INTRODUCTION: CONTEXT OF THE PROJECT

Health Promotion
As technology and medicine have progressed, and as the costs of health care continue to rise, health care providers have come to understand the need for prevention and positive health behaviors as a means of fostering healthier populations, and reducing the ultimate costs to an overburdened health care system. Health promotion is an important concept for improving the well-being and health-related quality of life of individuals and communities. It is a multifaceted process that includes education, screening, correction and prevention to reduce the effect of risk factors for disease or disability. The process emphasizes self-efficacy and positive attitudes as a foundation for individuals’ engaging in health-promoting behaviors and taking active steps toward healthy lifestyles.

Health Education
Health education programs provide an effective mechanism for presenting information and empowering individuals to make decisions, change their health behaviors, modify their environment, or take preventive action. The success of such programs depends on the strength of the planning process, and the extent to which the program matches the needs of the target group.

Program Evaluation
As providers of health-related programs, physical therapists must be able to assess the effectiveness of their interventions. One of the goals of this project is to foster the development of critical analysis skills and appreciation for the research process by utilizing designs, measurement principles and data analysis procedures to evaluate a health promotion program. This part of the project will focus on the evaluation of process and outcomes.

Service Learning
The community health promotion project falls within the framework of service learning, which is a structured learning experience in which students use acquired skills to meet specific learning objectives by providing community
service in the context of both experiential and reflective activities. The experience augments traditional physical therapist responsibilities, focusing on health promotion and wellness of the individuals served, and the prevention of disability. Students will have the opportunity to conduct a program that meets the health needs of an identified population within the community, using education, selected screening tools and various intervention strategies. The experience will benefit both the students and the persons served.

**SCOPE OF THE PROJECT**
The community health promotion project will be carried out across three semesters of study. Students will be assigned to groups, with faculty and clinical advisors. Each group will be linked with a particular agency for the development of a health promotion program.

**PT780 Critical Inquiry III:** Through the Fall semester students will work with faculty and clinical advisors to develop a proposal for a community health promotion program for a specific group of individuals. The process begins with the development of a full proposal, including a needs assessment for the population being served, a review of literature related to the service being provided, and an outline of the program’s goals and methods. The proposal will also include a full evaluation plan. At the end of the semester, students will present their proposal for feedback.

**PT738 Clinical Practicum IV and PT 781 Research Project:** In the Spring semester students will implement the program as a practicum experience, and collect appropriate data to determine the program’s effectiveness. Students should be collecting relevant information as the program is implemented, as part of a formative evaluation, and may make adjustments to the program as necessary.

**PT 782 Research Presentation:** Through the final summer term, students will complete a report on the program, including an analysis of process and outcomes. If appropriate, students will collect follow-up data from program participants or agencies. Students will use SPSS statistical software to analyze data. The project will be presented in the form of a professional presentation and a written report, which will also be submitted to the agency that was served.

**OBJECTIVES**
Students will work in small groups to carry out a community health promotion program, including design, implementation and evaluation. At the completion of this experience, students will be able to:

1. Exercise the individual professional responsibilities of the physical therapist to contribute to service in the community.
2. Analyze and integrate evidence to guide the implementation and evaluation of a community service program.

3. Promote wellness and prevent dysfunction and disability in a community setting by identifying, screening for and, where possible, remediating risk factors.

4. Utilize age-appropriate measurement tools, interventions, and communication and education strategies that meet the needs of individuals served.

5. Interact with clients in a culturally competent way that reflects a respect for the diversity of health and religious beliefs as well as individual attitudes.

6. Identify the need and make referrals for continued care utilizing appropriate resources.

7. Apply principles of research design and statistical analysis to evaluate program effectiveness and make appropriate recommendations.

8. Demonstrate an understanding of ethical issues in relation to informed consent, working with vulnerable populations, and handling of data.

9. Present findings in terms of process, structure and/or outcomes in a written report and oral presentation.

PROGRAM PROPOSAL
The planning process includes three major components. The first step is a needs assessment to determine the program’s goals, and to identify the needs, values and priorities of the individuals or agencies that will be served. Next, the proposal provides a description of the program plan, describing the specific purpose, content and learning activities that are appropriate. The design of the program includes a theoretical foundation to support the focus and methods of the educational activities. Finally, the proposal includes an evaluation plan, including a strategy for data collection and assessment of outcomes, with specific variables and measurement tools delineated.

A complete timeline should be developed for all phases of the project (see Hall et al, 1998).

NEEDS ASSESSMENT
For any health education program, the planner must match the program’s purpose with the learner’s needs, the organization’s needs, and the community’s needs. A needs assessment is an essential component of the planning process with several components:\footnote{McKenzie JF, Smeltzer JL. Planning, Implementing and Evaluating Health Promotion Programs: A Primer (3rd ed). Boston, Allyn & Bacon, 2001; Chapter 4.}

1. Understanding the target population, including the community, organization and individuals. This analysis incorporates the problems and
priorities of the target population, their specific health needs and quality of life issues, values, beliefs and attitudes.

2. An analysis of the relevant epidemiology, including such factors as morbidity and mortality, fitness, risk factors, and prevalence of health problems.

3. Assessing the environment for risk factors, including social, economic, physical, services and social factors.

4. Assessing behavioral risk factors, including individual compliance, preventive actions, consumption patterns.

5. Assessing administrative and policy issues, including what resources are available.

Gathering Needs Assessment Data
Information may be quantitative or qualitative, and may be obtained as primary or secondary data. Primary data include those obtained directly from individuals, using surveys, interviews, focus groups or other types of data gathering from individuals. Secondary data are those collected from other sources including governmental agencies, websites, organizational records, and professional literature.

Setting Goals and Objectives
Based on the identified needs of the target population, the program planner must develop relevant goals and objectives for the program. Data collected as part of the needs assessment must be analyzed to determine the program’s focus. The planner must assess how risk factors are linked with the health problem being addressed. Priorities and feasibility for change must be considered. Risk factors that are of high priority and that have potential for change present the best focus for goals. Those of low priority and those that have little potential for change will not present the most effective objectives for a health program.

Goals are broad statements that identify a long-range purpose. Objectives are specific steps that must be taken to achieve the larger goal. Objectives must be measurable with a specified time frame. Objectives should address the program outcomes in terms of process and administration, learners, the environment, and the program impact.

PROGRAM PLANNING
Once the specific purpose and objectives of the program have been determined, the planner must determine how the program will achieve these objectives. The program intervention must be developed, and an educational environment created, to promote the program’s desired outcomes.

The program must be based on a theoretical rationale that allows us to project why and how the proposed program will effect the desired changes. Theories
provide a foundation for planning the types of learning activities that should be most successful. Various theoretical models are available, and the planner must determine which one(s) will provide the most useful basis for the program. Theories may relate to behavioral change and health behaviors, or learning theory (for adults or children). See Chapter 7 in McKenzie and Smeltzer (2001) and recommended readings for examples. The proposal will include a full explanation of the theoretical premise for the program.

**Review of Literature**
A comprehensive review of literature is necessary to determine what types of programs have been successful for the identified health problem, to describe how the theoretical framework fits the program’s purpose, to describe the epidemiology related to the identified health problem and target population, and to discuss background related to the program’s expected outcomes.

The purpose of the review of literature is to demonstrate the students’ command of the literature that exists on the topic. It is not intended to be an annotated bibliography or simply a description of a list of articles. It is intended to generate a critical analysis of these papers, and discussion of how the findings of others relate to the project. Students are expected to compare and contrast studies, discuss the validity of previous research, clearly present the state of knowledge on the topic, and show how previous work supports the program plan. The scope of this review will vary, depending on the nature of the health promotion program, the theoretical rationale and the depth of previous work in this area. The faculty advisor will assist students in defining the scope of the review.

**Program Design: Intervention**
The proposal must include a complete description of the program’s methods. The planner must determine what types of interventions will be most effective for the target population, given the program’s goals, the participants’ needs and values, and the available resources. The program should address one or more risk factors that were identified. More than one intervention process is typically included. The type of interventions will depend in part on the availability of resources, including time.

Each intervention should be focused on one or more objectives for the program, and should adhere to the theoretical premise that was developed. The planner may design interventions that influence individual participant behaviors, or they may address community or agency policies.

**Types of Intervention Activities**
Planner should incorporate a variety of intervention activities to address specific goals. Activities may be focused on:

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1. Communication activities- written or video educational materials
2. Educational activities- lecture, discussion, workshops
3. Behavior modification activities- may include journal or logs
4. Environmental change activities- changing the environment, posting information
5. Organizational culture activities- changing the traditions or priorities of the organization
6. Incentives or disincentives- providing rewards or reinforcement for behavior change
7. Health status evaluation activities- providing information to participants on their own health status, such as screenings.
8. Social activities- building in important social supports such as support groups or buddy systems.
9. Technology-delivered activities- includes online activities for delivering information or providing for self-assessment.

Resource Plan
The planner must also develop a full plan for the use of resources, including materials, supplies, space, personnel, and a budget. The proposal must include a full description of materials that must be developed as well as those that are available from other sources, including materials needed for marketing or publicity. The proposal must detail any support that would be expected from the sponsoring agency or other funding sources. The budget must delineate all predicted expenses associated with the program.

Data Collection
The proposal must detail all data that will be collected throughout the program, related to process of implementation as well as outcomes. The measurement tools used should be described, with emphasis on their reliability and validity. The literature review should provide support for the proposed measurements.

Data may be quantitative or qualitative, depending on its purpose. A variety of outcomes measures should be used to address all the objectives of the program. Process measures must be collected as the program is implemented. All programs should include some form of follow-up with participants or agencies as part of the data collection plan.

PROGRAM EVALUATION
Program evaluation is an essential component of designing a health promotion program. The purposes of evaluation are to:

1. Determine if the intervention is reaching the appropriate audience.
2. Determine if it is being implemented as planned.
3. Determine if the program is achieving desired outcomes.
4. Determine strengths and weaknesses of the program and monitor standards of performance.
5. Determine if the program’s goals are generalizable to other groups.
6. Contribute to the knowledge base related to an understanding of health behaviors and health promotion for specific populations.
7. Identify hypotheses for future study.
8. Determine if the program is feasible from a resource perspective.

It is not expected that any single project will address all of these purposes, but they do present an important framework for organizing an evaluation plan.

Levels of Program Evaluation
Program evaluation can be performed at different levels of complexity. The first level is process evaluation, which is often seen as quality assurance. The program is monitored for the quality of procedures and the methods of implementation, how data are collected, how staff performs, to what extent the program follows its intended function. The second level is evaluation of program effectiveness, to determine the impact of the program to the agency and individuals served. The emphasis is on how participants learn or change their behaviors. Quasi-experimental designs are often used for this purpose. The third level of program evaluation is often called evaluation research, which utilizes experimental methods to study the efficacy of health education activities. By using random assignment and other controlled conditions, researchers can approach cause-and-effect explanations, although these may not approach real world situations because of their experimental controls.

The health promotion programs that you will develop will most likely meet the criteria for process evaluation and program evaluation. Within the constraints of time placed on this project, it is unlikely that you will be able to create a controlled situation for an experimental model. You will be expected to present a plan for evaluation of process and outcomes. Formative and summative evaluations are essential to gain an understanding of the program’s strengths and weaknesses, and to make recommendations for the future. Evaluations may be based on quantitative or qualitative data, and should include some form of analysis of data at the start and end of the program. It is also useful to plan for follow-up of participants to determine if the program has facilitated changes in behavior or attitudes.

Research Designs and Data Analysis
The evaluation plan will include a plan for data analysis, including statistical procedures to be used. Both descriptive and inferential statistical procedures should be applied as appropriate to the program design. The proposal must specify what design is being used to determine if the program is effective. The proposal should demonstrate steps taken to assure internal and external validity of the data.
FACULTY AND CLINICAL ADVISORS
Each group will be assigned a faculty advisor, who will coordinate and support the group as students develop the proposal and carry out the project. In some cases, a clinical advisor will also be assigned, who will support the group's process and work with students onsite.
APPROVAL OF COMMUNICATIONS
As part of the health promotion program, students may develop written materials
to be distributed to participants or agencies, or publicity materials such as
posters. All forms of communication must be approved by the faculty advisor
prior to use. Students may include the logo for the Institute in their materials with
the advisor’s permission.

Students may be communicating by phone or in person with individuals who
represent the service agency or with participants. One member of each group
will be appointed as the liaison for communicating with the service agency. All
plans for such communication should be approved by the faculty advisor in
advance.

COLLABORATIVE GROUPS IN EVALUATION RESEARCH
Students must recognize that although groups facilitate the sharing of
responsibilities and workload, all members of the group are equally responsible
for understanding the full scope of the project, the literature and the results.
Everyone must participate in the development of a program plan, presentation of
the proposal, implementation of the program, data collection, analysis and
interpretation of data, and in the preparation of the final written report and
presentation. Students are encouraged to discuss the dynamics of group
operations with their advisor to assure that all students feel comfortable with the
sharing of project responsibilities.

AUTHORSHIP
Although it is not an expectation, sometimes the results of a student project are
worthy of dissemination to a wider audience. When a study is presented as a
platform or poster at a professional meeting, or when it results in a written
publication, those involved must determine appropriate authorship. Privileges of
authorship are an important consideration, as one earns status as an author
through substantive contributions to the design, implementation, analysis or
writing of a research paper.

The health promotion project will be developed and carried out under the
guidance and supervision of a faculty advisor, and may include a clinical advisor
as well. Although the objectives for the student project do not include
preparation of a publishable paper or professional presentation, if the project
results in submission of an abstract or paper, the faculty advisor will negotiate
with the students on the order of authorship. In most cases, the faculty advisors
will merit primary authorship, followed by students in alphabetical order. The
individuals and agencies associated with the project must also receive an
acknowledgment.