

HEALTH PROMOTION/DISEASE PREVENTION

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Chapter Overview

As providers of primary care services optometrists are in a unique position to merge and blend public health and primary care concepts for better patient care. As a primary care provider, the optometrist makes the initial assessment and attempts to solve as many of the patient's problems as possible. He or she coordinates the remainder of the health care team, including ancillary personnel as well as consultants who are necessary in dealing with the patient's problems. The optometrist provides continued contact with the patient, and often his or her significant others regarding eye care needs. As a primary care provider, the optometrist assumes the continued responsibility for the patient's eye care. To fulfill the role of the primary eye care practitioner, to practice to the fullest scope, and to meet professional and ethical obligations, optometrists make health education, health promotion, and disease prevention part of routine optometric care. Optometrists have traditionally included these activities in the realm of eye and vision care (1). As the profession and health care moves from an acute care system to greater focus on chronic care models, optometrists assume a greater role on the interdisciplinary health care team, including addressing the patient's overall health and well-being. The first step in creating change, whether within ones self or within patients, is to increase awareness through health education, health promotion and disease prevention.

Objectives

1. The reader should be able to define public health and discuss core functions (3) as they relate to health promotion and disease prevention.
2. The reader should be able to define primary care, including listing the categories (4) of primary care.
3. The reader should be able to discuss the importance of health promotion and disease prevention as it relates to: a) the profession's role as a provider of primary eye care services and b) the profession's role as a community member in promoting a healthy community.
4. The reader should be able to define prevention. Additionally, define and give examples of primary, secondary, and tertiary prevention.
5. The reader should be able to apply health promotion/disease prevention programs to the practice setting.

Public Health Principles in Health Promotion/Disease Prevention

Public health is what we, as a society, do together to assure the conditions in which people can be healthy (2). Just as one's health is greater than the health care one receives, public health is more than services, programs, education, and activities provided by governmental health agencies. The Institute of Medicine's report, Future of Public Health, continues to provide guidance to public health. This report sets the foundation of public health by delineating the core functions of public health as 1) assessment, 2) assurance and 3) policy development.

Table #- Core Functions of Public Health

- Assessment: systematic collection and analysis of information on the health of the community.
- Assurance: ensures services are provided to achieve population health goals.
- Policy development: guides operations and resource allocation for the health system.

Further refinement of the core functions of public health lead to the document entitled Public Health in America, which articulates public health's Vision, Mission and the Essential Public Health Services (3).

Table #- Public Health in America - Vision, Mission and Essential Public Health Services (<http://www.health.gov/phfunctions/public.htm>)

Public Health in America
Vision: Healthy People in Healthy Communities

Mission: Promote Physical and Mental Health and Prevent Disease, Injury, and Disability

Public Health:
Prevents epidemics and the spread of disease
Protects against environmental hazards
Prevents injuries
Promotes and encourages healthy behaviors
Responds to disasters and assists communities in recovery
Assures the quality and accessibility of health services

Essential Public Health Services

Monitor health status to identify community health problems
Diagnose and investigate health problems and health hazards in the community
Inform, educate, and empower people about health issues
Mobilize community partnerships to identify and solve health problems

Develop policies and plans that support individual and community health efforts
Enforce laws and regulations that protect health and ensure safety
Link people to needed personal health services and assure the provision of health care when otherwise unavailable
Assure a competent public health & personal health care workforce
Evaluate effectiveness, accessibility, and quality of personal and population-based health services
Research for new insights and innovative solutions to health problems

However, it is imperative to remember that the broader sense of public health includes more than the governmental actions or even public-private partnerships among local, county, state, or federal health agencies. Public health is more than indigent care for the needy or less fortunate. Public health is more than immunization and vision screenings prior to entrance into the public school system. Public health activities, although very important to the health and well being of a community, are more than restaurant and sanitation inspection. Public health is what individuals do on a day-to-day basis. Public health includes all of these activities of local, county, state, and federal agencies, but it is also more than these activities. This broader sense of public health ultimately includes the collective actions chosen by the individual; for example, the decision as to whether to smoke or not smoke tobacco; whether to choose whole milk over 2% milk. These are choices or actions of self-responsibility that an individual makes in their daily life, creating a more or less healthy lifestyle. In concert with controllable and non-controllable factors, such as genetics, personal health status for the individual, when examined collectively, contributes to the health status of the family, the community, the nation, and to the public's health as documented and reported by governmental public health agencies. In a section on "Shared Responsibilities" in one of the earlier Healthy People series, Healthy People 2000, the US Department Health and Human Services issues a challenge to every American: "Each of us whether acting as an individual, an employee or employer, a member of a family, community group, professional organization, or government agency, has both an opportunity and an obligation to contribute to the effort to improve the Nation's health profile" (4). Public health includes, but is more than activities by local, state, federal or other governmental agencies.

Public Health and Primary Care

Primary Care: America's Health in a New Era, refines the definition of primary care in the United States (4). In addition to refining the definition of primary care, the report also addresses integration of public health and primary care, recognizing that the population-based function of public health and the personal care services that primary care delivers to individuals are complementary functions. The study also identifies the contributions of dentists and optometrists as providers of primary care to the health care team. Specifically, the report noted the role optometry plays in primary care as "first contact" health professionals in the health care system.

Key Concept: Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing sustained partnership with patients, and practicing in the context of family and community (5).

Primary care addresses a spectrum of personal health issues along the continuum of health and wellness as they occur separately or in combination with other conditions in a single patient. The following categories are identified as being within the scope of primary care:

1. Acute care
2. Chronic care
3. Prevention and early detection
4. Coordination of referrals (5)

In each of these categories the role of primary care provider as health educator of patients, others providers, and the community is readily identified.

CATEGORIES OF PRIMARY CARE

1. Acute care. (a) The primary care clinician evaluates a patient with a symptom or symptoms sufficient to prompt him or her to seek medical attention. Health concerns may range from an acute, relatively minor, self-limited illness, to a complex set of symptoms that could be life threatening, to a mental problem. The clinician arranges for further evaluation by specialists or subspecialists when appropriate. (b) The clinician manages acute problems or, when beyond the scope of the particular clinician, arranges for other management of the problem.
2. Chronic care. A primary clinician (a) serves as the principal provider of ongoing care for some patients who have one or more chronic diseases, including mental disorders with appropriate consultations, and (b) collaborates in the care of other patients whose chronic illnesses are of such a nature that the principal provider of care is another specialist or subspecialist. The primary care clinician manages illnesses, provides preventive care (e.g., screening tests, immunizations, counseling about life style), and incorporates knowledge of the family and the patient's community. An example would be managing the dermatitis, hypertension, or upper respiratory infection of a patient who is under the care of a rheumatologist for rheumatoid arthritis.
3. Prevention and early detection. The primary care clinician provides periodic health assessments for all patients, including screening, counseling, risk assessment, and patient education. Primary care must

reflect an understanding of risk factors associated with these illnesses, including genetic risks, and of the early stages of disease that may be difficult to detect at their outset.

4. Coordination of referrals. The clinician coordinates referrals to and from other clinicians and provides advice and education to patients who are referred for further evaluation or treatment.

KEY CONCEPT: Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing sustained partnership with patients, and practicing in the context of family and community (5).

KEY CONCEPT: Primary care services consists of four categories of care: acute care, chronic care, prevention and early detection, and coordination of referrals. (5)

Public health leaders have long been calling for a re-integration of population care, i.e. public health and personal health, with clinical care, i.e. management of illnesses. (6) Currently the best linkage between the personal health care system and the public health system is in the area of clinical guidelines and clinical preventive services. (www.guidelines.gov) Clinical preventive services provide a significant link for applying the population-based perspective of public health to personal health care. To achieve the goals of increasing the span and quality of healthy life for Americans and reducing the health disparities among all Americans, the nation has adopted an approach that promotes a closer working relationship between primary care, the provision of personal care, and the public health system. For the first time the nation's public health agenda includes specific vision and eye health objectives. (7) (8) (www.healthypeople.gov)

Health Promotion/Disease Prevention in Primary Optometric Care Settings

As one of the nation's largest independent health care professions, optometry has a responsibility to play a major part in averting health care costs and improving the public's health through active participation in programs of health promotion and disease prevention. (9) Additionally, optometry is a provider of primary care services that has widespread geographical distribution throughout the US. Optometric services are available in over 6,500 communities. (10) Virtually everyone needs eye care services during their lifetime in order to maintain good eye health and maintain maximal functioning and performance. The delivery of vision and eye care services is a non-threatening form of health care to a patient who may otherwise be reluctant to seek general or preventive care. A survey of patients in two inner-city Los Angeles optometric clinics showed that 53.4% of the respondents did not have a regular primary care physician. (11)

As such, optometrists have a unique opportunity to provide health education to patients who are not receiving health information through other sources. Appropriate health education messages will leave patients with feelings of empowerment.

It is vital to recognize that the environment and culture a person lives in may influence his or her desire or ability to make healthy choices. The former Executive Director of the American Public Health Association cautions health care providers to remember:

“Largely, health depends on the political, social, cultural, economic, and physical environments in which we live. These environments can and do limit the health choices open to any of us, and they are increasingly influenced by public policy and corporate practices which control or promote products that damage health. For many, their life environment does not encourage capacities nor afford opportunities for adopting healthy lifestyles. (12)

No discussion of health education or health promotion disease prevention would be complete with out acknowledging that the aggregate benefits in health status to be gained from increasing income or education greatly out weigh the gains from personal health services from medical intervention. Health status has been demonstrated repeatedly to have a direct, positive relationship to per capita income and to level of education. Preventing injuries from occupational and avocational eye injuries, avoidable falls or violence, elder or child neglect and abuse, or motor vehicle crashes, helping individuals maintain independent lifestyles, and deterring the adverse health effects of lack of physical activity, tobacco use, substance abuse, and polypharmacy, are critical to enhancing the health of the community. More than a decade ago McGinnis and Foege published a study identifying that approximately half of all deaths that occurred among United States residents could be attributed to the factors that are behavioral choices and therefore potentially preventable (13).

It is in the role as primary care optometrists that doctors of optometry make a significant contribution to the health and well being of the their patients and of the nation. Perhaps the most significance contribution to public health is in the area of health promotion and disease prevention. Optometrists have always included health messages regarding the health of the eye and optimal functioning of the visual system as a part of routine care. Optometrists provide their patients with information on eye protection for occupational safety and sports, advice on good visual hygiene for computer screens, information on ultraviolet light protection, and tips on driving safety, to name but a few areas. As a part of routine standard care, patient health education information is an important component of providing quality patient care. As a primary care practitioner, the optometrist assumes the responsibility of caring for his patients as a whole person, not just caring for an isolated organ. Bartlett states:

“As optometrists, we have dedicated our professional lives to the preservation and enhancement of good vision. Since optimal functioning of the vision system depends on a healthy body, we need to continue to not only be concerned about our patients’ general health, but we need to step up our efforts to improve the quality and quantity of advice we offer our patients relative to their general health status. As health care providers we have a responsibility to our patients to provide information that increases their knowledge and leads to happier, healthier lifestyles.” (14)

Optometrists as primary eye care practitioners are often the initial health care provider contacted. The optometric setting provides a non-threatening environment for those individuals who might otherwise not seek general or preventive care. By the very nature of eye care, it provides the evaluation, assessment and coordination of a broad spectrum of health care needs, including systemic disease, neurological, developmental, and psychosocial conditions, as well as other related conditions. Virtually everyone, at some time in his or her life cycle requires eye care. Additionally, the optometric profession has historically provided patient education as an essential service for contact lens wearers, addressing occupational and safety needs, developmental vision issues, along with other educational roles. Optometric care is accessible with a wide geographic distribution of practitioners.

It is in this role as primary health care provider that the optometrist assumes the role and responsibilities of health educator. While providing eye care for the individual, the optometrist also works toward ensuring the future health of the patient, his or her family, and the community-at-large by delivering positive health promotion and disease prevention messages. It is within this primary care component that lies the promise of prevention: health promotion and disease prevention.

The American Heritage Dictionary (15) defines prevention as keeping from happening, averting, thwarting, hindering, or impeding. Prevention may also be classified further into primary, secondary, and tertiary. Prevention is part of primary care. The Institute of Medicine specifically includes prevention i.e., the providing of periodic health assessments for all patients, including screening, counseling, risk assessment, and patient education as one of the four categories of service which are within the scope of primary care. (5)

KEY CONCEPT: Primary Prevention covers efforts to reduce the probability, severity, and duration of future illness and injury.

KEY CONCEPT: Secondary prevention involves measures to detect pre-symptomatic disease where earlier detection will mean more effective treatment. Earlier implies a stage before the individual would normally seek treatment, and usually before they would even be aware of the disease. Secondary prevention prevents the manifestation of illness so that health as perceived by the patient does not deteriorate.

KEY CONCEPT: Tertiary prevention involves measures to reduce the disability from existing illness and prevent it getting worse. Tertiary prevention seeks to prevent a further fall in the health status after an initial fall in health status.

CASE STUDY

Community-Based Health Education/Health Promotion Program. A federal agency recognizes the importance of strengthening the capabilities of community-based organizations by providing “seed money” to develop innovative collaborative partnerships promoting eye health education and health promotion projects that have the potential for sustainability once funding ends. The federal agency provided funding for health education and health promotion activities that support the *Healthy Vision 2010* Objectives and the *Healthy People 2010* goals of reducing health disparities and improving quality of life. The grant was applied for and the funds received. However, prior to completion of the grant the individual assigned to this grant project has been reassigned and you are asked to take over this project and complete the final report. Use the information provided below to create the final report for submission to the agency. **This will require that you complete the following items in the grant: #3 The Process, #4 Outcomes, and #5 Sustainability.**

Public Health Questions for the Case Study

1. Define the following:
 - Primary Care and its four categories
 - Prevention
 - Primary, Secondary, and Tertiary Prevention
2. Discuss options for actions that optometrists can take to raise their visibility as primary care providers and members of an interdisciplinary primary care team addressing chronic disease from a health promotion/disease prevention approach for their patients, community, state and local health departments, federal organizations and agencies.
3. Name at least 3 sources for national vision and eye health goals, objectives, or guidelines for eye care. Do state goals/objectives for vision and eye health exist in your state?

Eye health education and promotion projects are those that are designed to promote healthy behaviors in the community by increasing awareness about the importance of eye health. Innovative projects are those that use a unique approach or new strategy to reach a designated population. Project sustainability, is the continuation of the project once initial funding has ended.

The *Healthy Vision 2010* Objectives (7) address examination and prevention, eye diseases, injury and safety, and vision rehabilitation. The grant

applicants must select one or more of the following objectives for their project focus:

- 28-1 Increase the proportion of persons who have a dilated eye examination at appropriate intervals.
- 28-2. Increase the proportion of preschool children aged 5 years and under who receive vision screening.
- 28-3. Reduce uncorrected visual impairment due to refractive errors.
- 28-4. Reduce blindness and visual impairment in children and adolescents aged 17 years and under.
- 28-5. Reduce visual impairment due to diabetic retinopathy.
- 28-6. Reduce visual impairment due to glaucoma.
- 28-7. Reduce visual impairment due to cataract.
- 28-8. Reduce occupational eye injury.
- 28-9. Increase the use of appropriate personal protective eyewear in recreational activities and hazardous situations around the home.
- 28-10. Increase vision rehabilitation.

For information on **Healthy Vision 2010** visit:

www.healthyvision2010.org and
<http://www.aoa.org/HEHP.xml>

BACKGROUND INFORMATION: Call for Proposal

Final Selection. The final selection of award recipients was based on the evaluation scores below; geography; health education component; and racial/ethnic representation, project innovation, documented financial sustainability, and availability of funds. Innovation and sustainability were key factors in this grant being awarded.

WHO MAY APPLY? Nonprofit organizations, including but not limited to community-based organizations and groups, minority-based organizations, schools, faith-based organizations, civic and fraternal groups, and local health departments and agencies. Universities and university affiliations such as medical centers are precluded from receiving an award directly, but are welcome as collaborators with community-based organizations.

The primary focus of the proposed project must be eye health education and promotion. Each application will be evaluated according to the following criteria (for 100 total points).

1) Project Approach and Activities (40 points): A statement of your project objectives, your key activities, and a timeline of key activities. Describe in detail how your project addresses unmet needs in your community and how your

project is new or innovative to the proposed community. Describe how your project will be sustained once funding ends.

2) Project Director and Collaborations (15 points): A brief description of who will direct the project, including a resume of his/her skills and experience (a maximum of two pages). Please list the names and contacts of community groups collaborating with you on the project. Provide a detailed description of the unique role and contributions of these collaborators on your project. The number of collaborations is not limited. However, you must provide at least two letters of support that specifically outline how you will work with your collaborators and clearly define what resources they will bring to the table.

3) Project Effectiveness (25 points): A description of your project measurement processes. Describe how you will meet the objectives listed in the Project Approach section of your application. Describe how you will measure the effectiveness of the proposed strategies, the effectiveness of your collaborations and the sustainability of your program once funds have ended.

4) Budget (20 points): Provide both a) detailed, line-item budget and b) a narrative justification of the funding amount that is requested. Provide details on your proposed personnel and other direct costs, and list the in-kind contributions for this project.

The Grant Proposal

1. Identifying Information

Project title: Sight for Life!

Organization/Agency:

A rural state-based academic institution with local affiliations throughout the state.

2. The Activity (Briefly describe the key elements of your proposed project.)

A. Goals and Objectives

Revise the current eye health curriculum with new and expanded information:

1. The importance of monitoring and maintaining sound glucose control for maintaining good everyday vision (refractive error) in individuals with diabetes and pre-diabetes.
2. Diabetic retinopathy
3. Recreational eye safety prevention for individuals with diabetes, their family, and community.
4. Low-vision options and devices for individuals with diabetes, their family, and community.

Additional goals and objectives include:

- Develop experiential hands-on training materials, handouts and other support materials.
- Develop a 'low-vision' kit comprised of inexpensive devices to provide a hands-on learning experience for the primarily elderly program participants who may have unique learning styles and literacy levels indigenous to rural elderly populations.
- Select a minimum of 7 counties where the program will be piloted.
- Evaluate program reception and learning effectiveness making revisions/additions where and when needed.
- Hold a statewide training for additional educators and health care providers in preparation for statewide distribution.
- Monitor and revise program on an as needed basis.

B. Strategies

Planning meetings will be held with the state collaborators to review the current curriculum and will include a detailed discussion of the proposed expanded program. Collaborators will select areas of the proposal to work on based on their areas of knowledge, local community demand, and access to resources. On-going communication between partners and the project director will keep the project on target. Once the first 4 objectives outlined above have been met a minimum of 7 counties will be selected to offer the program as a pilot program in their communities. These counties will determine if the program will be:

- Held as a follow-up program in conjunction with other on-going health education program,
- Presented at a diabetic support group meeting or
- Held as a stand-alone program.

Following the pilot programs, the state collaborators will meet to evaluate the program, looking at the reception of the program, and its effectiveness. Evaluations by the program participants and the instructors will be reviewed to determine changes that may be needed. Once any needed revisions/additions are made, the curriculum will be presented at a statewide training session for educators and health care partners. Statewide distribution of the curriculum will follow with on-going monitoring and revisions on an as needed basis.

C. Target Audience

The target audience consists of individuals in a predominately rural state who have diabetes or pre-diabetes, their family members, and community.

YOUR ASSIGNMENT IS TO COMPLETE THE FOLLOWING SECTIONS OF THE GRANT: #3 The Process, #4 Outcomes, and #5 Sustainability. What

might have been the resultant effect of the proposed grant in these following areas?

3. The Process

Looking back over the term of your project (one year), please describe:

- Accomplishments: What worked?
- Barriers: What challenges or obstacles have you faced? How did you address them?
- Lessons learned: Is there anything the project would have benefited from that you were not able to do?
- Identify any changes made from the original plan and indicate why or why not that those changes were effective for the project.

4. Outcomes

- Were you able to meet your project's goals and objectives? Why or why not? Please describe.
- What information did you use to assess your project's effectiveness?
- Describe how you demonstrated your project's effectiveness.

5. Sustainability

- Will you be able to sustain your program and/or community partnership beyond this award period?
- If so, please describe how your organization will sustain the program and/or community partnership financially, as well as operationally.
- If you will not be able to sustain the program and/or community partnership, please explain why.

CASE STUDY

Health Education/Disease Prevention –In-office Health Education: Disease Prevention. Developing office based health education for health behavior change. An optometrist practices two days a week in a very busy community health center whose population base has many chronic health conditions that are exacerbated by unhealthy lifestyle choices. She desires to incorporate more health education into her daily interaction with the clinic's patients; however, she has limited knowledge in the theories of Health Behavior Change and limited time. She feels even if she did have greater knowledge in the area of health education/disease prevention that there is limited time for her to interact with the patients following the examination. Additionally, due to recent cut backs in funding, the health education staff has been reduced, so there are no additional personnel to take the extra time to coax her patients through the stages of change that is needed to make healthy lifestyle choices. Because her time available and resources are limited, the optometrist decides to work with what she has. Our task is to design an evidence-based health education

intervention that will move patients further down the continuum of change from inaction and precontemplative toward the action stages of healthy behavior change.

KEY CONCEPT: Defining an individual's or group's stage of readiness for change will provide valuable information to effectively shape health promotion/disease prevention messages to create the desired behavior change or outcome.

Public Health Questions for the Case Study

1. What can you do to help insure success of health education/disease prevention activities?
2. How and when will you measure success of health education/disease prevention efforts?
3. What actions can you take to overcome the barriers to providing health education/disease prevention messages in clinical care setting
4. Discussion ramifications of doctors of optometry providing health education re: general health issues such as exercise, nutrition, smoking cessation. Discuss both positive and negative consequences.

Influencing behavior change is a process. Interventions oftentimes influence ones ability to change or readiness to change, but does not create the desired outcome or behavior change. By first defining the change and talking with the individual or making contact with the intended audience, goals and anticipated outcomes can be clarified. Determining which messages and what media with which these messages are best communicated, along with testing the clarity and effectiveness of messages contributes to clear understanding. Finally, monitoring and examining outcomes continually along the way helps further refine the messages and strategies, and enables continued pursuit of the goals and intent of the public health prevention message.

Lack of knowledge, time, health education materials, and personnel have been identified as barriers to providing health education by doctors of optometry in their clinical practices. (16) Optometrists in the study expressed the greatest desire for improved knowledge by noting a need for additional continuing education on the best way to approach prevention issues, a need for journals and textbooks to include articles on health education specific to optometry, a desire for greater interaction with other doctors of optometry providing health education, and a need for clear guidance from clinical or national practice guidelines.

FOUR STEPS IN HEALTH EDUCATION/DISEASE PREVENTION

The implementation of health education/disease prevention activities in a busy office setting may take less time and resources than one might initially think. To simplify the process, think of it as consisting of four steps, or the four A's. (17)

In step one, ASK your patient about behaviors, personal and family medical history, and risk factors for a particular condition. This is usually performed during the case history portion of the examination. The information you receive will help to personalize appropriate health promotional messages.

In step two, ADVISE your patient about the health risks they face and the healthy choices that will help to minimize these risks.

In step three, ASSIST the patient in making these changes. Provide them with self-help materials which will enable them to set specific goals and times for meeting these goals.

The final step is to ARRANGE for follow up services. Refer the patient to his or her primary care medical provider, a specific agency, or a class they may find helpful. Make a note in the chart to ask about their progress at the time of dispensing or follow up exam. Reinforce and congratulate your patients on behavioral changes they are currently undertaking. Personal recognition and positive reinforcement are important motivating factors for maintaining desirable, but sometimes difficult, behavioral changes.

KEY CONCEPT: Set your patients up for success

In setting a patient up for success, it is necessary to:

1. Understand the patient's lifestyle, health status, and ability to make changes.
2. Help the patient to identify specific changes.
3. Assure that the patient has the resources to implement the changes.

DIABETES

ASK about family history of diabetes.

ADVISE about the effect of diabetes on vision and ocular health.

ASSIST by giving them a diabetes checklist to rate their risk for diabetes. Ex. Centers for Disease Control 'ABC's of Diabetes'

ARRANGE for your patient to see their physician if signs warrant concern.

HYPERTENSION

ASK about family history of hypertension, stress level, diet and exercise habits.
ADVISE about the risk of stroke or heart attack along with possible ocular health complications.

ASSIST by screening for hypertension in your office.

ARRANGE for another appointment to recheck blood pressure or make appropriate referral. Refer them for stress management, nutritional or exercise counseling to minimize risk.

EXERCISE

ASK about routine exercise levels.

ADVISE of the overall benefits of stress reduction, weight control and improved cardiovascular fitness.

ASSIST by suggesting some activities such as walking, taking the stairs, cycling, swimming or an exercise class.

ARRANGE for your patient to consult their physician about starting an exercise program and setting a start date to begin exercising.

SMOKING

ASK about tobacco use.

ADVISE about the serious health risks including vision complications.

ASSIST by giving them educational brochures or a nicotine addiction quiz.

ARRANGE for referral to a support group, follow up with a physician to prescribe nicotine patch.

CASE STUDY – Health Education/Health Promotion Developing a Primary Care Team Approach to Chronic Disease

The Center for Disease Control and Prevention (CDC) in collaboration with the National Institutes of Health and their 200+ partners has contacted you to update their National Diabetes Education Program (NDEP) (www.cdc.gov/diabetes/ndep) health education materials for educating health professionals about diabetes and its complications, *Working Together to Manage Diabetes: A Guide for Pharmacists, Podiatrists, Optometrists, and Dental Professionals*

http://www.cdc.gov/diabetes/ndep/CE_WorkingTogether.htm

<http://www.ndep.nih.gov/resources/health.htm>

or

http://www.cdc.gov/diabetes/ndep/diabetes_kit.htm

The goal of Working Together to Manage Diabetes is primary prevention (health education) of diabetes. This interdisciplinary primer focuses on diabetes-related conditions affecting the foot, eye and mouth as well as issues related to drug therapy management. The primer promotes a team approach to comprehensive diabetes care and provides simple care recommendations to providers on making cross-discipline treatment referrals as well as reinforcing messages for diabetes self care. Partners work together at the national and local community level to improve the treatment and outcomes of diabetes in individuals, families, communities, and health care systems.

Public Health Questions for Case Study

1. Describe the roles pharmacy, podiatry, optometry, and dental professionals have as members of a primary care team working to prevent the complications of diabetes.
2. Note the ABCs of diabetes.
3. List the messages that each PPOD provider should convey to their patients who have diabetes and their families.
4. Identify key results of the Diabetes Prevention Program (DPP).
5. What recommendations would you suggest, and why, to this CDC-NIH-NDEP provider education program?
6. What is your plan to work with one or more of the PPOD groups in your community?

Take Home Conclusions

1. Influencing behavior change at both the community level and individual level is a process, which is reinforced by health professionals repeating similar messages.
2. Interventions oftentimes influence ones ability to change or readiness to change, but do not always create the desired outcome or behavior change from the initial efforts.
3. By first defining the change and making contact with the intended audience, goals and anticipated outcomes can be clarified.
4. Determining which messages and by what media these messages are best communicated along with pre-testing the clarity and effectiveness of those messages contributes to the clear understanding of the ideas and practices that are the focus of the health promotion efforts.
5. Monitoring and examining the outcomes in stages along the way help the program further refine the messages, strategies, or program and enables continued pursuit of the intent of the public health promotion program.

6. Working with pharmacists, podiatrists and dentists in your community to decrease the complications of diabetes, not only can improve the health of people with diabetes, but also can grow your practice. It's a win-win!!!

Additional Resources: Website Resources

Put Prevention Into Practice (PIIP)

www.ahrq.gov/clinic/ppipix.htm

American Diabetes Association

www.diabetes.org

American Optometric Association

<http://www.aoa.org/x4778.xml>

American Public Health Association

www.apha.org

Association of Schools & Colleges of Optometry

www.opted.org

Association in Research in Vision and Ophthalmology

www.arvo.org

Agency for Health Care Policy and Research

www.ahrq.gov

Centers for Disease Control

www.cdc.gov

Health Resources and Services Administration

www.hrsa.gov

Healthy People 2010

www.healthypeople.gov

Healthy Iowan 2010

www.idph.state.ia.us/adper/healthy_iowans_2010.asp

National Cancer Institute, *Making Health Communications Program Work*
(designing health communication strategies)

<http://www.cancer.gov/pinkbook>

National Committee for Quality Assurance (HEDIS)

www.ncqa.org

National Diabetes Education Program (NDEP)

www.cdc.gov/diabetes/ndep

Pharmacy, Podiatry, Optometry, and Dentistry Work Group (PPOD)

WORKING TOGETHER TO MANAGE DIABETES

<http://www.ndep.nih.gov/resources/health.htm> or
http://www.cdc.gov/diabetes/ndep/diabetes_kit.htm)

National Eye Health Education Program

www.nei.nih.gov/NEHEP

National Eye Institute

www.nei.gov

National Commission on Vision and Health

www.visionandhealth.org

National Guideline Clearinghouse

www.guidelines.gov

West Virginia Healthy People 2010

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