostered more easily among in-person groups than telephone groups	 Findings not generalizable Respondents may be concerned about lack of anonymity Can be labor intensive and expensive, especially if groups are conducted in multiple locations 	Explore complex topics with target audience prior to program (e.g., what helps/hinders healthy eating) Learn about feelings, motivators, past experiences related to a health topic Test concepts, message, materials, and artwork Can generate and test hypotheses.

Research Method	Description	Pros	Cons	Common Uses
By telephone	When focus groups are conducted by telephone, the moderator and participants speak by conference call with observers listening and taking notes. Telephone groups may be recorded by audiotape. Typically, 6 to 8 people participate.	Interaction in group can help elicit in-depth thought and discussion Considerable opportunity to probe answers Can yield richer data than surveys about the complexities of audience's thinking and behavior Telephone focus groups can be more easily convened than in-person groups when participants' occupations/lifestyles afford little free time (e.g., doctors, mayors); reduce travel burden on research staff; and can allow for broad geographic representation Allow for project staff and partners to listen from their homes or offices	 Findings not generalizable Respondents may be concerned about lack of anonymity Telephone groups tend to work best when participants have tangible materials to which they can respond (e.g., pre-testing materials). Long distance phone bills for groups can be expensive, especially if many people listen in Productive sessions by phone cannot usually be sustained more than 1 to 1½ hours 	Explore complex topics with target audience prior to program (e.g., what helps/hinders healthy eating) Learn about feelings, motivators, past experiences related to a health topic Test concepts, message, materials, and artwork Generate and test hypotheses.

Research Method	Description	Pros	Cons	Common Uses
Theater testing	Quantitative data is collected from a large group of respondents (generally 60-100 people per session) who respond to audio-visual materials (e.g., commercials, PSAs). Some messages shown are controls and others are being tested, allowing for a more "real life" assessment of message concepts. Respondents answer questionnaires or respond electronically means.	Can gather quantitative data from large group at once Data available immediately Showing "actual" audiovisual materials allows more realism than storyboards Using control messages allows more realism	 Significant production costs associated with making draft materials available to test Limited ability to ask open-ended questions Rely on technological equipment that may not be readily accessible 	Test audiovisual materials with many respondents at once
Observational studies	Individuals are observed in a natural setting with minimal observer interaction (e.g., observing shoppers in a grocery store to see if they are reading posted nutritional charts)	Can observe behaviors or program implementation directly	 Can be labor intensive; requires site visits Many behaviors and program activities not easily observed Presence of observer can alter behavior of those being observed Ethics of observing people without their knowledge may be questioned 	Counting people accessing a service Assessing the consistency with which a service is delivered (e.g., whether registration desk clerks mention a program to all potential participants) Observing whether skills (e.g., testing blood sugar) have been learned correctly Useful for observing behavior at baseline, during a program, and after it ends.

Research Method	Description	Pros	Cons	Common Uses
Readability testing	Estimates the educational level required for target population to adequately comprehend written materials (i.e., if a pamphlet's readability level is sixth grade, readers need to read at about the sixth grade level in order to comprehend the pamphlet Readability tests are available on many standard word processing packages or a test can easily be computed by hand.	• Inexpensive • Test can be performed very quickly	• "Rule of thumb" only, not predictive of readers' ability to understand content • Must be interpreted with caution because many additional factors can enhance or diminish comprehension of written material (e.g., the conceptual context of the material, reader's motivation or interest in the material, layout of concepts in a passage, use of graphics and symbols)	• Increase likelihood that materials will be comprehensible for those with lower literacy levels
Expert review	An analysis of program material or approaches is performed by individuals who are particularly knowledgeable in a content area. Reviewers may check such issues as scientific and technical accuracy or cultural appropriateness. Reviewers may be individuals such as medical research scientists, social workers, law enforcement officials, teachers, or community leaders.	• Inexpensive • Can help obtain support or "buy in" for your program	 Risk of experts seeking to take over or radically change program plans Can be challenging to reconcile differing viewpoints 	Obtain input prior to program design from experts in a health field or who have experience working with your target audience Ensure that your messages are scientifically accurate Test program materials (e.g., ensure materials are culturally appropriate).

Research Method	Description	Pros	Cons	Common Uses
Gatekeeper Review	The appropriateness of draft program material for a target audience is assessed by individuals who can facilitate, complicate, or deny access to target population (e.g., those who control distribution channels). Gatekeeper commitment may be necessary to ensure that a program will be implemented as planned.	 Inexpensive Can help obtain support or "buy in" for your program Can ensure and smooth access to target populations 	 Can cause setbacks if major revisions are needed (project staff can plan ahead and use formative research to avoid this) Obtaining cooperation and getting priority attention can be challenging if gatekeepers are not especially invested in the population 	Ensure that messages will be disseminated and program plans carried out by obtaining gatekeeper approval prior to program dissemination Obtain "buy in" from influential people who control distribution channels Ensure that products conform to gatekeeper agency policies and goals (e.g., television station regulations for PSAs)
Media tracking (print, audio, or audiovisual media)	Content communicated by mass media outlets (e.g., television, radio, billboard advertisements) is tracked and analyzed systematically. A professional service typically is hired to do the tracking if the range of media sources extends much beyond the local level.	 Allows tracking of media that can be influential for the target audience Allows health communicators to better understand patterns of media attention given their topic 	 Review of data is time consuming May require training of readers or video viewers if automated tracking is not used Print and video clipping services are expensive 	Conduct needs assessment Track changes in media treatment of a topic in response to an event or program Identify issues addressed by media channels that focus on program's target audience Discern whether media outlets are disseminating program messages as hoped or planned

Source: CDCynergy: Your health communication planning and evaluation tool. Version 1.0. Centers for Disease Control and Prevention; Office of Communication. July 1998.