

Preparation

Create your partnership

There may be several individuals and organizations that can assist you in the design, plan and implementation (or putting into action) of your individual education interventions.

Example partners to implement your asthma individual education intervention with:

- medical providers (e.g., primary care physicians, nurses, occupational therapists, speech therapists)
- pharmacists
- mental health providers (e.g., psychologists, social workers)
- health educators
- peers/lay community members
- health/medical centers
- health departments
- senior centers and housing sites
- faith based organizations
- worksites
- schools – teachers, after school caretakers, nurses
- community centers
- community colleges
- universities
- community coalitions and/or task forces
- lay volunteers
- community based organizations
- local businesses
- tribal leaders
- media professionals

Try to think of partners that can serve a variety of roles. For example, you may need certain partners to help you create a plan for an asthma intervention (university researchers and physicians), while others may be more helpful in disseminating the information (schools, worksites, and community centers).

Besides creating an individual education intervention to promote asthma management and prevention, it is also important to evaluate your efforts. There may be elaborate and expensive ways to develop and implement an individual education intervention. Regardless of the complexity of your intervention, when developing and evaluating these interventions, it may be useful to seek out technical assistance from local colleges, universities or others with this experience.

For more information on engaging partners, go to [Partnerships](#).

Identify your population

Asthma individual education interventions may benefit by working to create interventions that suit the needs of various subgroups with regard to gender,

race/ethnicity, age or other sociodemographic characteristics. See [Asthma in Different Populations](#) for more information.

Asthma interventions have been used with a variety of populations, including:

- Older adults
- Adults
- Children
- Teenagers
- Caucasians
- Women
- African Americans
- Latinos
- Native Americans
- Asians
- lower income individuals
- middle class individuals
- individuals who do not have any signs or symptoms of asthma
- individuals at high risk of developing asthma – children, older adults, smokers,
- newly diagnosed individuals
- individuals who have had an asthma incident or have lived with asthma long-term
- caregivers to individuals with asthma

Also consider individuals other than those participating in the intervention. By providing information in some settings, such as schools and worksites, interventions may have the benefit of influencing not only individuals with asthma, but also key members of their support networks. Regardless of the setting, it is useful to make sure that the providers in all settings give consistent messages and that they act to reinforce and build upon messages provided in other settings. This requires good communication systems and partnerships be developed among practitioners in various settings (e.g., schools and health care facilities).

As you start to consider your own population, it will be important to identify important aspects of your population, such as:

- Define your population. (e.g., an organization, an Internet community)
- Are there subgroups within this population?
- What are the geographic boundaries?
- What are the shared social and cultural characteristics of this community?

For more information on identifying your population, go to [Assessment and Prioritization](#).

Once you have considered who your population is, you will need to consider where to approach your population.

Example settings for asthma individual education:

- schools
- after school programs

- health care facilities (including private clinics, public clinics, hospitals and Veterans Affairs systems)
- pharmacies
- in patient homes
- faith based organizations
- community based organizations
- worksites
- local businesses (including grocery stores, barber shops)
- pharmacies

When deciding on a setting for an individual education intervention, keep in mind that there may be some benefit to providing information in settings that have the potential to provide on-going and reinforcing messages during an individual education intervention. By providing information in some settings, such as schools and worksites, interventions may have the benefit of influencing not only individuals with asthma but also key members of their support networks. Regardless of the setting, it is useful to make sure that the providers in all settings give consistent messages and that they act to reinforce and build upon messages provided in other settings. This requires good communication systems and partnerships be developed among practitioners in various settings (e.g., schools and health care facilities).

Think about the population you will be working with and where your intervention will take place (e.g., in individual's homes, at a community center, at a church). For example, information prepared for Latino individuals attending a certain church may relay information about asthma in light of their spirituality and religious beliefs, and may also be presented in Spanish. The information that you provide should be specific to the setting and population.

For more information on settings for asthma interventions, go to [Asthma in Different Settings](#).

Record your intervention goals and objectives

If you and your partnership have not formed your intervention goals and objectives, you will need to work with your partners to do so. Although you may refine your goals and objectives, it is important to start with some idea of what you want to accomplish for this intervention.

Example of an asthma individual education intervention goal and objective:

- Goal: Reduce the incidence of asthma in your community by 25%.
- Objective: Increase the number of individuals in the community with knowledge of asthma signs and symptoms by 25%.

With individual education, as with other efforts to prevent or manage asthma, it is important to set attainable and realistic goals and objectives. This usually requires the development of intermediate outcomes such as changes in attitudes or readiness to use inhalers, take medications, and quit smoking (if applicable). The first step is to decide if you want to focus on providing information about asthma or providing skills for asthma self-management. Individual education interventions have been used to increase awareness of the health impacts of asthma and benefits of disease management. In particular, interventions have focused on increasing knowledge and

improving problem solving skills regarding a wide variety of asthma-related issues such as using inhalers and tobacco use.

It may be helpful to create a logic model to organize your goals, objectives and the action steps to meet your goals and objectives. Some funding sources have very specific logic models for your partnership to use, so be aware of different requirements. For more information on developing goals and objectives, go to [Preparing for Your Intervention in Readiness and Preparation](#).

Assess your community capacity and needed resources

Before beginning your individual education intervention, you must assess the resources you already have and the ones you need in order to successfully carry out your intervention. The resources needed depend on the specific strategies being used. For more information on creating your budget, see [Budget Preparation in Capacity](#).

Example resources needed:

- Automated phone calling systems allow medical centers to contact large numbers of patients for monitoring and preventive care with less investment of staff time than non-automated calling systems.
- Transportation may be needed to deliver participants to the intervention activities or to health facilities for monitoring.
- Most individual education interventions have expenses related to written materials (e.g., written brochures, posters, self management guides), audiovisual or media materials (e.g., videos), staff time (development and implementation) and delivery of materials.
- Individual education interventions can require space. The space needed may be general or specific to present information to individuals or in group settings.
- A copy machine or access to printing facilities for creating brochures or self-management workbooks
- When conducting tailored print communication interventions, some expenses include:
 - Kiosks for personalized feedback
 - Computers and software programs
 - Staff time to develop printed materials
 - Printers, paper and toner
 - Postage
- Some individual education interventions involve the use of targeted or stage-specific videotapes, which also require TVs and VCRs if these videos are shown in clinical or community settings, as well as cameras and production equipment.
- Interactive CD-ROMs used in individual education interventions require the software for development, personnel time and expertise to develop the algorithms, production equipment and computer equipment.
- Surveys and questionnaires may be required in order to gather information from individuals for the purpose of tailoring health messages.
- Some personalized or tailored materials may require professional artists to design the graphics and pictures used.

In addition, if you are generating tailored messages you may need more sophisticated forms of technology to develop the appropriate materials. It is also important to recognize that some individuals may need asthma-specific resources such as how to use inhalers.

The development of individual education interventions often requires the collection of qualitative or quantitative data, or asking others in your area what they have found through their assessments. It may be useful to look for assistance in developing these materials and implementing these interventions.

With respect to community resources, it may be useful to work with your partners to develop lists of community resources available for community members. In developing these lists, it is important to provide information on ways to prevent and manage asthma as well as resources in the community to support individuals (e.g., transportation to asthma specialists). In communities where there are few resources, it may be useful to combine individual education with other strategies, settings or approaches (e.g., [environment and policy approaches](#)).

Individual education interventions may also require certain skill sets depending on the specific strategies used. For example, you may need a nutritionist or health education expert, particularly when you decide to develop materials rather than use existing materials. Likewise, evaluation of individual education interventions can be complex and may require assistance from researchers and other partners who have experience with study design, measurement development, data collection, data analysis or translation of research findings into practical implications for your community.

The [Readiness and Preparation](#) and [Capacity](#) sections provide information and resources to help you think about the resources you might need for your intervention. For specific examples of tools and resources for asthma that have been created and used by other communities, visit [Tools and Resources for Asthma Supportive Relationships](#).

Design your intervention activities

- *Consider the readiness of your population to address asthma*

In addition to decisions about settings and populations, you will also need to consider the readiness of your population to prevent or manage asthma as follows:

- What are the current patterns in your community (i.e., asthma, risk factors associated with asthma such as exposure to asthma triggers and tobacco use)?
- Do community members with asthma know how to properly use their inhalers, follow medication recommendations, visit their health care provider on a regular basis, or follow other guidelines?
- If not, do community members perform these behaviors from time to time?
- If not, have they been thinking about starting to perform these behaviors?
- Once you have a sense of the community's readiness to learn more or change their behaviors, you can begin to design your intervention strategies.

After assessing the readiness of the target population in your community to changing behaviors regarding asthma, think about the specific groups your intervention will target:

- those who are not thinking about changing their asthma-related behaviors (e.g., following medication recommendations, visiting the health care provider on a regular basis, and quitting tobacco use)
- those who would like to change their asthma-related behaviors;
- those who have just started changing their asthma-related behaviors;
- those who have changed their asthma-related behaviors for some time now but have trouble maintaining these changes from week to week; and
- those who have changed and maintained their asthma-related behaviors on a regular basis.

With respect to each of the above groups that differ by readiness, you may want to provide different types of information and use different intervention strategies to help them move from stage to stage until they are able to maintain the asthma prevention or management behaviors.

The table below provides additional information to assist you in changing asthma prevention or management behaviors for individuals with different levels of readiness.

Stage of readiness to change behaviors	Recommendations for intervention strategies
Those who are not thinking about changing their asthma-related behaviors (e.g., following medication recommendations, visiting the health care provider on a regular basis, and quitting tobacco use)	Discuss the pros (reasons for wanting to change their behaviors) and cons (reasons why changing behaviors are challenging or undesirable).
Those who would like to change their asthma-related behaviors	Provide assistance in developing long-term goals, identifying short-term successes, reinforcing interest in changing behaviors, understanding the range of ways in which people can change their behaviors, minimizing barriers such as time, increasing social support and finding rewards for accomplishments.
Those who have just started changing their asthma-related behaviors	In addition to the above items, offer guidance on how to make their new behaviors a priority, create a personal plan for changing their behaviors and monitor progress.
Those who have changed their asthma-related behaviors for some time now but have trouble	Suggest helpful hints to anticipate barriers, create back-up plans, build ways to maintain new behaviors as part

maintaining their new patterns from week to week	of daily routines and shopping habits, increase social support and identify incentives.
Those who are able to maintain asthma-related behaviors on a regular basis	In addition to the above items, provide recommendations for ways to maintain self-confidence and balance.

- *Design your individual education strategies*

When implementing an individual education intervention, it is important to consider the information you will be presenting to your target population. It is important to consider the kinds of information, as well as the methods of sharing information, that will be most useful in getting the community involved.

Example strategies for information sharing:

- Brochures and wallet cards
- self-help manuals and/or tracking forms
- videotapes
- CD-ROMs
- DVDs
- Posters
- One-on-one information exchange
- Telephone calls
- Group information exchange; oral presentations
- Tailored information about the specific medications for asthma management to the individual
- Technologically advanced strategies (web-based interactive educational tools and games; automated email messages)

It is important to remember that all written materials should be based on the literacy level of the intended audience (adults, children, educational level, English or other language skills) and be culturally appropriate. It may be useful to include the use of lay health advisors who are linguistically, ethnically, and culturally similar to the intended audience. Lay health advisors are individuals from the population who are trained in asthma care and are encouraged to modify their teaching methods and messages to meet the specific needs of individuals with asthma and their families.

There are certain things that might be helpful to consider in developing each of these strategies. These are listed below;

Brochures, fliers, posters newsletters:

- Make sure that materials created are in the languages spoken by the community and are at the reading level of the intended population.
- It is also important that the materials have visual appeal and that the graphics used tell the story you want and are appropriate for the population of interest.
- Moreover, it is essential that the information provided is current and accurate and that the messages are clear and simple.

- Previous work has found that it is important to convey risk as well as specific steps to take to reduce risk.
- Be sure to ask the population of interest what they think about the materials before you use them.
- In order to be effective all materials should be culturally appropriate not only in terms of the language used but the messages conveyed.
- It is also important to place these materials in locations where the population of interest can access or see them easily. Previous work has found that the impact of these informational messages is enhanced when the same message is repeated more than once.
(<http://www.healthypeople.gov/Document/HTML/volume1/11HealthCom.htm>)
- Previous work has also found that using multiple methods of communicating may be more helpful than using a single method
(<http://www.healthypeople.gov/Document/HTML/volume1/11HealthCom.htm>)
- Combining these strategies to improve knowledge with strategies to improve skills as well as and reducing exposure to environmental triggers is likely to be more effective
(<http://www.healthypeople.gov/Document/HTML/volume1/11HealthCom.htm>)

Video tapes, audio tapes:

- Consider the tips provided for print materials as well as additional tips when preparing visual/audio media materials.
- In using audio or video tapes it is important that the individual speaking can be easily understood and that the quality of the tape is sufficient to use in a variety of settings.
- It is useful to utilize individuals who are known, valued, respected, trusted and believed to deliver health messages when possible

Individual or group programs to provide information or build skills:

- It is important to recognize that most individuals can only remember and process 3-7 pieces of information at a time- so keep each session focused and specific.
- A small amount of repetition can be useful to emphasize certain important points.
- It is useful for the health educator or person leading the sessions to be enthusiastic and share their own experiences to the extent it is appropriate.
- In terms of skill building, it can be helpful to describe the skill, demonstrate the skill, and ask the participant to demonstrate the skill through role playing.

It is also helpful to remember that different populations may have different styles of learning and may respond differently to different teaching strategies. It may be helpful to consider going to locations where individuals naturally gather (e.g., individual's homes, churches, community and neighborhood organizations).

Another important aspect of individual education is skill-building. Individual education strategies may include skill building by developing self-efficacy, or confidence in changing asthma-related behaviors (i.e., medication use, seeking

regular care), through self-monitoring, goal setting and problem solving using worksheets or diaries. The intent of self-management is to give the patient more control of their asthma management. In order to do this, the patient needs to understand how to monitor their symptoms and their responses to these symptoms.

Some strategies may offer opportunities to role play scenarios, particularly as a means to encourage maintenance of asthma prevention and management behaviors by addressing potential barriers. Strategies can also incorporate the use of certificates and/or incentives (or encourage self-reinforcement) for achieving a particular goal.

Some strategies may help to address potential barriers, including enhancement of time management skills or encouragement of cognitive restructuring (i.e., think can do rather than can't do). Skill-building strategies may include activities for learning skills to increase community members' ability to change their asthma-related behaviors. Demonstrations can be provided either individually or in groups (see [Group Education in Asthma](#)).

In encouraging these types of activities, it is important to have instructors who understand the specific benefits of asthma prevention and management as well as the need to meet the needs of various individuals who may respond differently to the condition. In addition, it is critical that the instructor knows how to address asthma prevention and management behaviors for individuals with specific health concerns (e.g., acute asthma attacks). Depending on the group you are working with, it may be appropriate to consider using certified dietitians, exercise physiologists, occupational therapist or other trained professionals.

It may also be useful for you to consider having participants speak with their health care provider prior to engaging in any efforts to change their asthma prevention or management behaviors. You can also ask them to sign a waiver indicating that they have consulted their health care provider and are engaging in the intervention activities with knowledge of the associated risks and benefits.

Go to [Asthma Tools and Resources](#) to see examples of what others have used.

- *Create a timeline and assign roles and responsibilities*

Work with your partners to decide on the timeline for the intervention as well as who will be responsible for carrying out the intervention activities. Be very specific about roles, tasks, and timelines to ensure that the intervention is implemented successfully. Include information about when your message will be distributed and by what communication channels.

Identify potential barriers

Think about the potential barriers that may be encountered along the way and prepare your reaction to these barriers.

Some of the barriers you might encounter:

- Frequency of program – A successful individual education program may require multiple meetings between recipients of the intervention and resources and personnel delivering the message. For example, a self management training often requires a commitment to a series of educational sessions. It may not be possible for all participants to be able to attend all of the required sessions.
- Cost – Costs may be a barrier to getting started or completing your activities. These costs can include the cost of technology needed to implement your intervention (e.g., CDs, DVDs, kiosks), ability for your target population to get to the site of information (e.g., transportation costs for the individuals receiving the intervention), and resources that are required for your target population to develop skills to help them manage their asthma (e.g., medications). Also, tailored print communication can have a high cost per item, unless a high volume is printed. Develop a budget and estimate the costs of creating, implementing, and maintaining the individual education intervention. Work with your partners to identify costs and sources of funding. See [Capacity](#) for resources to help you plan your budget.
- Resources – The knowledge, skills, and experience of your partners in presenting the information to the target population may be a barrier. Consider expanding your partnership, if necessary, to include representatives from other sectors of the community.
- Support for the intervention – It is important that your intervention have support both from individuals related to the target population as well as various parts of the community. Support can come from family and friends of the individuals in the intervention as well as worksites, schools, faith-based organizations, health care settings, etc.
- Literacy of materials – Materials prepared for the intervention must be written at a literacy level appropriate for the target population to ensure that the message comes across effectively and properly.
- Cognitive barriers – Although you will be doing your best to ensure that the literacy level of your materials is appropriate for the target population, not all individuals within a population have the same level of understanding. There is the possibility that your information may be well understood by some of the participants, but not as well by others.
- Technical barriers – While some individuals may be very familiar with the media used in your intervention, others may not be comfortable with, for example, computer or dvd based programs. In addition, not all individuals will have access to computers, dvd players, or other technology that is required to make use of the program.
- Language considerations-Large and growing populations of patients speak languages other than English, and therefore, educational interventions need to be translated into their own language. Budget limitations may not allow for developing material messages in multiple languages.
- Motivation-It is difficult to motivate participants over time to continue use of computer programs.
- Social support-Instructing students at school in behavioral skills to promote health and resist social influences to behave in an unhealthy way may have limited impact if other sources of socialization (i.e., parents, siblings, peers) are delivering a contrasting message.
- Time-Due to the limited amount of time patients spend with physicians, it is important that the individually tailored messages are appropriate for the population, and, most importantly, that the messages incorporate the stage of change (readiness) of the individual.

- Differences within and between populations-Individual education interventions may not reach a variety of different types of populations in a community given limited access to individuals and/or availability of their personal information. Furthermore, some individuals may find the program too complicated, or they may have competing priorities. Others may want to engage in parts of the intervention (e.g., access to screening) but may not see the other parts of the intervention as necessary (e.g., education).

Plan your evaluation methods and measures

- *Pre-test your messages*

Use focus groups or individual interviews with community members to ensure the strategies and messages are appropriate for your community. While you may believe that particular strategies or messages may be very helpful for your community, it is always valuable to ask members of the community what they think about the materials before you use them.

When testing the messages, consider how well the message is understood as intended, whether the information is clearly stated, whether the information is perceived as useful and how well the information is recalled or remembered.

- *Consider your evaluation strategy*

Once you have identified the specific individual or group characteristics that you plan to target as part of your intervention, you can begin to develop your evaluation strategy. These characteristics, or readiness factors, enable you to track how successful your strategies are at creating change. It is important to develop these intended outcomes and related evaluation questions with input from all partners including funding agencies.

As with all interventions it is useful to consider process, impact and outcome evaluation. Process evaluation enables you to assess if your program is being implemented as intended. You might consider collecting information on how satisfied individuals are with the various intervention activities, messages and materials. With individual education interventions, it may also be useful to assess the process used to develop and plan the individual education activities. This may include an assessment of the coalition processes (e.g., decision making, conflict management) and well as specific logistics (e.g., time of meeting, adequate day care, location of meeting). It may also be useful to identify the types of individuals who attend your program in comparison to those for whom the intervention was intended. For example, if the program was intended for both men and women and only women are enrolled it would be useful to know this and find out the reasons for this discrepancy.

Impact evaluation enables you to determine if you are achieving your intermediate objectives. You might consider collecting information through the use of standardized surveys, either face-to-face conducted at the specific setting or over the phone. These questionnaires may include information on health, behaviors, knowledge, attitudes, beliefs, perceptions of support in different settings, and many other factors. If specific behavior changes have been encouraged, it is useful to assess these through specific self-report checklists (e.g., frequency, duration).

In addition, questionnaires should include items to assess exposure to interventions, utilization of materials, and, if appropriate, changes in quality of life and behaviors in terms of readiness to change behavior (i.e., thinking about it, starting it, maintaining it). It might also be useful to consider alternative ways of tracking behavior, for example, through the use of interviews; logs tracking food eaten, pedometers, or clinical measures (e.g., weight, fitness, blood pressure, body fat).

Remember it is important to focus the evaluation on the objectives of the intervention. If the objective was to increase knowledge, it is important to assess knowledge. Alternatively, if the intent was to improve attitudes about the disease, then it is important to assess attitudes. Similarly, it may be useful to assess if the intervention influenced readiness to change.