2 Planning and Implementing Communication for Behavior Change

This chapter outlines the basic steps in planning and implementing CBC, with special reference to the World Bank project design, appraisal, and supervision steps. The planning and execution of these steps will be much more effective if *a communication/ behavior-change specialist comprises part of the project identification and project preparation teams*.

The process begins with a situational analysis and review of existing information to learn what key information is already available and what new research is required. *Formative research* on consumers', health workers', and/or policy-makers' perceptions and practices is intended to gain insights into the reasons people have for particular behaviors related to the nutrition or health problems the program will address. *Because the formative research part of the CBC process informs the design of overall project activities (including communication activities), it should ideally be conducted during the project preparation steps to ensure that key activities necessary for achieving the goals of the project are foreseen.*

Following formative research, *a CBC strategy* is formulated. It is desirable that by appraisal, initial decisions have been made on the *key behaviors*, target audiences and a draft *message strategy* for each, anticipated media, and plans for the development, pretesting, and production of *materials*.

The first steps of project execution include stakeholder meetings, finalizing the message strategy, completing and producing all materials and training staff in communication and other needed skills, and conducting a baseline. Then the program is *launched*, then *monitored*, and after two or more years, *evaluated* to assess impact, and guide decisions on continuing or expanding activities.

The table below provides an overlay of the steps in CBC planning, implementation, and evaluation, with the World Bank planning phases. Although the steps are numbered so that they can be referred to in the text below, projects, once underway, may not follow each step in the exact

Table 2. Overlay of World Bank Project Phases with Steps in Communication for Behavior Change

World Bank Project Phases	Steps in Communication for Behavior Change	Estimated Range of Time
Project Identification	1. Carry out communication situational analysis	2 weeks
	2. Determine broad CBC objectives based on overall project goals	1–2 weeks*
	3. Review existing information and analyze information gaps	4 weeks
Project Preparation	4. Complete assessment of institutional capabilities and decide on basic responsibilities	2 weeks
	5. Plan and conduct initial formative research	8–24 weeks
Pre-Appraisal / Appraisal	6. Complete initial formative research	4–24 weeks
	7. Design a comprehensive behavior-change strategy, including its communication component but also link to training needs, products, etc.	2 weeks
Project Implementation World Bank Supervision	8. Stakeholder meetings to complete behavior change strategy	2 weeks
	9. Assign responsibilities for materials preparation, training and remaining research, including monitoring and evaluation	2–4 weeks
	10. Prepare message and media plans; conduct additional formative research if needed	2–4 weeks
	11. Draft, pretest and finalize messages and materials	8–16 weeks
	12. Produce the CBC materials	8 weeks
	13. Prepare to implement communication and other components of the behavior-change strategy, including training	4–8 weeks*
	14. Plan, conduct, and analyze a baseline survey	8–16 weeks*
	15. Implement communication activities	1–4 years
	16. Monitor and adjust project activities	Ongoing / periodically
	17. Plan and conduct an impact evaluation	8–12 weeks
Project Completion	18. Disseminate project achievements and lessons learned	

*Usually done simultaneously with other steps

sequence presented. Nor will the CBC steps always fall into the World Bank phase indicated, although what is presented is desirable when feasible.

1. Carry Out a Communication Situational Analysis—2 weeks

Objective: To learn about potential resources and experiences that will assist new CBC activities.

During project identification, project planners should gather basic information relevant to CBC activities. This includes:

- Potential institutional arrangements for work on CBC and other project components, as well as institutional obstacles and bottlenecks to be avoided. Determine which agencies or divisions have the interest and capability (staff, financial, logistical) to carry out the required type of activities.

- Private-sector organizations that might be contracted for quantitative and survey research and for developing the communication materials.

- Information on securing air time and the approval process for the messages and materials, including the level of decentralized decision-making and budgeting.

- A review of recent and current programs and policies to determine experiences and prospects. Assess the structure, scope, and capabilities of communication-oriented groups, the media and their support institutions, and those organizations that will implement the program.

- Descriptions of CBC and other nutrition education programs that have been undertaken: their status, scope and impact.

- Official sector-related policies and strategies and the extent to which they support or hinder changes in key services or behaviors.

- Training, both health and communication-related.
- Lessons learned from CBC efforts relevant to this program.
- Other donors' interests/activities/resources relevant to the program.
- New government or other initiatives to tackle some of the key problems.

2. Determine Broad CBC Objectives—1–2 weeks, overlap with #1

Objective: To establish broad CBC targets to aim for and measure.

CBC objectives should be designed to support achievement of each of the overall program objectives. As mentioned above, ideally these objectives should be determined after new formative research has been conducted, but the reality is that in many cases broad objectives, that hopefully can be modified later, must be determined before the formative research is complete. A few observations on writing the objectives:

- The specificity of the objectives will depend on the level of development of existing programs. For example, CBC objectives for a micronutrient supplementation program might be more specific than for nutrition education effort to change feeding habits.
- It is best if the objectives can be time-bound and measurable, but it may be difficult to reach this level of specificity in the proposal stage. Most critical at this stage is that expectations for action at each program level be specified.
- One project may require multiple CBC objectives that encompass various health and nutrition activities. Do not limit CBC objectives at this stage. The challenge in designing the rest of the project is to find creative ways to link several objectives, for example, those related to policy advocacy, into an easily coordinated whole.

Box 3. Example of CBC Objectives By Role

Program Objective: Lower anemia prevalence in pregnant women

CBC advocacy objectives:

- Within the program's first six months, change policy from giving iron tablets only in the last trimester of pregnancy to the last two trimesters.
- By year 2, change policy to allow community distribution in addition to existing health center provision of iron tablets.

CBC objectives for improving services and their utilization:

- By end of year 2, 80% of pregnant women and their family members will be aware that iron tablets are available at local health centers and from village birth attendants.
- By year 3, village birth attendants in 75% of communities will be able to counsel pregnant women about anemia, iron-foliate tablets, side effects of the tablets, and how to overcome them.
- By year 3, 75% of pregnant women will state acceptance of obtaining pills from village birth attendants.
- By year 4, 80% of village birth attendants are supplying iron pills or referring pregnant women for iron supplements.

CBC objectives for promoting healthy behaviors:

- By year 2, 80% of pregnant women will be aware that anemia is a preventable condition during pregnancy and that they can take iron pills to prevent or cure it.
- By year 5, 70% of pregnant women will seek iron tablets by the fifth month of their pregnancy.
- By year 5, 90% of pregnant women taking iron tablets will return for a resupply of tablets every month.
- By year 5, 70% of pregnant women will take one tablet each day for at least three months.

- Unlike advocacy objectives for a national program, specific behavioral changes related to nutrition practices cannot be detailed at this proposal stage, but they can be notional. They will be specified later on the basis of formative research.

- The objectives should be targets against which project progress can be measured. Therefore, besides health or nutrition-related outcomes, they should also include process indicators related to policy changes, new management procedures and/or people trained.

3. Review Existing Information and Analyze Information Gaps—4 weeks

Objectives: Assess what is already known about behavioral issues related to the nutrition problems to be addressed, in order to guide the collection of new information.

- Study all available documents and interview key informants to establish what is known about behavioral aspects of the problem—current practices, reasons for them, barriers to change, and experiences in modifying behaviors. If available, qualitative or anthropological studies should be useful in specifying behaviors.

- Analyze gaps in the understanding of the nutrition or health problem and potential or proposed solutions.

4. Complete an Assessment of Institutional Capacities and Decide on Basic Responsibilities—2 weeks

Objective: Complete the assessment of institutional responsibilities for planning and managing CBC activities

This task is discussed in detail in Chapter 3.

5/6. Plan and Conduct Formative Research—12–36 weeks, depending on the geographical and technical scope of the project and the amount and nature of existing information.

Note: in the development of the project, several formative research studies may be needed. The more that can be done with the help of project preparation funds, the better, but it may not be possible to undertake the detailed work described here during preparation. Much detail is given here to provide an idea of what this step is about to distinguish it from the standard KAP (knowledge, attitudes, and practices) survey (which is *not* recommended). Someone on the project team must have a good understanding of qualitative research, and consultants will be needed.

Objectives: Plan and complete a mostly qualitative study of perceptions, experiences, and practices among mothers, health workers, and other relevant groups in order to establish the basis for defining the key behaviors, a message and media strategy and for training and orientation sessions for all program staff and collaborators.

- Develop a research protocol for new, mostly qualitative, research that will fill in missing information and guide a behavior-change strategy. The protocol specifies who will participate, what kind of information is needed, what methods will be used, and the sample (where and with whom it will be carried out).

- Assess institutional capabilities to carry out new research, and determine who will conduct it. Carry out selection and contracting, if necessary.

- Develop, pretest, and revise question and/or moderator guides and prepare a field plan for the study (responsibilities, schedules, etc.).

- Train research personnel.

- Conduct research (e.g., one or more of the following methods: in-depth interviews, focus group discussions, observation, recipe trials, trials of improved practices).

- Analyze findings of each research phase and use findings to design the following phase.

- Prepare a final formative research report with findings and implications for program activities.

Ideally, the formative research should be completed or at least begun during project preparation, since the findings should inform not only CBC but also the entire project strategy. It may be difficult for Task Managers to arrange funding for planning research at this stage. Possible strategies are to tap Japanese grants or other sources of planning support and/or to combine some of the research with the beneficiary assessment.

Research may be conducted by a research firm, university faculty and students, or government and NGO personnel, possibly with technical assistance in planning, training, and analysis. The objective is to obtain a detailed picture of what target groups, particularly mothers, do and why they do it, including their "lifestyle context" (how much control mothers feel they have, social expectations and pressures, major family and community influencers); how amenable practices are to change; what are the most important barriers to change and how they can be overcome; and what sources of information have the most impact on target audiences. To some extent, this formative research is similar to or can be an entry point to the beneficiary assessment, as recently introduced by the Bank (Rietbergen-McCracken and Narayan).

Where feasible and needed, the research should progress through several phases: exploratory research (mostly in-depth interviews and observations, possibly recipe trials), trials of improved practices (TIPs), and checking research (mostly focus group discussions, to confirm, enrich,

and possibly gauge the wider applicability of planners' tentative conclusions). Besides this Bank tool, several new manuals are available that describe this process; e.g., *Designing by Dialogue* and *Qualitative Research for Improving Breastfeeding Practices* (see bibliography).

Trials of improved practices (TIPs) are essential for planning a strategy to modify any repetitive nutrition-related practices in the home and are very useful for planning actions to promote changes in other types of practices. This methodology [detailed in *Designing by Dialogue* (Dicken) and found in Section D of the IMCI Adaptation Guide (WHO)] has been proposed for adaptation of the feeding recommendations prior to launching training for IMCI in a particular country. In the TIPs exercise, several visits are made to a small sample of carefully selected homes. On the first visit the researcher interviews a mother (or another person who may be responsible for an improved practice) in order to analyze her nutritional practices. On the second visit the researcher negotiates some specific changes in practices that the mother agrees to try for a fixed period (often a week or two).

Below is a portion of a worksheet for the second (negotiation) visit of TIPs in a project in Nigeria. Such a worksheet can be constructed once current nutrition practices and reasons for them are understood through a review of existing information and/or through new exploratory research.

At the end of the trial period, the final visit is made so the researcher can learn from the mother what she did or did not do and why, how she modified the agreement and why, what benefits she perceived, how she felt about the experience, what was easy or difficult, who gave her advice and what, her intention to continue the new practices, etc. This research activity can help avoid costly mistakes later, because planners can learn exactly what is feasible to whom and what messages and supportive activities are needed for success. Often, the program will decide to promote an improved practice that is feasible for most mothers, even though it is not the ideal behavior.

Box 4. Worksheet: Assessment and Counseling Guide for TIPs

Age Group 1: 0–less than 6 months
Problem #1: Child is not exclusively breastfed
Ideal Feeding Practices: Exclusive breastfeeding, frequently and on demand, day and night

Recommendations for Negotiation:

1. Stop giving feeds of water.

2. Stop giving feeds of milk, porridge or other foods.

3. Increase frequency of breastfeeding
   a. Feed more at night
   b. Feed more both day and night

4. Reduce frequency of other feeds.

Potential Motivations:

- Breast milk contains lots of water and won't be contaminated like unboiled water.

- Breast milk alone contains all needed nutrients for babies this age and avoids the cost, time, trouble and possible introduction of germs that supplements entail.

- The more you breastfeed, the more milk you will produce, so you'll always have enough to satisfy the baby; the more you breastfeed, the better the baby will grow; the more you breastfeed the less likely you will become pregnant too soon. The more you do this, the more you avoid the cost, time, trouble and possible introduction of germs that other foods bring.

The final research report should summarize the findings of all research phases and their implications for behaviors that will be recommended, likely resistances (obstacles or barriers), and motivational statements (appeals) for each segment of the target audience, as well as for improvements in planned services. An outline is provided below to indicate what the Task Manager should expect to see. The report should be a useful tool for the project in the general, not just for the CBC component and should be referred to periodically during program development so the words of the intended beneficiaries are remembered as new people join the team and advocate for particular activities.

Formative research should be a multi-step, learning process, not the simple application of one research method. The chart in Table 3 illustrates how, in one project, insights into various concepts changed during the course of formative research and pretesting. A Task Manager should ask about the formative research process and should see evidence that consumer needs have shaped the messages, materials, and media used by CBC.

7. Design a Comprehensive Behavior-Change Strategy—2 weeks

Objectives: To have all major project partners utilize the formative research findings, as well as previously available information, to define the behaviors that the project will promote—as well as communication activities, training, changes in legislation and norms, modifications in services, etc.—in order to overcome barriers to the target groups' carrying out the desired practices.

The final research report should be reviewed with appropriate government and World Bank authorities in order to develop a consensus on the problem and general guidelines for how to proceed. A two-to-three day workshop is normally the best way to do this. The product of this workshop is a strategy for changing key behaviors that impede better nutrition. The strategy includes communication activities as well as training, service modifica-

Box 5. General Outline for Final Formative Research Report

E**xecutive summary** (outline first and written last; 3–4 pages)

- Brief summary of the contents of the reports (may be all that some people read)
- Key recommendations and priorities for the program

Brief Summary of research methodology (1–2 pages)

- Purpose of the research and how the selected methods achieve that goal
- Basic steps of the research methods

Description of the population covered by the research (3–5 pages)

- Background description of aspects such as geography, demography, ethnicity, degree of urbanization, literacy, occupations, and income
- Types of people who participated in the study, such as mothers of children under three years old, fathers, and health workers
- Lifestyle context: general outlook on life , maternal and child caring roles, hopes for children, girl child discrimination, religious taboos, use of health care services

Description of current nutrition and health situation and practices related to the research topic, e.g. child feeding

- Nutrition and health status of the children in the study
- Summary of the practices related to breastfeeding, complementary feeding, transition to family diet, and feeding during illness, described by age and relevant sub-groups within the sample
- Comparison to previous studies
- Interpretation of the findings, emphasizing factors that need to be addressed in the program

Specific description of possible practice changes, motivations and constraints

- Description of the feeding practices, by age group, that are most possible to improve, how, and why
- Summary table of responses to recommendations tested with TIPs

Suggestions for a program strategy

- Key constraints that prevent mothers, families and communities from following optimal child feeding—include all factors: hygiene, child care, health information, lack of resources, seasonal availability of foods

Suggestions for a communication strategy

- Key constraints that prevent mothers or families from following optimal child feeding that include knowledge and attitudes and how they might be overcome
- Key phrases and ways to motivate improvements in child feeding
- Images of persons regarded as trusted sources of information on child feeding
- Access to various communication channels: interpersonal and mass media

Final recommendations for program design

- Priority feeding recommendations, messages and approaches that are suggested by the research results. This is a list against which the content of all the educational materials can be judged, to ensure that they reflect the expressed needs, attitudes and context of the consumers of the program.

Table 3. **Social Marketing of Vitamin A-Rich Foods:The Learning Process in West Sumatra, 1986–1987**

Issues	In-Depth Interviews and Focus Group Discussions (FGDs)	Household Trials (TIPs)	Message Strategy	Pretesting
Sources of vitamin A-rich foods	Lack of animal and fruit sources but green leafy vegetables (GLVs) readily available in markets and growing wild.	No new findings	In mass media, recommend several specific GLVs that are readily available and acceptable; in counseling materials also recommend papaya and mango.	This was well accepted, although mothers had trouble distinguishing GLVs from vegetables in general.
Main motivation to modify practices	No familiarity with vitamin A; some appreciation of vitamins as good for health and GLVs as good source of vitamins.	Consuming vitamins for better health was an effective motivation for eat-eating more GLVs.	Improve the "image" of GLVs, especially wild greens, as an absolutely essential food for good health.	Image of vegetables as full of vitamins and good for health well accepted but not for wild, free vegetables.
Authority figures / spokes-person	Doctors well-accepted as authorities although others have more contact with mothers.	Doctors were credible sources of advice on eating more GLVs.	On radio and posters, use doctor; nurse-midwife and others can say, "doctors say"; use Elly Kasim, popular regional singer, as spokesperson.	Elly Kasim excellent to create interest, but not credible as source of health / nutrition advice; this should come from doctor.
Frequency of consumption	Some GLVs, but not enough, commonly consumed by families.	All groups except 5–12 month olds increased consumption.	Recommend eating GLVs "every day, every meal" in specific quantities for various audience segments.	This concept was not well communicated in draft radio spots; it was decided to rely on counseling for communicating specific quantitative suggestions.
Fear of big baby / difficult delivery	The main reason for insufficient consumption of GLVs by pregnant women.	This resistance was easily overcome by doctor's advice.	Eating a small amount of GLVs at every meal essential for mothers' and babies' health; mothers feel healthier and stronger; doctors say will not cause big baby / difficult delivery.	Mothers readily believed the doctors' statements, a few even claiming that GLVs would make the delivery easier.

Digestibility	GLVs and oil considered hard to digest, especially for babies 5–12 months old.	This resistance was a major concern only for 5–12 month-olds and to some extent for all children re: wild vegetables.	Claim that GLVs cause no difficulty in digestion.	This claim given by doctor was readily believed.
Children don't like GLVs	Mothers claim this for children >12 months.	Emerged as a constraint for all children >5 months; reinforced by mothers' allowing children to choose their own food.	For 5–12 month olds, agree that it takes time for babies to accept new foods but mothers must perservere because GLVs are so important.	This claim in radio spot believed.
Inability to chew GLVs	Mothers claim this for one year-olds.	Not an issue, although new ones emerged (e.g. can't digest chilies).	Suggest adding GLVs, mashed or chopped, to child's normal food; also suggest giving without chilies or in sweet dish.	Ideas well-accepted
Monotony of regular consumption (every day, every meal)	Not an issue at this point.	Barrier for all children and also for pregnant and nursing mothers.	Enhance the value of GLVs; monotony will not be an issue if you use varied recipes/creative cooking.	Monotony remained a minor concern.
Availability of GLVs	Not an issue at this point.	Perceived unavailability of GLVs emerged as a major barrier—could be proxy for mothers' lack of time.	Worth the effort to do a little work each day to avoid major work of caring for sick child; on radio, recommend that older children help by hunting for GLVs.	Messages did not convince some mothers that GLVs were readily available.

(Adapted from Favin, M. et al. "Reducing Micronutrient Deficiencies: A Guide for Investigators and Program Planners" [draft, The Manoff Group])

tions, changes in policy or legislation, and any other actions needed to facilitate the desired behavior changes. This strategy workshop may be preliminary, among a small group, if it will and be repeated once the project is effective and all partners are identified (see Step 8).

During pre-appraisal and appraisal, it is critical to have the formative research to define the scope of major activities. If the research is left until after project appraisal, it is likely to identify key needed activities were not foreseen in project plans.

Below, Box 6 illustrates the need for a behavior change strategy that goes beyond communication activities in order to address the full range of barriers that emerge from the study of nutrition related behaviors. The comprehensiveness of this analysis shows why it is useful to all program consultants.

8. Stakeholder Meetings to Complete the Behavior-Change and CBC Strategy

Objective: Similar to objective for Step 7 above.

If the initial workshop was conducted with a limited number of project partners during project preparation, then another workshop, or series of workshops, should be conducted with the full array of project partners after the project is effective. These workshops are critical to achieving an appreciation for the behavioral dimension of program planning among the implementing partners. Spending time reaching a consensus on key activities avoids problems later when clearances are required for the communication materials. Two workshops are often helpful. The first can cover the general behavior-change strategy: the key behaviors and how to influence them through training, product development, policy reform, and service delivery changes. Program partners should “buy-in” by taking responsibility for actions that are not communication related. The second workshop is held with potential partners directly related with the communication activities.

9. Assign Responsibilities for Materials Preparation and Protesting—2–4 weeks

By this point in the process, the management unit (described in Chapter 3) must decide who will prepare and pretest materials. (Materials means print materials; scripts, story boards, or actual video or audio recordings; scripts or actual live performances.) Often this task is contracted out to a firm or individuals. This issue is discussed in detail in Chapter 3 and in Appendix E.

10. Prepare Message and Media Plans—2–4 weeks, may be simultaneous with #8

Objective: To provide detailed specifications regarding message content, media mix, reach and frequency objectives, phasing, schedules, and budget.

Message content and media plans are often suggested by the program management unit, perhaps working with consultants, but the actual messages and materials are often drafted by a contracted agency or individuals. It is helpful if the two groups can work together.

Tasks in this step are:

- Prepare a detailed message and media plan by audience. Planning for CBC should include a message strategy that describes target audience characteristics, message content and tone. The strategy should explain how each message will support a specific behavior change by explaining the behavior, including effective motivations, resolving resistance points, and presenting essential information clearly. It explains messages' broad motivational elements, such as use of authority figures or mothers' aspirations for their children. A media plan is developed with careful thought given to the audience, the type of message and the medium capable of conveying the message precisely, frequently and to those who need it.

Box 6. Typical Barriers to Selected Nutrition Behaviors

Behaviors	Some Typical Barriers
Exclusive breastfeeding for 6 months	• Mothers' lack of confidence in their ability to produce sufficient quantify and quality of their breast milk to meet baby's needs for food, drink and growth • Mothers' belief that they are not producing sufficient milk, often because of their own poor diet • Mothers' work outside the home • Breastfeeding problems (sore nipples, etc.) • Traditional beliefs (need for prelacteals, breast milk can pass on illness, etc.) • Lack of social support, strengthened by infant formula advertising • Poor advice from health workers
Initiate within one hour of birth	• Traditional beliefs on danger of feeding colostrum or that "milk has not come in" • Traditional practice of feeding prelacteals • Reinforcement of tradition by TBAs and grandmothers • Hospital norms and routines
Give frequent, on-demand feedings (including night feeds)	• Mothers' many duties, including work outside the home • Fear of crushing the baby if s/he sleeps with mother • No awareness that sucking stimulates milk production
6–11 months (most barriers applicable to 12–23 months also): Continue to feed substantial breast milk, introducing soft foods at around 6 months and mashed family foods at 9 months	• Some mothers introduce semisolids earlier if baby seems unsatisfied on liquid diet • Some mothers introduce semisolids much later, even in second year, for lack of awareness of need and ability of baby to digest • Poor advice from health workers
Do not feed watery foods	• Watery foods cheaper, easier to feed, fill baby's stomach • Mothers' think they are easy to digest, like breast milk • Mothers do not realize importance of food consistency in feeding enough calories and vitamins

Behaviors	Some Typical Barriers
Feed or add calorie or nutrient-defense foods such as oil, mashed nuts or seeds, fruit, vegetables, and animal products	• Traditional beliefs about foods that are difficult for baby to digest, hot and cold foods, etc. • Requires some extra time and work • Availability / cost of foods • Lack of information on baby's needs and feasible ways of meeting them
Feed 3 or 4 means of 150–200 calories each daily (plus healthy snacks and breast milk)	• Requires some extra time and work • Availability / cost of foods • Lack of information on baby's needs and feasible ways of meeting them
Practice good food hygiene re: food storage / reheating, hand washing, protection from flies, no bottles or pacifiers	• Limited or no belief / understanding of germ "theory" • Requires extra work, time, costs • Lack simple, feasible strategies for doing some of these practices • Lack of social support
Bring child for vitamin A supplement every 4–6 months	• Services not well promoted and / or reliable • Time, distance, cost, competing duties • Incomplete knowledge of benefits
Give a child vitamin A-fortified foods, if available	• May be more expensive than non-fortified food, especially if only available in sealed packages • Easier access to non-fortified food • Incomplete knowledge of benefits and / or false beliefs in dangers
Feed child and eat some source of vitamin A at each meal	• Some sources may be expensive, not considered appropriate or digestible by young children • Requires some extra time and work • Availability, particularly seasonally • Lack of information on baby's needs and feasible ways of meeting them • Monotony, lack of motivation / ideas for new food preparations or combinations

(Box continues on the following page.)

Box 6 *(continued)*

Behaviors	Some Typical Barriers
Bring a child with measles to a trained provider	• Measles hard to recognize, easy to confuse with other rashes • Traditional beliefs that measles is an essential event of childhood, that medicine should not interfere with its natural course • Times, distance, expense, poor experiences with health services, lack of confidence in health services
Continue breastfeeding and other feeding if the child is sick	• Child lacks appetite, becomes fussier eater • Mothers reluctant to insist since child already suffering • Beliefs in need to rest the gut or that milk or food could worsen illness
Give extra fluids if child has diarrhea or fever	• Child may not drink well because sick, uncomfortable • Mothers reluctant to insist since child already suffering • Beliefs in need to rest the gut or that milk or food could worsen illness
Use extra patience and persistence in feeding a sick child	• Mothers don't realize importance • Lack of time
Obtain iron tablets by the 2nd trimester of pregnancy	• Service barriers (time, distance, cost, hours, manner in which mothers treated) • Feeling that pregnancy is not illness, so no need to visit facility except late in pregnancy when want to know baby's position • Lack of confidence in services: that doctor will be there, tablets will be in stock • Unclear on tablets' purpose, not convinced of importance

Behaviors	Some Typical Barriers
Take them as directed (daily, between meals, with citrus drink, not with coffee or tea)	• Mothers may not be told clearly how to take tablets • May have trouble remembering to take daily without some strategy or reminder • May stop taking because of unpleasant side effects and lack of awareness that side effects diminish after a few days. • Citrus fruit may not always be available and coffee / tea more convenient, traditional
Store them as directed (protected from heat and humidity and from children)	• Mothers may not have been counseled on storage • May not have been given bag or bottle for storage
Handle side effects as counseled	• Mothers may not have been counseled on side effects • May not have understood or may not remember
Return for supply not want new supply	• May not have taken all of original supply or may • Lack of knowledge of importance of continuing to take tablets • Same barriers as for obtaining originally
Purchase and use only iodized salt	• May be more expensive than regular, especially if only available in sealed packages • People may be used to rock salt, reluctant to change without very strong reason. • Easier access to non-fortified salt • Incomplete knowledge of benefits and / or false beliefs in dangers
Add salt at table, not during cooking	• Mothers may not have been counseled on this • May not want to change traditional cooking methods.

- Negotiate arrangements for broadcasting, printing, distributing, and displaying materials with radio stations and other organizations.

- Review the plan with appropriate authorities.

The message strategy needs to be tailored for the audiences. It is important to note that messages promoting healthy behaviors may well need to address husbands, mothers-in-law, health workers, and others in addition to mothers. Husbands or others may need to approve or take actions in support of improving practices in the home, such as allotting pregnant women more-than-normal portions of food. Husbands may purchase most or all of the family food.

Health workers are usually another key target group for CBC, with the objectives of improving their attitudes (e.g., towards immediate postpartum breastfeeding) and skills (to help them cease incorrect and dangerous practices, effectively pass on essential information and advice, and teach essential skills). CBC activities aimed at health staff—including training, counseling materials, and technical information—contribute both to institutional strengthening and to improving services. Orientation packages for journalists and other media persons may also be needed depending on the extent of advocacy activities.

The ad agency or whoever prepares the messages should incorporate all necessary factual and motivational elements, while being *creative* in making them interesting and clear.

Part of the creative strategy is the image portrayed through a consistent tone conveyed by themes, logos, characters, and tag lines in all messages and materials.

Messages should be specific to the action needed, easy to understand, technically correct, and helpful in resolving the problem. The design should persuade people to view an idea from a new perspective. The

desired behaviors should be clear and specific. Motivations to follow the new practices can be emotional or rational. Messages need to be interesting and memorable and reinforced through various media. Information needed to facilitate the new behavior and combat attitudinal resistances is also essential. World Bank supervision visits should be used to review program messages and materials with the management unit to ensure that they are "on strategy," that is, consistent with the objectives and following good design discipline.

Perhaps the most difficult aspect of the above principles is that messages must be specific to be effective. It does little good to urge families to eat more vitamin A-rich foods or even more fruits and vegetables. Messages should suggest what foods, how much, how often, (possibly) how they can be prepared, and perhaps most importantly, *who within the family* needs the food. This specificity can only be achieved on the basis of good formative research, including household trials. While mass media can transmit concepts and general advise to various target groups, the specific information relevant to and feasible for a specific mother can only be communicated through individual counseling.

In deciding on the media mix, planners should consider: (a) each medium's coverage (reach) and the frequency with which it can give the message to each target audience; (b) the most appropriate media for various types of messages conveying them; (c) the impact or credibility each medium has with the various audiences; and (d) alternative media's relative costs. Appendix D provides some general guidelines on the use of various media.

The media plan should explain:

(a) the roles of each medium in the strategy (remind, instruct, give logistical information, create a new image, etc.), including mass media such as television, radio, and posters, and interpersonal media such as local health workers and mothers' clubs;

(b) how much and what segments of the audience each medium should reach; and

(c) the nature, distribution, or frequency of each.

The plan should cover support materials that will be provided to major print and broadcast media and to both public and private organizations working in nutrition, to minimize mothers' receiving conflicting messages. The media plan should be reviewed annually.

11. Draft, Pretest, and Finalize Messages and Materials—8–16 weeks

Objective: To design messages, and the materials that convey them, that are comprehensible, credible, culturally relevant, practical, and that dispose listeners to follow the advice given.

Once there are draft materials, they should first be reviewed and corrected for *technical* content. Then they should be pretested with their intended users and target audiences. Pretesting allows designers to improve key message attributes as well as to understand and be able to correct any negative reactions or other shortcomings. Basic steps are:

- Design the research protocol.
- Develop, test, and revise pretest instruments.
- Train the field team.
- Conduct pretests.
- Analyze results and recommend changes in the draft messages and materials.

Both quantitative (close-ended) questionnaires and qualitative methods (in-depth interviews and focus group discussions) can be used. A quanti-

tative opinion survey requires a much larger sample, but the statistical findings may facilitate decisions. More in-depth methods with a smaller sample, however, are better able to probe at deeper attitudes toward the acceptability of messages and likelihood that they will cause the audiences to modify their practices. While the creative aspects of the materials are an obvious aspect to pretest, the content or the "call for action" should also be probed. Any attractive material that is not compelling in content should not be accepted.

Mothers, influencers (husbands, mothers-in-law, local authorities) and health workers should all be queried. Counseling aids for interpersonal communicators (health or nutrition workers) must be tested carefully with both the workers and the mothers they counsel. If the program intends to use different sets of materials for different cultural/language groups, each set must be pretested with its audience. It is often most practical to fully develop and test one set first. It can then be adapted and pretested less intensively with new groups.

Based on the pretest findings, messages and materials should be revised. If major revisions are required, the revised materials should also be pretested. The revised messages should be reviewed by the management unit, which should consult with superior officials if they are unsure of any aspects.

Deciding which audience opinions to follow is not necessarily easy. If it is not clear which way to go on a decision, it is fine to test two versions of a message or material with its intended audience to see which is more effective.

12. Produce the CBC Materials and Buy Media Time—8 weeks

Objective: To produce or reproduce the actual CBC materials and arrange for slots for broadcast materials.

Materials include those for the main targets of CBC as well as information/educational materials for policy makers, journalists, teachers, health workers, traditional birth attendants, NGO personnel, and anyone else who is communicating the messages. Producing radio, television, drama and other materials and reproducing print materials is often done in stages, as the materials are needed throughout project implementation.

At or near this point in the process, if radio and television are included among the media, either the ministry's public relations or health education units or, more commonly, an advertising firm subcontracted by the project will need to come to an agreement with broadcast companies on time slots and costs. Even if free time is available on government stations, the time slots given are often not ones that will reach a good percentage of the target audience, so it is worthwhile purchasing some additional slots. It may be possible to obtain a significant discount on media time by guaranteeing to stations a certain level of purchase over several months, and stations may simply grant lower-than-normal prices because of the social nature of the messages. Advertising firms normally have established relations that may yield a good value for mass media purchases. Working with ad firms is discussed in Appendix E.

13. Prepare to Implement Communication and Other Components of the Behavior-Change Strategy—4–8 weeks

Objectives: To ensure that communication and other components (supplies and services) of the behavior-change strategy are in sync; to ensure that people are trained, materials are distributed, and ongoing management and monitoring of CBC are well planned.

As described above, achieving needed changes in practices may be solely in the realm of CBC, but often communication must be complemented by changes in policies, technical training, improvements in service delivery, or even a new product such as a child-feeding bowl with

food quantities marked. Since these complementary activities are often outside of the direct control of the communication manager, it may be difficult to coordinate their timing with CBC, but this may be critical for project success. The communication manager should maintain close contact with persons responsible for other project components, beginning at the strategy formulation workshop. All collaborating public and private organizations should be familiar with the objectives, strategies, and messages of the CBC activities and with their respective responsibilities in helping to ensure their success. At this stage certain CBC activities may be halted if other activities such as supplement supply are not ready.

Training interpersonal communicators is often a critical preparatory step. Health workers (or community volunteers, storekeepers, teachers, etc.) often play a key role in turning general messages given via mass media into actions that are relevant and doable for individual mothers. Besides acquiring new technical and counseling skills, health and nutrition staff need to become excited about the program so they can become an effective "sales force" for the desired practices. Their training typically includes a review of technical information and skills, an orientation to the project (behavior-change objectives, media, and messages, and their role in CBC), and motivation and practice in how to counsel groups and individuals and how to use counseling cards or other communication aids. This training—and good follow-up through supervision, monitoring, and in-service training—is often a key determinant of CBC success. Look for detailed training plans in the project.

14. Plan, Conduct, and Analyze a Baseline Survey—8–16 weeks, simultaneous with other activities

Objective: To quantitatively establish the position of the target audience in order to measure their exposure to messages and changes in the most important perceptions and practices that the CBC strategy has targeted.

If the project also has a service-delivery component, then key indicators of these activities should also be included. Basic steps are:

- Decide who will do it (see Chapter 3)
- Determine the sampling frame.
- Design the survey instrument.
- Pretest and revise the survey instrument.
- Prepare the field work plan (responsibilities, schedules, supervision, etc.)
- Conduct the survey.
- Analyze the findings.
- Write the report, including any significant implications for project materials or activities.

This survey comes *at the end of the preparatory phase* for several reasons. Most importantly, it is only after the message strategy and media plans have been completed that the specific project strategy and behavioral objectives are clear, so a baseline survey can thus be designed to provide quantitative data on the specifics of the program. It is a mistake to do the baseline too early because indicators will not be precise enough for sound program associations. Evaluation is discussed in more detail in Chapter 3.

15. Implement CBC Activities—1–4 years (longer if institutional capability will be built.)

Objective: To communicate messages through the indicated media that, in conjunction with other project activities, will lead to the desired behavior changes.

At the beginning of implementation and as each component is readied, there should be a highly publicized launch event, attended by persons involved in the project as well as politicians, print and television reporters, and if relevant, popular personalities. Within a month or two of the launch an initial monitoring should take place and local events planned to kick-off action. Following this there should be frequent supervision of CBC activities and ongoing monitoring of radio broadcasts and other regularly scheduled activities (see Chapter 3).

A common problem at the beginning of implementation is that several key elements may be out of sync. Some of the materials may be ready but not others. Not all of the health workers may have received training nor may all policies governing for example, vitamin A or iron been approved. Yet some political imperative forces the program to be launched anyway. Such a situation should be avoided if at all possible, since the mutual reinforcement offered by several media is very important to promote the new practices and move toward making them a social norm. If a service or product is not available yet, try to alter the launch so that it is more about the key concepts than the services.

During implementation, the manager must balance activities conducted by the central office with those conducted by states, districts, or communities. Even if the activities done at the local level appear less “professional,” they should be encouraged and supported, because their contribution can be very valuable in terms of ownership and relevancy, contributing to project sustainability.

A major challenge will be keeping program plans current to ensure that adequate provisions are requested in the annual ministry budgets. Here careful planning is required on two fronts: 1) project expansion (scale-up) and 2) shifting needs. But, if the next activity (#16) is undertaken seriously, this should be possible.

16. Monitor and Adjust Project Activities—ongoing and periodic

Objective: To routinely monitor that planned activities are taking place and to assess periodically the coverage of the CBC messages and the audiences' awareness, recall of them and action, so that strategic modifications can be made as needed.

The management unit and/or contractors should routinely monitor the distribution of materials, training of health workers, mass media broadcasts, etc. In addition, there should be special monitoring studies to assess the amount of contact the audience(s) has had with the message and whether it has had any impact. The basic steps are:

- Prepare a monitoring plan, including the sampling plan, and instruments.
- Conduct a study approximately every 6 months.
- Analyze the findings.
- Make needed program modifications.

These studies can be quantitative and/or qualitative in nature (see Chapter 3). The types of program modifications they may indicate changing priorities among target audiences, modifying messages, retraining of health workers, changing the weight of various media, and improving services in some specific ways. It is critical to remember that perceptions and practices are not static. The types of messages needed to initiate a behavior may be different from those to sustain one, so as people begin to try a new practice their message needs shift. Task Managers should inquire about monitoring and mid-project corrections.

17. Plan, Conduct, and Analyze a Project Evaluation— 8–12 weeks, simultaneous with other activities

Objective: To determine the extent to which the CBC activities have achieved their objectives.

The basic steps are:

- Review the baseline research plan and instrument and decide on any useful modifications.
- Train field investigators
- Conduct field research.
- Analyze the results and compare them with those of the baseline survey.
- Write a report.

This is essentially a repeat of the baseline survey, with additional questions on exposure, familiarity with the project materials and messages, and, possibly, more detail on the questions about the program's key behaviors. To obtain an accurate measure of changes in nutrition practices, it may be necessary to carry out this survey at the same time of the year when the baseline survey was conducted. Along with the monitoring studies, this survey should explain both the success of the project in exposing mothers and other target groups to the messages and the impact of messages on targeted perceptions and practices. Too few projects carry out such an evaluation, yet it is critical to program sustainability, and to enhanced learning. Ideally, evaluation findings should be used to design improvements in the behavior-change strategy, messages, and materials in the same or a follow-on project and to justify funding. The task manager may want to have a consultant on a supervision mission to advise on the evaluation and interpreting its findings.

18. Disseminate Project Achievements and Lessons Learned

Well planned, executed, and evaluated CBC projects or project components remain relatively rare. When one exists, its experiences and results should be analyzed and disseminated for the benefit of the government, the World Bank, and the international nutrition and public health community. This process can also justify modification or expansion of the original project.