

Demand Generation for Reproductive, Maternal, Newborn and Child Health Commodities

AN ADAPTABLE COMMUNICATION STRATEGY FOR AMOXICILLIN

JULY 2014









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Acronyms

ACT Artemisinin-based combination therapy

CBO Community-based organization

CCP Johns Hopkins Center for Communication Programs

CHW Community health worker

DHS Demographic and Health Surveys

DT Dispersable tablet

EWEC Every Woman Every Child

GAPPD Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea

HC3 Health Communication Capacity Collaborative

ICT Information and communication technology

IPC Interpersonal communication

M&E Monitoring and evaluation

MDG Millennium Development Goal

MICS Multiple Indicator Cluster Survey

MoH Ministry of Health

NGO Non-governmental organization

PPP Public-private partnership

RMNCH Reproductive, maternal, newborn and child health

SBCC Social and behavior change communication

SM Social marketing

SMS Short message service

UN United Nations

UNCoLSC United Nations Commission on Life-Saving Commodities for Women's and Children's Health

UNICEF United Nations Children's Fund

USAID U.S. Agency for International Development

WHO World Health Organization

Introduction

Aim

To provide step-by-step guidance and illustrative content in creating a communication strategy to generate demand for **amoxicillin** to treat childhood pneumonia.

Intended User

This Adaptable Communication Strategy (the Strategy) is designed to be useful to multiple audiences, including staff from ministries of health, non-governmental organizations (NGOs) and community-based organizations (CBOs). The Strategy can support the efforts of communication professionals working directly on behavior change communication programs, as well as other professionals working in reproductive, maternal, newborn and child health (RMNCH) who need to create a demand generation component to support program activities.

What is a Communication Strategy?

A communication strategy provides a "road map" for local action targeted at behavior change and creates a consistent voice for the messages, materials and activities developed. It also ensures that activities and products work together to achieve the program goal and objectives. The final communication strategy should be used to guide content development of program materials, such as advocacy briefs, client leaflets, and job aides and tools for health providers, thereby ensuring consistent positioning and messaging across all activities.

The communication strategy, however, is not a static product. It must be responsive to an ever-changing environment. Adaptations may be necessary in order to respond to new research findings and data, unexpected events, changing priorities or unforeseen results. Communication strategies are essential in addressing priority or emergent health issues and allow for harmonization of priorities, approaches and messages among all the relevant organizations and stakeholders.

How to Use this Adaptable Communication Strategy

This Strategy forms part of a comprehensive Demand Generation Implementation Kit for Underutilized, Lifesaving Commodities in RMNCH (the I-Kit) (http://sbccimplementationkits.org/demandrmnch). The I-Kit includes commodity-specific communication strategies designed to be easily adapted across multiple country contexts and integrated into existing RMNCH plans. The I-Kit also includes resources on four core cross-cutting demand generation areas: addressing the role of gender, a theory-based framework for media selection, utilizing information and communication technologies (ICTs) and new media, and leveraging public-private partnerships (PPPs).

This Strategy is not intended to serve as a "one-size-fits-all" model. It is designed as a quick-start foundation based on available evidence to provide guidance in answering the following questions:

- · Where are we now?
- · What is our vision?
- · How are we going to achieve our vision?
- How do we know we achieved our vision?

Ideally, country-level teams would then integrate commodity-specific content tailored to the country context into existing or new RMNCH communication strategies for demand generation.

It is important to note that the strategy focuses on communication—typically, the product promotion component of a social marketing approach. If desired, the strategy can be integrated and expanded into a broader social marketing framework, addressing product, price and place.

Thirteen Lifesaving Commodities for Women and Children

In 2010, the United Nations (UN) Secretary-General's Global Strategy for Women's and Children's Health (the Global Strategy) highlighted the impact that a lack of access to lifesaving commodities has on the health of women and children around the world. The Global Strategy called on the global community to save 16 million lives by 2015 by increasing access to and appropriate use of essential medicines, medical devices and health supplies that effectively address the leading avoidable causes of death during pregnancy, childbirth and childhood. Under the Every Woman Every Child (EWEC) movement, and in support of the Global Strategy and the Millennium Development Goals (MDGs) 4 and 5, the UN Commission on Lifesaving Commodities (UNCoLSC) for Women's and Children's Health (the Commission)

was formed in 2012 to catalyze and accelerate reduction in mortality rates of both women and children. The Commission identified 13 overlooked lifesaving commodities across the RMNCH "Continuum of Care" that, if more widely accessed and properly used, could save the lives of more than six million¹ women and children. For additional background information on the Commission, please refer to http://www.everywomaneverychild.org/resources/un-commission-on-life-saving-commodities.

Figure 1: 13 Lifesaving Commodities

Prevent newborn sepsis: WHO

recommends benzlypenicillin

and gentamicin, in separate injections, as first-line therapy

for presumptive treatment in

newborns at risk of bacterial

infection.

Prevent pre-term RDS:

term labor.

Antenatal corticosteroids are

are at risk of preterm delivery

to prevent respiratory distress

syndrome in babies born in pre-

given to pregnant women who

Reproductive Health Female Condoms Contraceptive Implants Emergency Contraception Prevent HIV and unintended pregnancy: Prevent unintended pregnancy: Prevent unintended pregnancy: The A female condom (FC) is a plastic pouch Contraceptive implants are small, thin, emergency contraceptive pill is the most made of polyurethane that covers the cervix, flexible plastic rods inserted into a woman's widely available emergency contraceptive in vagina and part of the external genitals. FCs arm that release a progestin hormone into developing countries. It is optimally taken in provide dual protection by preventing STI the body. These safe, highly effective, and one dose of 1.5mg as soon as possible after infection, including HIV, and unintended quickly reversible contraceptives prevent sexual activity. An alternative product of pregnancies. pregnancy for three to five years. 0.75mg is also widely available. **Maternal Health** Oxytocin Misoprostol **Magnesium Sulfate** Eclampsia and severe pre-eclampsia: WHO Post-partum hemorrhage: WHO Post-partum hemorrhage: In settings recommends oxytocin as the uterotonic of where skilled birth attendants are not recommends MgSO4 as the most effective present and oxytocin is unavailable, treatment for women with eclampsia and choice for prevention and management of postpartum hemorrhage. misoprostol (600 micrograms orally) is severe pre-eclampsia. recommended. **Child Health Amoxicillin Oral Rehydration Salts** Diarrhea: Oral rehydration salts (ORS) is a **Pneumonia:** Amoxicillin is an antibiotic that Diarrhea: Replenishment with zinc can is used to treat pneumonia in children under glucose-electrolyte solution given orally to reduce the duration and severity of diarrheal prevent dehydration from diarrhea. ORS is five. Amoxicillin is prepared in 250mg scored, episodes. Zinc is prepared either in 20mg dispersible tablet (DT) in a blister pack of 10 packaged in sachets of powder to be diluted scored, taste masked, dispersible tablets or in 200 ml, 500 ml or 1 liter of fluid, prepared oral solutions at concentration of 10mg/5ml. to an appropriate flavor. **Newborn Health Injectable Antibiotics** Chlorhexidine **Resuscitation Device Antenatal** Corticosteroids

Prevent umbilical cord

infection: Chlorhexidine

digluconate is a low-cost

antiseptic for care of the

umbilical cord stump that is

effective against neonatal

infections.

Treat asphyxia: Birth asphyxia,

or the failure of a newborn to

start breathing after birth, can

be treated with resuscitation

devices.

Demand Generation: An Overview

What is Demand Generation?

Demand generation increases awareness of and demand for health products or services among an intended audience through social and behavior change communication (SBCC) and social marketing (SM) techniques. Demand generation can occur in three ways:

- Creating new users—convincing members of the intended audience to adopt new behaviors, products or services.
- Increasing demand among existing users convincing current users to increase or sustain the practice of the promoted behavior and/or to increase or sustain the use of promoted products or services.
- Taking market share from competing behaviors (e.g., convincing caregivers to seek health care immediately, instead of not seeking care until their health situation has severely deteriorated or has been compromised) and products or services (e.g., convincing caregivers to use oral rehydration salts [ORS]) and zinc instead of other anti-diarrheal medicines).

When well designed and implemented, demand generation programs can help countries reach the goal of increased utilization of the commodities by:

- Creating informed and voluntary demand for health commodities and services.
- Helping health care providers and clients interact with each other in an effective manner.

- Shifting social and cultural norms that can influence individual and collective behavior related to commodity uptake.
- Encouraging correct and appropriate use of commodities by individuals and service providers alike.

In order to be most effective, demand generation efforts should be matched with efforts to improve logistics and expand services, increase access to commodities, and train and equip providers, in order to meet increased demand for products and/or services. Without these simultaneous improvements, the intended audience may become discouraged and demand could then decrease. Therefore, it is highly advisable to coordinate and collaborate with appropriate partners when forming demand generation communication strategies and programs.

Who are the Audiences of Demand Generation Programs for the 13 Lifesaving Commodities?

Reducing maternal and child morbidity and mortality through increased demand for and use of RMNCH commodities depends on the collaboration of households, communities and societies, including mothers, fathers and other family members, community- and facility-based health workers, leaders and policy makers. Some of the commodities are more provider-focused in terms of demand and utilization, but all depend on the care-seeking behaviors of women and families.

Figure 2: Audiences of Demand Generation

Provider-focused	Provider and End-user
☐ Oxytocin	☐ Female condoms
☐ Magnesium sulfate	☐ Implants
☐ Injectable antibiotics	☐ Emergency contraception
☐ Antenatal corticosteroids	☐ Misoprostol
☐ Resuscitation equipment	☐ Chlorhexidine
☐ Amoxicillin	□ ORS
	☐ Zinc

Key Concepts and Definitions in Demand Generation

Social and Behavior Change Communication (SBCC). SBCC promotes and facilitates behavior change and supports broader social change for the purpose of improving health outcomes. SBCC is guided by a comprehensive ecological theory that incorporates both individual-level change and change at the family, community, environmental and structural levels. A strategic SBCC approach follows a systematic process to analyze a problem in order to define key barriers and motivators to change, and then design and implement a comprehensive set of interventions to support and encourage positive behaviors. A communication strategy provides the guiding design for SBCC campaigns and interventions, ensuring communication objectives are set, intended audiences are identified and consistent messages are determined for all materials and activities.

Social Marketing (SM). SM seeks to develop and integrate marketing concepts (product, price, place and promotion) with other approaches to influence behaviors that benefit individuals and communities for the greater social good. (http://socialmarketing.blogs.com/r_craiig_lefebvres_social/2013/10/a-consensus-definition-of-social-marketing.html)

Channels and Approaches

Advocacy. Advocacy processes operate at the political, social and individual levels and work to mobilize resources and political and social commitment for social and/or policy change. Advocacy aims to create an enabling environment to encourage equitable resource allocation and to remove barriers to policy implementation.

Community Mobilization. Community mobilization is a capacity-building process through which individuals, groups or organizations design, conduct and evaluate activities on a participatory and sustained basis. Successful community mobilization works to solve problems at the community level by increasing the ability of communities to successfully identify and address their needs.

Entertainment Education. Entertainment education is a research-based communication process or strategy of deliberately designing and implementing entertaining educational programs that capture audience attention in order to increase knowledge about a social issue, create favorable attitudes, shift social norms and change behavior.

Information and Communication Technologies (ICTs). ICTs refer to electronic and digital technologies that enable communication and promote the interactive exchange of information. ICTs are a type of media, which include mobile and smart phones, short message service (SMS), and social media, such as Facebook and Twitter.

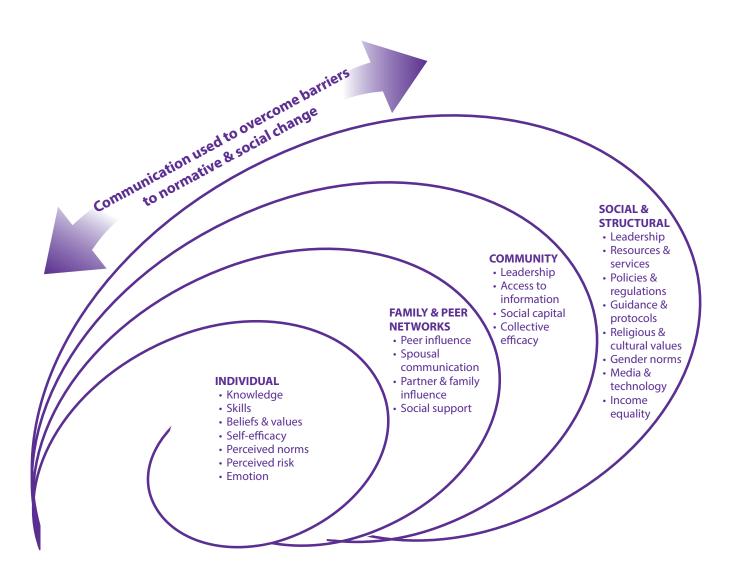
Interpersonal Communication (IPC). IPC is based on one-to-one communication, including, for example, parent-child communication, peer-to-peer communication, counselor-client communication or communication with a community or religious leader.

Mass and Traditional Media. Mass media reaches audiences through radio, television and newspaper formats. Traditional media is usually implemented within community settings and includes drama, puppet shows, music and dance. Media campaigns that follow the principles of effective campaign design and are well executed can have a significant effect on health knowledge, beliefs, attitudes and behaviors.

Conceptual Framework

This Strategy uses the social ecological framework to guide its strategic design. This model recognizes that behaviors related to demand for care and treatment take place within a complex web of social and cultural influences and views individuals as nested within a system of sociocultural relationships—families, social networks, communities, nations—that are influenced by and have influence on their physical environments (Bronfenbrenner, 1979; Kincaid, Figueroa, Storey,

& Underwood, 2007). Within this framework, individuals' decisions and behaviors, relating to an increase in demand and utilization, are understood to depend on their own characteristics, as well as the social and environmental contexts within which they live. Applying this model in each stage of the communication strategy development helps to ensure that all determinants of behavior are considered and addressed.



Adaptable Communication Strategy: Structure and Guidance

This strategy presents a six-step process to guide country-level adaptation based on local situation analysis and formative research:

Step 1	Analyze the Situation
Step 2	Define a Vision
Step 3	Choose Intended Audiences
Step 4	Select Key Messages
Step 5	Determine Activities and Interventions
Step 6	Plan for Monitoring and Evaluation

Explanations of each step begin below. Illustrative content for each step is provided in the following section.

Who Should Be Involved in Strategy Development?

Developing a communication strategy typically involves convening a group of stakeholders—ideally including representatives of the government, health area experts, marketing or communication specialists, and members of intended audiences—to review existing data, identify key audiences, and develop messaging and appropriate communication channels. Other potential partners may include private sector representatives for the formation of public-private partnerships, which can be used to strengthen a demand generation program, based on the needs and opportunities within an individual country context.

Step 1: Analyze the Situation

What is a situation analysis?

The situation analysis focuses on gaining a deeper understanding of the challenges and barriers to address within a specific context that influence the current demand and utilization of a priority RMNCH commodity, including those affected and their perceived needs, social and cultural norms, potential constraints on and facilitators for individual and collective change, and media access and use by the intended audiences. It also examines the status of the lifesaving commodity, including relevant policies, regulations, manufacturing, prices, supply chains, availability, level of knowledge (provider and end user) and level of use (provider and end user). In short, the situation analysis answers the question: "Where are we now?"

The situation analysis should also examine the attitudes, values, interests, aspirations and lifestyle of the intended audiences. This information, called psychographics, allows for a better understanding of what motivates and what hinders the intended audiences' decisions and actions. Psychographics provide character sketches of the intended audiences that go beyond demographic information (sex, age, education, parity, etc.) and help to build a fuller picture of the audiences as individuals and how they may be nested within and influenced by their community.

Why conduct a situation analysis?

A comprehensive situation analysis is essential as it provides a detailed picture of the current state of the commodity, needs and barriers, which will direct the design and implementation decisions of the strategy and ultimately affect the level of success in generating demand and use.

How to conduct a situation analysis

As noted above, conducting a situation analysis typically involves convening a group of stakeholders and reviewing existing data in order to identify key information. A global synthesis of evidence conducted for each of the 13 underutilized commodities can provide a global view of available information and lessons learned from other country contexts (available at http://sbccimplementationkits. org/demandrmnch/evidence-synthesis). Additional sources of country-specific secondary data may include Demographic and Health Surveys (DHS) (http://www.measuredhs.com/), Multiple Indicator Cluster Surveys (MICS) (http://www.unicef.org/ statistics/index_24302.html), quantitative and qualitative research conducted by NGOs, or private sector market research, where available, such as Nielson (http://www.nielsen.com/us/en.html). RMNCH policies and guidelines also may assist in analyzing the situation.

If existing data, particularly on social and behavioral drivers and psychographics, is not sufficient, outdated or does not provide enough insight into priority audiences, it may be necessary to conduct additional primary formative research in the form of focus groups, interviews or informal visits to communities and homes. For all provider audiences, it may be especially important to conduct formative research around provider attitudes and other drivers to provider behavior. Similarly, for all audiences (providers and end users), it may be especially important to conduct formative research to develop realistic psychographics.

What are the key questions?

The situation analysis has two main sections:

- Health and Commodity Context
- Audience and Communication Analysis

Health and Commodity Context

Below is an example of a set of questions to consider when analyzing the health and commodity-specific context relevant to amoxicillin:

- What is the rate of pneumonia (respiratory infections) in children under five?
- What is the mortality rate from pneumonia in

- children under five?
- What proportion of pneumonia cases in children under five currently receive amoxicillin?
- What are the primary treatments or medicines prescribed for childhood pneumonia?
- Do Ministry of Health guidelines include amoxicillin for treatment of childhood pneumonia?
- Is amoxicillin easily available in country? What is the availability of amoxicillin by region/district?
- Is amoxicillin available in the public sector? Does the public sector have a regular, uninterrupted supply of amoxicillin?
- What is the price of amoxicillin in the private and public sector?
- Is dispersible amoxicillin registered in country?
 What brands? What is the cost? If not registered,
 what is the registration process—e.g., time,
 requirements?
- What regulations or policies govern supply, distribution and availability of amoxicillin? How may these affect demand or access?
- What level of provider (e.g., doctor, nurse, pharmacist, community health worker, etc.) is permitted to prescribe/dispense amoxicillin?

Audience and Communication Analysis

Below is an example of a set of questions to consider when conducting audience and communication analysis:

Knowledge and Attitudes

- What proportion of caregivers knows the signs and symptoms of childhood pneumonia? Do caregivers know/believe that childhood pneumonia can be treated with antibiotics?
- What proportion of caregivers seeks care at the first sign/symptom? Typically, what are the reasons for delay in treatment seeking?
- What proportion of providers (clinical, non-clinical, community-based) recognize the signs/symptoms of childhood pneumonia?
- What proportion of providers knows the correct treatment for childhood pneumonia?
- What barriers do caregivers face in seeking treatment/receiving treatment; do other influencing audiences, such as mothers-in-laws and community leaders, pose barriers to seeking treatment?
- Are there common misconceptions or misinformation about childhood pneumonia?

Normative and Structural Considerations

- Are caregivers likely to seek treatment first from a provider who is authorized to prescribe/dispense amoxicillin?
- Is malaria endemic? Where is malaria diagnosed and treated?

Service Provision

- What proportion of childhood pneumonia is treated by the private sector and public sector?
 What are the perceived barriers and benefits to accessing services in each sector?
- How likely is a caregiver who seeks treatment to receive correct treatment for childhood pneumonia? (Correct diagnosis, prescription drug, dosage and duration?)

Media and Communication

- Do caregivers have information on and/or correct knowledge or beliefs about the causes and treatment of childhood pneumonia?
- Through what channels (including media and interpersonal communication) do providers and caregivers (and influencing audiences) prefer to receive health-related information?
- What channels can support the level of communication needed to increase knowledge of childhood pneumonia and demand for amoxicillin?
- What communication materials and programs already exist related to childhood illnesses? Childhood pneumonia?
- What is the technical and organizational capacity of media partners?

Psychographics

- What do providers and caregivers value? What are their core beliefs?
- Who and what influences providers and caregivers' decisions and behaviors?
- What dreams do providers and caregivers have?
 What do they aspire to in life? What dreams do they have for their child(ren)?
- What are providers' and caregivers' biggest worries? What fears keep them up at night?
- How do providers and caregivers spend their days? Where do they go? What do they do? What are their hobbies and habits?
- How do providers and caregivers perceive themselves? How do they want to be perceived by others?

How to use the situation analysis

After conducting a situation analysis, program managers should be able to identify the key implications or challenges from the data. What are the reasons that amoxicillin is not being utilized? What do potential users—end user, health care providers and health educators—believe about the commodity? Finally, select only a few key factors that the demand generation strategy will address. While it is tempting to address all factors, communications programs will be more successful if they focus on the top few factors that will have the biggest impact given available resources.

It can be helpful to organize the collected information—in order to distill the most important information—using a simple table organized by intended audience, such as the one below.

	Current Behaviors	Primary Barriers to Desired Behavior	Primary Benefits of Desired Behavior
End user/ community members (e.g. women, men, caregivers)			
Providers (including public and private, clinic- and community- based)			

In order to maintain an actionable focus throughout the strategy design, it is also helpful to synthesize the implications of this information. Population Services International's Global Social Marketing Department offers the following series of questions to guide the development of a situation analysis and the selection of strategic priorities to be addressed by the demand generation strategy:

What?	So What?	Now What?
Data Collection: Key facts collected during the situation analysis.	Data Analysis: Possible implications that the facts may have on the demand generation strategies.	Strategic Priorities: Identify which implications to address in the demand generation strategy. Limit to three to five strategic priorities in order to focus the plan.
Example from Somaliland:		
Caregivers seek treatment for childhood pneumonia first from pharmacies and get treatment advice from pharmacists. Mothers stop giving the medicine once their child feels better, even if they have not completed the dose.	Interviews indicated that pharmacists lack knowledge of the correct treatment (drug, dose, and duration). Pharmacists report that they offer the medicines that the caregivers request.	Educating pharmacists on the correct treatment (drug, dose and duration) becomes a strategic priority.

Source: Population Services International, n.d. The DELTA companion: Marketing planning made easy. (http://www.psi.org/sites/default/files/publication_files/DELTA%20Companion.pdf)

Step 2: Define a Vision

The vision anchors a communication strategy by stating what the program hopes to achieve. A vision statement sets forth the direction the strategy should follow and defines clearly and succinctly how the demand generation activities will affect the broader commodity and health environment. The vision should paint a mental picture of a desired scenario in the future.

The vision should be agreed upon by the stakeholders involved in the strategy design process and will thus be "shared" by all. This shared vision is a short statement that articulates what is important, illustrates what is desired in the future for the commodity once the demand generation strategy is successfully implemented, and clarifies the goal of the demand generation strategy. The shared vision ensures that all stakeholders are working toward the same goal and guides the strategy design and development process.

In addition, a true vision should be realistic, concrete and be attainable given the resources available. The vision should also be inspirational, provide direction, communicate enthusiasm, be inspirational and foster commitment and dedication from stakeholders toward the shared goal.

Some organizations call the vision the "Goal" or the "Primary Objective."

An example of a vision statement for amoxicillin is:

Caregivers of children under five will recognize symptoms and seek care immediately for pneumonia.

and

Healthcare providers will correctly diagnose and treat pneumonia with amoxicillin (dispersible tablets [DTs]).

Step 3: Choose the Intended Audiences

Segment the Audiences

Segmentation is the process of identifying unique groups of people, within larger populations, which share similar interests and needs relative to the commodity. If the group shares common attributes, then the members are more likely to respond similarly to a given demand generation strategy. Segmenting allows for targeted use of limited resources to those populations that would most affect increased demand. It ensures that the activities developed and implemented are the most effective and appropriate for specific audiences and are focused on customized messages and materials.

Using key findings collected from the situation analysis, the first step in audience segmentation is to answer the question, "Whose behavior must change

in order to increase demand and appropriate use of the commodity?" Initial segmentation is often based on demographics, such as age, sex, marital status, education level, socio-economic status, employment and residence (urban/rural). Audiences can be further segmented by psychographics—people's personalities, values, attitudes, interests and lifestyles.

Primary audiences are the key people to reach with messages. These may be the people who are directly affected and who would directly benefit from the use of the commodity. Or they may be the people who can make decisions on behalf of those who would benefit from the commodity. Primary audiences may be further segmented into sub-audiences. For example, identifying specific segments of women of reproductive age who may share common attributes, such as young unmarried women, married women or high-parity women.

	Primary Audience Influenced	Attitude Toward Use of Amoxicillin or Similar Commodities
Influencing Audience 1		
Influencing Audience 2		

Influencing audiences are people who can impact or guide knowledge and behaviors of the primary audience, either directly or indirectly. Influencing audiences can include family members and people in the community, such as community leaders, but can also include people who shape social norms, influence policies or affect how people think about the commodity. Prioritizing key influencing audiences by an estimated power of influence related to increasing demand and uptake of the commodity is crucial. For example, male partners are a likely key influencing audience, but the level of influence (low, moderate, strong) may depend on country context and/or commodity and should be

discussed among stakeholders. In order to prioritize influencing audiences, a table like the one above can be helpful.

Primary or influencing audiences for demand generation may also include national, sub-national or community-level decision makers, such as legislators and religious leaders, as they can be instrumental in removing or creating access barriers or spreading misguided beliefs about the product. Involving decision makers and influencers from the political and media realm—and carefully considering the legal and policy environment—is important to ensure demand generation efforts are not hindered

by political or social barriers. Scaling up lifesaving commodities for women, children and newborns: An advocacy toolkit (http://www.path.org/publications/detail.php?i=2381) provides advocacy resources to raise awareness and engage stakeholders in addressing commodity-related gaps in policy. Therefore, advocacy audiences are not included in this communication strategy.

Develop Audience Profiles

Audience profiles are the cornerstone of a communication strategy. They first help bring to life and personify each audience segment, which subsequently guide communication messaging and activity planning. The profile should embody the characteristics of the specific audience, with a focus on telling the story of an imagined individual within the group who can neutrally represent the intended audience. Basing decisions on a representative, personalized example from a specific audience segment, rather than a collection of statistics or a mass of anonymous people, allows for more intimate knowledge of that audience segment and better defined and focused communication strategies. Therefore, the profile is important to ensure the messages are tailored to members of this selected group, resonate with them and motivate them to take action.

Audience profiles for each audience segment are developed using the information collected in the situation analysis. The profile consists of a paragraph that should include details on psychographics, such as current behaviors, motivation, emotions, values, attitudes, preferred sources of information and access to communication channels, as well as socio-demographic information, such as age, income level, religion, sex and place of residence. The profile should exemplify the primary barriers to the desired behavior relative to the audience segment. The profile may include the name of this individual or a photo that represents this person to help visualize who this person is and tell his or her story. It is important to keep in mind that:

- 1. No two audience profiles look the same as the same data will not always be available for each audience segment.
- 2. The best profiles use qualitative research as a source.

3. Profiles are to be living documents and regularly updated when new information becomes available.

If the information gathered in the situation analysis lacks detail on a particular audience segment, additional research may need to be conducted to address the identified gaps. For example, for all provider audiences, it may be especially important to conduct formative research around provider attitudes and other drivers to provider behavior that could be used to better inform the audience profile and strategic design.

Step 4: Design Message Strategy (Objectives, Positioning, Key Messages)

The message strategy is one of the most important elements of a communication strategy. It drives the rest of the program and ensures synergy, consistency and coordination for the purposes of shared objectives and clear, harmonized messaging among all stakeholders and partners. A message strategy is designed for each primary and influencing audience and includes: (a) communication objectives, (b) positioning and (c) key messages. As previously mentioned, audience profiles are used to determine whether or not the objectives, positioning and key messages are appropriate for that individual.

(a) Objectives

Communication objectives are measurable statements that clearly and concisely state what the target audience should know (think), what they should believe (feel) and what they should do (behave), as well as the timeframe required for the change. "SMART" objectives are Specific, Measurable, Attainable, Relevant and Time-bound. Communication objectives should be derived from available evidence on the factors that drive or inhibit adoption by target users, as well as influencing audiences.

(b) Positioning

Positioning is the heart of the demand generation strategy and identifies the most compelling and unique benefit that the product offers the target audience. Positioning is often the emotional "hook" upon which the demand generation strategy hinges.

Effective positioning moves beyond the functional benefits of the commodity and appeals to the target audience with emotional benefits.

Positioning presents the desired behavior in a way that is both persuasive and appealing to the intended audience. It provides direction for developing a memorable identity, shapes the development of messages and helps determine the communication channels to be used. Positioning ensures that messages have a consistent voice and that all planned activities reinforce each other for a cumulative effect.

As part of the positioning, a **key promise** is identified that highlights the main benefit associated with the proposed change. Changes in behavior, policies and social norms are made only because there is a perceived benefit to those changes. The benefit must outweigh the personal cost of the change.

An accompanying **support statement**, also called a "reason to believe" in marketing, describes why the audience should believe the promise. This could be based on data, peer testimonials, a statement from a reliable source or a demonstration. The key promise and support statement should include a balance of emotion and reason.

(c) Key Messages

Key messages outline the core information that will be conveyed to audiences in all materials and activities. Messages cut across all channels and must reinforce each other across these channels. When all approaches communicate iterative and harmonized key messages, effectiveness increases. Well-designed messages are specific to the audience of interest, and clearly reflect both a specific behavioral determinant and positioning. They also clearly describe the desired behavior, which must be "doable" for the audience. Key messages are not the text that appears in print materials (taglines) or the words that are used to define a campaign (slogans). Creative professionals are often hired to translate key messages into a creative brief, which is a document for creative agencies or internal teams that guides the development of communication materials or media products, including taglines and slogans.

It is important that key messages are always:

- Developed on the basis of country-specific formative research.
- Derived from context-specific, strategic choices regarding segmentation, targeting and positioning.
- Addressed to known drivers of and barriers to behavior change in the country context.
- Pretested with the target audience and refined based on audience engagement.

Step 5: Determine Activities and Interventions

Activities and interventions allow for communication of key messages through a variety of communication approaches and channels. Messaging and media selection (i.e. channels) are best considered and selected in cooperation in order to effectively transmit information to the intended audiences. Activities should be carefully selected based upon type of messaging, ability to reach the intended audience through a variety of media/channels, timeline, cost and available resources.

It is helpful to refer to findings from the situation analysis to guide selection of activities and interventions. A theory-based framework for media selection in demand generation programs (http://sbccimplementationkits.org/demandrmnch/media-selection) is a helpful guide to inform media selection decisions based on communications theory. Table 1 is an overview of the types of strategic approaches that can be used. Any demand generation program should include activities across a range of different intervention areas and communication channels, which communicate mutually reinforcing messages.

It also is important to consider linkages with other new or existing programs and systems, both those directly related to demand and those less closely connected, but with an impact on demand or the ability to be utilized to improve efficiency. The following are examples of potential areas for linkages when designing a demand generation program for amoxicillin:

- Other child health programs that currently do not include amoxicillin.
- Quality of care improvement initiatives for service providers/clinics.
- Pre-service education and existing continuing education or in-service refresher training initiatives for clinical and non-clinical providers.
- Supply chain management and market shaping.
- Private sector approaches [For a guide to PPPs in demand generation, see the "P for Partnership"
- tool (available at http://sbccimplementationkits. org/demandrmnch/public-private-partnerships); for supply chain management, see the Private sector engagement toolkit (available at http://www.everywomaneverychild.org/images/content/life-saving-commodities/Private_sector_engagement_A_%20toolkit_for_Supply_Chains_in_the_Modern_Context.pdf)].
- Cross-sectoral programs (e.g., education, economic empowerment, transport).

Table 1: Overview of Strategic Approaches that Can Be Used in Demand Generation

Advocacy: Advocacy operates at the political, social and individual levels, and works to mobilize resources and political and social commitment for social change and/or policy change. Advocacy aims to create an enabling environment at any level, including the community level—e.g., traditional government or local religious endorsement—to ask for greater resources, encourage allocating resources equitably and to remove barriers to policy implementation. *Scaling up lifesaving commodities for women, children and newborns:* An advocacy toolkit provides advocacy resources for utilizing the Commission platform to raise awareness and engage stakeholders in addressing commodity-related gaps in policy. See http://www.path.org/publications/detail.php?i=2381.

Community-Based Media: Community-based media reach communities through locally established outlets. Such outlets include local radio stations and community newsletters/newspapers, as well as activities, such as rallies, public meetings, folk dramas and sporting events.

Community Mobilization: Community mobilization is a capacity-building process through which community individuals, groups or organizations plan, carry out and evaluate activities on a participatory and sustained basis to improve their lives, either on their own initiative or stimulated by others. A successful community mobilization effort not only works to solve problems, but also aims to increase the capacity of a community to successfully identify and address its own needs. For guidance on community mobilization, see *How to mobilize communities for health and social change* (Howard-Grabman & Snetro, 2003), available at http://www.jhuccp.org/resource_center/publications/field_guides_tools/how-mobilize-communities-health-and-social-change-20.

Counseling: Counseling is based on one-to-one communication and is often done with a trusted and influential communicator such as a counselor, teacher or health provider. Counseling tools or job aids are usually also produced to help clients and counselors improve their interactions, with service providers trained to use the tools and aids.

Distance Learning: Distance learning provides a learning platform that does not require attendance at a specific location. Rather, the students access the course content either through a radio or via the Internet, and interact with their teacher and fellow classmates through letters, telephone calls, SMS texts, chat rooms or Internet sites. Distance learning courses can focus on training communication specialists, community mobilizers, health educators and service providers. Additional information on eLearning can be found at Global Health eLearning Center and PEPFAR eLearning Initiative.

Information and Communication Technologies (ICTs): ICTs are fast growing and evolving platforms for electronic and digital technologies, including computing and telecommunications technologies, which enable communication and promote the interactive exchange of information. ICTs also include mobile and smart phones, the use of SMS and social media, such as Facebook, Twitter, LinkedIn, blogs, e-Forums and chat rooms. This approach also includes websites, e-mails, listservs, eLearning, eToolkits and message boards. Digital media can disseminate tailored messages to the intended audience on a large scale while also receiving audience feedback and encouraging real-time conversations, combining mass communication and interpersonal interaction. A theory-based framework for media selection in demand generation programs (http://sbccimplementationkits.org/demandrmnch/media-selection) and utilizing ICT in demand generation for RMNCH: Three case studies and recommendations for future programming (http://sbccimplementationkits.org/demandrmnch/ict-case-studies) are useful resources for program managers looking to utilize ICT in demand generation activities.

Interpersonal Communication (IPC)/Peer Communication: Interpersonal and peer communication are based on one-to-one communication. This could be peer-to-peer communication or communication with a community health worker (CHW), community leader or religious leader.

Mass Media: Mass media can reach large audiences cost-effectively through the formats of radio, television and newspapers. According to a review of mass media campaigns, mass media campaigns that follow the principles of effective campaign design and are well executed can have small to moderate effect size not only on health knowledge, beliefs and attitudes, but also on behavior (Noar, 2006). Given the potential to reach thousands of people, a small to moderate effect size will have a greater impact on public health than would an approach that has a large effect size, but only reaches a small number of people.

Social Mobilization: Social mobilization brings relevant sectors, such as organizations, policy makers, networks and communities, together to raise awareness, empower individuals and groups for action, and work toward creating an enabling environment and effecting positive behavior and/or social change.

Support Media/Mid-Media: Mid-media's reach is less than that of mass media and includes posters, brochures and billboards.

Step 6: Plan for Monitoring and Evaluation

Monitoring and Evaluation (M&E) is a critical piece of any program activity because it provides data on the program's progress toward achieving set goals and objectives.

Although planning for M&E should be included in the communication strategy, avoid developing a complete monitoring plan at the time of strategy development—e.g., indicators, sample, tools, who will monitor, frequency of data collection. At the time of strategy development, focus on the indicators that should be incorporated into the program's plan. M&E indicators should be developed based on formative research and should indicate whether the key messages and strategies are having the desired effect on the intended audience.

A full M&E plan should then be developed as a separate program document. Developing an M&E plan should outline what indicators to track, how

and when data will be collected, and what will happen to the data once they have been analyzed. A variety of data sources can be used to collect M&E data. It is important to assess the scope and context of the program to choose the most applicable methodology, as M&E activities vary in cost, staff and technology requirements. While some lower-cost M&E options will allow for identification of trends in demand for services, they may not be able to provide additional insight into the causal effects of activities and the function of the program. To measure cause and effect, larger program-specific data collection activities geared toward evaluation are needed. See Table 2 below for examples of low- and high-cost options.

While the collection of M&E data tends to receive the most attention, it is also critical to have a process for analysis and review of the collected data. M&E data should be used to inform program changes and new program development. It is best to build these M&E review processes into existing program management activities to allow for regular dissemination of M&E indicators.

Table 2: Examples of Low- and High-Cost Options of M&E for Demand Generation

Low-cost option: A low-cost option makes use of existing data sources and opportunities to gain insight into the program and its associations with changes in demand or uptake. However, it will only allow for the identification of trends and will not allow for the attribution of change to a given program or to program activities.

Illustrative data sources for a low-cost option include:

- Service statistics (information from clinics and providers, such as referral cards and attendance sheets).
- Communication channel statistics (information from television or radio stations on listenership of mass media activities).
- Omnibus surveys (addition of questions related to program exposure and impact to omnibus surveys).
- Provider self-reported data (small-scale surveys among providers about services rendered).
- Qualitative data (focus group discussions, in-depth interviews).
- DHS (trends in contraceptive prevalence and method mix—about every five years).

High-cost option: A high-cost option makes use of representative program-specific surveys and other data collection methods to gain considerable insight into the effects of the program and the way in which it worked.

Illustrative data sources for a high-cost option include:

- Service statistics (information from clinics and providers, such as referral cards and attendance sheets).
- Communication channel statistics (information from television or radio stations on listenership of mass media
- Provider self-reported data (surveys among providers about services rendered).
- Large, nationally representative program-specific surveys (focus on issues related to knowledge, perceptions, acceptability and use of amoxicillin for diarrhea).
- Qualitative data (focus group discussions, in-depth interviews, photo narrative, observation visits).
- Client exit interviews (exit interviews will assess user satisfaction with services delivered, including their perceptions, experience and intentions).

Indicators

M&E indicators should include process, output, outcome and impact indicators.

Process Indicators	Program Output Indicators	Behavioral Outcome Indicators	Health Impact Indicators
Measure the extent to which demand creation activities were implemented as planned.	Measure changes in audiences' opportunity, ability and motivation to use amoxicillin, and the extent to which these changes correlate with program exposure.	Measure changes in audiences' behavior and the extent to which these changes correlate with program exposure.	Measure changes in health outcomes.
Example: Number of IPC sessions conducted with caregivers of children under 5 years old on the use of amoxicillin to treat childhood pneumonia.	Example: Proportion of caregivers with children under 5 years old who know the signs and symptoms of childhood pneumonia.	Example: Proportion of caregivers of children under five who used amoxicillin to treat childhood pneumonia.	Example: Reduction in mortality from pneumonia in children under 5 years old.

Key issues to consider when developing indicators include:

Disaggregation: To increase the utility of M&E data, indicators should be disaggregated to facilitate more in-depth analysis of program performance. It is recommended that indicators are disaggregated by factors, such as gender, age, geographic location, etc.

Bias: Common biases that programmers should be aware of when designing, implementing and interpreting M&E include:

 Self-selection bias—for example, a caregiver who has previously sought out and received

- treatment for pneumonia in a child may be more interested and willing to answer a survey about childhood pneumonia compared to someone who has had no exposure.
- Social desirability bias—following exposure to health promotion initiatives, intended audiences may feel pressured to give "right answers" to survey questions—e.g., to report positive attitudes toward a commodity, even though they do not really feel that way. As demand generation interventions are successful at shaping positive social norms, social desirability bias may become more of a challenge in M&E.

An Illustrative Communication Strategy for Amoxicillin

Step 1: Analyze the Situation

Refer to page 15 for supporting guidance on this step, as well as "Step 1" in the I-Kit (http://sbccimplementationkits.org/demandrmnch/ch-step1/) for further resources.

Health and Commodity Context

*The majority of the information in this section is a global-level analysis for purposes of illustration. The country-specific situation analysis should be focused on the local context.

Health Context

An estimated 1.36 million children die each year due to pneumonia² alone. The majority of these child deaths (60 percent) occur in just 10 countries: India, Nigeria, Democratic Republic of Congo (DRC), Pakistan, Ethiopia, United Republic of Tanzania, Uganda, Bangladesh, Kenya and Niger. Additional attention and investment are needed to scale up effective treatment of pneumonia and diarrhea, which have received limited consideration and funding to date. Inexpensive means of diagnosis and treatment are available.

Pneumonia is an infection that causes the lungs to fill with pus and fluid, which makes breathing difficult and limits oxygen absorption. In developing countries, the bacterial pathogens Haemophilus influenzae type b (Hib) and Streptococcus pneumoniae are two of the most common causes of pneumonia; pneumonia can be caused by viral infections, other bacteria and fungi. Pneumonia pathogens can be transmitted through the air, blood or during delivery in the birth canal (UNICEF, 2006). Risk factors that make children more susceptible to pneumonia include inadequate nutrition and a lack of zinc, vaccine-preventable disease (e.g., measles, pertussis), HIV and tuberculosis infection, diarrhea, low birth weight, non-exclusive breastfeeding in first six months, indoor air pollution, lack of sanitation and crowded living conditions (WHO, 2013).

Laboratory tests and chest x-rays are used to confirm a pneumonia diagnosis. However, in low-resource settings, pneumonia is commonly diagnosed according to clinical symptoms. The primary clinical symptoms of pneumonia are fever, cough and fast or difficult breathing. Cases of severe pneumonia are diagnosed when children have lower chest wall indrawing and stridor (a harsh sound during inhalation) in addition to symptoms of fever, cough and fast or difficult breathing. Fast or difficult breathing is diagnosed by counting the breaths per minute; the thresholds for diagnosing fast breathing depend on the child's age (see table below). The table below also classifies pneumonia and severe pneumonia based on the signs and symptoms (UNICEF, 2006).

Classification and Treatment of Pneumonia Based on Signs and Symptoms			
Signs	Classify as	Treatment	
Fast breathing (see below) Lower chest wall indrawing Stridor (in calm child)	Severe pneumonia	Refer urgently to hospital for injectable antibiotics and oxygen if needed. Give first dose of appropriate antibiotic.	
Fast breathing (see below)	Non-severe pneumonia	Prescribe appropriate antibiotic. Advise mother on other supportive measures and when to return for a follow-up visit.	
No fast breathing	Other respiratory illness	Advise mother on other supportive measures and when to return if symptoms persist or get worse.	
What is fast breathing?			
If the child is	The child has fast breathing if you count		
2 months to 12 months old	50 breaths or more per minute		
12 months to 5 years old	40 breaths or more per minute		
		Source: UNICEF, 2006.	

Non-severe pneumonia among children under 5 years old can be treated with simple antibiotics. Antibiotics, such as amoxicillin, can prevent the majority of pneumonia deaths and cost only about \$US 0.21-0.42 per treatment course. Despite the existence of this simple, inexpensive treatment, many children in need are often left behind: only 30 percent of children with pneumonia receive an antibiotic (UNICEF, 2011).

The United Nations Children's Fund (UNICEF) and World Health Organization (WHO) recommend three essential strategies to reduce deaths from pneumonia among children under 5 years old:

- 1. Ensure all caregivers recognize the danger signs of pneumonia in children, which are a cough and difficult or fast breathing (UNICEF, 2006).
- 2. Ensure all children with signs of pneumonia are properly diagnosed by trained health personnel. WHO defines appropriate care as care from a provider capable of correctly diagnosing and treating pneumonia, including providers working in hospitals and health centers, as well as trained CHWs and providers in private clinics (UNICEF, 2006).
- 3. Ensure all children diagnosed with pneumonia are treated promptly with effective antibiotics (UNICEF, 2011).

In areas where malaria is endemic, there is often an overlap in the presentations of malaria and pneumonia symptoms in children. Fever is a common symptom for both malaria and pneumonia. While fever or a history of fever in children is often sufficient clinical criteria to diagnose and treat for malaria, a malaria diagnosis based on fever does not eliminate the need to check for symptoms of pneumonia. Additionally, both pneumonia and malaria in children may present symptoms of a cough and faster breathing. A child who has fever, cough and faster or difficult breathing in malaria endemic regions may have both illnesses (UNICEF, 2004). In malaria endemic regions, it is recommended that caregivers and providers are encouraged to check for symptoms of pneumonia, and providers are trained to check for co-infection.

Research and pilot programs have demonstrated effective approaches to scaling up treatments such as amoxicillin, and a growing number of countries are scaling up integrated community case management programs; however, these programs require significant systems supports in order to reach the majority of children in need. Comprehensive and ambitious programs designed to build on these initial projects are essential to achieve Millennium Development Goal 4 (to reduce the under-five mortality rate by two-thirds by 2015).

Commodity Context

The most updated guidelines from WHO for pediatric medicines recommend amoxicillin as the gold standard treatment for non-severe pneumonia in children under five. The WHO recommended dose of amoxicillin for children with pneumonia is as follows:

- If HIV prevalence below five percent: 40 mg/kg/dose, twice per day, for three days.
- If HIV prevalence above five percent: 40 mg/kg/dose, twice per day, for five days.

[Source: Every Woman Every Child, n.d. http://www.everywomaneverychild.org/component/content/article/1-about/305-amoxicillin--product-profile-]

Despite the wide availability and relative affordability of broad-spectrum antibiotics, only 27 percent of children suffering from pneumonia in developing countries actually receive an appropriate antibiotic (UNICEF, 2006). In many cases, children receive inappropriate and ineffective medicines because health care workers are not familiar with or disagree with standard treatment protocols and do not comply with national guidelines to correctly treat childhood pneumonia. Program managers report that often health providers are unaware

that the pediatric formulation of the antibiotic recommended for pneumonia treatment is available at an affordable price (PSI, 2013).

Studies have shown that the pneumonia treatment regimen using cotrimoxazole is equally as effective as the treatment scheme using amoxicillin and the costs are similar; however, cotrimoxazole is increasingly recommended to be reserved for the treatment of HIV opportunistic infections, and should therefore not be used in pneumonia case management programs (WHO, 2011).

Pre-packaged pneumonia treatment kits have been introduced in countries, such as Myanmar, Uganda and Madagascar. The pre-packaged kits contain the correct number of tablets or amount of syrup needed for one full course of treatment for one child, presented in a form suitable to children (e.g., flavored, dispersible). The packaging includes illustrated directions designed to assist caregivers and CHWs to understand the dosages and comply with treatment regimes.

WHO recently recommended dispersible antibiotics as the most convenient formulation for children. Amoxicillin is prepared in a 250mg scored, DT in a blister pack of 10 DTs. The average cost per treatment course is approximately USD \$0.23–0.44 for children aged 2–11 months and USD \$0.46–0.63\$ for children aged 12–59 months. Minimal manipulation is required prior to the use of a DT: it is readily and easily swallowed after adding a small amount of water. This alleviates the need to break or crush tablets before giving the dose to the child. Furthermore, dispersible antibiotics are flavored, which mask the taste of the antibiotic, making it more appealing to the child. However, dispersible antibiotics are not yet widely available, although efforts are underway to register the medicine in many countries.

Audience and Communication Analysis

A recent global synthesis of existing demand creation evidence found 37 peer-reviewed articles, grey literature and reports from 2003–2013 that specifically examined demand generation for amoxicillin to treat childhood pneumonia. The evidence was documented primarily from countries in sub-Saharan Africa, with a few studies from Asia (HC3, 2013).

The literature identified three key determinants of amoxicillin demand and utilization:

Lack of caregiver knowledge is a common barrier to prompt care-seeking for pneumonia, including a lack of knowledge about signs and symptoms, especially the differences from malaria, misperceptions about the severity of symptoms, and the benefits of antibiotics (Bedford, 2012a-c; Mulholland, Smith, Carneiro, Becher, & Lehmann, 2008; Ogunlesi, Runsewe-Abiodun & Olanrewaju, 2010; Taffa & Chepngeno, 2005; among others). Cultural beliefs play a large role in caregivers' decisions in many contexts. For example, several studies, both in Kenya and India, showed that caregivers may believe that pneumonia is caused by supernatural forces or other non-medical causes and is therefore not treatable by modern medicines (Bedford, 2012a-c; Irimu et al., 2008; among others). Although many authors noted that education and communication strategies must address these entrenched cultural beliefs, there is little evidence on the best methods or strategies. For example, simply trying to "replace" traditional beliefs with science is unlikely to resonate with target audiences.

Lack of health information at the community level. A review by Mulholland and colleagues (2008) found that inequitable access to child health messages is also a barrier, with messages not reaching mothers in the most remote areas. In Kenya, caregivers felt that there was a general shortage of health education at the community level about pneumonia, home management, when to seek treatment and the cost of treatment.

When such education was available, key messages were not conveyed in simple, memorable ways (Bedford, 2012a). Lack of male knowledge or involvement in child care was identified as a barrier to care seeking for children with diarrhea, pneumonia and malaria in Niger, Nigeria and Uganda (Bedford, 2012b, 2012c; Mbonye, 2003). However, in Nigeria and Kenya, caregivers other than mothers, including fathers and older relatives, felt that health education was directed only at women (Bedford, 2012a; Ebuehi & Adebajo, 2010).

Lack of access to care, including distance, cost and availability of amoxicillin. Most antibiotics, including amoxicillin, are widely available; however, dispersible antibiotics, recommended by WHO, are still being introduced in many countries. Studies from Kenya and India found that distance to health facilities and inability to afford treatment prevented caregivers from seeking care and that higher household income was significantly correlated with care-seeking behavior (Burton et al., 2010; Mathew et al., 2011; Mbagaya et al., 2005; Mulholland et al., 2005; Taffa & Chepngeno, 2005). In Sierra Leone and Uganda, perceptions of poor quality of service in health facilities also hindered caregivers from seeking appropriate treatment (Concern Worldwide, 2010; Hildenwall et al., 2009; Kallander et al., 2008; Mbonye, 2003). For many of these reasons, caregivers in Kenya, Nigeria, Sierra Leone and Uganda often visit private health facilities (Amuyunzu-Nyamongo & Nyamongo, 2006; Mbagaya et al., 2005; among others).

Example of Table to Organize Key Information

	Current Behaviors	Primary Barriers to Desired Behavior	Primary Benefits of Desired Behavior
End user/ community members (e.g., women, men, caregivers)	Caregivers of children under five lack knowledge of the signs, symptoms and urgency of treatment. In many cultures, caregivers believe in supernatural causes of pneumonia and that it is not treatable.	Lack of knowledge of signs and symptoms of pneumonia delays seeking treatment. Distance to health facilities, cost of transport, perceived quality of services, cost of treatment. Cultural beliefs in the causes and treatment of pneumonia.	Effective treatment may displace cultural beliefs as children treated appropriately recover.
Providers (public and private, clinic- and community- based)	Non-clinical providers lack knowledge of correct treatment (drug, dose, and duration). Community-based health care workers are not permitted to treat with antibiotics in many countries and contexts. In areas where malaria is endemic, fever is associated primarily with malaria and pneumonia diagnosis may be missed.	Distance to clinics with trained providers. Community-based providers may lack knowledge of signs and symptoms of pneumonia and of correct treatment, so that treatment may be delayed.	Increase in correct diagnosis and treatment, including diagnosis of co-infections in malaria endemic regions, will build the patients' confidence of providers. Increased number of children receiving correct treatment and recovering.

Step 2: Define a Vision

Refer to page 18 for supporting guidance on this step, as well as "Step 2" in the I-Kit (http://sbccimplementationkits.org/demandrmnch/ch-step2/) for further resources.

Illustrative Vision

- Caregivers of children under 5 years old will recognize symptoms and seek care immediately for pneumonia;
- Health care providers will correctly diagnose and treat pneumonia with amoxicillin (DTs).

Step 3: Choose the Intended Audiences

Refer to page 18 for supporting guidance on this step, as well as "Step 3" in the I-Kit (http://sbccimplementationkits.org/demandrmnch/ch-step3/) for further resources.

Primary and Influencing Audience Segments

Primary Audiences

- Primary audience 1: Caregivers of children under 5 years old
- Primary audience 2: CHWs
- Primary audience 3: Non-clinical providers, such as owners and employees in pharmacies and local shops (public and private) depending on the country, non-clinical providers may be an influencing audience
- *Primary audience 4:* Clinical providers (public and private) depending on the country, clinical providers may be an influencing audience

Influencing Audiences

• Influencing audience 1: Extended family/Mothers-in-law/Community members

Although health system officials and decision makers are potentially important influencing audiences, they are not included in this communication strategy. Key messages for advocacy on amoxicillin are found in *Scaling Up Lifesaving Commodities for Women, Children and Newborns: An Advocacy Toolkit*, which provides advocacy resources for utilizing the Commission platform to raise awareness and engage stakeholders in addressing commodity-related gaps in policy. See http://www.path.org/publications/detail.php?i=2381.

Audience Profiles

Primary Audience 1: Caregivers of Children Under Five



Bina, 21, young mother in the outskirts of Kathmandu, Nepal

Bina has two children, ages four months and 3 years old. She and her family live in a neighborhood near many relatives whose opinions highly influence how she cares for her children's health. Bina cares for her children and tends a small garden. Her husband is a laborer and they depend on his work for their income. A CHW who visits their neighborhood every few months is a woman Bina admires because she is educated and travels. The CHW recently spoke about taking children with fast breathing to the health center for treatment. Bina's older daughter was sick with fast breathing

before and Bina wanted to take her to the doctor. Friends and neighbors told her that fast breathing could not be cured with western medicine, so she used traditional medicine and her daughter recovered slowly. Even though Bina admires the CHW, she is not sure what do if her children are sick again.



Neha, 29, mother of three in rural Haripur, Pakistan

Neha lives with her husband, three children, ages two months and 3 and 5 years old, and her mother-in-law and brother-in-law. Neha is responsible for cooking for the family, cleaning the house and yard, raising her children and helping her mother-in-law. Her husband is a farmer and whenever possible, finds construction jobs to supplement their income. Neha cooks over wood and dung fires, and if it is cold, cooks inside. She thinks the smoke from cooking sometimes causes her children's coughs and respiratory problems. Recently, her 3-year-old daughter suffered from a fever and fast breathing, but Neha and her husband did not think it was serious and did not

seek care immediately. After a day or two, she sought advice from the CHW, who was not able to diagnose anything, but did refer her to the clinic. Neha was hesitant to go to the clinic because of the distance and long wait for care. However, when her daughter was really struggling to breathe, she asked her husband if they could go. He was reluctant, but agreed. The doctor diagnosed malaria and provided treatment. Her daughter seemed to get worse. They returned to the clinic and a different doctor diagnosed pneumonia and gave Neha a prescription for amoxicillin. Neha was afraid to ask too many questions and is not sure how she should give the treatment to her daughter.

Primary Audience 2: Community Health Workers



Kanta, 43, community health worker in Bangladesh

Kanta is a CHW in the rural communities to the north of Bangladesh. She is a mother with three children, ages 5, 8 and 10 years old. She was selected by community leaders to be trained as a health educator, and is now given a small stipend by an NGO and receives supervision visits once per quarter. She visits households and gives group talks, primarily focused on child health, including malaria, diarrhea and pneumonia. The women trust Kanta, and she is now recognized and welcomed in all the villages. However, mothers are often reluctant to buy antibiotics for pneumonia, saying that pneumonia is caused

by supernatural forces and cannot be cured. She likes the pre-packaged treatment because it is easy to explain the doses and helps her remember the dosages.

Primary Audience 3: Non-clinical Providers



Issa, 29, pharmacy worker in Bamako, Mali

Issa manages a small pharmacy outside Bamako, Mali. His father is a trained pharmacist and owns several pharmacies in the region. Issa prides himself on having learned about medicine and treatment of common illnesses working with his father. He knows that the community respects his knowledge and that he is often the first place families come for medical advice. He was trained on treatment of childhood illnesses by several NGO programs, including prescribing artemisinin-based combination therapy (ACT) for malaria and amoxicillin for pneumonia, and he appreciates

the job aids that the NGOs give him to help explain dosages to parents. Although Issa knows that amoxicillin is the correct treatment for pneumonia, many customers ask him for malaria treatment whenever their child has a fever, even if the child is coughing and breathing quickly, as they trust malaria treatment. As he makes more money selling ACT and he does not want to be wrong about his diagnosis, he sells customers what they request. Representatives from pharmacy companies also provide training, including gifts, such as promotional materials to decorate his shop, pens and notepads. These representatives are knowledgeable and friendly, and they offer him incentives to prescribe the medicines they promote, so he regularly follows their advice.

Primary Audience 4: Clinical Providers



Dr. Simaret, MBBS, 38, doctor just outside Addis Ababa, Ethiopia

Dr. Simaret is a doctor in one of the busiest health facilities near Addis Ababa, Ethiopia, and she operates a small private clinic on evenings and weekends. She stays updated in medical education by attending conferences and government trainings, and is a member of the local medical doctors association. She cares about her patients, especially the young mothers, and wants to give them the best possible care. However, Dr. Simaret sees more than 50 patients a day and does not spend as much time as she would like to educating her patients. Pneumonia is one of the most common illnesses she treats and even though

the health extension workers have been counseling mothers to seek treatment immediately, many children arrive having been ill for several days. She recently learned that the new guidelines call for amoxicillin, but is skeptical that it is the best treatment, since she has been working for a long time prescribing other antibiotics and cough syrups for pneumonia. She worries that if she follows the new guidelines, but the children do not recover fully, her reputation will suffer and she may lose patients who come to her private clinic.

Influencing Audience 1: Extended Family Members and Community Members



Mrs. Bekele, 57, mother-in-law in Asella, Ethiopia

Mrs. Bekele is very proud that her son is married and has two children and a job to provide for his family. Her daughter-in-law is respectful and good at keeping the home, and they get along well. Mrs. Bekele raised four healthy children by asking her own mother-in-law for advice and remedies, and she expects her daughter-in-law to now consult with her instead of spending money going to a doctor. She believes that coughing and respiratory problems are caused by the evil eye and that her daughter-in-law must take care so that her children are not affected. Mrs. Bekele cares about

her family's reputation and does not want her daughter-in-law to go out of the house more than necessary in case the neighbors begin to comment. Mrs. Bekele watches TV and speaks to her friends at the church each morning, and they share stories about their families.

Step 4: Design Message Strategy

Refer to page 20 for supporting guidance on this step, as well as "Step 4" in the I-Kit (http://sbccimplementationkits.org/demandrmnch/ch-step4/) for further resources.

Primary Audience 1: Caregivers of Children Under 5 Years Old

Objectives

By 2015, increase the percentage of caregivers of children under 5 years old who:

- 1. Recognize the signs and symptoms of childhood pneumonia and urgently seek treatment from a health care provider.
- 2. Believe that childhood pneumonia is life-threatening, yet treatable with antibiotics.
- 3. Know where to access quality treatment for childhood pneumonia.
- 4. Receive an appropriate diagnosis and treatment from a qualified health care provider.

Positioning

Caring mothers recognize that cough, fever and fast breathing are signs of pneumonia in children, and are empowered to seek treatment quickly so that their children will have a full recovery.

Key Promise

Cough, fever and fast breathing are signs of a serious illness that can be cured with immediate treatment from a health care provider.

Support Statement

The Ministry of Health recommends antibiotics to cure pneumonia in children under 5 years old.

Key Messages

Critical information and key messages should be provided in a simple, easy-to-understand and memorable way, especially regarding dosage and duration of treatment.

Examples of key messages include:

- Coughing and fast breathing in young children are signs of pneumonia, a serious illness; mothers or caregivers should seek immediate medical treatment for their children.
- If the child has a fever, mothers or caregivers should be sure to ask the provider to also check for pneumonia (especially important in malaria endemic areas).
- Coughing and fast breathing in young children can be cured with antibiotics; mothers or caregivers should seek treatment from a provider right away.
- Mothers in this community seek treatment immediately from a health care provider for coughing and fast breathing in children.
- Treatment for cough, fever and fast breathing in children is safe, affordable and effective.

A global evidence review (HC3, 2013) found limited evidence about precisely which messages used in communications campaigns have been most effective in increasing treatment seeking for pneumonia or demand for amoxicillin/antibiotics to treat pneumonia. However, based on the evidence available, programmatic experience and successful campaigns for malaria treatment, the Diarrhea and Pneumonia Working Group for the UNCoLSC recommends that the critical content in key messages for caregivers are:

- · Symptom recognition.
- Seek treatment immediately.

Key Messages (continued)

When selecting key messages, the Diarrhea and Pneumonia Working Group recommends that formative research investigate whether caregivers receive a correct diagnosis and prescription when they seek treatment.

- If there is confidence that caregivers who seek treatment will get the correct diagnosis and treatment, then messages should emphasize "seek treatment."
- If there is a concern that symptoms will not be correctly diagnosed, then the messages may want to emphasize getting "checked for pneumonia."

In areas where malaria is endemic, it may now be common practice for parents to seek treatment when their children have fevers. However, it may not be common practice for providers to check for symptoms of pneumonia. Therefore, the key message to caregivers should be: "If your child has a fever, have your child checked for pneumonia and malaria immediately." Finally, the Diarrhea and Pneumonia Working Group recommend using the term "pneumonia" instead of naming the symptoms of pneumonia in contexts where the symptoms of pneumonia are readily recognized by caregivers.

Primary Audience 2: Community Health Workers

Objectives

By the year 2015, increase the percentage of CHWs who:

- Correctly recognize pneumonia symptoms in young children (and, where permitted, distribute dispersible amoxicillin as the first line treatment for suspected pneumonia).
- Refer caregivers to qualified providers for severe pneumonia in young children.
- Demonstrate accurate knowledge of correct diagnosis and treatment (dosage and duration) with amoxicillin for suspected pneumonia in young children.

Positioning

In areas where CHWs are permitted to prescribe/dispense antibiotics:

• Respected health care workers recognize that cough, fever and fast or difficult breathing are the signs of pneumonia in children under 5 years old and they earn the trust of the community members because they treat childhood pneumonia effectively with amoxicillin.

In areas where CHWs are not permitted to prescribe/dispense antibiotics:

• Respected health care workers recognize that cough, fever and fast or difficult breathing are the signs of pneumonia in children under 5 years old and they earn the trust of the community members because they refer caregivers for appropriate treatment.

Key Promise

CHWs who offer correct, effective pneumonia treatment or advice (depending on whether CHWs are permitted to treat with antibiotics) for children under 5 years old are recognized as knowledgeable leaders in their communities, and their neighbors will return regularly to seek advice and medicine.

Support Statement

Amoxicillin is the treatment that WHO and the Ministry of Health recommend for pneumonia in children under 5 years old.

Key Messages

In countries where CHWs are permitted to distribute antibiotics, the key message is to use amoxicillin when a child presents with symptoms of pneumonia:

• When a child shows symptoms of pneumonia—cough, fever and fast or difficult breathing, amoxicillin is the recommended treatment because it is effective and affordable.

In countries where CHWs are not permitted to distribute antibiotics, the key message is to refer the child for immediate treatment:

• When a child shows symptoms of pneumonia—cough, fever and fast or difficult breathing, immediately refer caregivers to a clinic for affordable antibiotics that will effectively treat pneumonia.

Key messages for CHWs should be focused on knowledge of effective treatment—in line with national guidelines—and confidence in providing counseling and referrals to qualified providers, emphasizing how a good reputation benefits their work.

Illustrative examples include:

- Cough, fever and fast breathing in children under 5 years old are symptoms of pneumonia, which should be treated with (dispersible) amoxicillin.
- Health care workers should always counsel caregivers to seek treatment immediately if their children are coughing or have fast breathing.

Key Messages (continued)

- Check the child for symptoms of pneumonia if a child under 5 years old presents with a cough, fever or fast breathing.
- Health workers should check for signs of pneumonia as the symptoms are similar to malaria but the treatment is different. (In malaria endemic areas.)
- Amoxicillin is the recommended treatment for pneumonia in children under 5 years old by the Ministry
 of Health and WHO (or other respected sources of medical information such as a national association of
 pediatricians, etc.).
- Children under 5 years old with pneumonia can be treated effectively and affordably with amoxicillin.
- Health workers should carefully counsel caregivers to complete the full course of amoxicillin.

Primary Audience 3: Non-Clinical Providers (Pharmacists)

Objectives

By the year 2015, increase the percentage of non-clinical providers (pharmacists) who:

- 1. Demonstrate accurate knowledge of the symptoms and treatment of pneumonia in children under 5 years old, including the correct dosage and duration of treatment with amoxicillin.
- 2. Correctly recommend and sell amoxicillin as the first line treatment for suspected pneumonia in children under 5 years old.
- 3. Refer caregivers to qualified providers for suspected pneumonia in children under 5 years old.

Positioning

Trained providers recognize that cough, fever, and fast or difficult breathing are the signs of pneumonia in children under 5 years old and they earn the respect of their customers because they offer effective, affordable amoxicillin to treat childhood pneumonia.

Key Promise

Providers who offers correct, effective childhood pneumonia treatment and referrals will gain a loyal customer base.

Support Statement

Amoxicillin is the medicine that WHO and the Ministry of Health recommend for treatment of pneumonia in children under 5 years old.

Key Messages

Key messages for non-clinical providers should focus on improving their knowledge of the signs, symptoms and correct treatment of childhood pneumonia with amoxicillin. Non-clinical providers should be encouraged to refer caregivers to hospitals and health centers for appropriate diagnosis and treatment, emphasizing that customers will be loyal to providers who offer correct treatment and advice.

Illustrative messages include:

- Cough, fever and fast breathing are symptoms of pneumonia in children under 5 years old.
- Amoxicillin is scientifically shown to be the effective treatment for suspected pneumonia in children under 5 years old. Check for pneumonia if a child presents with a cough, fever or fast breathing (for trained non-clinical providers).
- If caregivers seek treatment for a child's fever, providers should check for signs of pneumonia also. The symptoms of both illnesses are similar, but the treatment is different. (In malaria endemic areas.)
- The Ministry of Health recommends amoxicillin as treatment for pneumonia in children under 5 years old (per country context).
- Customers have confidence in providers who offer correct treatment and referrals, and will recommend that provider to their family and friends.
- Providers should carefully counsel caregivers to complete the full course of amoxicillin when treating for childhood pneumonia.

Evidence from social marketing programs suggests that non-clinical providers, especially pharmacy and drug shop owners, are motivated both by reputation and profit. Communications programs and key messages should consider opportunities to address both the providers' desire to be recognized as knowledgeable and his or her need to manage a successful business.

Primary Audience 4: Clinical Providers

Objectives

By the year 2015, increase the percentage of clinical providers who:

- 1. Demonstrate accurate knowledge of the symptoms and treatment of pneumonia in children under 5 years old.
- 2. Correctly diagnose pneumonia in children under 5 years old and prescribe the right dosage and duration of amoxicillin as the first line treatment for pneumonia.

Positioning

Doctors and clinical providers who offer correct, effective pneumonia treatment for children under 5 years old with amoxicillin will be respected and trusted by members of their community.

Key Promise

Amoxicillin effectively and affordably treats pneumonia in children under 5 years old.

Support Statement

WHO and the Ministry of Health guidelines advise providers to treat pneumonia in children under 5 years old with amoxicillin.

Key Messages

Key messages for providers should focus on improving their knowledge and practice for managing pneumonia in children under 5 years old. Messages should reinforce that amoxicillin is the recommended treatment. In areas where malaria is endemic, key messages should emphasize checking for pneumonia, given that malaria and pneumonia may present with the same or similar signs.

Illustrative key messages for clinical providers include:

- Amoxicillin is scientifically shown to be an effective treatment for pneumonia in children under 5 years old.
- Amoxicillin is the recommended first line treatment by WHO and the Ministry of Health for pneumonia in children under 5 years old.
- Amoxicillin is affordable, effective treatment for pneumonia in children under 5 years old.
- Cough, fever and fast or difficult breathing are symptoms of pneumonia in children under 5 years old, which can be treated effectively with amoxicillin.
- When children present with a fever, providers should check for signs of pneumonia, as the symptoms are similar to malaria, but the treatment is different. (In areas with endemic malaria.)
- Providers must carefully counsel caregivers to complete the full course of amoxicillin.
- Providers who offer amoxicillin, the correct treatment for pneumonia in children under 5 years old, will earn the confidence and trust of their clients.
- Providers must always counsel caregivers to seek treatment immediately if children have a cough and fast or difficult breathing.

There is a need for country-specific formative research to understand providers' motivations and barriers for prescribing amoxicillin for pneumonia in order to develop relevant messages that resonate with the intended audience.

Influencing Audience 1: Extended Family Members and Community Members

Objectives

By 2015, increase the percentage of extended family/community members who:

- 1. Recognize cough, fever and fast breathing as symptoms of pneumonia in children under 5 years old.
- 2. Believe that childhood pneumonia is a serious illness and children should be taken to a health care provider for treatment immediately.
- 3. Support their families to seek treatment for children's pneumonia.
- 4. Support the use of amoxicillin for childhood pneumonia over other remedies or treatments.

Positioning

Extended family members/community leaders gain respect and influence when they protect the health of children in their communities, so they encourage mothers of young children to immediately seek treatment from trained health care providers when the children have a cough, fever and fast or difficult breathing.

Key Promise

You can help keep your family's/community's children healthy and strong by seeking prompt care when they have a cough, fever and fast or difficult breathing, which are signs of pneumonia.

Support Statement

- For family members: Fast breathing and fever can be confused with malaria, but may be signs of a more serious condition called pneumonia.
- For community leaders: By recommending effective, proven treatment for childhood pneumonia, community leaders are reiterating what national health experts are recommending.

Key Messages

Key messages for extended family and community members should focus on the benefits of treatment seeking.

Key messages may include:

- Respected community leaders/knowledgeable mothers-in-law encourage caregivers to visit a health facility when young children have a cough, fever and fast or difficult breathing, which are signs of pneumonia.
- Cough, fever and fast breathing are signs of a serious, but treatable illness for young children. Encourage young mothers in your family/community to visit a health care provider for treatment.
- There are effective medicines to treat pneumonia in children under 5 years old.
- Effective medicines for pneumonia in children under 5 years old are affordable. Guide young mothers in your family/community by telling them to visit a provider.
- Support young wives/families to seek treatment from providers for childhood pneumonia.

Step 5: Determine Activities and Interventions

Refer to page 21 for supporting guidance on this step, as well as "Step 5" in the I-Kit (http://sbccimplementationkits.org/demandrmnch/ch-step5/) for further resources.

Suggested approaches, activities and illustrative examples are presented here as appropriate choices for communicating to primary and influencing audiences about care seeking and treatment with amoxicillin. These suggestions are a starting point and close collaboration with communication and creative professionals can help ensure that design and execution are innovative and compelling.

When planning a communications campaign to promote use of amoxicillin:

- 1. Verify that amoxicillin is regularly available in the public and private sectors and at an affordable cost. If product availability is a problem, the communications campaign should be developed in coordination with strategies to improve availability.
- 2. In many countries, medicine cannot be promoted via mass media. Be sure that messages in TV and radio spots and other media are permitted/approved before developing a full campaign.

Mass Media

Intervention Area	Illustrative Activities	Purpose	Intended Audience		
Short-form mass media	Develop TV/radio spot to promote symptom recognition and treatment seeking—e.g., clearly showing the symptoms of pneumonia, talking to influencing audiences and then immediately seeking treatment.	To increase knowledge of symptoms, reinforce the belief that pneumonia is curable with medicines and promote seeking treatment immediately.	Caregivers Communities		
	TV/radio spots advertising affordable, dispersible amoxicillin tablets (where permitted).	To increase knowledge of DTs and increase perception of affordability.	Providers Caregivers Communities		
Long-form mass media	 Develop multi-episode TV/ radio drama serial (integrated with other child health issues). Produce radio call-in shows. This may be an opportunity to address cultural beliefs, but high-quality formative research would be required.	To depict (rather than describe) desired behaviors in local language/context, stimulate social dialogue and family communication, and shift social norms.	Caregivers Providers Communities		
Print media	Develop/adapt take home brochures and/or posters on pneumonia symptoms, diagnosis, urgent treatment seeking and locations of available treatment.	To increase knowledge of symptoms of childhood pneumonia, where to find quality treatments, how to use dispersible tablets (if available) and ageappropriate dosages.	Caregivers Providers Communities		
Digital media and mHealth	 Produce SMS promoting symptom recognition, information on retail and health care service points. Host "Child Health" hotline for non-clinical providers to consult trained providers (phone and/or SMS-based). If appropriate to the context, launch facebook and other relevant social media platforms for peer-to-peer communication and support (e.g., providers in a social franchise network, pharmacists, mothers). 	To increase correct prescriptions and stimulate social dialogue.	Caregivers Providers		

Clinic-Based Services

Intomication	Illustrative Activities	Duvinge	Intonded
Intervention Area	Illustrative Activities	Purpose	Intended Audience
Clinic services	 Organize health education sessions in clinic waiting room to promote symptom recognition and belief that pneumonia can be cured. Produce video for clinic waiting room on symptom recognition and immediate treatment seeking. Disseminate information to providers to enhance awareness of effectiveness of amoxicillin and provide scientific evidence through professional peer networks or associations. Create certification program, with recognition for providers who have completed training (franchisees). Train providers on face-to-face counseling designed to convince clients to seek treatment early. Develop/adapt job aids that focus on correct diagnosis and treatment of pneumonia. Establish a "supportive supervision" system that recognizes high-performing providers and assists others. 	To increase knowledge of symptoms of pneumonia. To improve prescribing and treatment by clinicians, which have flow down effect on retailers in community. To improve treatment-seeking by identifying access points. To recognize/identify qualified providers.	Caregivers Communities
Social franchising/ service promotion	 All of the above clinic services – in a network of private sector clinics Establish network of social franchise providers with set quality standards. Add services into an established social franchise network with a reputation for high quality care. Promote franchise logo through mass media and location-specific apps as a symbol of high quality care. 	All of the above To establish recognized franchises that offer affordable, correct pneumonia treatment.	Caregivers Clinical providers
Digital/distance learning	 Create distance learning/certification programs on correct pneumonia treatment. Establish "supportive supervision" for graduates of digital/distance learning programs to monitor quality and reward high performers. Develop short video clips and job aides that model counseling, diagnosis and treatment—including prescriptions of amoxicillin—that can be disseminated via print, video, smartphones and tablets. 	To increase knowledge and skills.	Clinical providers

Pharmacies

Pharmacies						
Intervention Area	Illustrative Activities	Purpose	Intended Audience			
Medical detailing	 Develop/adapt job aids that focus on correct treatment of pneumonia. Regular visits to pharmacies and drug shops using job aids and short (10 minutes) training sessions to educate owners and staff about pneumonia treatment with amoxicillin. Reward and recognition program—supportive supervision—to motivate correct diagnosis and treatment by pharmacy and retail staff. In urban areas, organize training sessions or continuing education sessions and invite trained pharmacists to update attendees on WHO and national guidelines and messages on recommending amoxicillin, recognizing pneumonia danger signs and providing referrals. Produce counseling aids that pharmacists/staff can use to ask mothers about symptoms and recommend products. Create certification program with recognition for pharmacists or staff who have completed training (franchisees or retail shop operators). Train pharmacists/staff on face-to-face counseling designed to convince clients to seek treatment early and/or complete full treatment. Establish a "supportive supervision" system that recognizes high-performing providers/retailers and assists others. 	To increase prescription/sales of amoxicillin. To improve pharmacy and drug shop staff knowledge of amoxicillin, pneumonia symptoms and correct treatment of pneumonia. To improve referrals for complicated/severe pneumonia. To improve provider-client counseling techniques to enhance capacity to diagnose pneumonia and correctly prescribe treatment.	Non- clinical providers (pharmacy and drug shop owners and staff)			
Social franchising with supportive supervision	 Establish network of pharmacies and drug shops trained to treat pneumonia with amoxicillin—use a logo marketed as a symbol of high quality care so caregivers can recognize where they will receive correct treatment/advice. Utilize all of the recommended strategies from the Medical Detailing section above. Offer preferred prices on amoxicillin products to network members to increase the margins earned. Promote the network through CHWs or other media. Use medical detailing for supportive supervision—ensuring quality of diagnosis and treatment by members. 	To increase prescription/sales of amoxicillin. To improve knowledge. To improve providerclient counseling techniques. To establish recognized network of pharmacies or drug shops that offer affordable, correct pneumonia treatment.	Non- clinical providers (pharmacy and drug shop owners and staff)			
Digital/ distance learning	 Collaborate with national pharmacist associations to create distance learning/certification programs on correct pneumonia treatment with certifications and continuing education credits. Train medical detailers to conduct short in-person sessions to complement distance learning and formal training programs for pharmacy and retail staff. Develop short video clips and job aides that model counseling, diagnosis and treatment—including prescriptions of amoxicillin—that can be disseminated via print, video, smartphones and tablets. 	To increase knowledge and skills.	Non- clinical providers (pharmacy and drug shop owners and staff)			

Community-Based Services and Outreach

Intervention	Illustrative Activities	Purpose	Intended
Area			Audience
CHW outreach and capacity building	 Recruit and train CHWs to conduct community-based counseling, treatment or referral for pneumonia, among other health areas. Provide a seed stock of pre-packaged treatment (amoxicillin DTs in correct doses) to CHWs so they can provide product in their communities. Set regular restocking meetings with short refresher training sessions. Establish CHW supportive supervision, providing feedback and monitoring quality. Develop and produce radio distance learning program for community workers that model positive behaviors and relationships with communities and referral clinics. Establish CHW radio listening groups and/or peer support groups for distance learning program. Develop/adapt low-literate materials and job aides to provide guidance on counseling and referral for pneumonia treatment. Develop logos, badges, buttons and other items that support the central positioning and promotion of quality. 	To improve knowledge and skills of CHWs. To provide peersupported learning opportunities. To ensure quality counseling and referral. To promote quality services/brand recognition. To encourage social dialogue.	CHWs
Community dialogues	 Hold community dialogues on recognizing symptoms, promoting treatment seeking and requesting diagnosis/testing. Involve providers from nearest public sector or social franchise clinic to lead education session. Use community dialogues to cross promote mass media efforts and sign up for SMS services. Organize discussion groups for caregivers, community leaders and grandmothers/mothers-in-law. Use community events as opportunities for promotion and education. 	To increase correct treatment of pneumonia with amoxicillin. To increase perceived availability and affordability of amoxicillin. To increase access to high quality care. To increase early treatment seeking from qualified providers.	Caregivers CHWs Extended family Communities
Champions	Identify satisfied mothers whose children were effectively treated with antibiotics (specify amoxicillin) as community advocates for seeking treatment.	To increase beliefs that pneumonia can be treated. To increase urgent treatment seeking.	Caregivers Extended family Communities
		To reduce myths and misconceptions regarding correct pneumonia treatment.	

Step 6: Plan for Monitoring and Evaluation (M&E)

Refer to page 23 for supporting guidance on this step, as well as "Step 6" in the I-Kit (http://sbccimplementationkits.org/demandrmnch/ch-step6/) for further resources.

The following illustrative indicators are examples of useful indicators for measuring project implementation and effects, with suggested data sources.

Caregivers:

- Proportion of caregivers with children under 5 years old who believe that childhood pneumonia can be treated with amoxicillin. (Evaluation data source omnibus survey or nationally representative survey.)
- Proportion of caregivers with children under 5 years old who know the signs and symptoms of childhood pneumonia. (Evaluation data source omnibus survey or nationally representative survey.)
- Number of cases of pneumonia in children under 5 years old where care was sought from a qualified provider (Evaluation data source service statistics.)
- Proportion of caregivers who seek care for childhood pneumonia. (Evaluation data source DHS or nationally representative survey.)
- Proportion of caregivers of children under 5 years old who report that their spouse, mother-in-law, extended family encouraged them to seek treatment for childhood pneumonia or to use amoxicillin to treat childhood pneumonia. (Evaluation data source – omnibus survey or nationally representative survey.)
- Proportion of caregivers of children under 5 years old who report that they know where to seek treatment from a qualified provider for childhood pneumonia. (Evaluation data source omnibus survey or nationally representative survey.)
- Proportion of caregivers of children under 5 years old who report that they can afford treatment from a qualified provider for childhood pneumonia. (Evaluation data source omnibus survey or nationally representative survey.)

Providers:

- Number of clinical providers trained (primary/refresher) on (updated) guidelines for correct treatment of pneumonia in children under 5 years old. (Monitoring data source program statistics.)
- Number of clinical or retail providers prescribing amoxicillin for suspected childhood pneumonia.
 (Monitoring data source mystery client survey.)
- Number of households visited by trained community health workers related to childhood pneumonia. (Monitoring data source provider self-reported data.)
- Number of referrals made by non-clinical providers for childhood pneumonia. (Monitoring data source provider self reported data; referral cards.)
- Proportion of non-clinical and clinical providers who can accurately report the correct treatment for pneumonia in children under five (Evaluation data source provider self reported data or survey.)

The Diarrhea and Pneumonia Working Group has endorsed an overall list of performance indicators for diarrhea and pneumonia treatment scale up. These indicators should be incorporated into M&E plans for childhood pneumonia programs.

Performance Indicators: Pneumonia Treatment					
Indicator	Definition	Metric	Method	Existing Sources to Leverage	Alignment with Other Tracking Efforts
Pneumonia care seeking	Proportion of children under age 5 with suspected pneumonia in the previous two weeks who sought care outside the home.	Numerator: Number of children under age 5 with suspected pneumonia in the previous two weeks who sought care outside the home. Denominator: Total number of children under age 5 with suspected pneumonia in the previous two weeks.	Population- based household survey	DHS MICS	Countdown 2015 Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea (GAPPD)
Availability of nationally recommended antibiotic for pneumonia treatment	Proportion of appropriate health care treatment sources with the nationally recommended antibiotic(s) in-stock on the day of the survey.	Numerator: Number of appropriate health care treatment sources with nationally recommended antibiotics in-stock on the day of the survey. Denominator: Total number of appropriate health care treatment sources.	Health facility assessment/ Retail audit	UNCoLSC Facility Assessment	UNCoLSC
Amoxicillin recommended as the first- or second- line treatment for pneumonia in national guidelines	Amoxicillin is the first- or second-line treatment for pneumonia in national guidelines.	N/A	Document review	National Treatment Guidelines	
Policy allowing local community-based provider to dispense nationally recommended antibiotics for pneumonia	There is a policy allowing local community-based provider to carry and dispense the nationally recommended antibiotics for treating pneumonia.	N/A	Document review	Ministry of Health (MoH) policy	Countdown 2015
Registration of the pediatric formulation of the nationally recommended antibiotic	At least one pediatric formulation of the nationally recommended antibiotic for pneumonia treatment registered with the National Drug Authorities.	N/A	Document review	National Drug Registry	UNCoLSC
Appropriate pediatric antibiotic formulation for pneumonia is included in the Essential Medicines List (EML) and National Procurement list	Pediatric formulations for the nationally recommended antibiotics for treating pneumonia are included in the EML and National Procurement list.	N/A	Document review	Essential Medicines List National Procurement List	UNCoLSC

In addition to the indicators listed above, demand generation efforts—messages, strategies and media channels—should be evaluated for impact. There are two fundamental questions for evaluating demand generation efforts:

- 1. Is exposure to messaging and demand generation efforts resulting in behavior changes—both increased knowledge and use of amoxicillin for childhood pneumonia?
- 2. Is the market working for everyone? Meaning, are all segments of caregivers being reached? For example, this should measure whether all socio-economic quintiles, populations in rural areas, ethnic/racial/religious/language groups are being reached.

The following are illustrative indicators focused on demand generation and behavior change that should parallel the performance indicators above:

Indicator	Definition	Metric	Method	Existing Sources to Leverage	Alignment with Other Tracking Efforts
Pneumonia care seeking	Proportion of caregivers of children under age 5 with pneumonia in the previous two weeks who sought treatment from a qualified provider.	Numerator: Number of caregivers of children under 5 years old with symptoms of pneumonia in the previous two weeks who sought treatment from a qualified provider. Denominator: Total number of caregivers with children under age five that had symptoms of pneumonia in the previous two weeks.	Population- based household survey	DHS MICS	
Amoxicillin availability	Proportion of health care treatment sources with amoxicillin in stock on the day of the survey, exposed to messages.	Numerator: Number of health care providers/ staff of pharmacies/ drug shops, exposed to messages, with amoxicillin in stock on the day of the survey Denominator: Total number of health care providers/staff of pharmacies/drug shops exposed to messages	Health facility assessment/ Retail audit	UNCoLSC Facility Assessment	UNCoLSC
Perceived Availability of Amoxicillin	Proportion of caregivers of children under age 5 exposed to messages, who report they know where to buy pneumonia treatment /amoxicillin.	Numerator: Number of caregivers of children under age 5 exposed to messages, who report they know where to buy amoxicillin. Denominator: Total number of caregivers of children under age 5 exposed to messages.	Population- based survey, program evaluation survey or communication impact evaluations.	Program baseline or endline surveys.	UNCoLSC

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Contacts

Hope Hempstone | United States Agency for International Development (USAID) | hhempstone@usaid.gov

Stephanie Levy | United States Agency for International Development (USAID) | slevy@usaid.gov

Zarnaz Fouladi | United States Agency for International Development (USAID) | zfouladi@usaid.gov

Heather Chotvacs | Population Services International (PSI) | hchotvacs@psi.org

Sanjanthi Velu | Johns Hopkins Center for Communication Programs (CCP) | svelu1@jhu.edu









