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 provider reminder and education systems training. Provider education interventions have been implemented with the assistance of a wide range of partners.

Example partners to help you implement your provider education intervention:

- doctors
- nurses
- physician assistants
- registered dieticians
- exercise physiologists
- pharmacists
- alternative health care providers (e.g., chiropractors)
- mental health care providers (e.g., psychiatrists, psychologists, social workers)
- insurance providers
- health care administrators and support staff
- community based organizations (e.g., local community center)
- community coalitions
- community health centers
- public health departments and agencies
- clinics
- doctors' offices
- medical residents
- media
- universities and researchers
- schools

Try to think of partners that can serve a variety of roles. For example, you may need certain partners to help you create your intervention messages (e.g., health departments, medical schools), while some partners may be more helpful in distributing those messages (e.g., hospitals).

Don't forget to consider partners that may help you with evaluating your intervention. To evaluate a provider education intervention, or any other intervention, it is often useful to seek out technical assistance from local colleges, universities or others with this experience. These may also be partners that you consider engaging in designing and planning from the very beginning.

For more information on engaging partners, go to Partnerships.

Identify your population

Before you start your intervention, you should develop a good idea of both the setting(s) and population(s) that your intervention will be working with. Settings are where the intervention is going to take place (clinics, schools, hospitals, etc.) while

populations are the specific types of providers that the intervention is targeting. It is important to develop intervention messages and materials that are appropriate for both the settings and populations that you are dealing with. See Diabetes in Different Populations for more information.

Some settings where provider education can be implemented include:

- doctor's offices
- hospitals
- health departments
- worksite clinics
- school-based clinics
- pharmacies
- communities (e.g., mobile clinics)
- faith-based settings (e.g., health ministry, parish nurses)

For more information on settings for diabetes interventions, go to Diabetes in Different Settings.

As you start to consider your provider education intervention it is important to decide to whom you want them to provide information and counseling.

- Do you want them to focus on those at risk, or those with existing diabetes?
- Do you want them to focus on pregnant women?
- Are there subgroups within this population?
- What are the geographic boundaries?
- What are the shared social and cultural characteristics of this community?

Provider education can also focus on a variety of health care providers including:

- doctors
- nurses
- mental health care providers (psychiatrists, psychologists, etc.)
- pharmacists
- physician assistants

Remember that there are often differences among providers in terms of age, gender, race, ethnicity, nationality, religion, etc. Tailoring intervention messages to fit each of these subgroups will improve the likelihood of success for your intervention.

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. Provider reminder and education systems provide cues and training to support health care professionals in counseling or advising their patients or clients. These systems can assist health care professionals in assessing the patient's or client's health needs as well as delivering the appropriate health recommendations.

Example of a goal and objective for a provider education intervention aimed at diabetes:

- Goal: Increase the number of people who are able to self-manage their diabetes in your community.
- Objective: Increase by 25% the proportion of primary care physicians who refer at risk patients to diabetes self-management class.

With provider education, as with other efforts to promote awareness of diabetes management and prevention, it is important to set attainable and realistic goals and objectives. This usually requires having a good idea of the providers needs and may require the development of intermediate outcomes such as changes in attitudes or readiness to provide education.

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

Provider education comes in a variety of shapes and sizes and requires different amounts and types of resources. The specific resources required will likely vary depending on the type of reminder system developed, the place or medium for training, training curriculum, number of participants, and number of trainers present. For example, you may want to have training classes at a health care facility. For these, you may need to have access to a copy machine or a printing facility to create materials for the participants or to share existing resources with the participants. If you have a large number of trainees, you may need to have access to multiple rooms and trainers. You may also need to have audiovisual equipment to teach some of the components of the training curriculum. Alternately, you may want to design an on-line reminder and training system. This will require additional technological resources and skills.

You may consider creating a resource management plan, in which you review your current resources and resource requirements and identify at what points in the intervention you will need these specific resources. As you develop your budget, be sure to incorporate the costs for these types of resources.

Some technologically advanced provider education systems (e.g., computer reminder systems) are expensive to implement, however, lower cost interventions have been developed (e.g., faxes to physician offices, reminder stickers in charts or posters).

Provider education interventions many require a lot of personnel and training time. Provider time is necessary to participate in training, implementation, or follow-up during office visits, by phone or mail or e-mail. Staff time and training are necessary to support implementation of counseling and advice to individuals and to conduct follow-up (e.g., chart preparation, audits of patient records, relaying feedback to physicians, monthly testing of random samples of patients to ensure improvement in outcomes, etc.). Furthermore, time is needed during office visits to allow for delivery

of advice and there may be other competing concerns that need to be addressed in this time period.

To save time and money, it is helpful to find partners who have already received this training. If this is not possible, you may have to provide your own training on topics like: health risks associated with diabetes, communication strategies regarding non-judgmental feedback and reinforcement, how to build cultural competence, how to help individuals with problem solving strategies, proper counseling attitude, community resources, and maintaining confidentiality.

You many need to consider additional equipment and resources for both training and intervention. You may need other equipments such as video recorders, players and tapes to provide visual diabetes educational information to providers. For provider reminders, computers and software programs may be needed to generate reminders for providers to counsel their patients on certain diabetes-related issues. Provider education systems such as prompt sheets and training sessions can be developed at a relatively low cost and can be done on-site. Provider education interventions may use incentives for providers to implement education into standard practice. Lastly, other various supplies may be needed to conduct simulations with providers.

Provider reminder and education systems may also require certain trainer skill sets (e.g., stages of change model, brief behavioral counseling and communication) depending on the curriculum that gets used. For example, it will likely be necessary to have trainers skilled at helping providers understand how to communicate with patients, the importance of self-management and the ability to teach practitioners how to work with their patients to improve their self-management skills, using public health theories of behavior change, and translating diabetes management recommendations into individual patient goals and plans. Space, equipment and materials are needed to conduct trainings and workshops for providers.

Likewise, evaluation of provider reminder and 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. There are a number of tools and resources for use in training providers to counsel individuals on lifestyle (e.g., nutrition and physical activity) and self-management techniques including provider prompts, behavioral counseling training, self-help manuals, and others. For specific examples of tools and resources for diabetes that have been created and used by other communities, visit Tools and Resources for Diabetes Provider Education.

Design your intervention activities

- *Design your provider education intervention strategies*

Think about what you want to prompt people to get from the provider education intervention and how you would like them to respond. For example, you may want the doctors to provide their patients with the tools to self-manage their diabetes. You

may also work with your partners to decide what changes are feasible based upon the amount of political and/or community support and available funding.

These interventions are most effective when characteristics of the patients are taken into consideration (see Assessment and Prioritization). This may require you to spend time in the population building relationships with people within the community. People within the population can help you identify the community's readiness to change as well as specific behaviors and outcomes that your intervention should address. Some provider education interventions have found it helpful to give providers lists of local referrals and resources to provide to their patients who may desire more in-depth counseling on other diabetes-related issues.

There are also several questions that you can consider when planning your provider reminder and education system, including:

- Will the training take place as part of a larger training program for health care professionals?
- Will the training be specific to health care organizations in the local area?
- How many participants will take part in the training?
- How many trainers or instructors will participate in the training? What will be their roles and responsibilities?
- Who will coordinate the training? Who else will be needed to assist in the training?
- How long will the training last? How many sessions will it include?
- Will you provide continuing medical education credits (CMEs)?

Many different types of provider education interventions have been used by others (go to Tools and Resources to see how these have been 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 intervention will be conducted and how you will recruit practitioners to be part of your intervention.

- *Create your training curriculum*

Training for provider education interventions may be conducted in multiple sessions or one. The training techniques have also been varied and may include:

- face-to-face lecture
- role play
- case review
- distribution of booklets or other materials
- video observation (e.g., modeling various communication patterns)
- newsletters
- pocket cards with information on management of diabetes
- ads in medical journals

Provider education interventions may also cover a wide range of information. It is important to remember that offering a range of learning opportunities, including hands-on, practical experience may be the best way to train health care professionals. In terms of the curriculum, others have included:

- Effectiveness of provider advice
- Consequences of diabetes and related behavioral risk factors
- Prevalence of diabetes in the community
- Natural history of diabetes and potential complications
- Physician role in diabetes prevention and control
- Rationale and effectiveness of behavioral changes and self management
- Availability of materials and services
- Behavior modification or self-management techniques

The training on interacting with and advising patients or clients may include:

- Assessing diabetes status and related behavioral risk factors by measuring health conditions, behavior patterns and factors affecting a patient's or client's lifestyle patterns
- Advising patients or clients by giving clear, specific, and personalized advice, including information about risks and benefits of various behavior patterns
- Working with the patient or client to select appropriate goals and methods of changing diabetes-related behaviors based on their current patterns as well as their interest and willingness to change
- Helping patients or clients acquire the necessary skills, confidence, or social and environmental supports for diabetes prevention or management.
- Arranging ongoing support by scheduling follow-up contacts to provide ongoing assistance and support and to adjust the goals and plans as needed
- Developing reminder systems that will work for the health care practice

For the assessment of diabetes indicators, it is helpful to ask training participants to consider what information they will collect, how they will collect the information, and how they will use this information to provide specific feedback to individuals. Health care providers may want to encourage patients or clients to participate in diabetes assessments and try new methods of collecting or tracking their behavioral patterns (e.g., diary to track nutrition, and physical activity).

The training on advising patients or clients may include:

- the content of the advice (e.g., blood sugar, nutrition and physical activity recommendations)
- when and where the advice should be given (e.g., at a doctor's office, at a local school)
- who will reinforce the advice given (e.g., a parent, a school nurse).

Training participants should also be encouraged to think about how long the counseling will last as part of the visit (e.g., less than 5 minutes, 10 minutes or 30 minutes) and whether or not they prefer to use a script so that the same advice can be given to all participants.

You may want to have training participants practice or role play giving advice to different types of patients or clients so they get experience tailoring

recommendations to individual's needs and readiness to change. For example, if the patient or client has not yet really considered taking cholesterol medications, it may be helpful to provide information on the health risks of continuing untreated and benefits of taking medications. In order to provide tailored advice to individuals, the health care professionals should be trained on the typical progression of diabetes-related behavior changes (stages of change) and reminded that most individuals will not change their behaviors the first time they try. Likewise, training participants can receive information on how to take into account the person's gender, age, health status, and cultural factors. All of these considerations can help the health care provider to make sure that their message fits the particular needs of their patient or client.

Another approach would be to have health care professionals discuss how they can serve as community role models by providing lectures or information sessions reaching multiple community members at the same time. This may be an effective strategy for community outreach and providing credible recommendations for diabetes prevention and management to high risk communities. Others have also found that it can be useful to have health practitioners tour the population to better understand the community factors influencing diabetes (e.g., where are the fast food restaurants? is there a community park?), and to try certain changes in their own behaviors to increase understanding about the challenges experienced by patients or clients.

Finally, health care professionals will need to be trained with respect to follow-up with patients or clients (e.g., subsequent visits, phone calls) and what the follow-up should include (e.g., reassessment of behavior, information about how to overcome barriers). Training can include information on how to track patients and clients for follow-up as well. For example, health care professionals can place color-coded stickers in patients' charts as reminders to follow-up at the next visit or to ask one of their staff to make a follow-up call within two weeks after the patient's visit. Training participants can also be given information to refer patients or clients to other programs, give them information on self-management programs, or refer them to other healthcare team members (e.g., nurse case managers, health educators).

Go to Tools and Resources to see examples of what others have used.

Identify potential barriers

Think about the potential barriers that may be encountered along the way and prepare your reaction to these barriers.
Some barriers to implementing your diabetes intervention you may encounter include:

- cost – develop a budget and estimate costs of creating the supportive relationships intervention and maintaining it over time. Challenges may also be faced regarding the lack of funding or other types of support from institutions, organizations or communities. See Capacity for resources to help you plan your budget.;
- resources and personnel – whether your partnership has the needed personnel and resources identified above. Substantial amount of personnel time is required for all phases of these types of interventions, including:

    - Planning and preparation phases – how to get access to participants, how to build supportive interactions into participants' everyday lives and how to address participants' readiness to change their lifestyle behaviors.
    - Implementation and evaluation phases – how to keep participants active in the intervention and how to track participants and their diabetes-related behaviors over time.
    - Maintenance phases – how to keep participants from relapsing (or discontinuing diabetes prevention and management behaviors) and how to allocate resources to sustaining the intervention activities over time;
- accessibility – ensure that most, if not all, individuals from the population will be exposed to the intervention strategies at one time or another;
- availability – ensure that diabetes medications, nutritious food choices, or opportunities for physical activity are available to most, if not all, individuals from the population;
- support-for children and families, parents and spouses have a strong influence on how individuals prevent or manage their diabetes (e.g., role modeling, food purchases, recreation and entertainment preferences). Parents' rates of obesity and unhealthy diets have a negative impact on their children's responses to interventions.
- cultural competency- people from racial or ethnic groups may understand and learn from information and resources that reflect their own culture. Language barriers or literacy may limit the reach of intervention materials The types of support and the giver of that support that are appropriate may vary by culture.;
- susceptibility -many people are unaware that they are at risk for diabetes or that they already have diabetes, so it may be difficult to encourage them to change their behaviors;
- social, economic, and environmental factors- these can have a strong influence on the intervention (e.g., poverty, chronic unemployment, shift from active to sedentary jobs, access to healthy foods, access to safe places to be physical active) Other priorities also may get in the way of making lifestyle changes (e.g., stress, illness, family, or relationship problems).

While all interventions will encounter unique barriers, you can learn from others' experiences. Barriers that have been encountered in other supportive relationship interventions and steps to prepare for these barriers are summarized below:

- Some programs have found that the recruitment strategies and materials they developed needed to be modified to suit the needs of the particular individuals or families they were working with in terms of culture, language, reading level, or other characteristics.
- Some have also found that while support has increased, their efforts have been unsuccessful because of an absence of policies, environments, promotions, or programs supporting healthy behaviors.
- Transportation may not be available to participants to activities.
- It is also important to consider that families have multiple responsibilities and stressors that inhibit their ability to take part in activities. Interventions may need to consider parental work schedules, religious holidays, and other commitments in developing their schedule of activities. Therefore, it may be helpful to incorporate intervention activities into existing family patterns and schedules and provide programs that meet the needs of individuals of

multiple ages. This may mean having the support interventions at worksites, schools, or in community settings where participants may naturally gather.

- It is also helpful to remember that simply providing information to participants may not translate into utilization of the materials. It may be necessary to clearly explain how these materials may be helpful and to describe specifically how to use them. Opportunities for dialogue and ongoing encouragement are strengths of supportive relationships interventions.
- In providing telephone support, staff may not be comfortable in making supportive phone calls to participants' homes. Training may be helpful in providing staff with reinforcements or strategies to overcome their discomfort.
- In some groups or communities, there may be social barriers to diabetes prevention and management. Supportive interventions work with community members and organizations to develop strategies to encourage support for lifestyle behavior changes.
- In faith-based organizations, pastors may not want to be involved in certain aspects of the intervention or believe that it is inappropriate to share health messages across the pulpit.
- Another barrier is that in many small communities, worksites, or faith-based settings, it may be difficult to maintain confidentiality, particularly in smaller congregations or rural communities that may have fairly dense social networks. In rural communities, it may be difficult for people outside the community to be effective in delivering interventions.
- It is difficult to determine which individuals may respond better to different types of supportive relationships intervention strategies (e.g., physician counseling, buddy systems, faith-based organization events).
- Although health care providers generally believe in the importance of counseling, patients or clients may not get all the support they need in the limited time they may spend with the health care provider. In addition to having limited time during an office visit, health care providers may not have training in behavior change strategies.
- Physician perceptions that many patients do not follow their recommendations may limit their desire to engage in supportive interventions. They may also feel constrained from providing this type of support because of inadequate reimbursement for counseling. It may be helpful to expand the provision of this type of formal support to others in the medical care system (e.g., nurses, occupational therapists).
- Because many of the challenges to implementing a supportive relationship intervention are relatively minor, communities, schools, worksites, faith-based organizations, families, and others can be easily encouraged to engage in this type of intervention despite their level of readiness.
- It is not too difficult to incorporate these interventions into existing infrastructure for health education in communities, schools, worksites and other venues.
- Environments, including facilities and equipment, and materials are not too expensive, reasonably easy to create, and require little maintenance.

Plan your evaluation methods and measures

- *Pre-test your intervention strategies*

Use focus groups or individual interviews with health care providers to ensure that the different components of the curriculum are appropriate for the intended audience. When testing these components, consider how well the information and activities are understood as intended, whether the information can be applied to different settings, whether the information is perceived as useful and how well the information is recalled or remembered. It can be very difficult to evaluate provider education interventions as they are usually part of a larger project with other intervention strategies. Therefore, changes in behavior, knowledge, attitudes, or other individual factors may be a result of one or a combination of strategies.

- *Consider your evaluation strategy*

In order to determine if your provider reminder and education is working, you will need to evaluate your efforts. It is important to design your evaluation in the planning phase of your intervention because you will need to be able to measure change in order to measure the impact of your intervention. To measure change, you will need to have an idea of what is happening right now.

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. Provider education may include documentation of attendance at the training sessions, ability to carry out assignments or activities, recall or memory of what information was provided to the provider, how much time was spent on different training components, and the health care provider's satisfaction with the information exchange. With provider education interventions, it may also be useful to assess the process used to develop and plan the intervention 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, location of meeting).

Impact evaluation enables you to determine if you are achieving your intermediate objectives. For provider education, you could evaluate the extent to which the provider changed the types and amount of information provided to their patients, individuals experienced any changes in their visits with the health care provider and their level of satisfaction with the visits, what information they were able to recall, changes in knowledge, changes in attitudes, actions the participant has taken as a result of information provided or changes in behavior. You could also access whether the training changed policies or practices related to the health care provider or their agency/organization. This can be done by through telephone surveys or alternately, some have met face-to-face with members of the target audience and conducted interviews or focus groups to determine how much of an effect the intervention has had on the target population.

Remember to focus evaluation on the objectives of the intervention. If the objective was to increase knowledge it is important to assess knowledge, if the intent was to decrease negative outcomes then it is important to assess these outcomes. Similarly, it may be useful to assess if the intervention influenced provider readiness to change their behavior related to providing information and resources to their patients. Evaluation may include face-to-face or telephone surveys or qualitative assessments.