

ABSTRACT

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A seven step leisure counseling program was developed by the researcher to aid patients in dealing with increased free time. McDowell's leisure counseling orientations were utilized to develop the program. The program was structured to take place in both the inpatient and outpatient phases of cardiac rehabilitation. Wenger's fourteen step inpatient cardiac rehabilitation program and Peterson's STILAP leisure interest inventory were included in the program. The researcher developed a model community leisure resource guide for the city of La Crosse. This guide would be used to help patients identify community resources. A slide/tape show and corresponding booklet were also developed by the researcher to promote safe exercise by cardiac patients after discharge from Phase II. The slide/tape program outlined the principles of aerobic conditioning and emphasized the use of the heart rate and METS to monitor activity intensity. Recreational and social activities were also emphasized. The corresponding booklet reinforced the concepts introduced in the slide/tape program and also included specific information about precautions to activity, warning signs of a heart attack, and environmental conditions. This leisure counseling program could be incorporated into existing cardiac rehabilitation programs to help patients find meaningful use of their leisure and to reduce the amount of time that patients devote to physical concerns.

THE DEVELOPMENT OF A COMPREHENSIVE
LEISURE COUNSELING PROGRAM FOR
CARDIAC PATIENTS

A Thesis Presented
to
The Graduate Faculty
University of Wisconsin - La Crosse

In Partial Fulfillment
of the Requirements for the
Master of Science Degree

by
Janet Treftz
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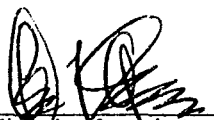
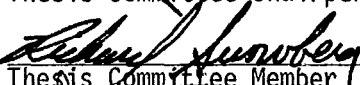
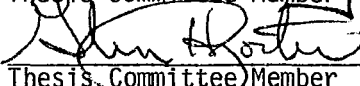
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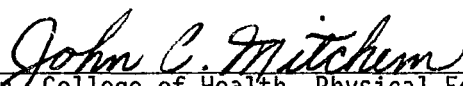
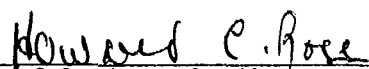
We recommend acceptance of this thesis in partial fulfillment
of this candidate's requirements for the degree:

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CHAPTER I

INTRODUCTION

The goal of current cardiac rehabilitation programs across the country is to help myocardial infarction and bypass patients return to the highest level of functioning after their cardiac event. It has been documented (Wenger & Hellerstein, 1978) that patients participating in cardiac rehabilitation programs have shorter hospital stays, less anxiety, and fewer false alarms from the fear of a reoccurring heart attack.

The course of rehabilitation for the cardiac patient is generally divided into several stages or phases. Phase I is the inpatient phase of rehabilitation. At the time of discharge (the end of Phase I), patients are often referred to an outpatient exercise therapy program. This stage of rehabilitation involves supervised exercise sessions that are conducted in the hospital setting. Patients who are not able to return to the outpatient exercise therapy program are often given a home exercise program to follow (Wilson, Fardy, and Froelicher, 1981). The outpatient or at home exercise program is frequently referred to as Phase II of cardiac rehabilitation. The duration of the Phase II program generally ranges from 2 to 3 months.

After the physician has released the patient from Phase II, the patient has several choices as to their rehabilitation. A community agency such as a local university, YMCA, or Jewish Community Center

may offer a cardiac exercise program and these individuals may enroll with their doctor's approval. Because some communities do not have a program of this type, or the patient is unable to travel to such a program, these individuals must meet their exercise needs on their own. Activity guidelines often are given to the patient, but tend to be general. These guidelines should include specifics about what activities are appropriate based on the needs and former recreational involvements of the patient.

Purpose of the Study

The medical literature generally indicates that there is a great deal of apprehension by patients regarding their level of activity after a heart attack (Charles & Kronnenfeld, 1980; Gentry, 1975). Patients have more free time due to lessened work hours, early retirement, or a general lifestyle change.

Cardiac patients need help in assessing what activities to pursue during free time. One way to alleviate the problems associated with increased free time is through the use of leisure counseling (McDowell, 1977). Once the patient has decided what activities are of interest to him/her, there is a need to show the individual how to derive the most benefit from the activities chosen.

The purpose of this study was to develop a comprehensive leisure counseling program to help cardiac patients make meaningful choices for leisure time activities and to help them exercise safely on their own.

Statement of the Problem

The problem that this study chose to investigate was the development of a comprehensive leisure counseling program that could be incorporated into existing cardiac rehabilitation programs. This program was based on existing research. Within this program the following tools were developed and utilized in addition to tools already developed by other professionals:

1. A slide/tape program to promote safe physical activity after heart attack or by-pass surgery. The program will stress the importance of regular exercise, recreational, and social activities.
2. A booklet to be used in conjunction with the slide/tape program. The booklet will reinforce the concepts presented in the program and in addition will include information about specific precautions to exercise, a MET chart, and environmental conditions to be aware of.
3. A community leisure resource guide for the city of La Crosse, Wisconsin. This guide will be utilized to match the patient's interests with existing resources in the community. Information about various organizations and their functions will be highlighted.

Need For The Study

The patient education programs designed for cardiac patients generally do not include a leisure counseling component to help

patients choose appropriate leisure time activities. Recent literature (Montiero, 1979; Wenger, 1978) suggests that the myocardial infarction patient usually has more free time and needs counseling in adapting to this new situation.

Leisure counseling is needed to help patients identify and develop leisure time interests. This process may also be helpful in enabling the patient to find a physical activity of interest that can be done on a regular basis.

The compliance rates for group exercise programs indicate that a great percentage of patients drop out within two years after joining such a program (Andrew, Oldridge, Parker, Cunningham, Rechnitzer, Jones, Buck, Kavanagh, Shephard, and Sutton, 1981; Andrew & Parker, 1979). Patients are usually offered a few choices of physical activities to do either in a group situation or alone. If the patient finds these activities acceptable, then participation is not a problem. Many patients are unable to find a group exercise program in their area. For individuals that cannot participate, those who drop-out, and those who prefer to exercise on their own exercise guidelines should be established.

Through a leisure counseling program the patient will identify activities to pursue after discharge (active and passive). Some of the activities identified will be for enjoyment, while others can be utilized for the patient's exercise program. There was a need to develop a patient education tool to enable cardiac patients to exercise on their own using their activities of choice. Patients are sometimes

asked to start activities that are not appealing to them. Instead, a wide variety of activity choices should be encouraged for the cardiac patient along with specific precautions for certain activities. The ultimate goal of the study is to encourage patients to take responsibility for their exercise and leisure needs through leisure counseling.

Assumptions

The following assumptions were made in the study:

1. The excess of free time is a source of anxiety for patients returning home following a myocardial infarction.
2. Compliance with an exercise program will improve when a variety of exercise alternatives are presented to cardiac patients.
3. A slide/tape program is the most appropriate way to present exercise alternatives to cardiac patients based on current research.
4. Patients have the educational backgrounds necessary to understand the concepts presented in the slide/tape program.

Definition of Terms

Cardiac Rehabilitation. A process of comprehensive care through which patients are restored to and maintained at their optimal medical, social, physiological, vocational, psychological, and recreational status (Naughton, 1977). Appendix A is an example of a cardiac rehabilitation program.

Compliance. The extent to which a patient's behavior coincides with the clinical prescription in terms of taking medications,

following diets, or executing other life style changes (Sackett & Haynes, 1976).

MET. The name for a resting metabolic unit, independent of body weight. One MET is the equivalent of approximately 1.2 cal/min. The oxygen equivalent of approximately of 1 MET is 3.5 ml O₂.kg.min. The term MET is now preferred for energy requirement or utilization (Wenger, 1978).

Myocardial Infarction. The damaging and death of an area of the heart muscle (myocardium) resulting from an interruption in the blood supply reaching that area.

Phase I of Cardiac Rehabilitation. This phase typically occurs in the hospital on an inpatient basis once the patient is free from pain or complications. The physician orders progressive activities based on the patient's responses to exercise. The activity program generally begins in the coronary care unit. There are several approaches to the activities prescribed, one of which is Wenger's 14 step program (Wenger, 1978). Three areas are involved in this program; exercises, activities of daily living (including self-care), and recreational activities. During the sessions, the patient is monitored for chest pain, breathlessness, or ECG changes. Appendix B is an example of a Phase I program developed by Wenger.

Phase II of Cardiac Rehabilitation. This phase typically occurs on an outpatient basis following hospital discharge. Patients return to the hospital clinic for exercise sessions on a regular basis (2-3 times a week). During the sessions patients exercise on a treadmill

or bicycle ergometer while being monitored for ECG changes. For patients who cannot return on an outpatient basis, a home exercise program is suggested and periodic returns for exercise prescription checks are scheduled. Appendix C is an example of a home walking and exercycle program designed for cardiac patients at La Crosse Lutheran Hospital in La Crosse, Wisconsin.

Phase III of Cardiac Rehabilitation. This is the maintenance phase of cardiac rehabilitation. This phase takes place in the community and involves a supervised exercise program for cardiac patients. The general format of these classes includes a check-in time where patient's blood pressures and heart rates are taken, a warm-up period, a conditioning period, and a cool down period.

CHAPTER II

REVIEW OF RELATED LITERATURE

In the last ten years changes have been made in the treatment of the myocardial infarction and bypass patient. The mortality rate for individuals admitted to hospitals with a myocardial infarction has decreased from 30 percent to 15 percent. Statistics show that 85 percent of those who suffer a myocardial infarction survive and return to "normal" lifestyles. Patients resume activities much sooner and are discharged much earlier from the hospital (Montiero, 1979).

Several studies have demonstrated the effects of conservatively treated myocardial infarction patients (Wenger, 1971; Siegel, 1968). These studies have given the medical profession a basis for recommending early activity for the cardiac patient. Goldberg (1973) showed that complete bedrest was psychologically harmful to the patients studied.

Patients who are considered medically stable are good candidates for early ambulation. These patients comprise one half of all patients admitted to coronary care units. This phase of rehabilitation is generally considered to be Phase I or the inpatient phase of cardiac rehabilitation (Wenger, 1978).

In Phase I, activities are of very low intensity and typically will progress in intensity each day of hospitalization. These activities generally include eating, self care, use of the commode,

and active and passive exercises. Once the patient is removed from the coronary care unit, activities are designed to increase endurance so that the individual can perform household and other light activities without difficulty prior to return home. The program may include occupational or recreational therapy as a regular part of the patient's daily routine. Patients perform light craft activities in their room and this activity is considered a regular part of their progressive physical activity (Wenger, 1978).

Once discharged, the patient may return to the hospital for exercise sessions 2 to 3 times a week. This phase of rehabilitation is called Phase II or outpatient cardiac rehabilitation. These sessions generally consist of regular exercise classes using the treadmill or stationary bicycle. The patients are monitored for EKG responses while exercising and a nurse, therapist, or exercise physiologist supervises each session. The patient remains in this phase anywhere from 4 to 12 weeks.

Cardiac patients who are unable to return to the hospital for outpatient exercise sessions are sent home with an exercise prescription that will often include either a walking program or stationary bicycle program. Periodic follow-up sessions are generally scheduled to check patient progress.

Impact of Increased Free Time

Wishnie (1971) studied the psychological hazards of the cardiac patient after returning home. Twenty three patients reported that they felt frustrated with their inactivity at home. A few patients

walked and others watched television during their free time. Three of the patients became involved in former hobbies. All the patients felt a lack of structure in their lives because they did not return to work. In all of the patient's families, there was evidence of significant emotional conflict after the myocardial infarction. Seventy five percent of the problems were the result of differences over medical instructions.

Patients that do not return to work are often depressed. (Nagel & Gargola, 1971) found that of the patients he studied that did not return to work, 55 percent were depressed. In more than half of the patients there was no clinical evidence of residual heart damage. They concluded that the emotional reactions were unrelated to the severity of the heart attack, but seemed to be associated with inadequate medical instructions about exercise and how to resume normal activities.

Finlayson & McEwen (1977) looked at the impact of a myocardial infarction on the patient's family and leisure activities. The men in the study reported a reduction in physical and social activities four years after the event. They spent less time gardening, were less involved in sports and clubs, went out less, and did less maintenance work around the house.

Totman (1979) studied those factors which promoted better adaptation to stressful life events. The results of the study indicated that the extent to which a person adjusted to a stressful life event could be determined by examining two factors before and after the event. The first factor was the overall extent of patient involvement in leisure

and work projects such as hobbies, yard work, carpentry, and others. The second factor was the patient's social involvements. If the individual's participation in projects and social activities increased or remained the same as before the event, it was inferred that the adjustment was good. A decline in socializing and activity involvement indicated that adjustment to a stressful life event such as a heart attack was poor or incomplete. Cardiac patients in the study were shown to have less goal directed activities after their heart attack than control subjects. It was concluded that a reduction in activities and social contacts was potentially harmful to the health of the patient.

Psychological Reactions to Myocardial Infarction

Patients that experience a myocardial infarction or open heart surgery undergo a great deal of psychological stress. Although patients have shorter periods of hospitalization and are given permission from their doctor to return to work earlier, many patients are unwilling to return to work (Wenger, 1973).

Wishnie (1971) has identified a reaction to a myocardial infarction called "cardiac invalidism". This term means that the patient has a psychological reaction to the heart attack so strong that it interferes with normal recovery.

Klein (1965) reported that cardiac patients who did not return to work and continued the sick role often did not have enough heart damage to prevent them from returning to work. These individuals felt that their hearts were very fragile and would not withstand physical activity.

Cardiac invalids tend to attribute somatic symptoms such as pain to their heart and abandon activities associated with pain. The physician must be careful to promote activity and to only discourage those activities which are too strenuous for the patient. It is sometimes difficult for the physician to differentiate the symptoms the patient expresses.

Goode (1960) suggests that once a patient is physically able to return to activity, the degree to which the individual recovers from this role of being ill is dependent on the expectation of others. If the patient believes that activity may be a further risk for heart damage, then role performance and expectations of others becomes less important because the patient is afraid of a recurrent infarction.

Deconditioning can occur in the cardiac invalid as a result of unnecessary restrictions to activity. When cardiac patients are allowed to become excessively deconditioned, these individuals may become preoccupied with physical symptoms. Deconditioning or restriction of physical activity results in tachycardia, orthostatic hypotension, weakness, and shortness of breath. These symptoms are interpreted by the patient as proof of cardiac dysfunction. These individuals may expect others to take care of them (Cassem & Hackett, 1973).

Role of Leisure Counseling in Cardiac Rehabilitation

When an individual is ill or handicapped the need for meaningful leisure time activities is magnified. The ultimate goal of rehabilitation is to restore the functional capabilities of the patient so

that he/she can return to the community as independent as possible. Vocational adjustment is very important, but for those patients who will not return to their some job or must modify their jobs, an excess of free time may be a problem (Hayes, 1977).

One way to individualize a program of physical activity and recreational involvement is through a process called leisure counseling. Leisure counseling is a process that uses all information gathered about a person to further explore interests and attitudes about leisure, recreation and social relationships to enable the patient to identify, locate and utilize community resources (O'Morrow, 1977). Leisure counseling can assist cardiac patients in the return to former hobbies and adapting to new restrictions by providing activities for leisure involvement (both active and passive).

Wenger (1978) suggests that counseling may be a necessary component of cardiac rehabilitation programs. Hoeft (1979) conducted a study that examined the impact of leisure counseling in altering leisure attitudes, work self concepts, work attitudes, leisure self-concept, and leisure satisfaction of cardiac patients. The study concluded that leisure counseling significantly affected leisure self concept and leisure satisfaction in the patients studied. A follow-up study was conducted to determine whether leisure counseling had sustained an increase in the participants' leisure satisfaction and leisure self-concept since the original leisure counseling sessions. It was concluded that those patients who participated in leisure counseling sustained a positive leisure self-concept after a period of two years (Hoeft, 1982).

The literature revealed several approaches to be used in the leisure counseling process (McDowell, 1977; Peterson, 1977). The approach or orientation that will be used with the client depends on the needs, strengths, and problems of the individual. Because people and their situations differ, the method or methods used to deal with these situations will also differ. The three orientations outlined by McDowell (1977) are Leisure Resource Guidance, Therapeutic-Remedial-Normalizing Service, and Lifestyle Development Education Service. Appendix D indicates how each of these orientations can be used to help with the specific needs of the client.

The first orientation (Leisure Resource Guidance) is an approach to leisure counseling concerned with the client's individual awareness of leisure interests as well as the leisure resources in the community. This approach might include administering a leisure interest inventory. The STILAP (State Technical Institute's Leisure Assessment Process) developed by Peterson and outlined by Navar (1977) is one example of an interest inventory (Appendix E). This inventory involved the patient indicating his/her level of participation in various active and sedentary leisure time activities. The main purpose of administering the STILAP is to identify past and present leisure activity involvements and to provide guidelines or suggestions for further leisure time involvements.

Another aspect of this orientation might be the development of a personal community resource guide. Appendix F contains a resource guide for the city of La Crosse, Wisconsin that could be utilized for this orientation. The leisure interest inventory described previously

could be utilized to identify the patient's interests. This information can then be matched with existing community resources using the resource guide (McDowell, 1977). Independent exploration of leisure interests is emphasized, but the therapist might help the patient make use of the guide by explaining the purpose and services of some community organizations.

The second orientation, Therapeutic-Remedial-Normalizing Service concerns itself with skill deficiencies that restrict the client from participating in enjoyable leisure time activities. Systematic evaluation of a new activity that the patient wishes to become involved in may help promote participation in that activity. The counselor's role in this case is to help the patient analyze strengths and weaknesses in activity skills. The counselor may develop structured experiences such as a mini course teaching patients skills in social interaction, physical skills, or socialization skills (Allen, 1980).

The final leisure counseling orientation, Lifestyle Development-Education Service, looks at a client's attitudes, values and behaviors related to leisure (Mundy & Odum, 1980). Through this kind of analysis a person can more easily identify what kinds of accomplishments they want from leisure experiences. This orientation also concerns itself with work and volunteer attitudes. The goal of this approach to leisure counseling is self understanding. Once a patient understands what they want to accomplish during leisure time activities, they are able to make better leisure choices (McDowell, 1977)

The remainder of the literature was used to develop the slide/tape program. The Exercise Prescription and Compliance Rates and Exercise Alternatives will be presented in the next sections.

The Exercise Prescription

The exercise prescription is given to the patient prior to discharge by his/her doctor and includes information about how hard to exercise, how often, and how long to exercise. This prescription should be based on the results of a low level discharge test. To achieve a training effect, the exercise prescription should be 60 to 85 percent of the maximum heart rate as determined by the low level discharge test. It is generally agreed that 60 percent of the maximal heart rate is the level necessary to see significant changes in cardiovascular fitness (Burke & Franks, 1975; Pollock, Wilmore, and Fox, 1978). These studies involved younger, more fit individuals. Sidney & Shephard (1978) found that in the elderly improvements were made in fitness levels with low intensity training combined with performing the exercise more times a week (increasing the frequency of the exercise sessions). Burke (1975) showed that exercising at low intensities caused significant changes in unfit middle aged and older individuals. Heart rates as low as 100-120 beats per minute (40 to 50 percent of maximal heart rate) were considered low intensity.

The intensity or energy expenditure of given activities can also be expressed in terms of metabolic units or METS. One MET is the amount of energy used per kilogram of body weight per minute while seated at rest or 3.5 ml.kg.min. The MET is based on the amount of energy used per unit of body weight. This enables individuals of all sizes to be given an activity prescription that provides a similar amount of energy expenditure for each exercise session (Brammell & Nicoli, 1976). The energy

cost of any activity can be expressed as multiples of the energy cost at rest or MET cost (Hellerstein, 1957).

In several studies by Gordon (1958) the energy cost of any activity was found related to the care of the cardiac patient. The energy cost of an activity was used as a means to monitor a patient's activities in order to control the amount of stress placed on the heart. Hellerstein (1957) found that a patient's ability to perform self care could be related to the ability to participate in other activities. The energy cost of any activity is an approximate value that can be used when determining appropriate activities for cardiac patients (Ogden, 1979).

Another component of the exercise prescription is the duration, or how long an activity needs to be performed to achieve physiological benefits. Improvements in fitness have been shown to occur with exercise programs listing only 5 to 10 minutes if the intensity was very high. Longer duration programs with moderate intensities have shown the greatest improvements, generally those that were 30 to 60 minutes in duration. Duration of the exercise session and the intensity are closely related. The actual energy cost of the activity per session is a major factor in the development of fitness. One example of this is the energy cost difference between running and walking. In a study by Pollock, Dimmick, and Miller (1975) forty minutes of walking briskly four times a week was compared with 3 days per week of moderate intensity jogging programs 30 minutes in duration. The energy costs of walking and jogging were shown to be approximately the same. In this

study, Pollock recommended those who prefer walking slower should increase the amount of time per exercise session. Participants can avoid unnecessary injuries by working at a slower pace and also add to the safety of their exercise program where strenuous exercise is contraindicated. Wenger (1978) suggests that patients should exercise for at least twenty to thirty minutes an exercise session to achieve benefits.

The number of times a week an exercise is performed or the frequency is another important part of the exercise prescription. (Pollock, Gettman, Durstine, Ward, Ayres, and Linnerud (1976) studied the effects of frequency of training on men that exercised either one, three, or five days a week. The degree of improvement in fitness was related to the number of times a week the exercise was performed (the five day a week exercisers showed the most improvement).

In another study by Pollock, Cureton, and Greninger (1969), exercise training occurred two or four days per week. Significant improvements were seen in the two day a week group, however, three days a week at a minimum was suggested to show losses of body fat. The study concluded that exercising a minimum of three days a week is necessary to show significant improvements in cardiovascular fitness and body weight.

The only form of exercise that has been shown to be beneficial in primary or secondary prevention of coronary artery disease is aerobic exercise (Brammell & Nicoli, 1976). Aerobic exercise involves the use of the large muscle groups of the trunk or legs in a rhythmic motion. Aerobic exercises are less intense, longer in duration, and designed

to tax the oxygen transport system of the body. Some examples of aerobic exercise are walking, running, cycling, swimming, and cross-country skiing. Any activity can be termed aerobic depending on how it is done. Anaerobic exercise is defined as short, fast bursts of activity that are very short in duration. Weight lifting and sprinting are given as examples of this type of exercise (Astrand & Rodahl, 1980).

Patients that become involved in a community exercise program may have progressed through hospital inpatient cardiac rehabilitation programs, or may have no previous involvement with exercise therapy. The admission criteria for these programs varies according to the type of agency offering the service (American College of Sports Medicine, 1981).

Compliance Rates and Exercise Alternatives

The compliance rates for community based exercise programs for cardiac patients have been shown to be anywhere from 15 to 45 percent. These percentages are based on the number of individuals that dropped out of programs within a two year period. Several studies have been conducted to determine why participants drop out of these programs (Andrew, 1979; Shephard, Corey and Kavanagh, 1981).

The research has identified several common characteristics of the dropout, one of which was a lack of activity during leisure time (Shephard, 1979). Jogging has become a popular activity in the United States for both the normal adult, and for rehabilitation of the cardiac patient. Most community based cardiac rehabilitation programs consist of either walking, jogging, or stationary bicycling because these can be done in a supervised setting where emergency equipment is readily available (Wilson, 1981).

Emes (1977) found that exercise becomes more difficult with age because of decreased muscle strength, stiff joints, painful movement, and stress on heart and lungs. Walking was suggested as the activity of choice because it avoids many of the disadvantages of more intense activities with similar advantages. Community exercise programs for cardiac patients tend to concentrate on lower extremity training and ignore individuals with orthopedic problems, arthritis, or peripheral vascular disease that are unable to participate in traditional exercise programs that include walking, jogging, or bicycling (Hellerstein, 1981).

The high drop-out rate among cardiac patients may be attributed to the lack of interest in the types of exercise offered. Oldridge (1979) reported that 42 percent of the patients that dropped out expressed a lack of motivation as the main reason for leaving the program.

In a study by Pollock, Miller, Janeway, Linnerud, Robertson, and Valentino (1971) middle aged sedentary men showed training effects through a walking program with a drop-out rate of only 25 percent. This study also indicated that walking at 4 mph or faster can require more calories per minute than jogging at slower speeds. Walking in a swimming pool is another example of beneficial aerobic exercise. Evans, Cureton, and Purvis (1978) found that walking and jogging in water was a good form of exercise. It took one-third to one-half of the walking or jogging speed to achieve the same intensity of exercise in water as compared to similar exercise on dry land. The buoyancy of the water reduced the stress on the joints and muscles. A similar

program has been used for lower extremity rehabilitation. The patients walked in shoulder height water for 15 minutes twice a day. As their conditions improved, the patients went into shallow water to continue the benefits of exercise (Pease, 1976).

Rope skipping is another alternative to jogging. The best activities for cardiac patients are those that involve low intensity, longer duration. Rope skipping intensity is difficult to adjust to due to the variety of jumping styles and speeds. Caution must be taken to avoid elevating the heart rate too quickly. It may be a good alternative for those attaining the appropriate levels of fitness (Sol, Town, and Senning, 1979).

Stationary bicycling is considered a good activity because it allows the individual to exercise at home. Stationary bicycles can improve physical fitness when performed at the right frequency, intensity, and duration (Gettman, 1981).

CHAPTER III

METHODS

A leisure counseling program was developed for myocardial infarction and bypass patients. From existing research in the area of leisure counseling a seven step program was developed (Appendix G). The purpose of this model was to outline various approaches to leisure counseling that might be effective in improving the quality of leisure time activities for cardiac patients and to provide guidelines for cardiac rehabilitation personnel interested in establishing this type of program in their hospital.

It is important to note that each step of the leisure counseling program can be independent of the others. The patient that has more problems participating in leisure activities may progress through all seven steps. The patient's needs will dictate which steps are appropriate.

The role of the physician in this program is to refer or provide orders for patient participation during the inpatient phase (steps 1-3), and to be available to the therapist should any questions arise. The therapist is responsible for writing progress notes on these sessions in the patient chart. The therapist should maintain contact with the exercise physiologist possibly with bi-weekly meetings to ensure that inappropriate activities are not prescribed for patients prior to discharge and after discharge. At these meetings patient progress or complications might be discussed. The exercise physiologist could utilize the Phase II outpatient sessions as a time to

reinforce the recommendations for leisure activities. The inpatient steps (1-3) are a necessary part of the program and should be a part of every patient's cardiac rehabilitation. In steps 4-6 (outpatient program) patient expressed desires for further counseling results in scheduled outpatient counseling sessions. At this stage counseling may or may not be referred by the physician. The therapist sends the physician progress notes on these sessions. Step #7 should be scheduled for every patient regardless of which steps he/she completes. This step is a follow up appointment to talk with patients about problems or questions. The steps developed could be carried out by a variety of hospital personnel.

Step #1 - Inpatient Occupational or Recreational Therapy

Step #1 is the 14 step program for Phase I of cardiac rehabilitation developed by Wenger (1978) for the inpatient or a modified version of this (Appendix B). The 14 step program begins with range of motion exercises and activities of daily living and progresses the patient to ambulation on the hospital floor. The 14 step program also specifies that in certain steps patients read or perform light craft activities as part of their program. The general guideline is that the activity should not exceed 1-2 METS. The therapist should refer to a MET chart to determine what activities are appropriate. Each step of the 14 step program is ordered or signed by the physician when he/she feels that the patient is capable of completing that step. Patients generally complete all 14 steps prior to discharge. In most hospitals the 14 step program will begin within 1-2 days after admission for those

patients that are not experiencing complications. The use of craft activities in the inpatient setting serves to increase the patient's functional capacity. In this setting, recreational activities are used to keep the patient active during his/her hospital stay.

Step #2 - Leisure Interest Inventory

Step #2 involves administering a leisure interest inventory to patients evaluating the findings of the inventory, and discussing the findings of the inventory with patients while they are inpatients in the hospital following their heart attack or bypass surgery. The purpose of this step is to help the patient and therapist identify leisure time interests and deficiencies. There are many interest inventories currently in use for leisure counseling purposes. One example of an interest inventory is the STILAP (State Technical Institute's Leisure Assessment Process) developed by Peterson and outlined by Navar (1977). This interest inventory has been field tested and evaluated through continuous implementation over the past four years at the State Technical Institute and Rehabilitation Center in Plainwell, Michigan. The researcher chose this particular inventory because it has been in use at Lutheran Hospital in La Crosse, Wisconsin for several years as a part of the Recreational Therapy Department and because it is based on a normal or non-disabled population.

The STILAP (Appendix E) was designed to provide the therapist with objective data that enables both the client and staff to become involved in leisure decision making. It also provides the therapist with valuable information about the needs of the client. To accomplish this, the STILAP categorizes the types of activities that the client is

currently involved in and identifies those in which the individual does not participate. These categories are referred to as competencies. By categorizing the inventory responses the patient will become more aware of the leisure activities available and the types of leisure activities or competencies that are not currently incorporated into one's life.

There are two parts to the STILAP. A detailed explanation of how to administer and score the inventory can be found in Appendix H. The first form, the checklist, is a list of activities. The interest inventory covers a wide variety of activities. These activities are of various types and may give the patient ideas for free time use that one may not have considered. The patient is asked to respond to the checklist in terms of his/her level of participation. The individual administering the inventory should explain the activity check list to the patient and establish that the inventory will be used to explore possible alternatives for future leisure needs and interests.

The patient may have difficulty understanding the written directions for completing the checklist, therefore the therapist should be available to explain the directions clearly to the patient. There are three possible answers to each activity listed. These include "M", "S", and "I". These answers refer to the patient's level of participation just prior to their cardiac event. If the patient circles "M", then the patient participates in that activity "Much" and his or her level of participation is high enough to be self-satisfying. Seasonal activities may be circled if the patient participates in the activity "Much" when the opportunity is available. One example of this would be ice skating. If the patient ice skated often during the winter then he/she should circle "Much" for this activity.

The answer "S" should be circled if the patient participates in the activity occasionally but not on a regular basis. One example of this would be the individual that occasionally golfs.

The letter "I" represents patient interest in the activity and a desire to learn the skills necessary for participation. If the patient does not participate and has no interest in learning then the answer is left blank.

Patients are encouraged to circle "S" and "I" if they participate sometimes in the activity and wish to improve upon their skills. Circling "M" and "I" will indicate that the patient participates much in the activity but he/she would like to improve the degree of skill. The checklist provides blanks for activities not mentioned since every leisure activity cannot be listed.

Once the activity checklist has been completed, the second form, the Leisure Profile Worksheet is used to calculate the client's responses to the activity checklist. The Leisure Profile Worksheet lists fourteen competencies that are needed for responsible use of leisure (Appendix I). Each activity in the checklist falls into one or more of these competency areas. The competencies are as follows:

1. Physical skill that can be done alone.
2. Physical skill that involves participation with others regardless of skill level.
3. Physical skill that requires the participation of one or more others.
4. Activity dependent on some aspect of the outdoor environment.
5. Physical skill not considered seasonal.
6. Physical skill with carry-over opportunity for later years.

7. Physical skill with carry-over opportunity and vigorous enough for cardiovascular fitness.
8. Mental skill participated in alone.
9. Mental skill requiring one or more others.
10. Appreciation skill or interest which allows for emotional or mental skill though observation or passive response.
11. Skill which enables creative construction or self-expression through object manipulation, sound, or visual media.
12. Skill which enables enjoyment/improvement of the home environment.
13. Physical or mental skill which enables participation in a predominately social situation.

These competency areas are a basis for discussing the development of satisfying leisure time pursuits. To satisfy a competency, the client should participate in at least one activity in that competency. The patient does not fail a competency, but competencies are a basis for evaluating which types of activities the patient is currently involved in, and those that he/she does not participate in at this time.

Although several competencies may not be satisfied, the therapist may suggest that the patient learn new skills in the activities that are circled "I" on the activity check list. For example, if the patient had not satisfied the competency of a physical skill that is not seasonal, then those activities that are in this category and have been circled "I" such as bowling would be promoted by the therapist.

Following the completion of the interest inventory and scoring by the therapist, the results should be discussed with the patient. The overall objectives of this step of the leisure counseling model include:

1. To promote discussion between the patient and therapist.
2. To identify skill areas or former hobbies of the patient.
3. To relate interest areas to existing resources in the community.
4. To provide any contacts necessary with community agencies.
5. To identify skills or hobbies that the patient has an interest in, but has not participated in previously due to lack of skill or knowledge.
6. To identify blocks or problems with leisure participation.
7. To promote the use of community resources.

The interest inventory can be used to identify the needs and interests of the patient. The therapist should make a follow-up appointment with the patient and proceed with Step #3, Distribution of Community Resource Guide, to provide the appropriate resources based on the results of the interest inventory.

Step #3 - Distribution of Community Leisure Resource Guide

This step of the leisure counseling program is designed to match leisure interests with existing resources. Once the patient has progressed to this step, he/she should have an idea of some interests or activities they would like to become involved in.

In order to provide the appropriate resources for patients' varied interests, it is necessary to develop a community resource guide. A

pamphlet was designed based on the community resources in the city of La Crosse, Wisconsin. The purpose of this pamphlet was to supply patients with a variety of community resources that might be utilized for leisure time activities. This guide not only listed the various clubs, agencies, and recreational opportunities, but attempted to instruct patients as to the function of these organizations and how they could best be utilized.

The headings included in this pamphlet were: Community Assistance Organizations, Cultural Groups, Educational Opportunities, Demoninational and Interdenominational Groups, Fraternal Organizations, Libraries, Men's and Women's Clubs, Recreational Clubs, Recreational Opportunities, and Volunteer Organizations.

The information contained in the pamphlet could be entered into a computer. Each time an organization changes its address or the individual in charge, the listing could be updated on the computer. In this way an accurate record of each organization would be available to make periodic revisions of the entire pamphlet.

During the session, the therapist explains the various sections of the book and emphasizes that no activity should be done that exceeds the patient's heart rate or MET level prescription. The exercise prescription, in general, should also be explained or reinforced. There may be several patient interest areas that need to be matched with community resources.

One example of how the guide book might be utilized is the patient that expresses an interest in sharing a musical talent with "sick people". The therapist should not just show the patient all volunteer possibilities, but should help the patient determine which agencies

could best use his/her talent. In this case, the patient might be referred to the director of volunteers at a local hospital since they generally have a wide variety of jobs to choose from. Appendix F contains a copy of this pamphlet.

The general objectives of this step are:

1. To help the patients become aware of the resources available in the community.
2. To give the patient a permanent copy of the resource guide book for home use.
3. To make the patient aware of various volunteer jobs and opportunities.
4. To explain the services of various agencies in the community and to inform the patient of how they might be utilized.
5. To determine if further counseling is necessary.

In this step, the therapist attempts to match leisure interests or needs with existing resources in the community. The patient may wish to learn a new craft or skill that is not offered in the community. The therapist would then set up a follow up appointment and proceed with Step #4.

Step #4 - Therapeutic Remedial Normalizing Service

This approach or component of the leisure counseling program attempts to define problems that the patient may have with leisure involvement that relate to a lack of skill in that area. The therapist can be instrumental in teaching patients new skills, or providing the resources necessary for new skill acquisition. Appendix J contains an example of how the therapist might facilitate the patient learning a new skill.

The following objectives outline how the therapist might help patients in this step:

1. Plan appropriate teaching sessions for patient expressed interests.
2. Utilize community resources for the teaching session (possibly bring in outside personnel to assist).
3. Give the patient the opportunity to try out the new skill. If teaching a craft, let the patient create his/her own project with the guidance of the therapist.
4. Have appropriate materials available for use. For example, if the patient expresses an interest in ceramics, ceramic materials would be available at the session.
5. Be available to help the patient if problems or questions arise with the new activity or skill.

The emphasis of the session should be centered around introducing the skill rather than attempting to teach the patient every aspect of that skill. The therapist should be prepared to discuss further resources such as books or classes in the community that the patient might utilize to develop the skill area. The session should be approximately one hour in length, and because of time and money limitations be confined to one session only.

Step #5 - Leisure Education-Lifestyle Development

Patients sometimes do not engage in leisure activities because of obstacles or difficulties with participation. These obstacles or difficulties may be due to attitudes, physical limitations or values. Counseling provides planned intervention into the patient's existing lifestyle to help him/her become involved in activities and experiences that are satisfying and appropriate.

As a means to facilitate discussion the therapist should ask the patient to list several activities or projects that he/she would like to do in the next five years. These activities could be done for recreational purposes (enjoyment), for the patient's family, for friends, or for community service. Patients should be encouraged to brainstorm ideas and to list activities that seem somewhat "impossible" at this time. A patient might for example list taking a cruise, learning to scuba dive, or going dancing more often as activities he/she would like to do. After the patient has listed the activities, the therapist then asks what is preventing the individual from doing each activity. The therapist may suggest that the patient contact an agency or person familiar with that activity. For example, the patient interested in taking a cruise may see financial obstacles as the block to doing this activity. This patient could be referred to a travel agent to determine the actual cost of the trip. Lower priced cruises or special priced package deals might be suggested by the travel agent to make this activity possible for the patient.

Another example of how this approach might help the patient is the individual who expresses a desire to participate in more recreational

activities with the family. Specifically, the patient desires to have more family outings such as visits to the zoo, picnics, and camping. The patient expresses that the reason these outings have not been occurring is that there are too many projects to complete around the home during the weekends and that there never seems to be time for these activities. The therapist in this case might suggest that one weekend a month be set aside for family recreation and that the children be asked to help more with the household activities so that these weekends could become a possibility.

This process of identifying why patients are not participating in activities or projects they would like to do is an important step in helping the patient initiate a plan to accomplish his/her objectives. The therapist functions as a mediator in helping patients do those activities that the patient expresses an interest in.

The following general objectives are the basis of utilizing this step:

1. To identify specific problems patients have with leisure involvement. One example of this is lack of finances to participate in the activity.
2. Explore with the patient possibilities for adapting activities of interest so that involvement is possible. For example, the patient may be unable to play an entire game of golf. The therapist may suggest that the patient play less holes and ride in a cart.
3. The therapist will be available for questions the patient might have after the counseling session is completed (patient feels free to call).

This step of the leisure counseling model might involve more than one session if the patient requests more assistance. There are no specific forms for this step, however the therapist might develop their own form.

Step #6 - Slide/Tape Show and Corresponding Booklet

Many patients are unable to attend Phase III Programs in the community or are not interested in group exercise programs. For this reason a slide/tape program was developed to provide the information necessary for patients to exercise safely on their own. The slide/tape program was chosen because it was designed to meet the specific goals and objectives outlined for this step of the leisure counseling program and because it was less expensive than the purchase of a film. By offering a wide variety of exercise modes it was hoped that patient compliance to a regular exercise program would increase. The slide/tape program was designed to be used in conjunction with a Phase II outpatient program.

In order to produce an effective tool, several topic areas and preliminary objectives were chosen for the study and approved by the committee members prior to the development of the slide/tape program. These topic areas were chosen:

1. The presentation would be shown to Phase II cardiac rehabilitation program participants.
2. The concepts of METS would be introduced.
3. The heart rate method of determining exercise intensity would be reinforced.

4. An explanation would be given about the number of times a week an exercise should be performed to get the most benefits from exercise.
5. Information about the duration or length of time each exercise session should last to achieve and maintain fitness would be presented.
6. The definition of "aerobic" would be given.
7. Several types of aerobic activities or modes would be portrayed.
8. The importance of recreational and social activities would be emphasized.

From these topic areas, the following objectives were formulated for the slide/tape program:

1. The patient should understand how to choose safe activities based on his/her MET level prescription.
2. The patient should be aware of the appropriate frequency and duration of exercise that will promote the best conditioning effect.
3. The patient should be able to monitor activity intensity using the heart rate method.
4. The patient should be able to choose aerobic activities with a knowledge of the wide variety of modes that are appropriate.
5. The patient should understand the value of recreational and social activities.

The slide/tape program was developed with these objectives in mind. The Audiovisual Department at the University of Wisconsin-La Crosse aided in the development of the appropriate graphics and subject treatment. The storyboarding technique was used to design the content and visual portions of the slide/tape program. Corrections were made in both the verbal and pictorial portions of the program to produce a program that would meet the objectives stated previously. Appendix K is a copy of the slide/tape program narration.

A corresponding booklet was developed to clarify the ideas presented in the slide/tape program (Appendix L). In addition, the booklet also included:

1. A MET value chart with the MET costs of various recreational, occupational, and daily activities.
2. A wind chill chart for determining the safety of exercising outside in the winter.
3. A temperature-humidity index for determining the safety of exercising in the heat.
4. General precautions to certain types of activities including isometrics.
5. General activity guidelines.
6. Warning signs of a heart attack.
7. A detailed explanation of each of the exercise modes presented in the slide/tape program.
8. Information about angina and the use of nitroglycerin.

A questionnaire was developed to evaluate the quality of the slide/tape show (Appendix M). The majority of the questions were based on the "MERL" approach to evaluating media. "MERL" represents message, environment, response, and learner. Stein (1979) outlines this approach which evaluates both the visual and verbal portions of media productions based on the needs of the audience.

Two groups were identified as individuals that could be helpful in evaluating the slide/tape program. These groups included current participants and former participants of the Phase III Cardiac Rehabilitation Program held at the University of Wisconsin-La Crosse in La Crosse, Wisconsin. A total of 14 individuals agreed to participate in the program evaluation. These volunteers were contacted by phone or direct contact at the Phase III program. The purpose of their participation was explained to them after they agreed to evaluate the slide/tape program. It was stressed that their comments would be invaluable in evaluating the slide/tape program.

Three days were scheduled in which the participants could view the slide/tape program and evaluate it at their convenience. In each scheduled time period the purpose of their participation was explained. A likert type scale was used to score the answers. The participants were asked if there were any questions regarding the use of the scale and given an example of how to score a question.

The participants then viewed the slide/tape program and completed the questionnaire. After everyone had finished, the participants were asked if they had any suggestions for improving the program. The data

collected from the questionnaire was used to establish a basis for evaluating the quality of the slide/tape program.

Summary

A slide/tape program was developed and evaluated by cardiac patients. The purpose of this step was to promote safe activity participation in both aerobic and recreational activities. The slide/tape program and corresponding booklet should be presented to the patient prior to leaving Phase II of Cardiac Rehabilitation. The best time frame for doing this would be one week prior to completion of the Phase II program. The therapist should be available to discuss any questions the patient might have about the contents of either the slide/tape show or the corresponding booklet.

Step #7 - Six Month Follow-Up Appointment

Most cardiac patients do not experience problems with adjustment to their cardiac event until a few months after the cardiac event. This step of the leisure counseling program should include all patients for this reason. This step is included in the leisure counseling program to ensure that the patient is receiving the necessary assistance with problems he/she may be having with leisure time involvement. The following topic areas are suggested as a means to establish how well the patient is doing and to facilitate discussion:

1. Exercise Routine: Has the patient been participating in regular physical activity? If so, what has he/she been doing? Have there been any problems with participation such as physical symptoms? If the patient has not been participating,

what was the reason? Is there a need to discuss this problem with the patient's physician?

2. **Recreational Activities:** What recreational activities has the patient been participating in? If the patient learned a new skill has he/she had any problems or questions about it? Has the patient been doing any activities with family members? Does the patient feel limited in any way with activity involvement? Does the patient have any new interest areas that he/she may need help finding classes or information?
3. **Social Activities:** Has the patient returned to normal social activities (church, card clubs, etc.) that he/she participated in prior to the cardiac event? If not, what problem has the patient had with returning to these activities? Has the patient been fearful of activity involvement because of physical limitations? Does the patient need to see the exercise physiologist to reinforce which activities the patient can and should not participate in?

CHAPTER IV

RESULTS AND DISCUSSION

A seven step comprehensive leisure counseling program was developed to be used with cardiac patients in both the inpatient and outpatient phases of rehabilitation. The program was divided into seven steps. Some of the steps were developed for the study and the others were based on existing research and programs currently in operation. In order to present this chapter in a logical sequence, each step will be discussed in terms of how it will be incorporated into a comprehensive program. The development of Step #6 will include a discussion of how it was evaluated by cardiac patients.

Step #1 - Inpatient Occupational or Recreational Therapy

This step is based on Wenger's 14-step program (1978) or a modified version of this program. It includes recreational or occupational therapy as a part of the patient's routine of progressive activities (Appendix B). For this study it was suggested that the patient work on light craft activities as specified in the program. The craft activity should be chosen based on the patient's interests. The 14 step program is used in many hospitals across the country (including La Crosse Lutheran Hospital, La Crosse, Wisconsin) for their inpatient or Phase I cardiac rehabilitation program.

Step #2 - Leisure Interest Inventory

For this step the STILAP interest inventory developed by Peterson (1977) would be administered, scored and discussed with the patient.

The main goal of this step is to identify the patient's current interests and activities in addition to determining the types of activities that he/she is not participating in at this time. The therapist working with the patient then encourages matching patient expressed interests with existing community resources which will be accomplished in Step #3. This step is a part of the Leisure Resource Guidance leisure counseling orientation outlined by McDowell (1977).

Step #3 - Distribution of Community Leisure Resource Guide

This step involved the development of a model community resource guide book to be used to match patient interests with the resources available in the city of La Crosse, Wisconsin. A book of this type should be given to every patient at the end of the counseling session after it has been discussed with the patient. A preface to each section of the book is included so that the patient can easily use the guide to meet his/her needs. Several sections have been chosen as important for making the book helpful to the patient. These sections are explained as follows:

1. Community Assistance Organizations: These organizations are available to help patients with various medical, social, or other problems and to provide services to the elderly or handicapped.
2. Cultural Groups: These groups provide cultural events for the city. Membership in these organizations is based on interest or a particular talent.
3. Educational Opportunities: A list of colleges in the area that provide classes and workshops are included under this heading.

4. Denominational and Interdenominational Groups: Membership in these organizations is based on religious preference.
5. Fraternal Organizations: Membership to these clubs may be somewhat exclusive. Many serve meals, have dances, and provide other forms of entertainment on a regular basis for its members.
6. Libraries: A list of local libraries is included under this heading.
7. Recreational Clubs: These clubs have been formed through interest in a particular recreational activity. The members often meet to exchange ideas and to participate in the activity together.
8. Recreational Opportunities: This section lists various recreational activities available in the community. Included in this listing are classes for learning the skill of interest, and the names of the facilities or location where these opportunities exist.
9. Senior Citizen Centers: This category lists the names of senior citizen centers in the community. These centers may offer low cost noon meals and social activities.
10. Volunteer Organizations: These organizations can use volunteers for projects, transportation, or to work with hospitalized patients or nursing home residents.

These categories are suggested by the researcher to provide a wide variety of ideas and opportunities for cardiac patients. Once the patient has determined what activities he/she would like to participate in, then this guide can be utilized to local the appropriate community resources.

Step # 4 - Therapeutic Remedial Normalizing Service

This step is based on a leisure counseling orientation by McDowell (1977). This step will be utilized with those patients who are interested in learning a new skill. The objective of this step is not to teach the patient everything about a particular craft or sport, but to teach him/her the basics, stimulate further interest, and to provide the resources for further learning. An outline was developed that showed how the therapist might facilitate the patient's interest. For those crafts or skills that the therapist is unable to teach a specialist might be asked to teach the patient within the hospital setting or in the community.

Step #5 - Leisure Education-Lifestyle Development

This step is based on another leisure counseling orientation developed by McDowell (1977). The goal of this step is to help the patient determine what kinds of experience he/she wishes to derive from leisure time activities. Within this orientation patients are asked to examine their work and volunteer attitudes. The therapist discusses what blocks or inhibits the patient from participation in leisure activities and develops a leisure time plan with the patient. This step is particularly useful for patients who did not participate in leisure activities prior to their cardiac event. These individuals may have had a high pressure job that kept them from enjoying their leisure time. Through the examination of attitudes and interests patients will find more meaningful use of their leisure time.

Step #6 - Development of and Evaluation of Slide/Tape Program

A slide/tape program was developed to be used in conjunction with a Phase II cardiac rehabilitation program. The goal of the slide/tape program was to provide patients with information that would enable them to exercise safely on their own. The slide/tape program outlined the principles of aerobic conditioning including the concepts of frequency, intensity, duration, and mode. Patients were instructed how to use both the heart rate method and MET level prescription to safely monitor the intensity of their activities. A variety of modes or types of exercise that can be used to improve cardiovascular fitness were presented. The benefits of recreational, social, and volunteer involvements were also included.

The quality of the slide/tape program and need for revisions was evaluated by fourteen adults. The participants in the evaluation process included nine individuals currently enrolled in the Phase III Cardiac Rehabilitation Program in La Crosse, Wisconsin, and five former participants in the program. A questionnaire was given to the participants after they viewed the slide/tape program.

Each question was analyzed separately in terms of the mean answer to each question on a scale of one to six and the percent of times each number was used. The percent of times the numbers 1, 2, or 3 were circled are shown on Table 1. The numbers 1-3 indicated average to strong agreement with each questionnaire statement. The first question dealt with the length of participation in the program. The results show that the average or mean length of participation in the Phase III program (past or present) was roughly three years. The responses ranged from nine months of participation to approximately eight years.

TABLE 1
Questionnaire Results

Question	Mean Answer	% Circled 1	% Circled 2	% Circled 2	Total
1	37.6 Months	-	-	-	-
2	2.75	33.3	8.3	25.0	66.6%
3	2.5	37.5	12.5	25.0	75.0%
4	1.2	71.4	28.6	-	100.0%
5	1.2	85.7	7.1	7.1	100.0%
6	1.3	71.4	21.4	7.2	100.0%
7	1.3	71.4	21.4	7.2	100.0%
8	1.5	71.4	21.4	-	92.8%
9	1.4	71.4	21.4	-	92.8%
10	1.2	85.7	7.2	7.1	100.0%
11	1.7	42.9	42.9	14.3	100.0%

The second and third questions were asked to validate the need for the slide/tape show and the leisure counseling program presented previously. The results of question two indicated that 66 percent of the participants would be interested in alternatives to the typical walking and jogging program offered at the Phase III program at the University of Wisconsin, La Crosse, Wisconsin. These results gave some validity to the purpose of the slide/tape program and might prove valuable in encouraging traditional Phase III programs to incorporate other exercise modes into their existing programs.

Question three was asked to determine whether leisure or free time activities had changed since the initial cardiac event. Research by Totman (1979) indicated that social and recreational activities change after a heart attack. The results of the questionnaire agree with this research. Seventy five percent of the respondents felt their leisure time activities had changed. These results confirm the need for appropriate leisure counseling as described earlier.

The remainder of the questions dealt with the evaluating the quality of the slide/tape program. For all of these questions at least 75 percent of the respondents agree with the statements presented about the slide/tape program in regards to title, narration, visuals, appropriateness of content, and length. The respondents were asked to give an overall rating of the program. The program was rated Good-to-Excellent by 100 percent of the participants. No suggestions were made to alter the verbal or visual portions of the program.

Step #6 - Development of Booklet To Be Used With Slide/Tape Show

A booklet was developed by the researcher to be used in conjunction with the slide/tape program. The purpose of the booklet was to reinforce the concepts presented in the slide/tape show and to include other important information to enable patients to exercise safely on their own. A MET chart with the MET values of various occupational and recreational activities was included to help patients determine the appropriateness of activities based on their MET level prescription. Since patients may be unfamiliar with the dangers of exercising in heat/humid conditions or with wind chill factors, information about environmental considerations was included. General information about contraindications to exercise such as exercising immediately after eating was included. Precautions for certain activities such as weight lifting were mentioned in the booklet.

Step #7 - Six Month Follow-Up Appointment

This step involves a six month follow-up appointment with a member of the cardiac rehabilitation team. This individual could be the patient educator, exercise physiologist, or a nurse. The function of this meeting with the patient is to discuss any problems that he/she might be encountering with leisure time activities (active or passive). The patient may also mention difficulties he/she may be having with medication, family relationships, or recurrent pain. The therapist working with the patient must be able to refer these questions to the patient's physician, exercise physiologist, or other personnel that could

help the patient with these specific problems. It is at this time that the patient is asked if he/she is happy with how their free time is being utilized. This step should be mandatory in all programs because it is often not immediately after the event that the patient encounters problems.

CHAPTER V

CONCLUSIONS

Summary

A comprehensive leisure counseling program was developed for use with cardiac patients. This program utilized some established tools such as Wenger's 14-step program (Wenger, 1978) and the STILAP interest inventory (Navar, 1977) as part of its components. The purpose of establishing this program was to provide cardiac rehabilitation personnel guidelines for developing a leisure counseling program in the hospital setting. Within the program a model community leisure resource guide pamphlet was developed for the city of La Crosse, Wisconsin to help patients identify community resources.

A slide/tape show was also a part of the program. It provided guidelines for safe activity and aerobic involvement so that the patient could exercise at home after Phase II. The slide/tape program was evaluated by 14 cardiac patients through a questionnaire. The results of the questionnaire indicated that the slide/tape program was rated as above average in both verbal and visual content as well as its value to cardiac patients. The results of the questionnaire were significant in validating the need for this study and to ensure that the slide/tape program content was appropriate. A booklet was also developed to correspond with the slide/tape program. This booklet reinforced the topics presented in the audiovisual program and included other information that was considered important for safe activity involvement.

The leisure counseling program should be viewed as an adjunct to cardiac rehabilitation programs already in existence thus enabling them to become more comprehensive in terms of meeting patient needs.

Recommendations

The leisure counseling program developed could be promoted in all cardiac rehabilitation programs. Medical personnel may not support the program at first because little research has been done in this area that documents its effectiveness. For this reason, it is important that patient involvement be well documented. Since this program has not been used with Phase II patients, once it has been implemented in a hospital setting a questionnaire might be developed to determine how effective it is in helping cardiac patients after hospital discharge. The questionnaire could be sent to the participants three months after they have completed Phase II of the cardiac rehabilitation program. Questions might be asked about their overall level of participation in both aerobic and recreational activities. This questionnaire could be designed to give patients the opportunity to express concerns about other aspects of their recovery so that hospital personnel might be contacted to help those requesting assistance.

The success of the slide/tape program will depend on in part the attitudes or philosophy of the individual that shows the program to the patient. It is strongly recommended that a member of the cardiac rehabilitation team be available for questions after the showing of the program since this is their area of expertise. The corresponding booklet should also be discussed with the patient at this time. The program could be shown to a group of cardiac patients to make better

use of the cardiac rehabilitation teams' time. The program should be shown at least one week before the patient leaves the Phase II out-patient program. This would give the patient an opportunity to discuss any further questions he/she might have with the therapist.

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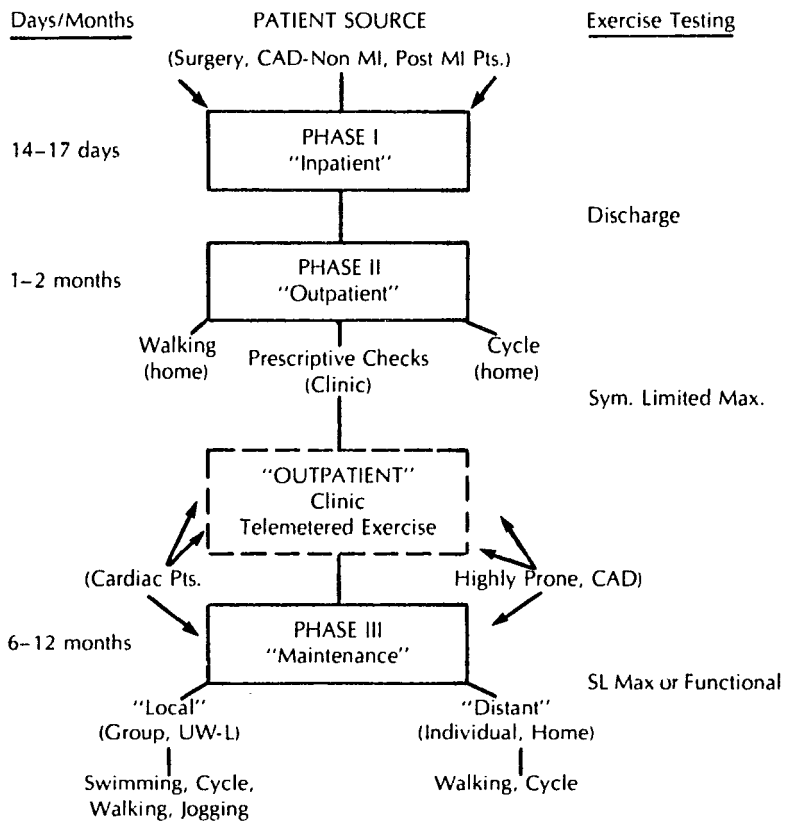
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APPENDIX A
Cardiac Rehabilitation Program

Cardiac Rehabilitation Program
La Crosse Lutheran Hospital
La Crosse, Wisconsin



APPENDIX B
Wenger's 14 Step Program

WENGER'S 14 STEP PROGRAM

- | | | |
|--|---|---|
| 1. Passive ROM to all extremities. Patient to do active plantar and dorsiflexion of ankles several times a day. | Feed self, sitting with bed rolled up, trunk and arms supported by overbed table. | Interview and brief orientation to program. |
| 2. Repeat exercise of Step 1. | <ol style="list-style-type: none"> 1. Feed self. 2. Partial A.M. care. 3. Dangle legs on side of bed. | Light recreational activity such as reading. |
| 3. Active assistive exercise in shoulder flexion and extension; hip flexion, extension and rotation; knee flexion and extension; rotation of feet. | <ol style="list-style-type: none"> 1. Begin sitting in chair for short periods as tolerated. 2. Bathe whole body. 3. Use bedside commode. | More detailed explanation of program. Continue light recreation. |
| 4. Minimal resistance, lying in bed in above ROM (5 x each). Stiffen all muscles to the count of 2(3x). | <ol style="list-style-type: none"> 1. Increase sitting to three times a day. 2. Change gown. | Begin explanation of MI. Give patient pamphlets. Begin craft activity: <ol style="list-style-type: none"> 1. Leather lacing 2. Link belt 3. Hand sewing 4. Copper tooling |
| 5. Moderate resistance in bed at 45 degrees above ROM exercises; hands on shoulder, elbows circulating (5 x each arm). | <ol style="list-style-type: none"> 1. Sit ad lib. 2. Sit in chair at bedside for meals. 3. Dress, shave, comb hair sitting down. 4. Walk in room (2 x a day). | Continue education about healing of heart, reasons for early restrictions in activity. |

6. 1. Further resistive exercises sitting on side of bed, manual resistance of knee extension and flexion.
2. Walk to bathroom and back.

1. Walk to bathroom and sit if patient can tolerate.
2. Stand at sink to shave.

Continue craft activity - supply patient with another one. Patient may attend group meetings in a wheelchair for no more than 2 hours.

7. 1. Standing warm-up exercise:
 - a. Arms in extension and shoulder abduction, rotate arms together in circles (circumduction), (5 x each arm).
 - b. Stand on toes, (10 times).
 - c. May substitute abduction, (5 times each leg).
2. Walk length of hall (50 feet) and back at average pace.

1. Bathe in tub.
2. Walk to telephone or sit in waiting room (1 time/day).

May walk to group meetings on same floor.

8. 1. Warm-up exercises:
 - a. Lateral side bending (5 times each side).
 2. Walk $1\frac{1}{2}$ lengths of hall down 1 flight stairs; take elevator up.
2. Walk to waiting room.
3. Sit up most of the day.

Continue all previous craft and educational activities.

9. 1. Warm-up exercises:
 - a. Lateral side bending (10 times each side).
 - b. Slight knee bends, (10 times with hands on hips).
2. Increase walking distance, walk down 1 flight of stairs.

Continue above activities.

Discussion of work simplification techniques and pacing of activities.

10. 1. Warm-up exercises:
 a. Lateral side bending with 1-1b weight (10 times).
 b. Standing--leg raising, leaning against wall, 5 times each).
 2. Walk 2 lengths of hall and downstairs; take elevator up.
- Continue all previous ward activities.
1. Patient may walk to OT clinic and work on craft project for $\frac{1}{2}$ hour.
 a. Copper tooling
 b. Woodworking
 c. Ceramics
 d. Small weaving project
 e. Metal hammering
 f. Mosaic tile
 2. Discussion of patient's home exercises.
11. 1. Warm-up exercises:
 a. Lateral side bending with 1-1b weight, leaning against wall (10 times each side).
 b. Standing--leg raising (five times each side).
 2. Repeat part 2 of Step 10.
- Continue all previous ward activities.
- Increase time in OT clinic to 1 hour.
12. 1. Warm-up exercises:
 a. Lateral side bending with 2-1b. weight (10 times).
 b. Standing--leg raising, leaning against wall (10 times each)
 c. Trunk twisting with 2-1b weight (10 times).
 2. Walk down 2 flights of stairs.
- Continue all previous ward activities.
- Continue craft activity with increases resistance.
13. Repeat all exercises of Step 12.
- Continue all previous ward activities.
- Complete all projects.

14. 1. Warm-up exercises:
 - a. Lateral side bending with 2-lb. weight (10 times each side).
 - b. Trunk twisting with 2-lb. weight (10 times each side).
 - c. Touch toes from sitting position (10 times).
2. Walk up flight of 10 stairs and down.

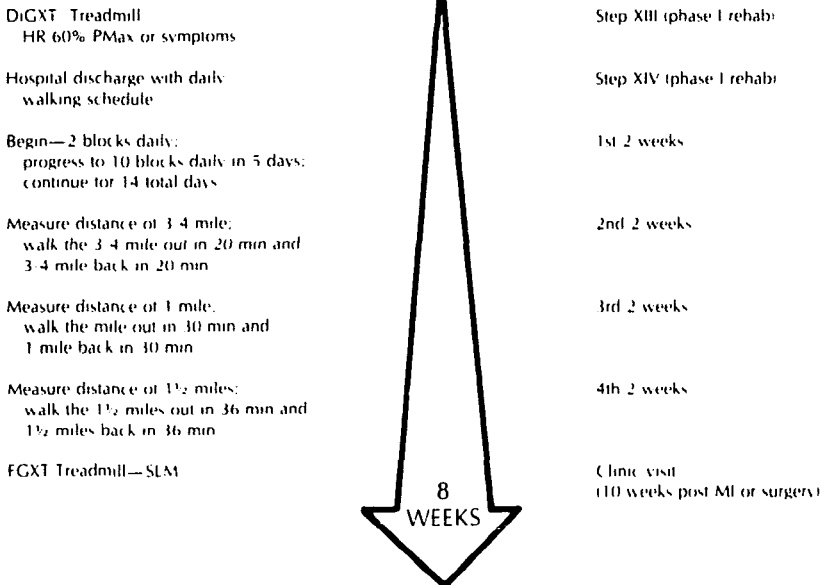
Continue all previous ward activities.

Final instructions about home procedures and activities.

APPENDIX C

Phase II Home Walking and Exercycle Program

PHASE II-WALKING PROGRAM



PHASE III—WORK, RETIREMENT, VOC. REHAB.

PHASE II-EXERCISE PROGRAM

DiGXT Bicycle with exercise Rx:
HR 60% PMax or symptoms

Bicycle exercise—12 min
HR 60% PMax
No symptoms

Bicycle exercise—Patient adjusts
bicycle to Rx;
Hospital discharge with daily
exercise Rx

↑ Duration to 14 min and intensity
HR < 65% PMax, daily
Frequency, asymptomatic

↑ Duration to 16 min and intensity
HR < 65% PMax, daily
Frequency, asymptomatic

FGXT Treadmill—SLM

↑ Duration to 20 min and intensity
HR < 70% PMax, daily
Frequency, asymptomatic

Step XII (phase I rehab)

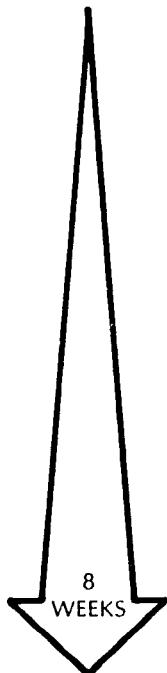
Step XIII (phase I rehab)

Step XIV (phase I rehab)

Bicycle Rx ✓
(2 weeks posthospital discharge)

Bicycle Rx ✓
(4 weeks posthospital discharge)

Clinic visit
(10 weeks post MI or surgery)
Bicycle Rx ✓



PHASE III—WORK, RETIREMENT, VOC. REHAB.

APPENDIX D
Leisure Counseling Orientations

LEISURE COUNSELING ORIENTATIONS

McDowell (1977) has classified the existing Leisure Counseling Orientations into three categories:

1. "Leisure Counseling as a LEISURE RESOURCE GUIDANCE SERVICE."
This approach basically attempts to match a client's expressed leisure interests to existing leisure resources. It is an information sharing process that assumes that the client has interests and skills and is blocked only by a lack of knowledge related to the availability of opportunities or facilities.
2. "Leisure Counseling as a THERAPEUTIC REMEDIAL NORMALIZING SERVICE." This category encompasses models that relate to client problems with leisure participation that spring from a lack of recreational skills and knowledge. Programs using this approach are most likely to use structured activities to bring needed leisure and social skills into existence.
3. "Leisure Counseling as a LIFESTYLE DEVELOPMENT - EDUCATION SERVICE". This category contains approaches that deal with problematic leisure involvement based on attitudes, values, and concepts. It does not assume illness in the traditional sense, but rather some difficulty in relating to leisure as expressed by the client.

APPENDIX E
STILAP Leisure Interest Inventory

STILAP INTEREST INVENTORY

Name _____ Date _____

DIRECTIONS: Following is a list of leisure activities.

1. Circle "M" (much for those activities you participate in regularly. (daily, when in season, etc.).
2. Circle "S" (sometimes) for those activities you have experienced but not on a regular basis.
3. Circle "I" (interested in) for those activities you would like to learn (you may or may not have done these before, but you'd like to learn).

-
- | | |
|-----------------------------------|------------------------------------|
| M S I - 1. Pool/Billiards/Snooker | M S I - 17. Horseback Riding |
| M S I - 2. Dieting/Nutrition | M S I - 18. Miniature Golf |
| M S I - 3. Bowling | M S I - 19. Golf |
| M S I - 4. Roller Skating | M S I - 20. Hunting |
| M S I - 5. Archery | M S I - 21. Biking |
| M S I - 6. Riflery | M S I - 22. Motorcycling |
| M S I - 7. Shuffleboard | M S I - 23. Sailing |
| M S I - 8. Pin Ball Playing | M S I - 24. Canoeing |
| M S I - 9. Ice Skating | M S I - 25. Boating |
| M S I - 10. Auto Mechanics | M S I - 26. Trailer Camping |
| M S I - 11. Jogging/Running | M S I - 27. Tent Camping |
| M S I - 12. Physical Fitness | M S I - 28. Backpacking |
| M S I - 13. Yoga | M S I - 29. Orienteering |
| M S I - 14. Relaxation Techniques | M S I - 30. Cross Country Skiing |
| M S I - 15. Darts | M S I - 31. Tobogganing |
| M S I - 16. Horse Shoes | M S I - 32. Snow Skiing (downhill) |

- | | |
|-------------------------------------|------------------------------------|
| M S I - 33. Snow Shoeing | M S I - 59. Watching Other Sports |
| M S I - 34. Fishing | M S I - 60. Watching T.V. |
| M S I - 35. Ice Fishing | M S I - 61. Touring |
| M S I - 36. Hiking | M S I - 62. Traveling |
| M S I - 37. Bird Watching | M S I - 63. Listen to Music |
| M S I - 38. Softball/Baseball | M S I - 64. Art Appreciation |
| M S I - 39. Football | M S I - 65. Theater (Movies/plays) |
| M S I - 40. Frizbee | M S I - 66. Party Going |
| M S I - 41. Judo/Self-Defense | M S I - 67. Backgammon |
| M S I - 42. Table Tennis(Ping Pong) | M S I - 68. Checkers |
| M S I - 43. Paddleball/Racquetball | M S I - 69. Dominos |
| M S I - 44. Handball | M S I - 70. Other Table Games |
| M S I - 45. Squash | M S I - 71. Cribbage |
| M S I - 46. Tennis | M S I - 72. Bridge |
| M S I - 47. Badminton | M S I - 73. Chess |
| M S I - 48. Deck Tennis | M S I - 74. Euchre |
| M S I - 49. Volleyball | M S I - 75. Hearts |
| M S I - 50. Basketball | M S I - 76. Poker |
| M S I - 51. Ice Hockey/Hockey | M S I - 77. Other Card Games |
| M S I - 52. Meditation | M S I - 78. "Ham" Radio Operator |
| M S I - 53. Jigsaw Puzzles | M S I - 79. Writing |
| M S I - 54. Crossword Puzzles | M S I - 80. Leather Crafts |
| M S I - 55. Reading | M S I - 81. Jewelry Making |
| M S I - 56. Watching Football | M S I - 82. Pottery/Ceramics |
| M S I - 57. Watching Baseball | M S I - 83. Ceramics (Molds) |
| M S I - 58. Watching Basketball | M S I - 84. Horn Playing |

- | | |
|--|---|
| M S I - 85. Guitar Playing | M S I - 110. House Plants |
| M S I - 86. Other Instruments | M S I - 111. Gardening |
| M S I - 87. Ballroom Dancing | M S I - 112. Wood Refinishing |
| M S I - 88. Social Dancing | M S I - 113. Woodworking |
| M S I - 89. Square Dancing | M S I - 114. Sweekstakes |
| M S I - 90. Drawing/Painting | M S I - 115. Member of a School Club |
| M S I - 91. Collecting Items
(Coins, stamps,etc). | M S I - 116. Member of a Community Organization |
| M S I - 92. Singing | M S I - 117. Signing Group (Deaf) |
| M S I - 93. Participation in Play | M S I - 118. Volunteer Work |
| M S I - 94. Macrame | M S I - 119. Swimming |
| M S I - 95. Photography | M S I - 120. Water Skiing |
| M S I - 96. Batik | M S I - 121. Skin/Scuba Diving |
| M S I - 97. Lapidary (Rocks) | M S I - 122. _____ |
| M S I - 98. Copper Anameling | |
| M S I - 99. String Art | |
| M S I - 100. Sewing/Needlepoint/
Crewel,etc. | |
| M S I - 101. Knitting/Crocheting | |
| M S I - 102. Other Crafts | |
| M S I - 103. Baking/Cooking | |
| M S I - 104. Canning | |
| M S I - 105. Basketball Officiating | |
| M S I - 106. Volleyball Officiating | |
| M S I - 107. First Aid Certification | |
| M S I - 108. Life Saving Certification | |
| M S I - 109. Member of a School Club | |

APPENDIX F
Community Leisure Resource Guide

Community Leisure

RESOURCE GUIDE

INTRODUCTION

This guide was developed to give you a listing of the various recreational, social and assistance organizations and opportunities in the City of La Crosse. Remember to monitor the intensity of any activity using your heart rate and MET level prescription as a guide. If you have any questions feel free to contact this department at any time.

Section 1

Community Assistance Organizations

These organizations offer educational classes in the areas of health and safety, provide meals, are support organizations for people with particular needs, and provide answers to various medical or social questions. Their services are free or carry a minimal charge. Their sole function is to help people.

SECTION 1

American Red Cross

This organization offers classes in First Aid, CPR, Swimming, and Lifesaving. It also functions to assist communities in emergency situations.

Chairman-King Holley
230 North 8th Street
784-4787

American Heart Association

This organization provides free information and literature about heart disease, stroke, and other related topics. Films are also available for group use.

American Heart Association
9360 US Highway Onalaska
783-0111

Committee on Aging

This organization provides information and counseling in regards to wills, income tax, social security, and assistance organizations. In addition, they will perform small household duties for those unable to do these tasks.

Marriane O'Neil
1707 Main Street
782-8740

First Call For Help

This organization is a telephone referral service. Its purpose is to answer questions and to refer people to the proper community resources. For any question you need help with, this might be the first place to contact.

First Call For Help
782-8010

Tele-Care

This service is a phone information library. A booklet of the subject areas available to be heard over the phone can be picked up at the information services desk at the hospital.

Bernice Spooner
Lutheran Hospital
788-5544

Mobile Meals

This service brings hot meals to your home at noon five days a week. For those of you who live alone it might be helpful to utilize this service the first week after hospital discharge.

Kathy Mattison
333 South 7th Street
784-4623

Section 2

Cultural Groups

These groups provide cultural activities and events for the city of La Crosse. Membership in these organizations is based on interest or a particular talent. If you are an artist or craftsman you may enjoy joining one of these groups.

SECTION 2

Barbershoppers

This group performs for various organizations singing the old "barbershop quartet" style.

Sig Rudser
2417 CTH "B"
782-8952

East Bank Artists

This group is a free lance artists association.

Mary Jo Peterson
409 South 14th Street
784-7261

Great River Festival of Arts

This group plans and executes the annual Great River Festival of Arts.

Mrs. Marilyn Shultz
2231 Valley Road

Great River Symphony

This group performs symphonies at local colleges and for the public.

Frank Italiano
2917 South 7th Street
788-3796

La Crosse Boychoir, Inc.

Adults interested in singing help promote concerts for the young boys in this organization.

Daniel Wilmot
Viterbo College
784-0040 Ext. 495

La Crosse Music Study

This group is interested in studying various music styles such as classical and jazz.

Mrs. Charlotte Mangan
621 West Avenue South
782-3027

La Crosse Society of Arts and Craft

This group organizes craft fairs and other events for its members to display and sell their crafts.

Sister Ann Schollosser
322 South 11th Street
782-7380

Western Wisconsin Regional Arts

This organization consists of a number of local artisans in the Western Wisconsin region.

Mrs. Judy Sleik
4082 Glenhaven Drive
788-6229

Section 3

Educational Opportunities

These organizations offer classes in a variety of subject areas. Classes are offered as weekend workshops, night classes, and day classes. Call to find out more information about the types of classes and to obtain a copy of their schedule.

SECTION 3

Division on University Outreach

Dr. Norene Smith
U.W.-La Crosse
785-8565

Western Wisconsin Technical Institute

Admissions Office
304 North 6th Street
785-9200

University of Wisconsin

Admissions Office
1725 State Street
785-8900

Viterbo College

Admissions Office
815 South 9th Street
784-0040

Section 4

Demoninational and Interdenominational Groups

Membership in these organizations is based on religious preference. These groups offer social activities, fellowship, and provide services and funds to charity organizations.

SECTION 4

Catholic Daughters of America

Mrs. Marie Schmidt
528 Oakland
782-6581

Roncalli Newman Center (Catholic)

Father John Schultz
1732 State Street
784-4494

Jewish Women's League

Mrs. Dee Peacock
2102 South 29th Street
788-5160

United Campus Ministry (Protestant)

Dr. Keith Kensinger
126 North 17th Street
784-7600

Lutheran Men's Federation

Dennis O'Brien
3121 Kenton Street
788-2169

La Crosse Christian Businessmen

Dick Geiwitz
Stoddard, Wisconsin
788-0868

Lutheran Campus Center

Pastor Armin Heidmann
127 North 17th Street
784-5935

La Crosse Christian Women's Club

Mrs. Harold Peterson
502 3rd Avenue North
783-2390

La Crosse Clergy Association

Reverend Billy Brose
St. Luke Methodist Church
782-6421

Section 5

Fraternal Organizations

The membership in these clubs is somewhat exclusive. These clubs serve meals, have dances, and provide other forms of entertainment on a regular basis for its members. For details, contact the organization you are interested in.

SECTION 5

Elks Lodge #300

Thomas Kessler
1532 Wood
784-1365

Knights of Columbus

Ralph Larson
9051 U.S. Highway 16
782-9151

Order of Eagles #1254

Jerry Breuggeman
Sparta, Wisconsin
269-3138

Royal Order of the Moose

David Holen
1602 South 31st Street
788-6989

Odd Fellows #44

Robert Klar
3023 South Marion Road
788-1012

Masonic Temple

Harry Wiggert
724 Main Street
784-4790

Section 6

Libraries

Libraries provide other services besides book borrowing. Films, educational programs, and referral services are also available at your local library. Ask your librarian for assistance when you visit.

SECTION 6

Main Library

8th and Main Streets
784-8623

Murphy Library

U.W.-La Crosse Campus
785-8507

North Branch Library

1552 Kane Street
782-7986

W.W.T.I. Library

6th and Vine Streets
782-6238

SECTION 7

Audobon Society (Birds)

Patrick Wilson
2222 Hoeschler Drive
788-8831

La Crosse Camera Club

302 Royal Street
783-1591

Cardiac Club (Cardiac Patients)

Jan Utz-Cardiac Rehab Coordinator
St. Francis Hospital
785-0950

La Crosse Coin Club

Meets at American Legion
1st Tuesday of month at
7:30

Coulee Region Men's Garden Club

Jack Buchel
3635 State Road
788-6979

La Crosse Men's Bowling Association

Jess Andrews
2907 Losey Boulevard
788-8550

Coulee Region Promenaders(Square Dance)La Crosse Sailing Club

Marty Marquardt
1937 Nakomis
784-1333

Don Magnason
322 North 23rd Street
784-3877

Coulee Snow Drifers (Snowmobilers)

Raymond Flynn
725 Green's Coulee Road
783-3714

La Crosse Stamp Club

Dave Peterson
P. O. Box 240
Stoddard, Wisconsin

Floral Arts Garden Club

Mrs. Lois Adaina
4438 State Road
788-3553

La Crosse Women's Golf Association

Mrs. Tari Kleven
2646 Hackberry Lane
784-4723

Gunslick Trap Club (Trapshoot)

Briggs Road
Holmen, Wisconsin
526-3923

Old Style Auto Club

Norman Kohlmeier
1601 South 30th Street
788-0726

SECTION 7

Open Heart Club(By-Pass Surgery
Patients)

Mrs. Eric Cox
782-7178

Relax-In Campers (R.V. Campers)

Eugene L. Etzlaff
1507 Western Street
788-0828

La Crosse Women's Bowling Association

Betty Harris
103 Copeland Avenue
782-2856

Weaver's Guild

Beth Humiston
Route 1/Forest Ridge Estates
788-2331

SECTION 8

Arts and Crafts Classes

YMCA-YWCA
1140 Main Street
784-5479

The Hobby Hub
4336 Mormon Coulee Road
788-0818

Busibee Handicrafts
2419 Green Bay
788-9440

Diane's Knit Kniche
Village Shopping Center
782-1210

Art Galleries

Studio Gallery
1311 Market Street
782-7188

Viterbo Fine Arts Building
9th and Mississippi Streets
784-1760

Bowling Alleys

University of Wisconsin
Cartwright Center, Basement
784-6050

Plamor Bowling Center
807 South 4th Street
784-3043

South Lanes
4107 Mormon Coulee Road
788-0763

King Pin Bowl
208 Copeland Avenue
784-2456

Campgrounds

Bluebird Spring Campground
4297 Smith Valley Road
784-1311

Goose Island Park
Highway 35
3 miles south of La Crosse

Perrot State Park
1 mile north of
Trempealeau, Wisconsin

Dancing Instructions

YMCA-YWCA
1140 Main Street
784-5479

University of Wisconsin
Mitchell Hall
785-8000

Dance Establishments

Hoffman House
1835 Rose Street
784-7350

Holiday Inn
529 Park Plaza Drive
784-9500

Dealers-Coins

Midwest Gold/Silver Exchange
528 Cass Street
785-2117

Western Wisconsin Coin Exchange
107 North 4th Street
782-8569

SECTION 8

Flight Instruction

La Crosse Flite Center, Inc.
2709 Fanta Reed Road
784-5567

Viking Aviation, Inc.
2906 Fanta Reed Road
782-1120

Golf Courses

Hillview Golf Course
3900 South 33rd Street
788-2072

La Crosse Country Club
600 Losey Boulevard
784-3257

Maple Grove Country Club
Highway 16
786-0340

Pine Creek Golf Course
La Crescent, Minnesota
(507) 895-2410

Walsh Golf Center
2261 CTH "B"
782-0838

Hiking Trails

Hixon Forest Reserve
Highway 16
La Crosse, Wisconsin

Perrot State Park
Trempealeau, Wisconsin
Maps available at Park office

Horseback Riding

Continental Ranch
R. R. #3/ Mormon Coulee Road
788-2670

Irish Hill Stable
Highway 35
788-1440

Greenfield Stables, Inc.
R.R. #1/Box 116
788-7288

Ice Skating-Outdoors in Winter

These parks have skating when the weather permits. Call the park board at 784-1905 to see if it is okay to skate.

Copeland Park
Bluffview Park
Emerson School
Haas Park
Hood Park
Leath Park
Pettibone Park
Trane Park
Powell Park
Erickson Park

Movie Theatres

Cinema I & II
2032 Ward Avenue
788-1285

Rivoli
119 North 9th Street
782-0971

SECTION 8

Movie Theatres (Continued)

King I & II
216 South 7th Street
784-7212

Hollywood
5th and Jay Streets
782-9285

Museums

Hamlin Garland House
West Salem, Wisconsin

Hixon House
427 North 7th Street
784-9080

Old Salem
Leonard & Jefferson Streets
West Salem, Wisconsin

Steam Locomotive and Caboose
Copeland Park at Rose Street
La Crosse, Wisconsin

Viterbo College
Market Street
784-1760

Music Instruction

Dahlberg's Music, Inc.
219 Main Street
782-6250

Leithold Piano Company
116 South 4th Street
784-7555

Race Track

La Crosse Interstate Speedway
R.R. #1/West Salem
786-1525

Skiing - Cross Country Trails

Hixon Forest
Myrick Park
Goose Island
La Crosse Country Club
Pettibone Park
Perrot State Park (Trempealeau)
Mt. La Crosse

Swimming - Outdoor

These pools are open from
Memorial Day until Labor Day.
For specifics on pool times,
call the park district at
784-1905.

Erickson Municipal Pool
La Crosse Municipal Pool
Logan Municipal Pool
Pettibone Park

Swimming - Indoor

YMCA-YWCA
1140 Main Street
784-5479

Section 9

Senior Citizen Centers

These centers offer noon meals and social activities. Many people enjoy the fellowship available at these centers. Volunteers are welcomed with a wide variety of jobs available such as crafts helper, meal servers, and many other tasks.

SECTION 9

Happy Island Senior Center

Fred Lehmeier
617 Plainview Road West
785-0783

Southside Senior Citizens, Inc.

Ernie Munson
1220 Denton Street
782-7554

Harry J. Olson Senior Center

Irene Beguin
1607 North Street
781-2122

St. Rose Convent Senior Citizens

Sister Claire Henkels
912 Market
782-5610

Onalaska Senior Citizens

Cleo Muñock
315 Quincy
783-5254

West Salem Senior Citizens

Estella Bryhn
313 West Jefferson
West Salem, Wisconsin
786-1646

Section 10

Volunteer Organizations

These organizations utilize volunteers on a regular basis. They have a wide variety of volunteer job descriptions for you to choose from. If you are interested in volunteering for one of these organizations, contact the person listed under the heading.

SECTION 10

Bethany Lutheran Auxillary

Mrs. Sally Hammond
2181 Valley Road
788-6996

Lutheran Hospital

Volunteer Services
1910 South Avenue
785-0530

Bethany St. Joseph Auxillary

Mrs. Caroline Sellack
125 South 10th Street
784-4108

Retired Senior Volunteer Program

Melanie Mornard
2530 South Avenue
788-5097

Hillview Auxillary

Nancy Flume
2205 Orchard Valley Road
788-5608

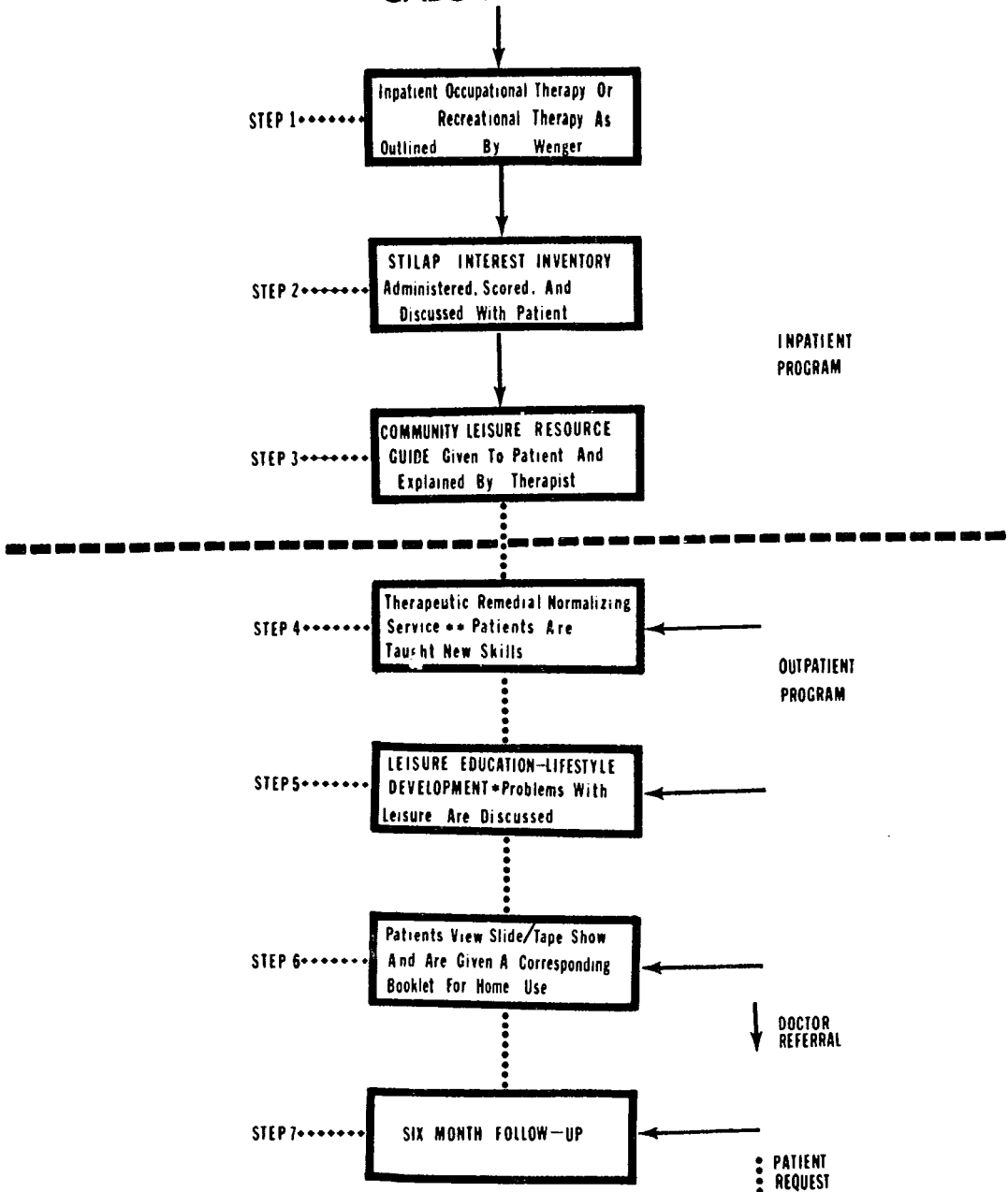
St. Francis Hospital

Volunteer Services
700 West Avenue South
785-0940

APPENDIX G
Leisure Counseling Model

LEISURE COUNSELING MODEL

Myocardial Infarction And CABG Patients



APPENDIX H
Administering and Scoring the STILAP

ADMINISTERING AND SCORING THE STILAP

I. Instructions for Administering the Activity Check List:

A. Before the client is given the Activity Check List, he/she should complete the sample check list. The following verbal instructions should be presented (individually or in a group):

1. Create an environment that will help the client be comfortable and feel at ease, i.e., non-threatening, enjoyable meeting.
2. Explain the purpose and procedure of the Leisure Assessment Process.
3. Read the directions included on the STILAP Activity Check List.
4. Emphasize the meaning of "Much" (M) and "Some" (S). To correctly circle (M), the client should participate often and skill level should be relatively high.

Give examples of (M) and (S), i.e., M = I bowl in a league every week. S = I bowl when my brother-in-law comes to town.

The client should consider his/her skill level in a recreational setting, not at a competitive level.

If the client is uncertain on whether (M) or (S) is appropriate, a question mark should be placed next to that activity.

5. Describe the meaning of "Interested" (I). (I) indicates an interest in learning more about the activity.

The client may circle an (S) and an (I) if participation is occasional and there is interest in learning more about the activity; or an (M) and an (I) if participation is often (regular) and there is interest in learning and improving skills in that activity; circle just an (I) if the client has not experienced the activity but is interested in learning about the activity.

6. Nothing should be circled if the client does not participate in the activity and is not interested in learning the activity.

7. Place a question mark by the activity if there is a question; i.e., not sure what the activity is; not sure what to circle.

B. Distribute Activity Check List

A) Instruct the client to print name, and date on the form.

B) Have student complete the Activity Check List.

1. Some staff prefer that this be completed in the presence of a staff member, i.e., if the client has difficulty reading; if the student feels more at ease.

2. Some staff prefer to have the client think about the activities overnight and complete the Activity Check List on their own.

C) Review the completed Activity Check List with each client individually.

1. To clarify any questions.

2. To verify the validity of the responses, i.e., Is (M) really a correct response?

II. Instructions for Completing the STILAP Leisure Profile Worksheet:

1. To determine if a specific competency has been met, refer to the numbers listed after each competency statement. These numbers correspond to the activity numbers on the Activity Check List.

2. If the client participated Much (M) in at least one activity related to that competency, the competency has been met.

3. Once an (M) activity has been used to fulfill a competency statement, it should be circled, indicating that it has been used. An activity which is rated (M) can only be used once to fulfill a competency statement.

4. If the activities that relate to a particular competency are dispersed on several pages (not conveniently grouped), two options are available:

- a) The staff member can easily design a transparency to facilitate locating the activity numbers.
- b) Most staff members quickly learn which activities meet which competencies (if they are skilled in activity analysis). Practice and familiarity with the Activity Check List will aid the staff member in quickly locating even dispersed activities.

APPENDIX 1
Leisure Profile Worksheet

LEISURE PROFILE WORKSHEETCompetency Met?

1. Physical Skill Done Alone
(1-7; 9-36; 121)
2. Physical Skill - With Others Regardless of Skill Level
(3-7; 9-36; 121)
3. Physical Skill Requiring Others
(38-51)
4. Activity Depending on Outdoor Environment
(18-39)
5. Physical Skill, Not Seasonal
(1-7; 9-14; 29; 37-39; 41-50; 87-89; 121)
6. Physical Skill With Carryover To Later Years
(1-7; 9-30; 33-57; 42; 46-48; 121)
7. Physical Skill - Cardiovascular
(3-4; 9-14; 16-17; 19-25; 27-30; 33-36; 42; 46-48; 121)
8. Mental Skill Done Alone
(13-14; 52-65)
9. Mental Skill Requiring Others
(67-77)
10. Appreciation Skill - Mental
(56-65)
11. Creative Construction of Self - Expression
(78-108)
12. Enjoyment or Improvement of Home
(82-83; 94-109)

LEISURE PROFILE WORKSHEET (Continued)

Competency Met?

13. Social Skill
(3-4; 18-19; 66; 87-89; 93; 116-120)
14. Leadership - Community Service
(112-120)

APPENDIX J
Implementing New Skill Development

IMPLEMENTING NEW SKILL DEVELOPMENT

1. Patient expresses an interest in learning leathercraft.
2. Therapist schedules a time to meet with patient again for a teaching session on leathercraft.
3. Therapist visits library and checks out several books on leathercraft.
4. Therapist reviews his/her knowledge of leathercraft and is prepared to teach the patient this craft.
5. Therapist prepares a teaching outline to cover the basic methods on leathercraft and designs a handout for patient use.
6. Therapist visits local craft shop and purchases a simple leathercraft project.
7. Patient arrives on day of teaching session.
8. Therapist gives the patient the prepared handout and teaches the patient the basics of leathercraft using the purchases project.
9. Therapist shows patient the library books on leathercraft and encourages the patient to copy down the titles so that he/she will have references for later use.
10. Therapist is available to patient should any questions arise following the teaching session.

APPENDIX K
Narration for Slide/Tape Program

NARRATION FOR SLIDE/TAPE PROGRAM

1. Title
2. You have been participating in an outpatient exercise program.
3. Pause 3 seconds
4. Soon you will be exercising on your own.
5. While you were involved in this program, the benefits of exercise were explained to you.
6. We would like to give you some guidelines to help you exercise on your own.
7. You have probably seen advertisements about exercise programs in magazines and on television.
8. Although there are many forms of exercise, not all produce cardiovascular fitness.
9. Exercises that produce cardiovascular fitness are those that use continuous rhythmic motion of the arm and leg muscles.
10. The word aerobic is used to describe this type of exercise.
11. Walking,
12. Riding a bicycle,
13. And swimming are examples of aerobic exercises.
14. A good exercise program takes into consideration the components of the exercise prescription. The four components include frequency, intensity, duration and mode. First let's talk about frequency. Frequency refers to the number of times a week that an exercise is performed.
15. To obtain the benefits of exercise, you must exercise a minimum of three times a week.
16. Duration refers to how long you exercise. To get the most benefit, exercise at least 30 minutes each exercise session.
17. Intensity refers to how hard you work during an exercise session.

18. The intensity of your exercise will be based on the exercise prescription that was given to you before you left the hospital.
19. Your prescription is the result of your treadmill or bicycle test.
20. Most of you will start exercising at about 60 to 70 percent of your highest heart rate or workload. This target zone has been determined, through testing, to be optimal for your cardiovascular fitness improvement.
21. There are two ways to determine the intensity of your activity.
22. These are the heart rate method and using METS. The heart rate method gives you an indication of how hard you are working.
23. To count your hear rate rest the hand palm up on a flat surface. Using the first two fingers of the other hand, line those fingers up with the thumb side of your wrist. Apply pressure firmly until you feel a beat beneath your fingers. Try to take your heart rate now. If you have trouble finding it, be sure to ask for help.
24. Using a clock with a second hand, count the number of beats you feel in ten seconds. Multiply this by six to get your resting heart rate.
25. There is a second way to monitor the intensity of your activity.
26. It is based on the fact that the amount of oxygen you use while exercising is similar to the heart rate you reach
27. The amount of oxygen you use is broken into units called METS
28. When you are sitting or lying down at rest, your exercise intensity is one MET. As the intensity of the activity increases the MET value increases. MET values are expressed in whole numbers like 1, 3, 6.
29. Patients usually are able to attain 5 or 6 METS by the time they complete the outpatient exercise program.
30. The MET level value was given to you to indicate the intensity at which you should exercise. You should not exceed your prescription during any activity.
31. A booklet will be given to you at the end of this program. This booklet has a chart with the MET values of various activities. Use this chart to help decide which activities are appropriate for you.
32. To exercise safely select your activities based on the MET level prescription given to you....

33. Then proceed with the activity but monitor the intensity of the activity by using the heart rate method.
34. The final component is the exercise mode. The mode is the type of exercise you choose to do
35. Pause 4 seconds
36. Pause 4 seconds
37. There may be a supervised walking/jogging program for cardiac patients in your community. Programs such as these have proven very effective in maintaining interest and participation.
38. If your community does not have a program of this type,
39. Or if you prefer to exercise on your own....
40. Here are some alternatives for you to consider.
41. Pause 4 seconds
42. Jogging has been recognized as a good activity for some cardiac patients.
43. It can be done any time of the year and requires no special equipment.
44. There are other activities which are also beneficial. An often overlooked activity is walking.
45. Walking briskly can be as beneficial as a slow jog with less stress to the joints. Many individuals enjoy walking in the outdoors more than jogging.
46. To make your walks interesting, bring along a spouse or friend. Try a forest or park for a change of scenery.
47. Cross country skiing can be a good winter activity.
48. There are certain precautions listed in your booklet for this activity and others. If you attend to these precautions, you should have no problems participating.
49. Bicycling is a good exercise to do at any time. There are many trails to follow outdoors or....
50. You can exercise inside on a stationary bicycle.

51. Adjust the tension
52. Or gears on the bicycle to make the activity harder or easier.
53. Perhaps you enjoy fishing.
54. To add some cardiovascular benefit, you might park a mile or two from the place you fish....
55. And walk briskly to your fishing spot.
56. Pause 4 seconds
57. Aerobic dance can be a fun way to exercise. To start, you should begin slowly, perhaps doing exercises to music.
58. As with any exercise you would get your heart rate close to your prescription level without exceeding it.
59. What about swimming? You may enjoy swimming laps....
60. Or, you can walk back and forth across the pool. Start with walking in water that is mid chest high and as you progress go into shallow water.
61. You have a lot of activities from which to choose. Do something you enjoy and do it on a regular basis. -
62. Now let's look at some activities that are not necessarily aerobic, but are also very important.
63. One benefit of involvement in recreational activities is that they will help you relax.
64. Recreational activities such as golf,
65. Canoeing....
66. Or fishing will burn calories and can help you control your weight.
67. If you are unable to return to work or wish to do something with your free time consider volunteering.
68. There are many agencies that could use your help.
69. Renewing social involvements can also be important. Contact the Occupational or Recreational Therapist at this hospital for additional ideas.

70. In conclusion, it is important you keep active and enjoy life to its fullest.
71. Pause 4 seconds
72. It's Your Choice.

APPENDIX L
Slide/Tape Booklet

“IT’S YOUR CHOICE”

**BOOKLET FOR USE
WITH
SLIDE/TAPE PROGRAM**

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Principles of Aerobic Conditioning

 Frequency

 Duration

 Intensity

 Mode.

Precautions To All Activities.

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 Coffee, Tea, and Colas

 Alcohol

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 Isometric Exercises

 Arm Support Exercises

 Exercise After Meals.

 Hot Showers, Baths, or Saunas

 Temperature Extremes - Heat

 Temperature Extremes - Cold

Angina and Nitroglycerin

Appendix

 Wind Chill Factor Chart

 Temperature - Humidity Index.

 Warning Signs of A Heart Attack

 MET Table

INTRODUCTION

This booklet contains the information presented in the slide/tape program. In addition, other information is included to help you exercise safely on your own. If you have any questions, feel free to call us.

PRINCIPLES OF AEROBIC CONDITIONING

There are many forms of exercise, but not all produce cardiovascular fitness or the type of fitness that will benefit your heart and lungs.

Exercises that produce cardiovascular fitness are those that use continuous rhythmic motion of the arm and leg muscles. Walking, riding a bicycle, and swimming are examples of aerobic exercises although there are many others that will be mentioned later in this booklet.

For an exercise program to be effective, the four components of exercise should be considered. These components are Frequency, Duration, Intensity, and Mode.

FREQUENCY is the number of times each week that you exercise. To obtain some benefits from exercise you must exercise a minimum of three times a week.

DURATION refers to how long you exercise. To get the most benefit from your exercise, the exercise sessions should last at least 30 minutes.

INTENSITY refers to how hard you work during an exercise session. Before you left the hospital outpatient program, you were given an exercise test on a bicycle or treadmill. The results of this test helped the doctor and therapists determine your individual exercise prescription which is the intensity level that you can safely exercise.

When you were given your exercise prescription, it included the heart rate and MET level you should reach during exercise and not exceed. This prescription is based on about 60% of your highest heart rate or workload you reached during testing.

It is important that you understand how to use the heart rate method and METS to monitor the intensity of your activity. The heart rate method gives you an indication of how hard you are exercising. To count your heart rate, first rest the hand palm side up on a flat surface. Using the first two fingers of the other hand, line those fingers up with the thumb side of your wrist. Apply pressure firmly until you feel a beat beneath your fingers. If you have difficulty finding your heart rate, ask someone for help.

To get your resting heart rate, use a clock with a second hand and count the number of beats you feel in 10 seconds. Take this number and multiply by six.

Example: You find your heart rate for 10 seconds is 12.
To find your resting heart rate: $12 \times 6 = 72$.

Bicycling

Bicycling can be done indoors on a stationary bicycle or in the out of doors on any street. You can use the tension or gears on the bicycle to make the activity harder or easier. There are many bicycle trails in the city parks and special ones converted from old railroad beds. Keep up an even pace, and monitor your activity to get the most benefit from this mode.

Fishing

Perhaps you enjoy fishing. This may seem like the type of activity that would have little benefit to the cardiovascular system. To add some cardiovascular benefit you might park the car a mile or two from the place you fish...., and then walk briskly to your fishing spot.

Swimming

Swimming is another great form of exercise. It takes a great deal of stress off the joints, and burns a lot of calories, often with less effort than on land. Lap swimming can be enjoyable or you can walk back and forth across the pool. Start with walking in water that is chest high, and as you progress go into shallow water. The deep water will hold you afloat at first, and later walking in shallow water will require more effort. Here are some tips to make swimming a safe activity:

1. If you are a beginner or non-swimmer, it is suggested that you swim on your back to avoid improper breathing. Do not hold your breath.
2. Take a medium shower after the exercise session. Do not take a cold or hot shower.
3. Do not take a sauna.
4. Dry hair thoroughly before going out in cold weather.

Dance

Aerobic dance has become a very popular exercise for both men and women. To start, you should begin slowly, perhaps doing exercises to music. There are record albums to purchase that can get you started with this activity. Remember to check your heart rate periodically.

Cross Country Skiing

Cross country skiing is an excellent aerobic activity for the winter months. Because it uses large amounts of energy, there are several precautions that must be considered before venturing into the snow:

1. Monitor your heart rate and stay within the recommended heart range during activity. Cross country skiing is unusual in that it is sometimes very difficult to tell how hard you are actually working.

Another way to monitor the intensity of your activity is through METS. A MET is a term used to measure the use of oxygen by the body, or how much "work" you have done. One MET is the amount of work your body does at rest and all other activities are graded upward from this base level. Using a MET table will give you a good indication of how hard you are working during different activities and it tells you what activities require more energy as compared to others.

The MET level given to you as a part of your exercise prescription should not be exceeded during any activity. Use the MET table at the end of this booklet as a guideline for choosing activities, then proceed with the activity but monitor the exercise intensity using the heart rate method.

THE MODE is the final component of a good exercise program. The mode is the type of exercise you choose to do. Many forms of exercise are listed here.

Jogging

There may be a supervised walking/jogging program for cardiac patients in your community. If such a program exists, your doctor's permission to enter the program along with an exercise prescription are prerequisites for starting such a program. If you are going to participate in a program of this type or jog on your own, here are several suggestions for you:

1. Purchase a pair of reasonably high quality running shoes, paying close attention to the fit.
2. Proper Running Form.
 - A. Keep your jaw and neck muscles relaxed.
 - B. Use your arms for balance, don't clench your fists tightly or you will tire out more quickly.
 - C. Run erect and relaxed.
 - D. A shorter stride is generally more efficient.

Walking

An often overlooked activity is walking. Walking briskly can be as beneficial as a slow jog. One real advantage to walking is that it involves less stress to the joints than running. Walking in the out of doors can make this exercise more enjoyable. Bring along a spouse or friend. There are many parks and forests that have good hiking trails. Don't let winter stop your walking!! Walk at your local shopping mall. Some of these malls may have maps so that you can record your distance. Remember these tips:

1. If you must walk by yourself, be sure to carry your identification with you.
2. Face oncoming traffic if you must walk in the streets.
3. Always wear bright colored clothing if walking at night so that drivers can see you.

2. Maintain a regular pace when you are skiing and avoid fast bursts of speed. Start slowly to warm up.
3. Consider weather conditions carefully before going out. See Wind Chill Factor Chart at the end of this booklet.
4. Dress warmly, but do not overdress. It is best to layer clothing. Start with some insulated underwear, wool socks and woolen outerwear.
5. Carry candy or nuts to maintain your energy level. This activity burns a lot of calories.
6. Never ski alone.
7. Slow down if breathing becomes difficult, but keep moving to keep warm.
8. Wear visible (bright) clothing.

Weight Training

This activity is not aerobic, but it is mentioned here because many people use weight lifting to increase body strength along with their aerobic exercise program. If you would like to do this, you must be sure to avoid lifting heavy weights. If you must strain to lift, then the weight is too heavy. To achieve muscular tone, use a lighter set of weights with more repetitions. The danger of heavy weight lifting is that it can increase your blood pressure and oxygen demand on the heart. Do this activity with care and get your doctor's permission and advice prior to the start of any weight lifting program.

Recreational Activities

There are some activities that are not aerobic, but are also very important. One benefit of involvement in activities such as a hobby is that it will help you relax.

Recreational activities such as bowling, golf, or fishing will burn calories and can help you to control your weight.

If you are unable to return to work or wish to do something with your free time, consider volunteering. Many agencies could use your help.

Renewing social involvements can also be very important. If you need additional ideas for community resources and activities, contact the Recreational or Occupational Therapist at this hospital.

PRECAUTIONS TO ALL ACTIVITIES

The following precautions to activity should be considered in conjunction with any exercise program:

SMOKING

Smoking increases your heart rate and makes less oxygen available in your blood for your heart and other body tissues. If you do smoke, abstain from smoking for 4-5 hours before exercising.

COFFEE, TEA, AND COLAS

These beverages contain caffeine which increases your heart rate and can cause your heart to work even harder. It is recommended that you reduce your intake of these drinks to approximately two cups each day. You may substitute decaffeinated coffee or tea for regular coffee or tea.

ALCOHOL

Alcohol tends to depress or slow down the function of the heart. This can be dangerous for a heart that has already been injured with a heart attack. Alcohol may cause the heart to work harder during times of increased activity and therefore should be avoided at least 4-5 hours prior to exercise. Your doctor may recommend that you should abstain from alcohol completely, so be sure to ask.

HOLDING YOUR BREATH

Holding your breath can create an extra strain on your heart and should always be avoided. It is important that you take slow deep breaths while exercising. You should inhale while you are using muscles, and exhale when relaxing muscles.

EXCESSIVE FATIGUE

Excessive fatigue that lasts two hours or more after you exercise indicates that the exercise was too vigorous. After exercising you should feel tired but not exhausted. If you do experience lasting fatigue, the intensity of your exercise should be decreased.

ISOMETRIC EXERCISES

Isometric exercises involve contracting the muscles in a set position for a definite period of time. These types of exercises should be avoided because they diminish blood flow to muscles. Examples of isometrics are lifting, pushing, or pulling heavy objects, or doing things that make you "grunt" or strain.

ARM SUPPORT EXERCISES

Arm support exercises such as push-ups against your full weight should be avoided because they can cause increases in your blood pressure which makes your heart work harder.

EXERCISE AFTER MEALS

You should never exercise immediately after a meal. Perform only light activities for at least one hour after eating. When you eat, blood is needed by your intestines to digest your food. When you exercise, extra blood is needed by your heart and therefore exercising after a meal places a strain on your heart.

HOT SHOWERS, BATHS, OR SAUNAS

Immediately after exercise hot showers, baths, or saunas should be avoided because they can cause a drop in blood pressure and place an extra strain on your heart.

TEMPERATURE EXTREMES - HEAT

Exercising in extreme heat and humidity can place an excessive strain on your heart. Even mild temperatures combined with high humidity can be dangerous. Consult the Temperature - Humidity Index at the end of this booklet whenever you exercise outside and you question the weather conditions for exercise. Don't exercise if the weather says danger or emergency when you consult this chart. Some other important things to remember when exercising in the heat are:

1. Never take salt tablets.
2. Drink plenty of fluids before, after, and during exercise in the heat. Water is best.
3. Wear light colored clothing and a hat on sunny, hot days.

TEMPERATURES EXTREMES - COLD

Cold weather exercise can be safe and fun if you are prepared. Use the Wind Chill Factor Chart at the end of this booklet to decide if you should exercise outside whenever the temperature drops below 30 degrees. Some other considerations are:

1. Layer your clothing. Cotton next to the skin is the best because it absorbs moisture. Next, use down, because it retains air for insulation. Wool is the best outer layer.

2. The head, the hands, and feet should be covered. Down can be used for the hands while wool is the best for the head and feet.
3. A face mask can be worn in cold weather to make outside activity more comfortable.

ANGINA AND NITROGLYCERIN

People sometimes experience discomfort in the chest which is called chest pain or ANGINA. This pain is the heart's way of telling you that it is not getting enough oxygen. Certain areas of your coronary arteries may be narrowed and there may not always be enough blood able to pass through these narrowed arteries when the heart is working harder and needs more blood. Most people get angina when they are working hard, emotionally distressed, after heavy meals, or when they are exposed to very hot or cold weather. The symptoms of angina include:

1. Heaviness, numbness, tingling, or pain in any or all parts of the arms.
2. Pressure, heaviness-sensation, tightness, burning, or pain in the chest.
3. Feelings of pain, indigestion, or burning in the upper abdomen.
4. Pain or discomfort in the shoulders, neck, jaw, throat, earlobes, or upper back.

The discomfort may be present in one or more of the above areas, or may be limited to just one small area. If you experience angina, you should first stop what you're doing and REST. If the discomfort does not go away with rest alone, take one nitroglycerin tablet under the tongue as you have been directed by your physician. Nitroglycerin opens up the blood vessels temporarily so that the heart can receive more blood and oxygen. This should cause the discomfort to go away within minutes. Do not hesitate to take nitroglycerin even if the pain is mild. If the pain goes away, continue what you were doing, but at a slower rate. YOU MAY TAKE UP TO 3-4 NITRO TABLETS, ONE EVERY FIVE MINUTES. IF THE ANGINA PAIN CONTINUES 20 MINUTES OR MORE, YOU SHOULD CALL YOUR DOCTOR IMMEDIATELY.

Nitroglycerin has some side effects. These include experiencing a warm flushed feeling of the face, headaches, fast heartbeat, or slight dizziness. Keep nitroglycerin in its brown bottle and replace it every 6 months to make sure that it is fresh. Keep your nitro with you at all times in case you need it.

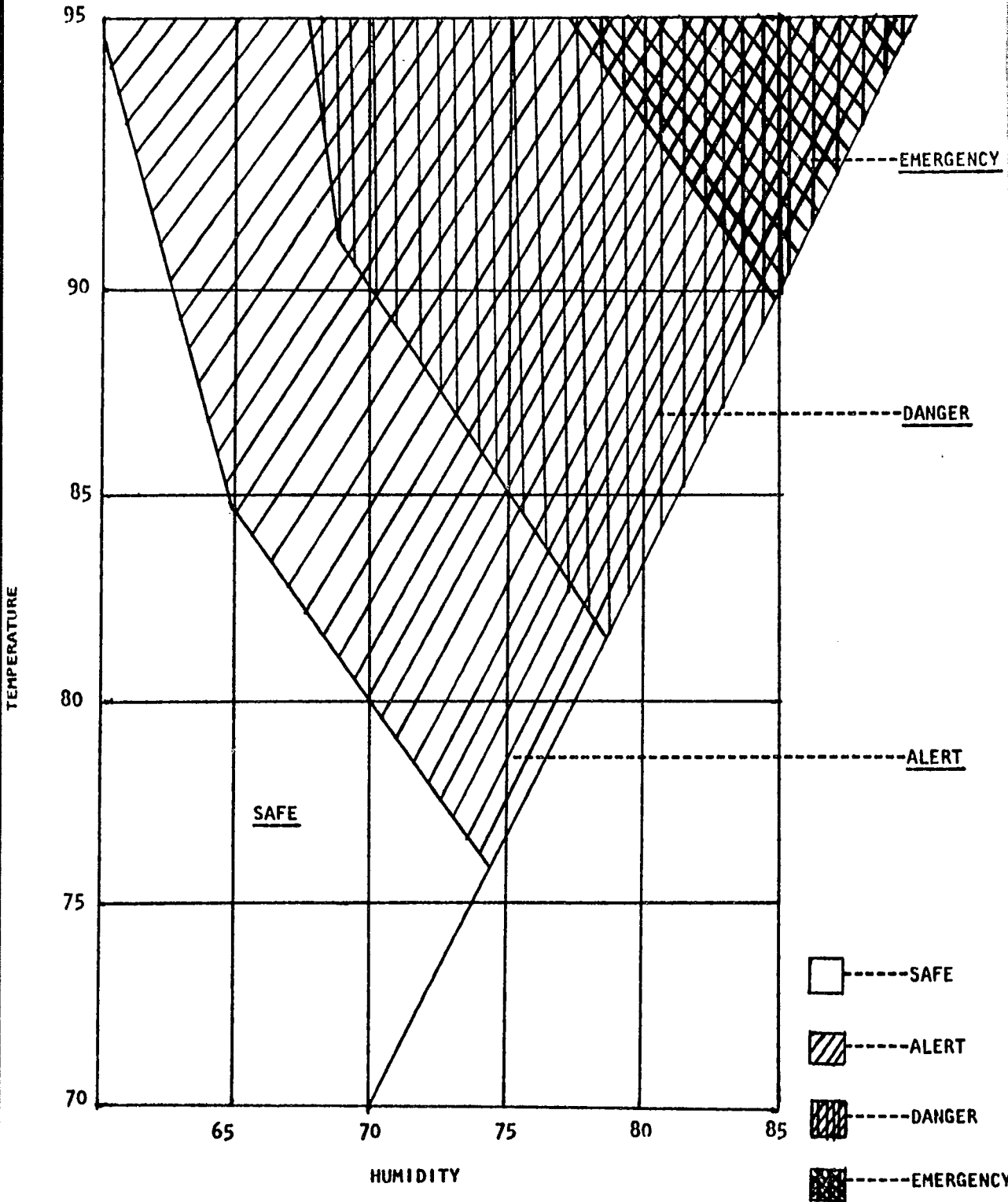
Wind Chill Factors

Wind Speed mph (km/h)*	Temperature °F (°C)*				
<i>Calm</i>	40 (5)	35 (2)	30 (-1)	25 (-3)	20 (-6)
5 (8)	35	30	25	20	15
10 (16)	30	20	15		
15 (24)	25	15			
20 (32)	20				
25 (40)	15				

*Do not exercise out of doors
when the wind chill factor
is below the level indicated
to the left of the heavy line.*

*Metric equivalents are approximate

TEMPERATURE-HUMIDITY INDEX



WARNING SIGNS OF A HEART ATTACK

The warning signs or symptoms of a heart attack can differ from person to person, but the common signs include:

1. Prolonged pain, pressure, aching, or heaviness sensation in the middle of the chest.
2. Pain, discomfort, or a burning sensation in the stomach, similar to indigestion.
3. Pain that may spread to the arms, throat, neck, jaw, shoulders, or shoulder blades.

The pain or discomfort may go away and then return. It can also be accompanied by:

4. Nausea and vomiting
5. Shortness of breath
6. Excessive sweating
7. Rapid heart beats

These symptoms may go away with rest. If they do not go away and become persistent, you should obtain immediate medical attention either by calling your doctor or reporting to the nearest emergency ward.

MET TABLE

1 - 2 MET TASKS

ACTIVITIES OF DAILY LIVING

Sleeping
 Bed Rest
 Lying Quietly
 Feeding Oneself in Bed
 Brushing One's Teeth
 Washing the Upper Body
 Shaving
 Combing One's Hair
 Washing One's Hair
 Sitting on the Edge of the Bed
 Washing the Entire Body Bedside
 Using Bedside Commode

WORK AROUND THE HOME

Conversation
 Use of Light Hand Tools
 Hand Sewing

OCCUPATION

Electric Calculator
 Paper Work
 Typing--Electric

RECREATION

Reading in a Chair
 Picture Painting
 Leather Punching
 Belt Making
 Rug Hooking
 Knitting
 Embroidery
 Card Games

2 - 3 MET TABLES

ACTIVITIES OF DAILY LIVING

Dressing and Undressing
 Sitting in a Chair
 Standing Quietly
 Walking to the Bathroom
 Bathing in the Bathtub

WORK AROUND THE HOME

Walking Around the House
 Fixing Small Meals
 Folding Clothes
 Riding in a Car
 Mending Clothes
 Driving a Car
 Sweeping the Floor
 Polishing Furniture
 Washing Dishes

OCCUPATION

Light Desk Work
 Typing--Manual
 Very Light Repair Work
 Bartending

RECREATION

Wood Carving
 Metal Work
 Weaving
 Leather Carving
 Piano Playing
 Using Small Power Tools
 Horseshoes
 Pool
 Walking at 2 MPH--Level
 Music Playing
 Shuffleboard

MET TABLE

3 - 4 MET TASKS

WORK AROUND THE HOME

Showering - Standing
 Bending and Stooping
 Making a Bed
 Fixing Dinner
 Washing Dishes
 Cleaning Around the Kitchen
 Window Cleaning
 Washing Clothes by Hand
 Ironing Clothes
 Mowing - Power, Riding Mower

OCCUPATION

Office Work

RECREATION

Hammering
 Walking 3 MPH-Level
 Walking 2 MPH-Graded
 Bicycling 7.5 MPH
 Croquet

4 - 5 MET TASKS

WORK AROUND THE HOUSE

Walking Up and Down Stairs
 Carrying Light Objects
 Vacuum Cleaning/Making a Bed
 Hanging Out the Wash
 Lift 0-25 Pounds
 Hoeing
 Raking Leaves

RECREATION

Sledding
 Volleyball
 Sailing
 Light Swimming
 Tennis-Doubles
 Ice Skating
 Roller Skating
 Dancing-Social
 Fishing-Wading in Stream

6 - 7 MET TASKS

ACTIVITIES OF DAILY LIVING

Ambulation, Braces/Crutches

WORK AROUND THE HOUSE

Chopping Wood

OCCUPATION

Average Manual Work
 Carpentry
 Farm Chores

RECREATION

Tennis-Singles
 Hunting with a Gun: Small
 Game and Carrying Light Load
 Light Downhill Skiing
 Bicycling 10 MPH
 Dancing-Aerobic
 Horseback Riding

MET TABLE

7 - 8 MET TASKS

WORK AROUND THE HOUSE

Turning a Mattress
 Walking Up an Average Grade
 Lifting 50-75 Pounds
 Shoveling Dirt
 Mowing-Manual Push Mower
 Complete Gardening
 Tree Chopping

RECREATIONAL

Hiking
 Canoeing
 Calisthenics
 Water Skiing
 Downhill Skiing: Vigorous
 Bicycling 14 MPH

8 - 9 MET TASKS

WORK AROUND THE HOUSE

Powdery Snow Shoveling

RECREATIONAL

Football-Touch
 Horseback Riding: Galloping
 Running 5.5 MPH
 Bicycling 16 MPH
 Jogging 5 MPH
 Basketball
 Boxing/Sparring

9 - 10 MET TASKS

WORK AROUND THE HOUSE

Lifting 75-100 Pounds

OCCUPATION

Heavy Manual Work
 Construction Work

RECREATION

Soccer
 Jumping Rope-Fast
 Mountain Climbing
 Handball-Racquetball

APPENDIX M
Questionnaire

QUESTIONNAIRE

1. How long have you been involved in the Cardiac Rehabilitation Program at the University?

Length of time _____

- | | Agree | Disagree | |
|--|-------|----------|---------|
| 2. If the University offered other activities besides running/jogging, I would be interested. | 1 | 2 | 3 4 5 6 |
| 3. My leisure time (free time) activities have changed since my heart attack or by-pass surgery. | 1 | 2 | 3 4 5 6 |
| 4. The title of the slide show was appropriate. | 1 | 2 | 3 4 5 6 |
| 5. The purpose of the slide show was clear to me. | 1 | 2 | 3 4 5 6 |
| 6. The narration or verbal portion of the presentation was easy to understand. | 1 | 2 | 3 4 5 6 |
| 7. The slides made the verbal portion or the narration easier to understand. | 1 | 2 | 3 4 5 6 |
| 8. The slides were interesting and kept my attention. | 1 | 2 | 3 4 5 6 |
| 9. The content of the program would be helpful to cardiac patients after Phase II or the outpatient phase of exercise therapy. | 1 | 2 | 3 4 5 6 |
| 10. The length of the program was appropriate. | 1 | 2 | 3 4 5 6 |
| 11. My overall rating of the program. | | | |

- 1 - EXCELLENT
- 2 - ABOVE AVERAGE
- 3 - GOOD
- 4 - AVERAGE
- 5 - FAIR
- 6 - POOR