

Relational Caring in Cardiac Rehabilitation: How Case Management Service Affects  
Clients' Recovery and Risk Factor Modification

by

Sonya Maria Catherine Rinzema  
B.S.N., University of Victoria, 1994

A Thesis Submitted in Partial Fulfillment of the  
Requirement for the Degree of

MASTERS OF NURSING

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Supervisor: Dr. Marjorie MacDonald

### ABSTRACT

Cardiac rehabilitation programs assist clients to modify their risk factors, improve clients' health, are cost effective, and elicit positive client satisfaction feedback. In 2002 the Vancouver Island Health Authority implemented a multi-site cardiac rehabilitation program using a case management service. This grounded theory and utilization focused evaluation revealed how case management service affects clients' recovery and risk factor modification after an acute cardiac event. Data collection involved reviewing ten client files and interviewing ten people with heart disease, two family members, and two Case Managers. Data collection and analysis occurred simultaneously using an inductive and deductive constant comparison process. The findings showed that participants engaged in a basic social process, Relational Caring in Cardiac Rehabilitation, which included Influencing Factors, Initiating Relations, Developing a Trusting Rapport, Collaborating, Figuring it Out, and Taking Control. With increased understanding of relational caring, health care providers can better support clients.

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## ACKNOWLEDGEMENTS

I would like to thank and acknowledge the many individuals who supported me during this thesis undertaking. Sincere gratitude is extended to Dr. Marjorie MacDonald, the supervisor of my committee for her outstanding support and assistance. Her encouragement, guidance, feedback, and reassurance kept me going and feeling hopeful. I would also like to extend a warm thanks to my committee members: Dr. Jane Milliken and Dr. Joan Wharf Higgins, who each provided a unique perspective and constructive feedback.

I would also like to express my gratitude to the Grounded Theory Club members for their support and assistance. This group's high level of expertise provided me with multiple opportunities and a venue to learn about grounded theory and obtain guidance and feedback on my process of data collection and analysis. The members were always excited and keen to discuss my agenda items.

I would also like to express my gratitude to the clients and family members who volunteered their time to share their experience and perception. I want to acknowledge that the CMs dedication both to the program and to improving client care made this research project possible and exciting. The theory would not be as complete without their input.

Sincere gratitude is extended to my mother for her assistance and for always being there. I would like to thank Anna for her support as we worked to complete our masters. I want to recognize Sandy for her ongoing encouragement and support of my project.

My deepest gratitude is to my husband, Olav, for his continuous support. I appreciate all the extras he took on so that I could work on my thesis. I am forever in awe of his gentle and caring personality. I want to acknowledge my son, Olav Philip, whose birth interrupted my thesis work, but whose personality enabled me to complete it.

Finally, I would like to acknowledge the financial support I received from the University of Victoria, School of Nursing Dorothy Kergin Endowment Fund and from the Vancouver Island Health Authority – South Island, scholarship program. These grant and scholarship monies enabled me to do this research.

## GLOSSARY

CABG	Coronary artery bypass graft (surgery)
CACR	Canadian Association of Cardiac Rehabilitation
CAD	Coronary artery disease
CHF	Congestive heart failure
CHR	Capital Health Region
CM	Case Manager
CMs	Case Managers
GTC	Grounded Theory Club
HSF	Heart and Stroke Foundation
IHI	Institute for health Care Improvement
MSCR	Multi-Site Cardiac Rehabilitation (Program)
VIHA	Vancouver Island Health Authority

## CHAPTER 1 – INTRODUCTION

Many clients leave hospitals after coronary artery bypass graft (CABG) surgery not necessarily feeling as good or as confident as they had before hospitalization. When a client is recovering from a coronary artery disease (CAD)-related event, she or he is faced with many possible experiences, such as changes in heart rate and / or decisions about whether or not to make lifestyle changes, and if so how? After surgery clients often experience new sensations that were not present before, such as chest discomfort and numbness. During recovery many clients want to do something to delay or prevent the progression of heart disease and the occurrence / recurrence of an acute cardiac event.

The use of case management and telephone follow-up intervention has been proven to be an effective way to help clients modify coronary risk factors, increase knowledge, and reduce anxiety (Beckie, 1989; DeBusk, Houston Miller, Superko, et al., 1994; Haskell, Alderman, Fair, et al., 1994; Houston Miller, 1996). Today many Canadian cardiac rehabilitation programs utilize a case management model and some use telephone follow-up. Despite their use, there is limited information on how a case management model, delivered mostly through telephone contact, affects clients' recovery and risk factor modification.

The purpose of this grounded theory evaluation research project was threefold: first, to gain a theoretical understanding of the participants' experience of the Multi-Site Cardiac Rehabilitation (MSCR) Program Case Management Service; second, to determine the process and generate a substantive theory on how the Case Management Service affects clients' recovery and risk factor modification; and third, to improve the MSCR Program and / or Case Management Service.

In this chapter, I present my background and interest in cardiac rehabilitation and case management. Then I provide my rationale for the research project and I end with a brief overview of my thesis. In this document, when I refer to a client or clients, I am generally referring to the person who has experienced a cardiac event but, in some cases, a family member.

### Researcher Background

For the past eight years, my nursing focus has been in acute care medical cardiology, community cardiac rehabilitation education and support, and development and management of a cardiac rehabilitation program. In 1996 I took a position as a staff nurse in a local coronary care unit. This is when my interest in cardiac rehabilitation began. Immediately, it became evident to me that emotional support along with physical support was significant to a client's cardiac rehabilitation.

In the fall of 1997, I also took a coordinator position for a local cardiac rehabilitation education and support program called Heart to Heart. As a hospital nurse and as the coordinator and a facilitator for Heart to Heart, I had spoken with numerous people about their or their family members' cardiac recovery and rehabilitation. These work experiences shaped how I saw the need for support and education for people following a cardiac event. From these positions, I realized that significant gaps existed in the delivery of cardiac rehabilitation in the region.

During this time I also realized the complexity of coronary artery disease, cardiac recovery, rehabilitation, and risk factor modification. I began to appreciate that CAD and atherosclerosis developments were multifaceted processes in which numerous interrelated experiences were possible. The complexity of CAD development is demonstrated by the

facts that the prevalence of CAD is significantly greater for people who live in poverty and who have lower education and, that a person's gender influences their risk and overall experience. These two facts often impact a person's cardiac rehabilitation goals and options. Despite theoretically equal access to cardiac rehabilitation services, the actual experience of recovery may differ depending upon participants' life circumstances.

My interest in case management began after I was hired by the Capital Health Region (now Vancouver Island Health Authority [VIHA] - South Island) to provide leadership in the delivery of cardiac rehabilitation. Generally, case management involves communicating directly and indirectly with clients and various disciplines, scheduling regular contact with clients, reviewing clients' progress and goal attainment, providing formal and/or informal education, and providing reports to physicians (Ribisl et al., 1999). As I reviewed literature on cardiac rehabilitation, I read and investigated the use of case management in different cardiac rehabilitation programs. I noticed that case management was implemented differently in different centres. Most case management programs used face-to-face contact whereas fewer used telephone follow-up, although the use of telephone follow-up is increasing significantly.

The VIHA Case Management Service is a cardiac rehabilitation service delivery model that uses nurses and mostly telephone follow-up to support and help clients during their cardiac recovery and risk factor modification process. Working in the VIHA MSCR Program as a Case Manager (CM) has shown me that nurses can help clients during their recovery and rehabilitation process in numerous ways. For example, nurses help clients by: listening and hearing clients' concerns, answering their questions, assisting clients to identify strategies and a plan to reduce their cardiac risk, and helping clients articulate

their needs. I see case management as a valuable system that assists clients during their recovery and risk factor modification process. I believe that CMs can help facilitate client empowerment, assist clients and families to better understand the cardiac condition and risk factors, and provide clients with personalized guidance in a cost effective manner. However, the more I understand case management, the more I struggle to concisely articulate how clients experience the case management process and how it affects their recovery and risk factor modification process. What is it that CMs do that helps clients in their recovery and risk factor modification process? What in the Case Management Service is working well and what needs to be improved? Might such data about processes and strategies be useful to other chronic disease management / rehabilitation programs?

### Thesis Overview

Since I needed a research method that would help me obtain a better understanding of the Case Management Service and an evaluation technique to identify the service strengths and areas for improvement, I selected grounded theory in combination with utilization focused evaluation. I selected grounded theory because it allowed me to explore the interactional process that occurs between clients (and family members) and CMs, as clients learn to manage their lives after the challenge of CABG surgery. Two sociologists, Barney Glaser and Anselm Strauss, developed the exploratory research method of grounded theory (Schreiber & Stern, 2001). This method uses an inductive approach to develop a theory that is grounded in the data (Schreiber & Stern, 2001). Grounded theory, which is based on symbolic interactionism (Blumer, 1954) identifies basic social processes that exist in society. Symbolic interactionists believe that within a social system people create meaning through symbols and interactions (Johnson, 1995),

and that people act in the world on the basis of the meanings they make about the world around them.

I integrated a utilization-focused evaluation method which is an evaluation done for a specific purpose. I selected this process type evaluation because I wanted to complete a useable evaluation for those delivering and receiving the service.

The information from this project will be used to guide modifications and improvements to the Case Management Service. The research project provided clients and family members with an opportunity to reflect on the cardiac recovery and risk factor modification experience. A dialogue with clients and family members about the clients' recovery and risk factor modification process provided me with insight about the Case Management Service. In addition, the findings will help CMs and other health professionals realize and acknowledge the experiences and challenges faced by clients going through the program. With an increased understanding of how the Case Management Service affects clients, CMs will be in a better position to support and assist clients and family members during the cardiac recovery and cardiac risk modification process. The evaluation contributes to the literature by presenting a participant-centred perspective of case management that comes from people living with the experience. Lastly, the evaluation may possibly provide other organizations with insight into the Case Management Service as provided by the MSCR Program.

This first chapter provides a brief description of my background and an overview of the thesis. In Chapter 2, I review the literature and describe the MSCR Program. Chapter 3 covers the methodology which includes the research project purpose and questions, evaluation design, participant identification and recruitment, data collection, and data

analysis. This chapter also includes a discussion of ensuring scientific rigour and ethical and other issues. I present the findings in Chapter 4 which are based on an analysis of thirteen participant interviews; of these ten were people who had CABG surgery, one was a family member, and two were CMs. In addition, two family members provided data while being present during their partner's initial interview. Four of the clients and one CM were interviewed a second time. The findings are also based on data from the review done on the ten clients' files. Finally in Chapter 5, I discuss related literature, the implication of the findings for nursing, policy and practice, and research. I end by providing recommendations to improve the Case Management Service and the MSCR Program.

## CHAPTER 2 – REVIEW OF THE LITERATURE AND MSCR PROGRAM

After an acute CAD-related event, such as CABG surgery or a heart attack, a client's recovery, risk factor modification, and rehabilitation is a complex process. In many Canadian cities, cardiac rehabilitation programs are available to help clients during their recovery and their risk factor modification process. According to the Cardiac Care Network of Ontario (1999):

...cardiac rehabilitation is provided within the continuum of cardiac care and consists of integrated and multi-factorial interventions which are intended to enhance and maintain the physical, psychosocial and vocational status of individuals with established heart disease or at high risk for the development of cardiac disease. Cardiac rehabilitation includes ...[tertiary] prevention, which is the modification of cardiac risk factors in clients with established cardiac disease, in an effort to prevent disease progression and recurrence of cardiac events (p. 4).

The three concepts: *cardiac rehabilitation*, *cardiac recovery*, and *cardiac risk factor modification* are interrelated and overlapping processes. In this document the terms are sometimes used interchangeably. Cardiac rehabilitation is defined above and cardiac recovery is defined as a process of getting better, regaining strength, control, and a balance in life after a cardiac event. To many people, cardiac recovery involves a return to a prior or improved health state by resuming or improving lifestyle. Cardiac risk factor modification is defined as a process of changing certain circumstances or conditions to decrease cardiac risk in hopes of preventing or delaying the progression of heart disease and the recurrence of cardiac events. This often involves implementing healthy lifestyle choices in one's life. For many people implementing a healthier lifestyle (i.e., risk factor modification) is also part of the recovery process; for example, a person regains physical strength by exercising or doing activities and eating a healthy diet.

A Case Manager (CM) commented that she thought of recovery as something one feels, for example a person no longer has chest discomfort, whereas she wonders "...what does a risk factor feel like!" (p. 4). She saw risk factor modification as an academic target that is known and set through research (Interview 13). For example, a person exercises five days a week for thirty minutes per session. She questions, can a person really feel that their risk is down from having done 'X' amount of exercise?

In 2002, the VIHA South Island established and implemented an integrated and coordinated comprehensive cardiac rehabilitation program titled the MSCR Program. This multi-site program tapped into the community's strengths by using existing cardiac rehabilitation and prevention services. To coordinate and integrate the existing services, a new service was established, the Case Management Service.

The MSCR Program consists of a case management service, a medical assessment, a health clinic service, education and support services, and exercise services. Health professionals at a hospital provide: the Case Management Service, health clinic, some education and support services, and exercise guidance. Professionals from community organizations supply many of the education, support, and exercise services. Nurses deliver the Case Management Service and a portion of the health clinic.

I begin this chapter by discussing cardiac recovery, risk factor modification, and rehabilitation literature. Then I examine literature on case management and telephone follow-up. I conclude by describing the VIHA – South Island MSCR Program and its Case Management Service.

### Cardiac Recovery, Risk Factor Modification, and Rehabilitation

CAD is accelerated by exposure to certain risk factors and conditions. “The presence of several factors [and conditions] places an individual at a markedly increased risk. This applies even though there may be only slight elevations of the risk factors concerned. ...” (Advisory Board, International Heart Health Conference, 1992, p. 18). The major modifiable risk factors and conditions are cigarette smoking, diabetes, abnormal lipid levels, elevated blood pressure, obesity, sedentary lifestyle, stress, and depression. Appendix A contains information on the specific cardiac risk factors and conditions.

Recovery after a major cardiac event, like CABG surgery, is worrisome, frightening, and overwhelming for many clients. The possible cardiac and non-cardiac complications or symptoms that clients can experience during the early recovery period after CABG surgery are numerous. Some of these symptoms are headaches; confusion; sleep disturbances; short term memory loss; labile emotions; depressed mood state; general aches; discomfort to the back, ribs or chest; chest pain; numbness or reduced sensation to the chest, hand, forearm or arm; unstable sternum; incision issues; swelling in an arm or leg or both legs; changes in breathing; heart rhythm issues; gastrointestinal problems or bleeding; and fever (Dafoe & Koshal, 1999; Fasken, Wepke-Tevis, & Sagehorn, 2001). In addition, many clients and family members have numerous questions and concerns, such as about recovery, medication, sexual intimacy, and sometimes confusion about new medications. Many clients have to learn or relearn what certain body sensations and symptoms mean. Clients are frequently unsure whether they should inform their physician of their concerns. A number of clients reported that they do not

discuss all of their concerns with their physician(s). Often there is not time. Yet when clients focus on their concerns, they seem to become bigger and their anxiety often therefore increases.

Recovering from and / or modifying cardiac factors after a CAD-related event is a multifaceted and variable process. A person's recovery and risk factor modification experience is context specific and impacted by a number of interrelated factors and conditions, such as the presence and number of cardiac risk factors, the disease presentation, a person's personality, his or her responsibilities, expectations, support system, income or socio-economic status, age, ethnic origin, and past experiences (Advisory Board, International Heart Health Conference, 1992; American Association of Cardiovascular & Pulmonary Rehabilitation, 1999; Artinian & Duggan, 1995; Greenwood, Muir, Packham, & Madeley, 1996; Heart and Stroke Foundation of Canada [HSF of Canada], 1997; Riegel & Gocka, 1995; Wenger, 1997). In addition, people have different choices and opportunities available to them. During the recovery and / or risk factor modification phase after a CAD-related event, some people follow western medical treatments and recommendations while others pursue alternative treatments and practices; some people implement many lifestyle changes while others overtly appear not to change at all.

The following three qualitative studies offer a glimpse into the diversity of experiences involved in women and men's cardiac recovery and risk factor modification after an acute cardiac event, from discharge to several years following hospitalization. Johnson and Morse (1990) report that, after a myocardial infarction, people go through a process of adjustment; yet not all people gain control in the same manner during this

process. A person's ability to gain or regain control following an unpredicted CAD episode is dependent on her or his (a) ability to anticipate the consequence of an action, (b) possession of enough information and knowledge to make informed choices, and (c) capacity to do something about these choices (Johnson & Morse, 1990). The authors found that some people regain a sense of control by continuing with a process of adjustment until they obtain a sense of mastery while others gain control by surrendering their responsibility for upcoming challenges.

According to Mitchell, Muggli, and Sato (1999), after a cardiac event the integration of structure into clients' lifestyles is important for people who participate in a cardiac rehabilitation exercise program. For these clients "their quest to survive became the driving force in their lifestyle modification" (p. 238). This study found that intervention by nurses positively influences clients' lifestyle modification process.

Fleury, Kimbrell, and Kruszewski (1995) developed a theory of healing that explained women's non-linear process of struggling to recover and create new healthy patterns eight weeks to three years after an acute cardiac event. Healing was theorized as "...a process of individual questioning, patterning, feedback, and repatterning that leads to the creation of personal strength and balance over time" (Fleury et al., 1995, p. 477). Participants moved from surviving, to making sense and re-defining their situation, into a place where they became more than their cardiac disease (Fleury et al., 1995). Personal empowerment of the participants seems to have evolved during, and as an outcome of, their healing process.

These three studies contribute to my understanding of the recovery process by showing the uniqueness of each person's experience while at the same time showing that

similarities exist. Yet missing from the nursing literature is information on how a case management service affects clients' recovery.

Several quantitative research studies have demonstrated that intensive risk factor modification and the use of medications results in less coronary artery narrowing and / or in reduced coronary artery disease progression (Haskell, Alderman, Fair, et al., 1994; Ornish, Brown, Schewitz, et al., 1990; Ornish, Schewitz, Billing, et al., 1998; Schuler, Hambrecht, Schlierf, et al., 1992). The authors of a number of clinically controlled and other quantitative studies have concluded that "cardiac rehabilitation programs that address multiple risk factors have been shown to be effective in improving health outcomes of post cardiac event clients, in reducing heart disease risk factors, and in fostering attitudinal and lifestyle improvements" (Ades & Coello, 2000; Canadian Association of Cardiac Rehabilitation [CACR], 1999; Dubusk, Houston Miller, Superko, et al., 1994; Haskell et al., 1994; Hedback, Perk, Engvall, & Areskog, 1990; Maines, Lavie, Milani, Cassidy, Gilliland, & Murgo, 1997; Oldridge, Guyatt, Fischer, & Rimm, 1988; Ornish et al., 1990; Ornish et al., 1998 cited in Rinzema, 2001a, p. 2). In addition, the initiation of cardiac rehabilitation (i.e., medication therapy, diet, exercise, and other counselling) in hospital results in better immediate and long term follow-up utilization rates of cardiac prevention measures (Fonarow & Gawlinshi, 2000).

Providing cardiac rehabilitation to post event cardiac clients has become the gold standard of care in all major centres throughout Canada and is an essential component of cardiac care (Heart and Stroke Foundation of BC & Yukon [HSF of BC & Yukon], 1997; King & Teo, 1998). Cardiac rehabilitation programs have been shown to be cost effective, to improve clients' functional capacity, to support clients to optimize their

health, and to elicit positive client satisfaction responses (Haskell et al., 1994; Rinzema, 2001b; Suter, P., Suter, W., Pekins, Bona, & Kendrick, 1996). Data from the Capital Health Region's (CHR) *Multi-site Cardiac Rehabilitation Pilot Program: Exit Surveys*, which had an 88% response rate, documented positive client satisfaction (Rinzema, 2001b). Eighty-seven percent of those who responded would recommend the MSCR Program to others. However, it was evident in the pilot program exit survey findings that a general exit survey is not the best method to learn specifics about the Case Management Service and its strengths and weaknesses. First, since the MSCR Program has a number of components, often it was difficult to identify in the exit survey responses the specific service or program to which a client was referring. Second, an exit survey reflects exposed or external information or aspects of the program or service as perceived by the clients, not the internal aspects that may be invisible to clients. Yet the external aspects are affected by the internal, thus a different method is needed to uncover them.

#### Case Management and Telephone Follow-up

To support client cardiac recovery and risk factor modification processes, some cardiac rehabilitation programs incorporate a case management model perhaps with telephone follow-up as part of the program. A case management program model is "...a system where a case manager, usually a nurse, coordinates the activities of various healthcare disciplines, on behalf of the client. .... This model has been shown to be significantly more effective than usual physician-based care in programs of smoking cessation and cholesterol reduction" (Canadian Association of Cardiac Rehabilitation [CACR], 1999, p. 279). For a description of different cardiac rehabilitation program models see Appendix B.

The concept of case management originated in the 1940's in the US insurance industry as a strategy to contain the spiralling costs for workers' compensation (Siefker, Garrett, Van Genderen, & Weis, 1998). Case management focused on non-medical concerns, such as work transition and modification issues, to assist minimally disabled or no longer ill persons back to work (Siefker et al., 1998). The concept was expanded in the 1960's to address occupational rehabilitation. But as accident and health insurance costs increased, the concept of case management infiltrated the health arena. In the 1970's, case management became part of the US government's claim programs. From 1985 into the late 1990's there was an explosion in the number of Case Managers (CMs) (Siefker et al., 1998).

A number of definitions of case management exist; however, most definitions state the steps or actions of CMs as opposed to providing a conceptual definition of case management (Powell, 1996). Many terms are used interchangeably for case management: managed care, coordinators of care, and disease management, to name a few. It is therefore difficult to provide one universally accepted definition and model of case management.

The MSCR Program is currently not using a specific definition of case management; however, since the program needs to look at outcomes the following definition may be appropriate. "The Commission for Case Manager Certification defines case management as...a collaborative process that assesses, plans, implements, coordinates, monitors, and evaluates the options and services required to meet an individual's health needs, using communication and available resources to promote quality, cost-effective outcomes" (Mullahy, 1998, p. 9). The Canadian Oxford Dictionary

defines case as "...an instance of a person receiving professional guidance, e.g., from a doctor or social worker..." (Barber, 1998, p. 220), and management is defined as: "1) the process or instance of managing or being managed; 2) the professional administration of business concerns, public undertakings, etc...3) the technique of treating a disease" (Barber, 1998, p. 875). These definitions readily apply to a disease management model for CAD recovery. A more health promoting definition is the one used in Ontario; case management is: "...a collaborative service consisting of interrelated processes to support clients in their efforts to achieve their optimal health and independence in a complex health, social and fiscal environment" (Ontario Case Manager's Association & Ontario Community Support Association, 2000, p. 2).

In the US and Canada, case management models exist in a variety of medical and non-medical settings, such as in long term health care and Worker's Compensation Boards. In the US, case management is used in cardiac rehabilitation to track program outcomes and clients' lifestyle behavioural changes that are aimed at reducing the risk of cardiac disease progression (Haskell et al., 1994; Ribisl et al., 1999). In Canada, within the health care system, the concept of case management has been implemented in many forms.

In the literature, there are many examples of successful case management models (Berra, 2001). Two pivotal research studies, the Stanford Coronary Risk Reduction Project (SCRIP) and the program known as MULTIFIT (multiple risk factor intervention study by DeBusk et al. 1994), show positive effects of a case management model in cardiac rehabilitation (DeBusk et al., 1994; Haskell et al., 1994). These studies occurred simultaneously and both used a case management model that includes different amounts

of face-to-face, telephone, and mail contact. A third study, the Health Education and Risk Reduction Training (HEAR2T), tested and showed the feasibility and effectiveness of the Stanford Coronary Risk Reduction Project nurse case management model in non-academic centres (Stanford Heart Network, 2003).

CACR authors suggest that case management may be an ideal process for cardiac rehabilitation programs because “this model has been shown to be significantly more effective than usual physician-based care in programs of smoking cessation and cholesterol reduction” (1999, p. 279). They add that studies are currently underway exploring the effectiveness of comprehensive case management cardiac rehabilitation care versus regular cardiac rehabilitation care and they note that further investigation is needed to determine the cost effectiveness of case management. According to CACR (1999), until CMs can directly bill the health care system, in Canada CMs will probably continue to be underutilized and under-investigated. Yet I wonder if a fee for service model would truly provide a feasible solution.

Many cardiac rehabilitation programs in British Columbia (BC) utilize case management in some format. Most use a case management model with a face-to-face / clinic type intervention model, whereas fewer programs, like the MSCR Program, integrate a case management model that primarily uses telephone follow-up.

According to Houston Miller (1996) the use of telephone follow-up as an intervention in cardiac rehabilitation commenced in the late 1970's. It was originally used to monitor clients' home-based exercise progress. The MULTIFIT home-based program is an example of such as model. This program provides regular telephone / mail contact and follow-up by a CM, with a limited number of hospital / clinic visits (DeBusk et al.,

1994). MULTIFIT is primarily based on social cognitive theory and behaviour therapy (Houston-Miller & Taylor, 1995). As mentioned earlier with case management, MULTIFIT showed successful use of telephone follow-up to aid behaviour change (DeBusk et al., 1994). Telephone intervention has also been successfully used to provide education, reduce anxiety, and improve adherence (Beckie, 1989; Kim & Oh, 2003).

The use of case management with telephone follow-up in Canada is increasing both in cardiac rehabilitation and other parts of the health care system. Lear, Ignaszewski, Linden, et al. (2003) report that some studies have shown a deterioration in risk factors and lifestyles after completion of a short term cardiac rehabilitation program. Thus Lear, Ignaszewski, Linden, et al. (2002) are conducting a four year controlled trial, in Vancouver BC, that examines an extensive lifestyle management intervention (ELMI) with cardiac clients who have completed a cardiac rehabilitation program. After completion of an initial cardiac rehabilitation program, clients are randomized into either usual care or ELMI. ELMI uses a case management model, in which CMs monitor clients' exercise, provide telephone contact, and face-to-face contact. The first year results show "...modest non-significant benefits to global risk compared to usual care" (Lear et al., 2003, p. 1920).

The provincial government of BC and VIHA are both increasing the use of health care via telephone; the government through the use of a nurse line and VIHA through their participation in the *Province-wide Chronic Disease Collaborative for Patients with Congestive Heart Failure in British Columbia*. The BC NurseLine is a 24-hour toll-free telephone service in which nurses provides people with confidential health related information and recommendations (see <http://www.bchealthguide.org/kbnurseline.stm>).

In VIHA, the Congestive Heart Failure (CHF) committee is looking at improving the quality of care for people with congestive heart failure through the use of partnership, collaboration, and by using an evidenced-based case management model that incorporates telephone follow-up (Rinzema & CHF IMPACT Team, 2004).

According to Keeling and Dennison (1995) and Nevett (1995), clients are receptive and appreciative of nurse-initiated telephone follow-up. Keeling and Dennison (1995) found that discharged clients had many unmet needs that could be met in this way to: 1) provide and reinforce information, 2) provide emotional support, and 3) provide referrals to physicians, hospital, community resources (Keeling & Dennison, 1995).

#### VIHA MSCR Program

The development of the VIHA (South Island) MSCR Program was shaped by various cardiac rehabilitation-related initiatives that occurred in the region between 1986 and 2000. In the late 1980's and 90's both cardiac-specific education and exercise programs arose, such as Heart to Heart (an eight week education and support program of the Heart and Stroke Foundation) and various community cardiac exercise rehabilitation programs. These programs, however, were neither integrated nor coordinated as part of a comprehensive cardiac rehabilitation program.

In February 1997, Dr. Woodwark, a cardiologist, and the First Open Heart Society of BC initiated a home-based cardiac rehabilitation program for post MI and post open-heart surgery patients in the CHR. The program, which was based on the MULTIFIT model, provided clients with approximately eight weeks of telephone follow-up. After two years, the service ended with Dr. Woodwark's retirement. Then in January 1999, the First Open Heart Society funded a nurse to provide a follow-up service for cardiac

surgery patients. A nurse telephoned patients during the first six to eight weeks of their recovery after open-heart surgery. This service, which operated out of the region's cardiovascular surgeons' office, ceased after six months due to a lack of ongoing funding.

Between 1996 and 1999 both the provincial government and the CHR made recommendations that the region offer a full continuum of cardiac care that included cardiac rehabilitation. In 1996, Dr. Victoria Foerster prepared a document for the Deputy Provincial Health Officer, a preliminary plan to develop a cardiac prevention and rehabilitation program for persons who were high risk or had confirmed cardiovascular disease. In 1997, prior to regionalization, a CHR working group was formed to plan a regional heart health program. This group held a heart health forum (Capital Health Region, 1998a) to identify important aspects of heart health services and to present recommendations for offering a full continuum of cardiac care from prevention through to tertiary services and rehabilitation (Capital Health Region, 1998b). In 1998, the CHR Department of Cardiac Services accepted the recommendations and supported development of a Cardiac Services Center of Excellence "to provide exemplary tertiary cardiac health care to the adult population of Vancouver Island and area ... [by providing] leadership in prevention, timely diagnosis and treatment, rehabilitation, research and education" (Department of Cardiac Services, 1998, p.1). The centre was later developed but rehabilitation was not the primary concern. In 1999, a fifteen-year Regional Service Plan initiative commenced and a CHR Heart and Peripheral Vascular Health Advisory Panel was formed to identify issues, barriers, and opportunities and to provide recommendations concerning all future heart and vascular health needs. One of the recommendations of this panel was the addition of a cardiac rehabilitation program.

In spring of 2000, the CHR hired me as the Manager of Cardiac Rehabilitation to provide leadership in the delivery of cardiac rehabilitation and to commence the process of delivering a comprehensive cardiac rehabilitation program. I began by sequentially and simultaneously completing a number of processes. First, I researched and stratified data on the numbers of post-event cardiac clients in the region and I reviewed past CHR cardiac rehabilitation-related initiatives. Second, I established a project steering committee in August 2000 to oversee and guide the overall design, development and implementation of a regional cardiac rehabilitation program. Third, I conducted an assessment of the cardiac rehabilitation services that existed in the CHR. The purpose of this assessment was threefold: (1) to acknowledge and compile a comprehensive inventory of cardiac rehabilitation and prevention related services in the CHR; (2) to obtain service providers and clients' visions for cardiac rehabilitation; and (3) to identify gaps and barriers in the existing cardiac rehabilitation delivery model. Fourth, I researched and reviewed cardiac rehabilitation literature and a number of BC, other Canadian and a two US cardiac rehabilitation programs<sup>1</sup>. Fifth, I performed a gap analysis of the current cardiac rehabilitation system. Sixth, I worked with a project steering committee to identify two program design options; option one would deliver a single site cardiac rehabilitation program whereas option two would be a multi-site program. In 2000, the CHR Heart Health Executive Committee endorsed the development of option two.

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<sup>1</sup> The VIHA MSCR Program model was developed after reviewing the following programs (though this is not an exhaustive list). In British Columbia - St. Paul's Healthy Heart Program; Vancouver General's Healthy Heart Program, Burnaby's Healthy Heart Program. In other parts of Canada - Saskatchewan Saskatoon's Tri-hospital Cardiac Rehabilitation; Ontario's St. Michael's University Hospital; Nova Scotia's – Atlantic Canada / Halifax Cardiac Rehabilitation Program. In the USA – California's Kaiser MULTIFIT and Jewish Community Centre Cardiac Rehabilitation Program.

Early in the 2001, (prior to the amalgamation of the CHR with the rest of the Vancouver Island region) I pilot tested a multi-site cardiac rehabilitation program model that integrated features of non-traditional programs, including case management and home-based and interventional program models. (See Appendix B for details on different cardiac rehabilitation program models). In 2002 the VIHA South Island formally commenced the MSCR Program.

The MSCR Program delivers cardiac rehabilitation and prevention services to cardiac clients at multiple locations; it integrated and coordinated use of existing cardiac rehabilitation and prevention services; and offered new services, such as case management with telephone follow-up. In this way it addressed some of the gaps identified in the earlier analysis. The goal of the MSCR Program is to help clients manage their cardiac condition to the best of their ability and prevent or limit disability. To achieve this goal, the MSCR Program supports clients' cardiac recovery and cardiac disease risk factor modification through the use of a case management service with telephone follow-up, medical assessment, health clinics, education and support services, and exercise services.

#### MSCR Program Case Management Service

Nurses working with post-event cardiac clients as CMs in the MSCR Program, mostly through telephone follow-up, have a complex role. Besides tracking outcomes and monitoring clients' lifestyle behavior changes, these nurses fill many roles including client advocacy, facilitation, liaison, lifestyle or crisis counseling, listening, problem solving, and providing direct care. These roles require them to answer questions, provide recommendations, and give advice. The CM role is dynamic and evolving and the nurses

working as CMs in the MSCR Program are actively working on improving the program's Case Management Service.

The primary focus of the MSCR Program Case Management Service is to provide regular telephone follow-up to clients to: (a) help guide clients through recovery, (b) assist clients to determine which program services are suitable to meet their needs, (c) coordinate multidisciplinary healthcare activity and clinic visits, (d) facilitate clients' identification of cardiac risk, modification options, strategies, and rehabilitation goals, and (e) provide clients' physicians with an end report of their client's progress. The nurse follow-up provides clients with support and consistent personal contact. This is intended to help reinforce and clarify information provided in the hospital and informs clients of the opportunities, such as the 'health clinic' where a client can see their CM, dietitian, or if need be another health care professional. Generally, half of the CM-client contacts occur in the first six weeks following hospitalization even though clients are followed for about six months. The general follow-up schedule involves CM initiating contact within 72 hours of discharge, then weekly for two to three weeks and then monthly for five to six months. Individual needs and available resources determine the exact follow-up schedule.

## CHAPTER 3 – METHODOLOGY

In the literature, the majority of the case management information is presented from an organizational and disease management perspective, and has been used as a cost containing measure. The many assumptions implicit in this perspective often lead to a narrow view of case management and this eventually affects the way that case management is incorporated into programs, such as the MSCR Program. In this research project, I used a qualitative approach to gather data on the Case Management Service from a client-centred perspective; that is, one that comes from people living with the experience.

I begin this chapter by introducing the purpose of the research and the questions that guide the process. Then I explain the research design, and how participants were identified and recruited. I follow by describing the procedure used for data collection and analysis. Then I discuss how rigour was ensured during the research project. Finally, I conclude by discussing ethical and other issues.

### Purpose and Question

The purpose of this research project was threefold: (1) to gain an understanding of the participants' experiences (and the influences on the experience) of the MSCR Program Case Management Service; (2) to determine the process by which the Case Management Service affects clients' cardiac recovery and, if applicable, cardiac risk factor modification, and (3) to better understand the MSCR Program Case Management Service so that the service could be improved. The research was guided by the following two questions: (a) what is the process by which the Case Management Service affects

clients' recovery and risk factor modification? (b) which aspects of the Case Management Service work well and which could be improved?

### Research Design

Within the context of this utilization-focused evaluation research project, I used grounded theory methodology to learn how the Case Management Service affects clients' recovery and risk factor modification after an acute cardiac event. The intent was to obtain data that would be useful for improving the Case Management Service.

Grounded theory is generally known as an explanatory qualitative method in which a theory, generated from the data, explains a phenomenon. Schreiber (2001) "...found grounded theory to be useful when we want to learn how people manage their lives in the context of existing or potential health challenges..." (p. 57). The purpose of grounded theory is (1) to develop a theoretical understanding of a process that can explain what is occurring in the area being studied; and (2) to discover the meanings people ascribe to their actions and reactions to a particular phenomenon in a particular context (Wallace & Wolf, 1986).

Grounded theory has its foundation in the philosophical perspective of symbolic interactionism, which assumes that a human being and society are mutually dependent and indivisible (Schreiber, 1995). The assumption is that human behaviour is revealed through meanings and symbols, which are shaped and understood through social interactions (Ritzer, 1988; Schreiber, 1995; Strauss & Corbin, 1998). "To understand human behaviour, the researcher must look beyond the behavioural component to the underlying meaning that motivates it" (Milliken & Schreiber, 2001, p. 178). At the same time, however, the social behaviour of humans influences changes in the world around

them. “People are able to modify or alter the meanings and symbols that they use in action and interaction on the basis of their interpretation of the situation” (Ritzer, 1988, p. 181).

Symbolic interactionism is based on the following three assumptions, the first of which is that human beings take action towards an object based on the meaning they have assigned to that object (Blumer, 1954). Second, the meaning a person applies to an object arises from social interaction. Third, meanings are created, modified, or altered through an interpretative process. Data are descriptive interpretations that are “reconstructions of experience” (Bond, 1990 cited in Charmaz, 2000, p. 514).

Grounded theory is thought of as a “...process of explaining social psychological and social structural processes, and requires only that we study these processes in the context of social interaction” (Stern & Covan, 2001, p. 28). Grounded theory involves the systematic development of a theory of behaviour that is generated from the data (Glaser 1978; Glaser & Strauss, 1967; Schreiber, 2001). Grounded theories do not explain known theories or concepts; they explain what is occurring in the data.

I used grounded theory to determine the process and generate a theory on how the Case Management Service affects clients’ cardiac recovery and, if applicable, cardiac risk factor modification. In this research project, a grounded theory, which was linked to the circumstances of the phenomenon being explored, was incrementally built and advanced through an inductive and deductive process of constantly comparing data. Constant comparison involves the comparison of different participants’ data, the comparison of a participant’s data to itself at a variety of points in time, and the comparison of data to

categories and categories to categories (Charmaz, 2000). This process keeps the data linked, which keeps the theory grounded.

The grounded theory constant comparison analysis (which is further discussed later in this chapter) allows the researcher to create either a substantive or formal theory. A substantive theory examines a phenomenon in one situation or context whereas a formal theory examines a phenomenon in many different contexts (Glaser & Strauss, 1967). Within the limitations of this thesis, I generated a substantive theory that accounts for the experience of my participants.

Grounded theory was used within a utilization-focused evaluation design in an attempt to understand and improve the implementation of the Case Management Service for those delivering and receiving the service.

Program evaluation is the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgements about the program, improve program effectiveness, and / or inform decisions about future programming. Utilization-focused evaluation (as opposed to program evaluation in general) is evaluation done for and with specific, intended primary users for specific, intended uses (Patton, 1997, p. 23).

The purpose of this evaluation was to gain a better understanding of how the Case Management Service affects clients' recovery and risk factor modification and what elements of the service work well and what elements could be improved. The primary users in this case are the program staff, clients, and family members. Data from interviews and a review of client files were analyzed to generate a theory about how the Case Management Service affects clients during their recovery and to uncover new knowledge to guide improvements.

In the 1970's evaluations were primarily being done by external evaluators, but this trend changed in the 1980's and the use of internal or insider evaluations expanded

significantly (Patton, 1997). According to Patton “the defining characteristic of external evaluators is that they have no long-term, ongoing position within the program or organization being evaluated. They are therefore not subordinated to someone in the organization and not directly dependent on the organization for their job and career” (1997, p. 138). Theoretically, this provides for objectivity in the evaluation. An internal evaluation is one done by someone involved in the program or organization and therefore, objectivity may be questioned.

I completed this evaluation. My insider status provides both advantages and disadvantages. Five advantages are, first, I, as the evaluator, possess insider knowledge about the details about the VIHA, the MSCR Program and its Case Management Service. I possess knowledge on the details about how the service is operating. Second, as the manager, I have a strong commitment to improving the service and I have the authority to facilitate or carry out the recommendations. Third, since I am staying with the MSCR Program, the knowledge and insight I gained about the service stays with the service. Fourth, as an insider I was aware of and sensitive to the managerial relationships and norms. Fifth, since I am doing this research project for my thesis, using me as the evaluator resulted in negligible costs to the VIHA and its MSCR Program.

There are also some disadvantages to insider evaluation, the first of which is that an insider is seen as a less objective than an independent evaluator. Although, “Fetterman (1989) states that research of any kind is subject to bias, and that making the potential biases of the study explicit can, to some extent, mitigate against their effect on the findings” (cited in Hewitt-Taylor, 2002, p. 34). As mentioned earlier grounded theory is based on the understanding that researchers interact with their subjects and thereby affect

the data that emerge (Charmaz 2000), thus findings are subjective and context specific. Second, Patton (1997) notes that internal evaluators are presumed to be more easily manipulated by the organization's administration to show positive findings to promote the program or to justify decisions. This research project stemmed from my personal interest, not from the administration; however, findings will be given to VIHA. Third, insider evaluator expectations about the process or outcome may cause certain findings to be taken for granted or over-emphasised. This is mitigated to some degree by strategies used to guard against bias (as discussed sections on theoretical sensitivity and ensuring scientific rigor) and by the constant comparative method itself.

### Theoretical Sensitivity

Theoretical sensitivity is defined as “personal qualities of the researcher that is reflected in an awareness of the subtleties of meaning of data” (Strauss & Corbin, 1990 cited in Streubert-Speziale & Carpenter, 2003, p. 364). This involves my ability to have insight, to notice details, to identify that which is pertinent, and to think theoretically.

In keeping with the principles of grounded theory I began this research project from an atheoretical stance, which is without any preconceived ideas as to what I would find (MacDonald & Schreiber, 2001). Though, I bring assumptions and experiences (i.e., personal and professional experiences and knowledge from literature and the data analysis process) to this research project. However, built into the grounded theory method are safe guards to ensure that my biases don't influence the data and the interpretations I make. As mentioned in Chapter 1, I developed my theoretical sensitivity through my experiences as a cardiac nurse, as a coordinator and facilitator for the Heart to Heart Program, as a CM in the MSCR program, as a past volunteer with the Need Crisis Line,

through my knowledge gained as a University of Victoria masters student, creating the MSCR program, and my life experiences.

To help me guard against my biases, I used various strategies to promote trustworthiness, such as memoing, questioning the data, doing constant comparison of data, looking for negative cases, testing preconceived concepts against the data, and doing a detailed analysis of concepts. I tried to avoid imposing my understandings by not specifically asking participants about these concepts but by being sensitive that they may emerge in that data. I tried to analyze concepts to determine the many possible explanations. In addition, I tried to conduct the interviews in a non-judgemental way. Additional ways used to address theoretical sensitivity are discussed later in the section on ensuring scientific rigor.

#### Participant Identification, Recruitment, and Sample

The grounded theory methodology requires that each participant have some experience of the phenomenon, either directly or indirectly. In this research project, the three sets of participants who experienced the Case Management Service were: cardiac rehabilitation program clients, cardiac rehabilitation program clients' family members, and MSCR Program CMs.

CMs provide the Case Management Service to approximately 73% of all the clients who have had CABG surgery and that live in the south island area. The exact percentage varies slightly depending on who agrees to participate. In this Case Management Service population, approximately twenty three percent are female in comparison to seventeen percent of the total CABG surgery population. Data were not obtainable on the number of family members that directly or indirectly received the service.

To obtain participants, the processes of participant identification and recruitment occurred simultaneously. However, for ease of reading these processes are written out in a linear format, which does not reflect the actual process that occurred.

#### The recruiter and recruitment process

To reduce the risk of implicit sense of obligation or coercion (such as a power-over situation) to participants because of my role in the program, a third party recruiter (hereafter called the recruiter) not associated with the VIHA MSCR Program was used for participant recruitment. The recruiter, who has a Master in Science in Biology and is a Registered Professional Biologist, was hired because of her skill in using a random selection method for participant recruitment and also because of her gentle and caring telephone presence. I informed the recruiter about her role and emphasized that it was necessary to select participants at random. The recruiter kept confidential the names of participants who were telephoned and asked to participate but who declined. At no time, was I made aware of the names of clients who were contacted. Once participants had agreed to participate, the names were forwarded to me.

The recruiter followed the telephone script recruitment process described in Appendix E. To summarize, the recruiter telephoned the potential participants and informed them why they were being called. After the preliminary introduction, the recruiter asked for permission to inform them about the research project. Then the recruiter provided interested participants with details about the research project and conveyed that participation needed to be voluntary, that they should not participate due to feelings of obligation or gratitude to the MSCR Program or the CM and that the telephone call was not trying to coerce them to participate. The recruiter informed each

person that agreeing or declining to participate would in no way affect their future status in or support from the program and that no one from the program would know if they declined to participate. The recruiter informed the potential participants that a copy of the information letter (see Appendix F; Appendix H) and the consent form (see Appendix G; Appendix I) would be mailed to them for their review and she explained their contents. The recruiter contacted the consenting persons again, about two weeks later, to answer any questions and to determine the person's interest in participating. After a person agreed to participate, the recruiter reminded them that Sonya Rinzema, the evaluator, would be contacting them to arrange an interview.

The recruiter enrolled the program's primary CM to reduce the risk of coercion. A second CM, who joined the program while I was on leave, approached me about participating. Random selection of CMs was not possible due to the low number of CMs.

The response or participation rate for this research project was 31%. The recruiter randomly attempted to contact 36 participants, i.e., people chosen from the list of MSCR Program "graduates". Of which, 11 agreed to participate. However, of the 36 prospective participants, only 23 were able to be contacted for both phone calls. Of these, 11, or 48%, agreed to participate. Of the 26 people originally spoken to by the recruiter, 20 (77%) agreed to consider participation and were sent written information about the research project. Only 17 of these 20 people were available at the time of the second call; of which 11 agreed to participate. Messages were not left. So, 65% of those who were contacted after receiving the written information about the study participated.

It is important to remember, however, that the purpose of sampling in grounded theory is not to obtain a representative sample but a purposeful sample. Random selection was only used in this study to protect participants from feeling coerced to participate.

#### Participant description

In total, fifteen different people provided informed consent and were involved in the research project. I interviewed thirteen participants; ten clients who experienced the CABG surgery itself, one family member, and two CMs. I obtained additional data from two family members (spouses) who were present during their partner's interview.

The participants were selected within the constraints imposed by a third party recruitment process to reduce the possibility of coercion. Table 1 contains demographic information of the thirteen formally interviewed participants.

The participant sample was slightly different than anticipated. I had estimated interviewing a similar number of people who experienced CABG surgery as family members. During the early interviews, I realized that many family members had minimal contact with a CM. Those that had less contact often viewed their partner and not themselves as having received the service.

The client participants consisted of two females and eight males. The family members and CMs were all females. The average age of the client participants was 66, ranging from 53 to 77 years of age. This average age of 66 is slightly younger than the average age of 68 for all Case Management Service clients. The average female client's age of 73 was slightly older than the average age of 71 for female clients in the Case Management Service. The average male client's age of 63 was younger than the average age of male clients (67 years) followed by the service. All of the client participants had

their CABG surgery between seven to thirteen months prior to participating in this study. Seven of the client participants were partnered whereas three were single. In the two years prior to surgery, six of the ten interviewed client participants were retired, two were looking for work, and two were working. Participants were not asked their cultural background; although, one client participant named him or herself as being French-Canadian and another as being East Indian.

Table 1 – Demographic Information

<p><u>Case Managers Participants (N=2):</u></p> <ul style="list-style-type: none"> <li>◆ Gender: 2 female</li> <li>◆ Ages: 39 to 45</li> <li>◆ Marital status: 1 partnered; 1 single</li> <li>◆ Education: both have a Bachelor Science in Nursing.</li> <li>◆ Employment: both working as nurses. <ul style="list-style-type: none"> <li>○ Cardiac nursing experience: mean 20 years; range 17-23 years.</li> <li>○ Case Management experience at time of interview: 1-2 years.</li> </ul> </li> </ul>
<p><u>Client Participants (N=10):</u></p> <ul style="list-style-type: none"> <li>◆ Gender: 2 females; 8 males</li> <li>◆ Ages: ranging from 53-77 (mean 66); <ul style="list-style-type: none"> <li>○ females ages: 70-77 (mean 73.5)</li> <li>○ males ages: 53-72 (mean 63)]</li> </ul> </li> <li>◆ Marital status: 7 married; 3 single</li> <li>◆ Living arrangement: 2 living alone; 7 living with partner; 1 living with room mate</li> <li>◆ Employment: 6 retired; 2 looking for work; 2 not working</li> <li>◆ Education: <ul style="list-style-type: none"> <li>○ 1 not completed high school</li> <li>○ 4 completed high school or grade 13</li> <li>○ 3 attended college or technical school;</li> <li>○ 2 attended one or more years of university</li> </ul> </li> </ul>
<p><u>Family Member Participant (N=1):</u></p> <ul style="list-style-type: none"> <li>◆ Gender: Female</li> <li>◆ Age: 72</li> <li>◆ Living arrangement: living with partner</li> <li>◆ Employment: retired</li> <li>◆ Education: Grade 13 education</li> </ul>

According to the Heart and Stroke Foundation of Canada (HSF of Canada) (2000), nine percent of the population with chronic heart disease have less than high school education. The lowest rate of CAD is in people with university education (HSF of Canada, 2000). My sample had a good range of education levels; however, only one person had less than high school education. According to BC Stats (2001), the Capital Regional District has the highest general education levels in the province. General education data on the age group of my sample was not available, Yet in the Capital Regional District population aged 25-54, 12.3% have not completed high school and 37% have not completed post-secondary education versus the BC population age 25-54, 17.2% of have not completed high school and 42.3% have not completed post-secondary education (BC stats, 2001). Thus the research project sample, with only one client (10%) not having completed high school, and four clients (40%) not having completed post secondary education, likely represents the general Capital Regional District population.

### Data Collection

To ensure a broad view of the phenomenon, I incorporated a number of data sources and perspectives. Data collection sources included participant interviews and program client file reviews. I conducted retrospective participant interviews with clients, family members, and CMs, which provided a range of perspectives and experiences with the MSCR Program Case Management Service. In addition, I conducted ten retrospective client participant file reviews. Data collection took place over ten months.

### Theoretical sampling

In grounded theory, the emerging theory guides the data collection. I used theoretical sampling during data collection; a process in which I concurrently collected, coded and analyzed data, and determined additional data needed and where to find it (Glaser & Strauss, 1967; Schreiber, 2001). Theoretical sampling involves sampling for concepts not for individuals, although additional individuals may need to be recruited to provide sufficient data on the concepts identified. I used theoretical sampling to refine my ideas. “Theoretical sampling helps us to define the properties of our categories; to identify the context in which they are relevant; to specify the conditions under which they arise, are maintained, and vary; and to discover their consequences” (Charmaz, 2000, p. 519).

As the evaluator, I wanted to theoretically sample for concepts, thus I tried to obtain diverse experiences. Due to the fact that I was required to use a recruiter to deal with the power-over issue, I used random and stratified sampling techniques to help me obtain a varied sample and concepts. I provided the recruiter with two lists of potential participants from VIHA MSCR Program Case Management Service records. The first list comprised an inclusive list of persons [N=90 (26 aged 46-64, 64 aged 65-84), (16 females, 74 males)] who had received the Case Management Service for a minimum of four months and met the criteria in Appendix C. Since CAD happens and is experienced differently by men and women and by people at different ages, I asked the recruiter to randomly select a few older participants by gender and the few younger participants by age only since I had a limited number of females.

During the first five interviews, I realized that two participants had limited memory of the Case Management Service; one was due to medical complications and the other was for unknown reasons. I assumed that this was because of the length of time since receiving the service. After the seventh interview, I noticed that all but one of the six interviewed client participants had utilized the clinic option. I wondered if there were differences between clients who used additional services, and those who did not. In grounded theory, it is important to seek variation in participant experiences. Thus, in keeping with grounded theory sampling principles, I sought additional participants who had declined the clinic option and who had completed the Case Management Service more recently. To do this, I provided the recruiter with a new inclusive list of past program participants [N=12 (3 females, 9 males), (age range 48-73)] who had not utilized the health clinic option and had completed the service less than two months prior. From this list, the recruiter randomly selected three more people who had recently completed the Case Management Service.

The exact number of participants recruited and interviewed was determined by the data needed. Theoretical saturation of data is reached when the same data keep emerging and once no new data emerge during the process of coding and analyzing. For the most part, participant recruitment continued until theoretical saturation. However, I ceased seeking additional people after obtaining data from the thirteenth participant, as per my supervisor's direction prior to full saturation. I came close to saturating all of the categories; however, a few complex categories were not fully saturated, such as the subcategory "Negotiating the Power Dynamic". To obtain full saturation of all the categories, additional data collection and analysis would be necessary.

The University of Victoria and the VIHA ethics committees' requirement that I use a third party recruiter made it difficult for me to fully utilize theoretical sampling when it became necessary to recruit additional individuals to the study. As much as possible, however, the recruiter made random selections based on the theoretical sampling criteria I provided to her. I was able to use theoretical sampling fully in the development of additional interview questions asked of participants already in the study. In addition, I theoretically sampled for concepts during the second interviews with the five participants.

### Interviews

Thirteen participants (along with 2 family members present) engaged in an initial 45 – 90 minute retrospective face-to-face audiotape-recorded interview. An in-depth semi-structured interview strategy with open-ended questions was used. The client and family member participants were asked questions such as: “Tell me about your experience during the first six months of your recovery after surgery?”, “What was it like for you to receive regular telephone follow-up?”, “What was most helpful in the nurse telephone contact?”, “What would you like to see changed in the service?” This type of questioning provides data on participants' experiences (see Appendix J for interview guide). Some of the initial questions changed as the data analysis progressed and as concepts and categories emerged.

Five of the participants were interviewed a second time during the data analysis process to further explore concepts and to clarify and / or validate findings. In most cases, this was a telephone interview that lasted 15–30 minutes. One CM engaged in a second face-to-face interview. Some of the second interviews were tape-recorded and some not.

The participants and I agreed upon an interview location for the initial face-to-face interview. Considerations of privacy and safety to the participant and myself, and the availability of space influenced my location choice. All the interviews took place in a private quiet location, such as a participant's home or private office where there were limited or no interruptions.

Shortly after each interview, I recorded memo notes of my observations, reactions, assumptions, hunches or hypotheses, and residual questions. I conducted all the interviews and as soon as possible after each interview, all thirteen initial interviews were transcribed verbatim either by a transcription clerk or by me and reviewed by me. Immediately after a second interview, I extracted a few verbatim quotes that supported new or existing categories or concepts.

#### Client files

The second data source was the Case Management Service client participants' files review. The MSCR Program keeps files on all cardiac clients followed by CMs. All ten participants who had CABG surgery consented to my reviewing their file (see Appendix G for a copy of the client consent). Permission was obtained from VIHA to access the program client data and files (see Appendix N).

The purpose of these file reviews was twofold: (1) to identify whether the health professional's perspective was consistent with the client's perception of how they progressed; (2) to obtain health outcome results. The information in each client's file was consistent with the client's perspective expressed during his or her interview. The client participants' pre and post program risk factor data was compiled and coded as part of the findings, in the category "Figuring it Out".

## Data Analysis

In grounded theory research, a theory is created from the data and not from literature or other preconceived ideas and assumptions. Therefore, the literature review done prior to the data collection and analysis was limited to information that provided an explanation for the research project. Then during the analysis I paid attention to what the previous literature said to ensure that the data confirmed it, rather than letting preconceived notions or ideas drive the analysis.

### Constant comparison

In this grounded theory evaluation, data analysis involved a systematic yet complex process of constant comparison (which is interrelated with and occurs simultaneously with data collection). Constant comparison involves generating a theory through the incremental process of inductively and deductively coding and comparing data (Creswell, 1998). Concepts that emerged from the data were the units of analysis in a four-step iterative process. The first step, open coding, involved coding the raw data on a line-by-line basis. This involved reflecting on what concept was reflected in the piece of text, which I then labelled with a code that reflected the concept. These codes were often the words used by the participants themselves. I constantly compared each portion of text with other pieces of text, and each code with other codes, to determine whether they reflected the same or different concepts. In the second step, I continued the constant comparative process by grouping and regrouping the coded data into categories and specific properties and dimensions (MacDonald, 2001). The third step involved theoretical coding to develop relationships among the categories. Hunches, theories or hypothesis were generated from the data and then they were tested against (and compared

to) additional data. The fourth step involved identifying a core category and then generating explanations around this core category. “The core category is the central phenomenon or main concern for the people in the setting, when viewed from their own perspective” (Schreiber, 2001, p. 74). The categories that occurred over and over were linked to the core category by their specific properties.

During the data analysis I made several diagrams of the relationship. After working with the data for about four months, I realized that a mutual relational caring process was occurring. Figure 1 is one of the early diagrams that I created, which I continued to develop. Once the core category and its own specific properties were identified, I tested the theory against the data, particularly against negative cases. The result was a theoretical framework of how the Case Management Service affects clients’ recovery and risk factor modification (see Figure 2 in Chapter 4). In the end, I moved from a string of first level codes (see Figure 1), into a full substantive grounded theory (see Figure 2 in Chapter 4).

### Memoing

Memoing is a strategy that I used throughout the data collection and analysis to promote theoretical sensitivity. I commenced a memoing process immediately after being granted ethics approval, which was before data collection started, and continued until I finished the thesis. I used memoing: 1) to help me to look at the data through different lenses, 2) to record my biases, assumptions and preconceived theories or notions so they could be later compared with the data, 3) to ensure rigor by recording my reflections, reactions, and questions after each interview and at any other point in time so I could

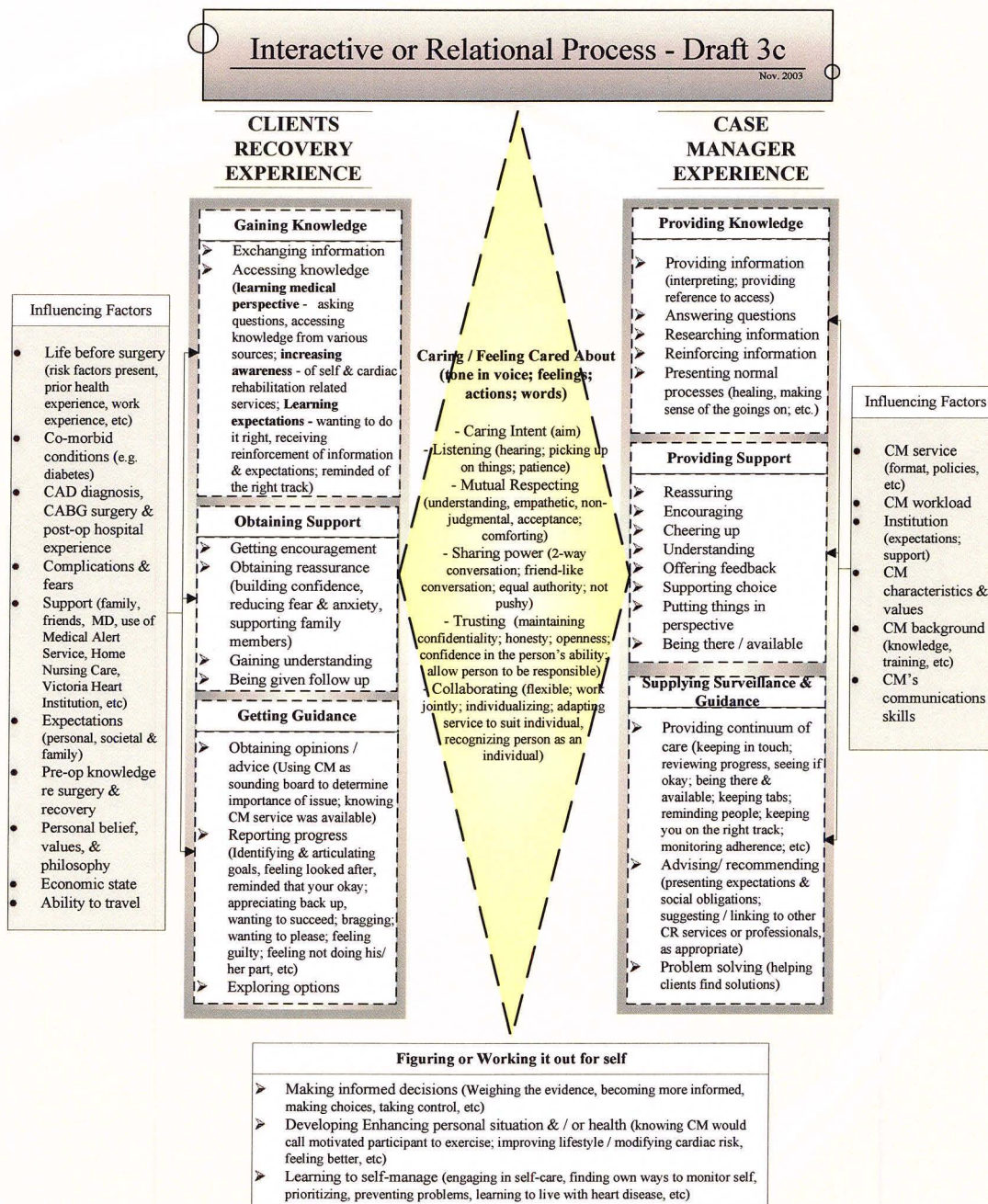


Figure 1 – An Early Diagram

reflect on them later, 4) to create an audit trail to track the research and evaluation process, and 5) to guide subsequent data collection and aid the data analysis process to

develop theoretical connections (Charmaz; 2000; Schreiber, 2002). As per standard grounded theory procedures, memoing included both writing and diagramming (Schreiber, 2001).

### Ensuring Scientific Rigour

In qualitative research different terms are used to discuss rigor; I used terms defined by Chiovitti and Piran (2003) and Sandelowski (1986). To ensure scientific rigour in grounded theory several strategies were used to enhance credibility, auditability, and fittingness.

Credibility involves making sure the findings are trustworthy. Credibility was shown when participants confirmed that the descriptions and interpretations represented their experience and also when the experience was recognized by others after only reading about the experiences (Sandelowski, 1986). To enhance credibility, I took the following steps. To help me guard against my potential bias, I constantly documented my values, beliefs, assumptions, and hunches, and examined and tested them against the data. I found my data to be consistent with the literature about case management and other theories. As mentioned earlier, I commenced a memoing process immediately after being granted ethics approval and continued until the end of the research project. I used open ended interview questions to let the participants guide the process. I also asked participants focused questions to obtain additional data, clarification, correction, and / or validation. Whenever possible, I used participants' own words to try to keep their meaning. I looked for negative case to show extremes and to test the robustness of my interpretations.

To ensure that I obtained and conveyed accurate information, I took a number of steps. I listened, a number of times, to every tape recorded interview with the transcription in front of me and I made corrections. I offered each participant the opportunity to review his or her transcription. I made use of the skills and obtained direction from experts on evaluation and grounded theory, i.e. my three University of Victoria committee members and the Grounded Theory Club (GTC) members. The committee members (who were external to the research project and to VIHA) guided the evaluation process to ensure that I produced a quality MSCR Case Management Service evaluation. I used peer debriefing to obtain feedback, confirm codes and verify the data analysis and coding and to validate the data analysis process, from the start of data collection through theory development. The University of Victoria GTC is an interdisciplinary (informal seminar) group of approximately ten faculty and graduate students who meet every two weeks to discuss theoretical issues or any other issues that arise with members' grounded theory research projects, such as reviewing the developing theory and data analysis.

Auditability involves making explicit the process I used so another researcher can follow my process and arrive at similar and not contradictory results. I enhanced auditability through memoing and by asking the standard grounded theory questions during data analysis, such as what is occurring in the data? What do I call what is occurring? What do the participants call it? How do the codes relate? What are properties or consequences of the codes? In addition, I enhanced audibility by explaining in this thesis how and why I selected the participants and the process that I followed to come to my findings.

Fittingness, also known as transferability, refers to the likeliness that the findings fit with the participants and in contexts other than the original research. Fittingness is demonstrated by the fit of the findings with participants' and others' experiences (Sandelowski, 1986). As a whole, the theory itself is not transferable, but aspects and ideas are. Other people can apply pieces to their experiences. To ensure fittingness, I took the following steps. I took the theory back to some client and CM participants for validation. I asked an outside person who has had multiple heart attacks but not received the Case Management Service to critically reflect and provide feedback on the findings. I explain in this thesis that a substantive theory was generated on how the Case Management Service affects the clients' recovery and risk factor modification as described by the participants identified in Table 1. In the discussion, I incorporated literature that related to the theory.

In addition, to ensure that I completed a quality evaluation, I considered and attended to the following four standards: utility, feasibility, accuracy, propriety (Patton, 1997; Sanders, 1994). First, utility means that the evaluation has to serve "...the practical information needs of intended users" (Patton, 1997, p.17). Thus the research findings must be used as intended to improve the Case Management Service for the service providers and users. An expectation of the VIHA Heart Health Program director is that the Manager of Cardiac Rehabilitation evaluates and improves her program and / or specific services. Since the Case Management Service is a new service, it commenced in March 2002, an evaluation was fundamental to learn how the service affects clients' recovery and risk factor modification and to identify possible defects in the service.

Second, feasibility means the evaluation must be feasible, practical, and cost effective. Since the MSCR Program Case Management Service is a small service, the use of an insider evaluator was the most cost effective, practical, and feasible way to do an initial evaluation. Since this grounded theory evaluation was done for my thesis there was minimal cost to the VIHA.

Third, accuracy means the evaluation must convey accurate information about the program being evaluated. As mentioned above to ensure that accurate information was conveyed, I invited critique and obtained direction from my committee and the GTC. As mentioned, I also obtained feedback from an outsider person and from a CM. A recommendation is that an external evaluation of the service be done at a later date.

Fourth, to ensure propriety, which means the evaluation must be conducted legally, honestly, and ethically, I followed the strategies mentioned to enhance credibility. In addition, I obtained both VIHA and the University of Victoria ethics approval and informed participant consent (see below).

### Ethical and Other Issues

In interviewing participants for a grounded theory evaluation of the Case Management Service of which I am the manager, there were a number of issues that I had to consider in addition to the usual ethical concerns. In this section I present how I dealt with the following ethical and other issues: risks and benefits to participants, power-over conditions, informed consent, confidentiality / anonymity, dissemination of results, and approval from the University of Victoria and the VIHA.

The risks and benefits to participants was the first ethical issue I considered. To minimize any potential risk for all the participants (clients with heart disease, family

members, or CMs), they were informed prior to our meeting and again at the beginning of the interview that they may interrupt or terminate the interview or their participation at any point without consequence. The consent forms contain specific information on how the risks to the participants were explained (Appendix G; Appendix I). Further, before being interviewed every participant took the offered opportunity to ask questions or to express their feelings.

Based on my experience and cardiac research literature, it is my opinion that there was little to no known or anticipated health risk to the participants who had heart disease or their family members. A possible but unlikely risk was that the interview dialogue would trigger an unexpected reaction in a participant, such as emotional distress. To my knowledge no such reaction occurred. Participants were aware that if they became uncomfortable about the interview after it was finished, they could contact me. None did. See the information letter and consent form for details on how this risk was described to participants (Appendix F; Appendix G; Appendix H; Appendix I). In addition, since clients and family members are more vulnerable immediately after a client's cardiac surgery, I limited recruitment to people who had completed the MSCR Program Case Management Service one to seven months prior.

Even though one of this research project / evaluation purposes was program improvement, not program effectiveness, any internal program evaluation creates potential threats or risks to program staff, in this case the primary CM, and me, the manager. Notwithstanding this fact, I believe that including the primary CM's professional standpoint adds significant depth, honesty, and insight into how the Case Management Service affects clients' recovery and risk factor modification process.

Five potential risks existed for the primary CM, the first of which was that this research project / evaluation may lead to changes in the CM's role. The primary CM was aware of this and agreed that changes should occur if it would improve the program.

The second potential risk was that I (the manager) might have discovered unexpected negative information about a CM, such as inadequate work performance, during an interview. This was assumed to be a low risk based on the employees' performance and anecdotal feedback received on the service suggested that the CM was providing exemplary service to post CABG clients and family members. In addition, the MSCR Program quality assurance performance appraisal requires that the program manager annually contact at random program participants to obtain feedback about clients' interaction with the CM. Nevertheless, a plan was established in advance on how the manager and the CM would deal with unexpected (negative and positive) findings that might emerge during the data collection (see Appendix M).

A third potential risk to the primary CM is that negative information gained about another CM, who was filling in, may be interpreted by people reading this thesis as being about the primary CM. To deal with this, a statement was added in the findings section to identify that negative references can not be attributed to the primary CM since there are times when other people not included in this research project have covered for that CM.

A fourth potential risk is that information learned during the research project / evaluation may change the relationship between the CM and me, the manager. This risk could not be mitigated but seemed unlikely at the outset and has not materialized.

The last potential risk is that the VIHA deletes the Cardiac Rehabilitation Program and its Case Management Service based on the research / evaluation finding. If this were

to occur it would affect both the CM and me, the manager of the Cardiac Rehabilitation Program. It seems unlikely that any conditions, of sufficient gravity as to jeopardise the program, exposed by this project would not become evident to VIHA regardless of the performance of the research. To see how these risks were explained to the CM see the information letter and the consent form (Appendix G; Appendix I). The CM was aware of these risks before agreeing to participate (Appendix H; Appendix I).

For the manager, there were three potential risks. First, the organization's administration may delete the program or service based on the finding as discussed above. In order to minimize the risk of program deletion, consent was obtained from the program director. Appendix N shows that the program director was aware that the purpose of the evaluation was to improve the service.

The second potential risk to the manager was that information gained could change the CM-manager relationship. However, whenever a manager does an internal evaluation or a staff performance review there is always a potential risk that information gained will change a relationship.

The last potential risk was that the evaluation findings would reveal that Case Management Service policies are inadequate and / or that the service did not achieve some of its goals, such as client satisfaction. As researcher / evaluator and manager, this is important information for me to obtain and is viewed not as a risk but as an asset to enable proactive changes to occur.

The evaluation may potentially benefit the participants involved. The possible benefit in participating in this research project for persons with heart disease or family members was the knowledge that their participation will contribute to improving the Case

Management Service which will help future clients. In addition, a dialogue with me, the evaluator, may have had a positive effect on a participant's overall health state through his or her reflection on the Case Management Service, recovery, and risk factor modification experience. The likely benefits for the CMs were reassurance about what works well and information about how to improve the service. Another benefit was the positive feedback the CMs received from the findings. By having shown that the CMs are doing a good job, this may add job security. In addition, a dialogue with me, the evaluator, may have benefited CMs through their reflection on the Case Management Service experience and its effects on clients' recovery and risk factor modification process. See the consent forms for how the benefits were explained to the different participants (Appendix G; Appendix I).

The second ethical issue considered was two potential power-over conditions. The first power-over situation involved the client and family member participants; there was a risk that the participants felt coerced or obligated to participate since I am also the Cardiac Rehabilitation Program manager. To reduce or mitigate this risk, I implemented the following strategies. First, to recruit participants I used a third party recruiter not associated with the MSCR Program or employed by the hospital. Second, I had the recruiter use a randomization method to determine which specific people to contact. By using this method only the recruiter knew who she contacted and who declined participation. Third, I tried to obtain voluntary participation thus the recruiter, myself, and the mailed information informed and reinforced to participants what voluntary participation means. See Appendix E, Appendix F, Appendix G, Appendix H, and Appendix I for the explanations given to the potential participants. Based on the final

participation rate it would appear that the participants did not feel coerced or obligated to participate.

The second power-over situation involved the program's primary CM. To reduce the risk that the primary CM felt coerced to participate I implemented the following strategies. First, the third party recruiter enrolled her. Second, the recruiter and the consent form both explained that participation should be voluntary and that the CM should not participate if she felt pressured to do so. The consent outlined the potential risks to the CM as a result of the evaluation (Appendix I). This was assumed to be a low risk because the CM had expressed her interest in participating in this research project and in obtaining both participants' positive and negative feedback before the original proposal was completed.

Informed consent was the third ethical issue that I considered. To ensure each participant could provide informed consent, information was provided at the appropriate level of comprehension. The recruiter and later myself, the evaluator, discussed participation requirements in detail with interested participants. The recruiter sent interested participants an information letter (Appendix F; Appendix H) and a copy of the consent (Appendix G; Appendix I) after the first telephone contact. The consent provided: 1) the purpose of the research project; 2) the names and contact numbers of additional people that participants could contact if they had questions and concerns; 3) information regarding data collection, i.e. in-depth tape recorded interviews; 4) details that participation must be voluntarily; 5) particulars on confidentiality, anonymity, such as use of a pseudonym, confidentiality of the data; and 6) details on the use of the evaluation findings. Prior to giving consent, participants were informed that they could

withdraw their participation at any time, and if possible, their data from the evaluation. No participants withdrew. Only individuals capable of giving consent were accepted as participants. To minimize health risks, I also chose to include only people without new onset chest discomfort or pain; however, no potential participants reported having such pain or discomfort. Prior to the first interview, I obtained from each participant written consent for the interview(s) and, when applicable, access to his or her program file.

The fourth ethical issue that I considered was confidentiality and anonymity. To protect anonymity the following strategies were used.

- 1) I had the recruiter signed a contract that stated she would maintain the anonymity and confidentiality of potential participants being recruited (Appendix L). The recruiter was not involved in any capacity until after signing the contract.
- 2) I had the recruiter use a random selection method to identify which cardiac clients to contact. Only the recruiter had knowledge of which people were contacted regarding participation and who declined participation. In the end, I was only provided with the names of the people interested in participating, the total number of people the recruiter contacted, and the number of people not available and that declined participation.
- 3) I removed participant names and other identifiers, such as dates and places, from the interview transcriptions and from any other research project related documentation.
- 4) I used aliases in the interview transcriptions and any other written documentation. I used interview numbers to identify the interview participants

however, in this document in most cases the interview numbers were removed to preserve anonymity of the participants because it was possible that a person reading all of the quotes could identify participants.

- 5) I used general quotes to reduce the likelihood that a CM recognizes an individual's comment.
- 6) I had that CM review and give permission to use her personal quotes since people reading this thesis may know the primary CM.
- 7) I asked each participant if he or she wanted to review their interview transcript for accuracy. I informed participants that if they reviewed their transcript they could remove or change any information. I offered this so a participant could feel empowered to remove/change any information that made them uncomfortable (Appendix G; Appendix H). Four participants reviewed their transcript and only one person made minor changes. I incorporated all of this person's changes.

The consents explained how I would protect confidentiality. I used the following strategies to protect participant confidentiality.

- 1) As mentioned above, I used a third party recruiter and she signed a written commitment about maintaining confidentiality (Appendix L).
- 2) I informed participants that I would not use or share with anyone "off the record" any personal participant information.
- 3) I used alias names or interview numbers in all written material.
- 4) I kept all forms and data collected confidential, and when not in use, these were either secured in a locked file or in a password-protected computer file.

- 5) I informed participants that I would only allow the interview transcription to be read by me, my supervisor, and the transcription clerk when used. The transcription clerks all signed a written contract agreeing to maintain confidentiality (see Appendix K).
- 6) In the data analysis and write up, I only used quotes without identifying information. Only the principal investigator and a transcription clerk heard each audio-taped interview.
- 7) I shredded all confidential paper and the transcriptions and I destroyed the tape recordings.

Dissemination of the findings was the fifth issue I considered. I wrote up the findings and included them in this thesis document which will be bound. I will be sharing the findings with others in the following ways:

- A copy of the thesis will be placed in the University of Victoria library, in the University's Human and Social Development administration office, and a copy will be given to the Vancouver Island Health Authority.
- The findings will be presented at my thesis oral defence, as a requirement for a Masters Degree in Nursing.
- In the fall of 2004 or spring of 2005, participants will be invited to attend a special meeting, which will be open to the public, where I will present the findings.
- The findings or information from the thesis may be written up as an article for publication, presented at a conference, and / or released by VIHA.

Second, the findings have been presented to the CM as stated in the plan developed by the CM and myself. The research revealed minimal unexpected positive and / or negative information about the program's primary CM.

Obtaining approval to do the evaluation was the sixth considered issue. The University of Victoria Human Research Ethics Committee and the Vancouver Island Health Authority Research Review and Ethical Approval Committee provided ethical approval to do this research project (Appendix O). The VIHA Heart Health program director also provided permission for me to do the research project and to access the MSCR Program participants' files (Appendix N).

In this chapter I presented the purpose of the research project and the questions that guided the process. Then I explained the research / evaluation design, and how participants were identified and recruited. I followed by describing the procedure used for data collection and analysis. Then I discussed how rigour was ensured. I ended by presenting the ethical and other issues that I considered.

## CHAPTER 4 – FINDINGS

In this chapter I present my findings on how the VIHA South Island, MSCR Program Case Management Service affects clients' recovery and risk factor modification. The findings are based on data from the participant interviews and client file reviews. The demographic information and additional client file data in Table 2 which describes the participants helps create the context in which the process of relational caring occurred.

Table 2 – Demographic Information with Clients File Data

<p><u>Case Managers Participants (N=2):</u></p> <ul style="list-style-type: none"> <li>◆ Gender: 2 female</li> <li>◆ Ages: 39 to 45</li> <li>◆ Marital status: 1 partnered; 1 single</li> <li>◆ Education: both have a Bachelor Science in Nursing.</li> <li>◆ Employment: both working as nurses. <ul style="list-style-type: none"> <li>○ Cardiac nursing experience: mean 20 years; range 17-23 years.</li> <li>○ Case Management experience at time of interview: 1-2 years.</li> </ul> </li> </ul>
<p><u>Client Participants (N=10):</u></p> <ul style="list-style-type: none"> <li>◆ Gender: 2 females; 8 males</li> <li>◆ Ages: ranging from 53-77 (mean 66); <ul style="list-style-type: none"> <li>○ females ages: 70-77 (mean 73.5)</li> <li>○ males ages: 53-72 (mean 63)]</li> </ul> </li> <li>◆ Marital status: 7 married; 3 single</li> <li>◆ Living arrangement: 2 living alone; 7 living with partner; 1 living with room mate</li> <li>◆ Employment: 6 retired; 2 looking for work; 2 not working</li> <li>◆ Education: <ul style="list-style-type: none"> <li>○ 1 not completed high school</li> <li>○ 4 completed high school or grade 13</li> <li>○ 3 attended college or technical school;</li> <li>○ 2 attended one or more years of university</li> </ul> </li> <li>◆ Additional data <ul style="list-style-type: none"> <li>○ Prior comorbid conditions: 3 had prior CAD for &gt; one year; 3 Asthma / Chronic Obstructive Pulmonary Disease; 2 Diabetes; 2 Depression or Anxiety; 1 Renal insufficiency; 1 Claudication; 1 Sleep Apnea.</li> </ul> </li> </ul>

- Cardiac surgery procedures: 7 CABG only; 2 CABG & aortic valve replacement; 1 CABG & carotid endarterectomy.
- Length of stay in hospital after surgery 4 to 9 days; mean 6.2 days
- At time of first interview, length of time since CABG surgery 7-13 months
- Number of telephone calls from CM: 7 to 9 (mean 7.7)
- Length of CM service: 6 to 8 months (mean 6.5)
- Number of modifiable risk factors: 2 to 5 (mean 3.5 per person)
  - Numbers of modifiable risk factor (limited to the five examined risk factors): 1-3 (mean 2.4)
- Risk factor changes
  - Number of client participants that made risk factor improvements: N=10; 100%
  - Number of client participants that worsen their risk with one risk factor: N=1, 10%
  - Unknown, N=1, 10%
- Number that utilized a cardiac rehabilitation related services: (8 yes; 2 none)
  - Clinic option: 7
  - The Heart to Heart Program: 2
  - Community exercise program: 2
  - Other: 1

Family Member Participant (N=1):

- ◆ Gender: Female
- ◆ Age: 72
- ◆ Living arrangement: living with partner
- ◆ Employment: retired
- ◆ Education: Grade 13 education

As mentioned in the previous chapter, in addition to using pseudonyms to preserve anonymity of the participants, I removed many of the interview numbers from the quotes. Thus it is not possible for the reader to identify which participant provided the quote. In addition, it is important to note that there were times over the course of a participant's recovery when other nurses, not included in the study, covered for one or more CM therefore any negative reference can not be attributed to any particular CM.

Through the interviews, client file review, and data analysis, what became apparent was the essence of the client (and family member) and nurse CM relationship. The

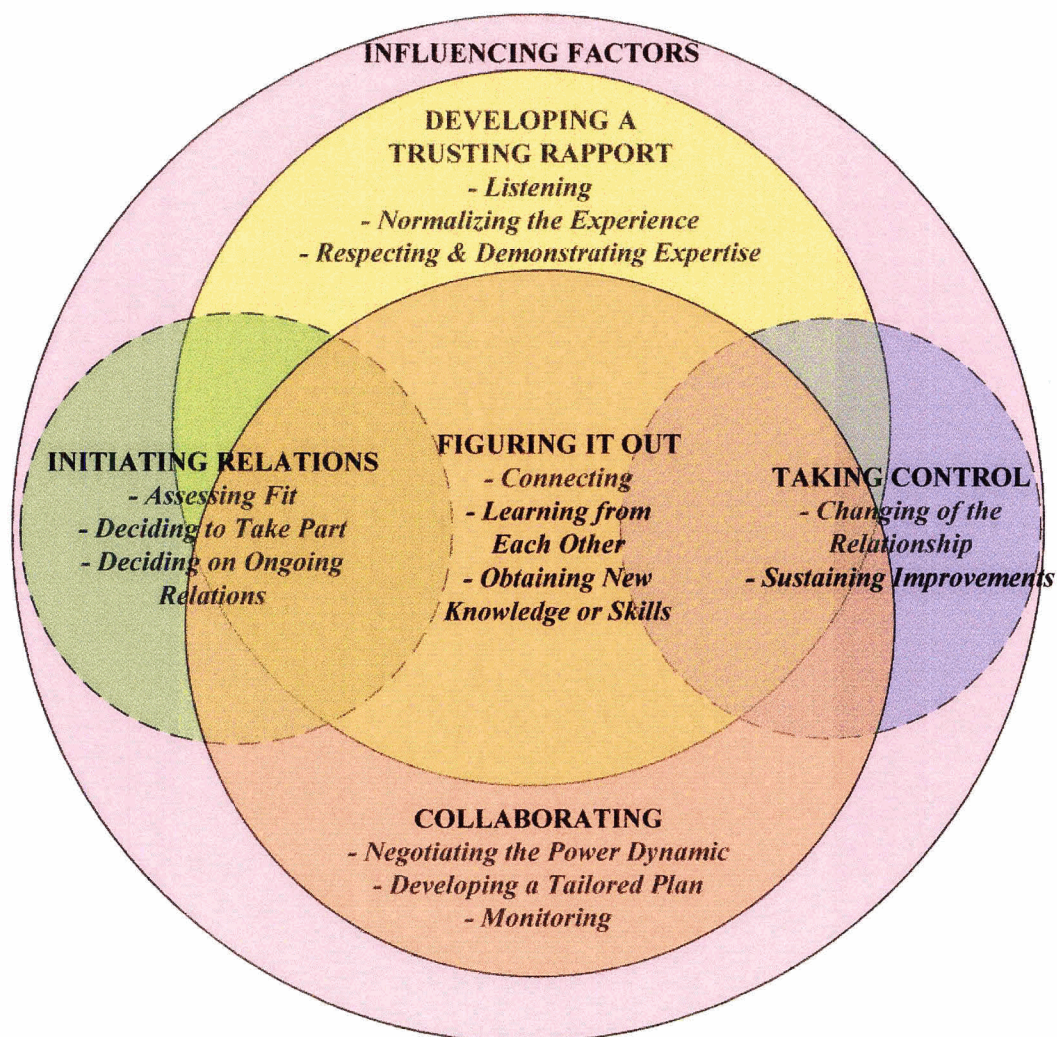


Figure 2 – Relational Caring in Cardiac Rehabilitation: A Grounded Theory

(© Sonya Rinzema, 2004, University of Victoria)

participants identified an intrinsic meaningful connectedness that existed between a CM and themselves. It is through this connectedness that the Case Management Service affects clients' recovery and risk factor modification process. I have named this basic social process as **RELATIONAL CARING IN CARDIAC REHABILITATION** (see Figure 2). The following two quotes by the same client provide a sense of this basic social process.

I think my relationship with the CM was by far the best part of all of it. She was great. Like she just sounded like she was really concerned about you, like "I care

about how you feel”. “How do you feel about this”, “what do you think about that” and whatnot? Yeah, she was really really good. I really enjoyed our conversations and she didn’t say no you have to do this; no you have to do that. .... Nope, she never said, “You have to do this.” She made some suggestions and said you should be doing this and making sure that this is you know, you keep up this and keep up that and you know, stuff that you should be doing which is fairly obvious. But as far as a lot of the other stuff she said, I’ll go do the research for you. Send you what I’ve found. And she did! Like she sent me pages and pages and pages of stuff because I had some concerns about it. Yeah, she was great. (p. 6).

...it was just like the CM was sort of a continuation of the care you got in the hospital. She just couldn’t do enough for you. And she was great. She just, as soon as you talked to her, like she did all these follow-up phone calls and oh hi how you doing Adam...it was like meeting an old friend you know, after a certain length of time. Then she would do all this research for me. And then I would go see her and she would look you straight in the eye and she’d say, how are you doing Adam? It was just like this person cares whether I’m well. Whereas a lot of, you sort of get the lip service a lot of times. And you walk out and you just think, they don’t give a shit whether I get better or not. That type of thing, not just with the health thing but in other areas. They don’t care. But with the CM you just felt that she did. (p. 17)

### Relational Caring In Cardiac Rehabilitation – A Grounded Theory

To help describe the model, I have used different font styles and effects to differentiate the categories and concepts in the model. The basic social process **RELATIONAL CARING IN CARDIAC REHABILITATION** is uppercased, bold printed, and underlined. The major or first level categories (e.g. **INITIATING RELATIONS**) are uppercased and bold printed. Second level categories are capitalized, bold printed, and italicized (e.g. *Assessing Fit*). Third level categories, which are described in the text, are italicized (e.g. *paying heed*). Having used grounded theory, I have labelled each category with gerunds to suggest process.

Even though there is a clear start, the end is transitional. The majority of the process is interconnected and non-linear. The categories often play off each other, influence each other, evolve over time, occur simultaneously and widely overlap. This process is unique for everyone. For example, one CM commented that the whole process

can take place within one conversation and it also develops over time (Interview 13). Another CM commented that "...it is not just one interaction; it is shared information over time. It is the layers that established a bit of a depth to it as well." (p. 33). For the purposes of this thesis, I am describing the categories separately and in a linear fashion, even though the process itself is clearly not linear.

The process of **RELATIONAL CARING IN CARDIAC REHABILITATION**, itself consists of six major or first level categories. The first major category **INFLUENCING FACTORS** create the context within which the rest of the process of **RELATIONAL CARING IN CARDIAC REHABILITATION** occurs. What a client and CM bring to the relationship is influenced by many things, their prior experiences, personal beliefs, values, and expectations, their personality, and the situation in which the relationship occurs.

The second major category **INITIATING RELATIONS** involves CMs and clients realizing they have a mutual interest in improving a client's situation and is characterized by CMs and clients *Meeting, Assessing Fit, and Deciding on Ongoing Relations*. **INITIATING RELATIONS** creates a foundation from which the rest of the process develops.

The third major category **DEVELOPING A TRUSTING RAPPORT** is a process that enables a positive connection to occur between the people in the relationship. Through a give and take approach, each person increases faith and confidence in the other person. **DEVELOPING A TRUSTING RAPPORT** is characterized by *Listening, Normalizing the Experience, and Respecting and Demonstrating Expertise*. *Listening* involves both people being present during and involved in the interactions and is

characterized by *hearing* and *paying heed*. ***Normalizing the Experience*** involves both people discussing experiences that are common during CABG surgery recovery and / or cardiac risk factor modification and is characterized by *contextualizing experiences* and *exploring significance*. ***Respecting and Demonstrating Expertise*** involves both people bringing special knowledge and skill in cardiac recovery and rehabilitation to a relationship and is characterized by *acknowledging expertise* and *acting out expertise*. The process of **DEVELOPING A TRUSTING RAPPORT** moves clients from a nurse-client relationship to a collaborator relationship.

The process of **COLLABORATING** is the fourth major category and occurs during and at the same time as the process of **DEVELOPING A TRUSTING RAPPORT**, but is a unique process in its own right. This process is also interactive and reciprocal. **COLLABORATING** involves CMs and clients working in-partnership towards shared goals. Ideas are brought to an active state. During the process each person considers the feeling and actions of the other person. **COLLABORATING** is characterized by *Negotiating the Power Dynamic*, *Developing a Tailored Plan*, and *Monitoring*. *Negotiating the Power Dynamic* involves working out the authority each person has in a relationship and is characterized by *communicating in an egalitarian style*, *changing authority roles*, and *being transparent in dialogue*. *Developing a Tailored Plan* involves both parties slowly producing a cardiac rehabilitation plan that fits the client and is characterized by *considering the client as whole*, *requesting support*, *identifying shared goals*, *being flexible*, and *creating a win-win plan*. *Monitoring* involves observing, checking on process, and updating a plan and is characterized by *communicating regularly* and *focusing dialogue*.

The fifth major category **FIGURING IT OUT** is a reciprocal process that is the culmination of the first four major categories: **INFLUENCING FACTORS**, **INITIATING RELATIONS**, **DEVELOPING A TRUSTING RAPPORT**, and **COLLABORATING**. What each person figures out is specific to his or her needs and life situation. **FIGURING IT OUT** is characterized by a CM and client *Connecting*, *Learning from Each Other*, and *Obtaining New Knowledge and Skill*.

**TAKING CONTROL**, the last major category, is a reciprocal process which occurs as an outcome of the entire process and often occurs once clients have figured it out. **TAKING CONTROL** is characterized by *Changing of the Relationship* and *Sustaining Improvements*. As clients take control (or not), both CMs and clients are letting go. Most clients got on with their life by proactively managing and / or taking charge. A positive transition occurs when clients move from wanting help to feeling more independent and safe finding their own solutions.

Table 3 provides an overview of the process **RELATIONAL CARING IN CARDIAC REHABILITATION**. The table identifies the six major or first level categories in the process, along with the second and third level categories, and conditions and consequences.

Table 3 – Relational Caring in Cardiac Rehabilitation: The Categories

INFLUENCING FACTORS		
Second Level Categories	Third Level Categories	Conditions & Consequences
		<u>Influencing Factors</u> ♦ Client & family members ♦ CMs ♦ MSCR Program ♦ Case Management Service

INITIATING RELATIONS		
Second Level Categories	Third Level Categories	Conditions & Consequences
Assessing Fit  Deciding to take part  Deciding on ongoing relations	<u>Strategies</u> ♦ Seeking knowledge ♦ Supplying knowledge	<u>Conditions</u> ♦ Meeting takes place <u>Influencing Factors</u> ♦ Clients reason for participating ♦ Clients state of mind at time of decision ♦ Timing of initial contact ♦ Each person's intentions and expectations ♦ CMs presentation of service <u>Consequences</u> ♦ Clients show interesting with working with CM on their recovery & risk factor modification ♦ CM and clients learn specifics about a clients risk factors ♦ In some relationships, the process of initiating relations simultaneously begins process of developing a trusting rapport
DEVELOPING A TRUSTING RAPPORT		
Second Level Categories	Third Level Categories	Conditions & Consequences
Listening	<u>Characteristics</u> ♦ Hearing ♦ Paying head  <u>Strategies</u> ♦ Letting the other speak ♦ Reflecting	<u>Conditions</u> ♦ Active role ♦ Language understood by both <u>Influencing Factors</u> ♦ Each persons communication style & skill ♦ Person's capacity to recognize relevant expertise ♦ Ability to negotiate power dynamic <u>Consequences</u> ♦ Feel understood, validated, respected ♦ Develop trust ♦ Creates safe environment

DEVELOPING A TRUSTING RAPPORT		
Second Level Categories	Third Level Categories	Conditions & Consequences
		<ul style="list-style-type: none"> <li>◆ Grants permission to make recommendations</li> </ul> <p><u>Negative:</u></p> <ul style="list-style-type: none"> <li>◆ If listening does not occur, client becomes frustrated; wonders if CM has not realized their knowledge level or understanding of that topic; client speculates that CM does not believe them; that CM has their own agenda</li> <li>◆ Client would look for other negative experiences</li> </ul>
Normalizing the experience	<p><u>Characteristics</u></p> <ul style="list-style-type: none"> <li>◆ Contextualizing the experience</li> <li>◆ Exploring significance</li> </ul> <p><u>Strategies</u></p> <ul style="list-style-type: none"> <li>◆ Sharing knowledge</li> <li>◆ Eliciting information</li> <li>◆ Promoting understanding</li> </ul>	<p><u>Conditions</u></p> <ul style="list-style-type: none"> <li>◆ Active roles</li> <li>◆ Accept &amp; acknowledge other persons thoughts and ideas as valid</li> <li>◆ Willing to share knowledge</li> <li>◆ Each person possesses knowledge &amp; expertise</li> </ul> <p><u>Influencing Factors</u></p> <ul style="list-style-type: none"> <li>◆ Ability to hear and pick up on things</li> <li>◆ Person's knowledge and experience of cardiac recovery and risk factor modification</li> </ul> <p><u>Consequences</u></p> <ul style="list-style-type: none"> <li>◆ Clients self assessment become less based on fear and more on objective sense of where they are in the recovery process</li> <li>◆ Clients feel supported, reassured, and encouraged</li> <li>◆ Clients keep their concerns in perspective</li> </ul>
Respecting and demonstrating expertise	<p><u>Characteristics</u></p> <ul style="list-style-type: none"> <li>◆ Respecting the other person expertise</li> <li>◆ Acting out your own expertise</li> </ul>	<p><u>Conditions</u></p> <ul style="list-style-type: none"> <li>◆ Active roles</li> <li>◆ Confidence in other person's abilities</li> <li>◆ Considering information &amp;</li> </ul>

DEVELOPING A TRUSTING RAPPORT		
Second Level Categories	Third Level Categories	Conditions & Consequences
	<u>Strategies</u> <ul style="list-style-type: none"> <li>◆ Listening</li> <li>◆ Knowing limits</li> <li>◆ Taking action</li> <li>◆ Advocating rights</li> </ul>	making independent decisions <u>Influencing Factors</u> <ul style="list-style-type: none"> <li>◆ Capacity to listen</li> <li>◆ Capacity to act</li> <li>◆ Confidence in own expertise</li> <li>◆ Intellectual knowledge each person has in the subject are</li> </ul> <u>Consequences</u> <ul style="list-style-type: none"> <li>◆ Trust develops</li> <li>◆ Both parties contribute to &amp; shape the CR plan</li> <li>◆ CM demonstrate insight by recognizing their boundaries</li> </ul> <u>Negative:</u> <ul style="list-style-type: none"> <li>◆ When CM try to control – clients shut down</li> <li>◆ Perpetuates past experiences of not being respected</li> </ul>

COLLABORATING		
Second Level Categories	Third Level Categories	Conditions & Consequences
Negotiating the power dynamic	<u>Characteristics</u> <ul style="list-style-type: none"> <li>◆ Communicating in an egalitarian style – power with</li> <li>◆ Changing authority roles – fluidity of leadership</li> <li>◆ Being transparent – open &amp; honest</li> </ul> <u>Strategies</u> <ul style="list-style-type: none"> <li>◆ Establishing principles</li> <li>-client make the decisions about their own life;</li> <li>-allowing time;</li> <li>-being open, honest, &amp; authentic;</li> <li>-being responsive</li> </ul>	<u>Conditions</u> <ul style="list-style-type: none"> <li>◆ Active roles</li> <li>◆ Clients in a place where they have greater control, e.g. Their home</li> </ul> <u>Influencing Factors</u> <ul style="list-style-type: none"> <li>◆ Nature of CM-client relationship</li> <li>◆ A persons intent</li> <li>◆ A persons confidence level</li> <li>◆ Person’s capacity to demonstrate their expertise</li> <li>◆ Degree of openness each person has</li> </ul> <u>Consequences</u> <ul style="list-style-type: none"> <li>◆ Engage in dialogue that allow the service delivered to be modified, extended or reduced</li> <li>◆ Plan has greater degree of</li> </ul>

COLLABORATING		
Second Level Categories	Third Level Categories	Conditions & Consequences
	<ul style="list-style-type: none"> <li>◆ Creating common language</li> <li>◆ Exploring wants, abilities, &amp; goals</li> </ul>	<p>success b/c both involved</p> <ul style="list-style-type: none"> <li>◆ Better quality service provided</li> <li>◆ CMs balance tension b/w responsibility &amp; their understanding that power may lie within the hands of the client</li> </ul> <p><u>Negative:</u></p> <ul style="list-style-type: none"> <li>◆ If clients wants &amp; abilities are not fully explored, plan becomes one-sided or authoritarian</li> <li>◆ If CM does not respect client knowledge, client becomes frustrated</li> <li>◆ Principle allow time – can lead to client not actively participating if they are not comfortable telling the CM the current time is not good for them</li> </ul>
Developing a tailored plan	<p><u>Characteristics</u></p> <ul style="list-style-type: none"> <li>◆ Considering client as whole</li> <li>◆ Requesting support</li> <li>◆ Identifying shared goals,</li> <li>◆ Being flexible</li> <li>◆ Creating a win-win plan</li> </ul> <p><u>Strategies</u></p> <ul style="list-style-type: none"> <li>◆ Discussing risk factors</li> <li>◆ Setting limits</li> <li>◆ Providing recommendations</li> <li>◆ Customizing the program</li> <li>◆ Considering the timing</li> </ul>	<p><u>Conditions</u></p> <ul style="list-style-type: none"> <li>◆ Take active roles</li> <li>◆ Recognize common interest &amp; form partnership</li> <li>◆ Alignment of shared goals</li> <li>◆ Each person needs to keep up their part or be honest about what they have been doing</li> <li>◆ Case Management Service need to be set up to allow flexibility</li> </ul> <p><u>Influencing Factors</u></p> <ul style="list-style-type: none"> <li>◆ CMs willingness &amp; ability to have a workload that allows each client to have some degree of uniqueness to their CR plan</li> <li>◆ Each person's capacity to listen affects how well they tailor the program</li> <li>◆ How well each person understanding what the client is capable of, interested in, and</li> </ul>

COLLABORATING		
Second Level Categories	Third Level Categories	Conditions & Consequences
		<p>desired</p> <ul style="list-style-type: none"> <li>◆ Clients motivation for working on a specific goal</li> </ul> <p><u>Consequences</u></p> <ul style="list-style-type: none"> <li>◆ Work in partnership, not against each other</li> <li>◆ Custom fit plan developed</li> <li>◆ Long and short term goals and outcomes are considered</li> <li>◆ CMs show a willingness to meet clients needs</li> <li>◆ Good intentions may not be realized when other things take precedence</li> <li>◆ CMs trying to balance pressure of clients needs with effectively utilizing resources (competing needs) – an awareness of this naturally shifts the balance back towards meeting clients needs</li> </ul> <p><u>Negative:</u></p> <ul style="list-style-type: none"> <li>◆ If a client feels pushed tailoring does not necessarily occur</li> </ul>
Monitoring	<p><u>Characteristics</u></p> <ul style="list-style-type: none"> <li>◆ Communicating regularly</li> <li>◆ Focusing dialogue</li> </ul> <p><u>Strategies</u></p> <ul style="list-style-type: none"> <li>◆ Answering questions</li> <li>◆ Discussing recovery progress</li> <li>◆ Evaluating progress</li> <li>◆ Modifying the plan</li> </ul>	<p><u>Conditions</u></p> <ul style="list-style-type: none"> <li>◆ Calls need to occur; CMs need to initiate planned calls</li> <li>◆ CMs needs expertise on cardiac recovery, risk factors &amp; modification</li> </ul> <p><u>Influencing Factors</u></p> <ul style="list-style-type: none"> <li>◆ Each person believes not issue is too trivial to make contact to discuss</li> <li>◆ CMs confidence breeds client confidence</li> <li>◆ Relevancy or importance of partnership</li> </ul> <p><u>Consequences</u></p> <ul style="list-style-type: none"> <li>◆ Provides clients with access to a HP, without having to go through a MD</li> </ul>

COLLABORATING		
Second Level Categories	Third Level Categories	Conditions & Consequences
		<ul style="list-style-type: none"> <li>◆ Provides reassurance</li> <li>◆ Helps clients improve their ability to proceed on their own by increasing confidence, self-awareness, &amp; competence</li> <li>◆ CM becomes a catalysis for experiential learning</li> <li>◆ Family members stop interfering with client recovery / rehab progress b/c they feel reassured</li> </ul> <p><u>Negative:</u></p> <ul style="list-style-type: none"> <li>◆ Induces feelings of guilt</li> <li>◆ Affects CM workload</li> </ul>

FIGURING IT OUT		
Second Level Categories	Third Level Categories	Conditions & Consequences
<p>Connecting</p> <p>Learning from each other</p> <p>Obtaining new knowledge or skills</p>		<p><u>Conditions</u></p> <ul style="list-style-type: none"> <li>◆ Active role</li> </ul> <p><u>Influencing Factors</u></p> <ul style="list-style-type: none"> <li>◆ Other processes (initiating relations, developing a trusting rapport &amp; collaborating)</li> <li>◆ The approximate 6 month linear end to the follow-up service due to workload (anticipated end)</li> <li>◆ Certain people and personalities click more than others</li> </ul> <p><u>Consequences</u></p> <ul style="list-style-type: none"> <li>◆ Involves living through or solving immediate problems</li> <li>◆ Regaining personal control</li> <li>◆ Feeling more confident</li> <li>◆ Gaining a better understanding and knowledge of CAD</li> <li>◆ CMs interpret effectiveness by client feedback, information they compile</li> <li>◆ Making informed decisions /choices</li> </ul>

FIGURING IT OUT		
Second Level Categories	Third Level Categories	Conditions & Consequences
		<ul style="list-style-type: none"> <li>◆ Improving ability to proceed on own</li> <li>◆ Improving one's personal situation</li> </ul>

TAKING CONTROL		
Second Level Categories	Third Level Categories	Conditions & Consequences
Changing of the relationship  Sustaining improvements	<ul style="list-style-type: none"> <li>◆ Altering or letting go of the CM-client relationship as it exists</li> </ul>	<u>Consequences</u> <ul style="list-style-type: none"> <li>◆ Clients still feel connected, thus ongoing support continues</li> <li>◆ Positive transition from wanting / needing help to where clients feel independent and in some sense safer</li> <li>◆ Keep up with lifestyle changes</li> </ul>

### Influencing Factors

The first major category, **INFLUENCING FACTORS**, is what each person brings to a relationship and the situation in which the process occurs. These factors create the context in which the relationship is experienced by those involved (see Figure 3). Early on in the analysis<sup>2</sup>, the data revealed that many factors influenced the clients (and family members) and CMs relationship experience. The **INFLUENCING FACTORS** affect what occurs during the process of recovery and risk factor modification.

Each person brings their own experiences to the relationships, such as their health, risk factors, and expectations. Some clients had prior health experiences which limit their

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<sup>2</sup> Figure 1 in Chapter 3 lists some of the earlier identified **INFLUENCING FACTORS**.

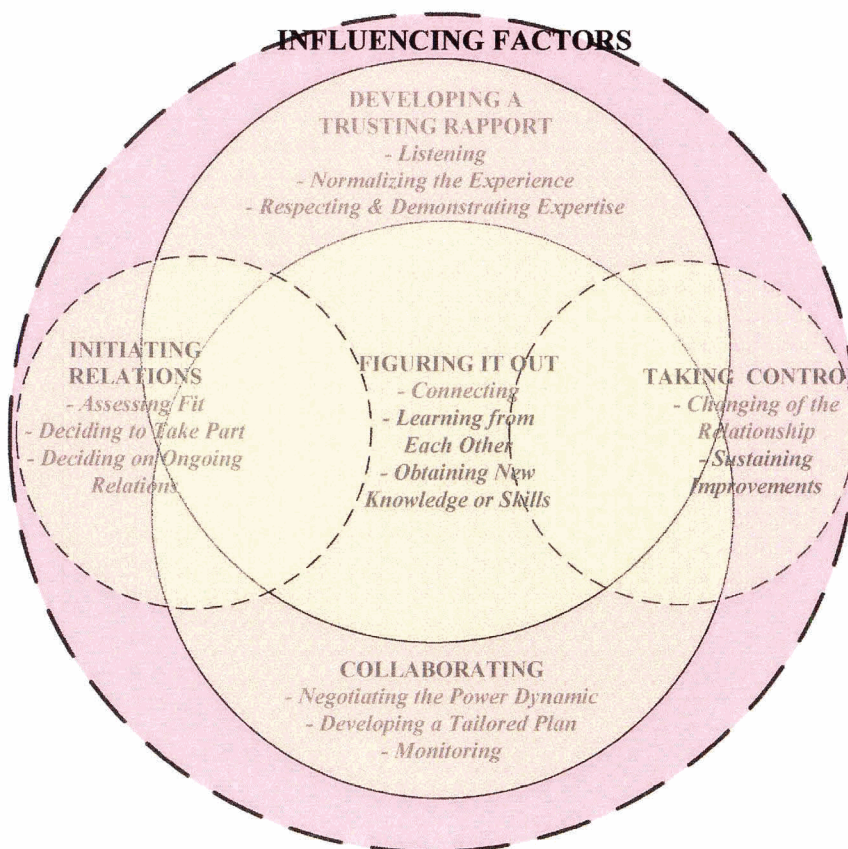


Figure 3 – Influencing Factors

ability to improve or have certain prior experiences, such as exercise. For example a client stated:

I've had four surgeries in the last four years with general anaesthetic and my arm was broken and I had two surgeries on that and I just sat with that and it was horrible and I sat. I never seemed to get back into it [exercise] because then I started getting the heart thing. (p. 3).

Many clients also come to this experience with other comorbid conditions. For example one client stated "I have suffered from depression for years..." (p. 9). Clients also come with certain risk factors. The following examples show that one client had made significant risk factors changes before their surgery whereas another client had never thought of him or herself as being at risk for heart disease. For example:

I've changed my, I changed my life quite dramatically ten years ago as far as bad habits go. Like I quit drinking, quit smoking, quit ... I mean I was both way too

much. Way too much. ... So I made the huge changes ten years ago. Ten and eight. And then my diet changes about five years ago. Yeah. Like when I went in, I knew I was having heart problems, I knew exactly where, what the factors were. (p. 8)

... I felt very healthy and when I went in she [the physician] asked me something and I said oh well I get tired and sometimes when I'm sleeping and sometimes when I first go to bed you know I feel my heart's going to jump out my mouth or something. But for what ever reason she picked up on something and gave me, startled me by saying I'm worried about your heart. I say oh no, I'm very healthy there's nothing wrong with me. And indeed gave me a prescription for Nitroglycerin and spray and I came home and I must confess and I really did not fill that cause I felt this little girl's just not got any experience and the next thing, I got a call from the office that she had made an appointment with a cardiologist... (p. 1)

For some clients (and family members) the anticipation of surgery brings certain expectations. For example one client stated: "I didn't know how I expected to feel afterwards, actually, I thought I would probably feel better, and I feel a little bit better but it's not huge" (p. 8).

Family members also come with their own experience and expectations. One family member had an overwhelming past experience which influenced her process during her husband's recovery. She stated:

You can't imagine, maybe you can but when I had this [CABG surgery] there was nothing. Nobody. I wasn't even here. I had to be sent to Vancouver to have it done. My own family doctor was just the best in the world but he was a bit out of his league with major heart surgery. So there was nothing. (p. 5).

For many people who experience CABG surgery, and their family members, the imminent recovery and risk factor modification after surgery can be an unfamiliar and frightening experience. There are many potential cardiac and non-cardiac complications or symptoms that can occur, such as memory loss, depressed mood state, discomfort to back or chest, and leg swelling to name a few. People recovering from this type of surgery are often living with aches and discomforts they have not experienced before.

After surgery, people frequently lose confidence in their body; they are unsure how much they should or can push themselves during recovery. Many people feel ready to make lifestyle changes but are not sure how or where to start. Lots of people recovering from CABG surgery turn to health professionals for help.

How clients and family members deal with the cardiac recovery and risk factor modification experience is shaped by their own framework of reference, views, and understandings of the medical system, health professionals, and their own health. Society often creates a sense of personal responsibility which in turn influences a person's framework, particularly about the health care system and their responsibility in maintaining his or her own health. During the Lalonde era, which started with the publication of the Lalonde Report in 1974, Canadian health promotion strategies emphasized people's responsibility for their own health (MacDonald, 2002). After the Ottawa Charter in 1986, the emphasis of social responsibility for health increased, although some emphasis on personal responsibility remained but within a framework that gave consideration to the determinants of health (MacDonald, 2002).

A person's experience before, during, and immediately after surgery shapes what a person understands, perceives, expects, and believes about the health care system, and about health professionals and the help they offer. This shapes the recovery experience. Most of the participants perceived health professionals, including physicians, as having relevant and important knowledge and expertise. For example, a client remarks:

...the people on the fourth floor, like in your department or, or the nurses who are extremely knowledgeable. It's amazing they, of course they're doing it every day for a living, so, they develop a tremendous, um, knowledge that far exceeds what an MD can possibly learn cause MD's, as you know, have to spread their knowledge over a huge spectrum of medical, ah, medical, um, ah, aspects. (p. 16).

Clients (and family members) are comfortable and open to receiving medical-related information from health professionals, other than physicians.

Clients (and family members) seem to perceive nurses as available and accessible, often more available than physicians. The following quote shows that this client perceived himself being mostly in the care of the nurse when hospitalized.

You are basically in the nurses' care [when in hospital]. You see your doctors, but they are not in there doing the day to day care so to speak. The doctors read your charts, but I think you are sort of reliant on the nurses. You were always asking them questions. ... (p. 19).

Hospitalized clients often develop trust in the nurses who are providing much of their care.

Having access to a nurse CM was viewed as beneficial to clients because it seemed to save some potential health care system and individual client costs, such as the system cost of an expensive physician visit and the client cost of making an appointment and driving to the physician office. For example, a client stated:

...I don't know what it costs every time I go to my MD, but I am sure there is some, some significant cost for them and then I have to, as you say, make the appointment. And I have to drive in and so, and also if it's a significant problem, then, um, and should be dealt with quickly, then, ah, based on the (nurse) CM's advice I would go directly to the hospital and, and seek help. Whereas if I had to wait a couple weeks to see my MD there could have been, um, um, more problems, aggravation, you know of a problem, you know. (p. 27).

The Case Management Service offers clients lots of needed medical information, guidance, and support at low cost to the system and the client. Overall physicians are seen as busy health professionals, whereas, nurses are seen as cheaper, more available and accessible health professionals (Interviews 3, 4, 5, & 6.). The following quote shows that one CM's goal was to be accessible.

For a lot of them [clients] I was more accessible than their family physician. ...the fact that they can leave a voice mail message directly on my phone service. Whereas you go through the guardian of a physician, being their office person. My drive is to be accessible to them. (p. 1).

Being able to directly contact the nurse makes her accessible and useful.

Societal expectations of the physician's role in decision-making for a client are changing. A number of the participants saw themselves as the decision maker, not health professionals. This is evident in the following client comment:

...when I was younger, doctors were god and you didn't question anything, like they were always right and well, that's such crock. They're not always right. And it is your body and when you make informed decisions that are good for you then you can stand by them. (p. 4).

Many clients want to make and be respected for their decisions.

The nature of the Case Management Service and the characteristics of a CM influence a client's recovery and risk factor modification experience. The Case Management Service is:

designed to coordinate the cardiac rehabilitation and prevention services clients utilize, to provide clients with support during the first six months following hospitalization and to provide an element of continuity of care. CMs reinforce information, and / or clarify client's and support person's questions and concerns. CMs offer regular telephone follow-up, help coordinate health care activities and facilitate clients' identification of goals and strategies for cardiac risk reduction and rehabilitation (Rinzema, 2001, p. 12).

The qualities of a nurse CM, such as her background, experiences, personality, characteristics, and values, have some bearing on how the service is delivered and thus experienced. For example, one CM comments:

...Well for myself, that fact that I could also talk from my own standpoint of having risks for CAD. That was a real relationship builder for them. ...I tell people that I am taking Rampril [medication] myself. It was really trust building because it was not that I was just some 22-year-old nurse saying well you should be doing this. (p. 1).

### Influencing factors – In summary

**INFLUENCING FACTORS**, which is the first major category, create the context within which the rest of the process of **RELATIONAL CARING IN CARDIAC REHABILITATION** occurs. There are numerous influencing factors, such as cardiac risk factors, social support, surgery and immediate recovery experience, a person's personality, and expectations, which affect the relational caring process. Additional influencing factors are CMs characteristics and the Case Management Service in which the relationship occurs.

### Initiating Relations

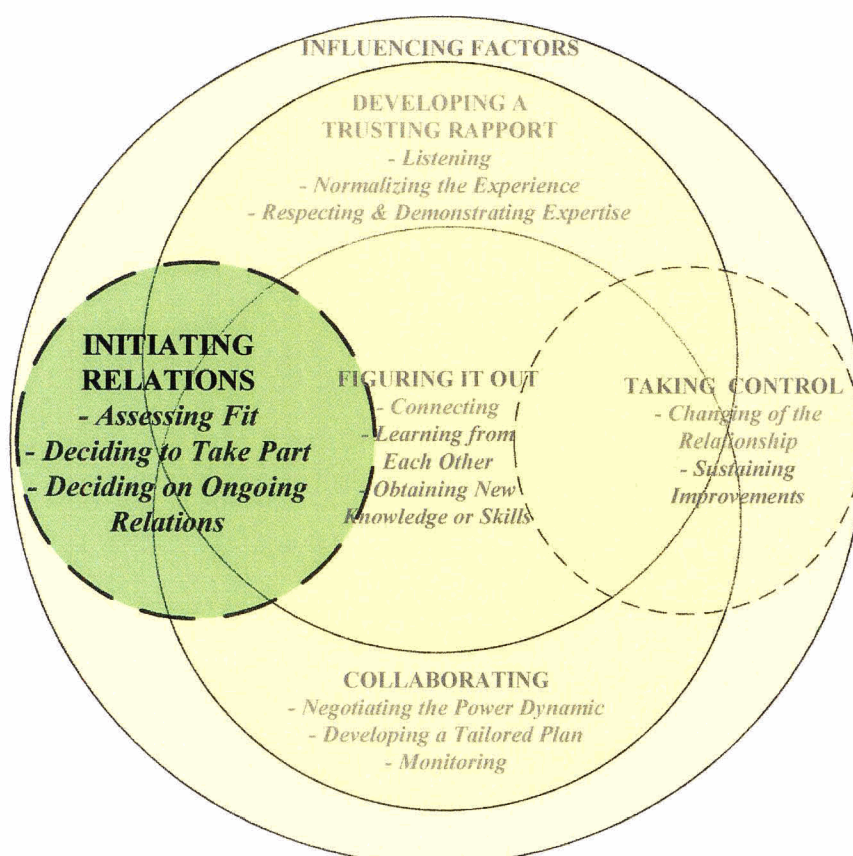


Figure 4 – Initiating Relations

The second major category **INITIATING RELATIONS** is a reciprocal process in which a CM and client realize they have a mutual interest in improving a client's situation (see Figure 4). **INITIATING RELATIONS** is the category in which CMs and clients meet and, after reviewing the appropriateness of the service, both people decide to engage in ongoing communication. What developed from the findings are clients', family members, and case managers' memories of the early development of a relationship.

The process of **INITIATING RELATIONS** is characterized by: *Meeting*, *Assessing Fit*, and *Deciding on Ongoing Relations*. *Meeting* involves introducing oneself to the other and generally takes place after CMs have assessed the appropriateness of service for a client. Entry into the MSCR Program and Case Management Service is through a CM. For the clients in this study, a CM initiated the meeting. Periodically, a client or third party referrer will initiate this process. Generally the first meeting occurs one-to-one and face-to-face in the hospital, but occasionally it occurs on the telephone. Most of the time the CM that a client meets in hospital is the person who provides the majority of the client's follow-up; however, not always. For the client participants, all but one met a CM in hospital and of these approximately 60% met their primary CM at the initial meeting.

*Assessing Fit* involves determining if the MSCR Program and its Case Management Service are suitable for a client. Both parties assess a client's overall cardiac risk profile. For CMs this process involves using a screening procedure to identify which clients from the open-heart surgery roster will be informed of and / or offered the MSCR Program Case Management Service. The program entry procedure is set up so CMs routinely consider all clients who have had CABG surgery and who meet the inclusion

criteria and do not have exclusion criteria. For clients, assessing fit involves learning about the program and weighing the benefits of participating. After being approached by a CM, clients (and some family members) assess the appropriateness of the MSCR Program with its case management service with their wants, intentions, expectations, and goals. Then they make the decision about taking part.

*Deciding on Ongoing Relations* involves coming to a decision whether to continue the relationship by participating in the Case Management Service. CMs make this decision before meeting a client, whereas, clients come to a decision after they meet and talk with a CM.

For the process of **INITIATING RELATIONS** to occur, CMs and clients (and occasionally family members) have to take active roles. For example, clients who meet the inclusion criteria are contacted by a CM and offered the service and then clients indicate acceptance or rejection of the service.

Four factors influence the process of **INITIATING RELATIONS**, the first of which is the client's reason for participating in the service. The main reasons were that clients wanted to: (a) stay connected to the hospital to make sure that they were doing as well as expected or that they were doing the right things (Interview 1), (b) obtain support, guidance and / or knowledge (Interviews 2, 3, 4, 5, 6, & 7), and (c) take the opportunity for help because they were unsure about what to expect (Interviews 8, 10). A few clients could not remember making the decision to take part, let alone why (Interviews 9 & 11). For instance, a client commented: "...I didn't know what was going on, I can't even remember the outset and the actual explanation that the CM went through, but obviously there was some explanation. ... I don't even remember whether I said yes or no" (p. 15).

The second influencing factor is the client's state of mind at the time of decision. First this can affect a client's ability to listen. During the early post-operative recovery period after CABG surgery, many hospitalized clients are tired and have altered mental and physical states. After surgery many clients experience pain and an altered consciousness due to pain medications and fatigue. For example a client states: "...I think I was sort of groggy ..." (p. 15). Second, during the early post-operative period clients experience a reduction in their concentration and memory and can feel overwhelmed. "...They say when you come out of surgery your memory is not there and this is true. ... Like the first few days when I was home, I had to get my wife to help me line everything up, because I just could not seem to concentrate" (p. 15). For some clients their state of mind contributes to their decision to participate because they just accepted the service without much thought.

The third influencing factor in **INITIATING RELATIONS** is the timing of the initial contact. This involves CMs trying to connect with clients at the right time in order to achieve the greatest effect. The right time for CMs seems to be while clients are still hospitalized which allows CMs to help clients move their cardiac recovery and / or risk factor modification thoughts into action immediately upon discharge. According to CMs, determining the right time involves considering how, where, and when the initial CM-client contact occurs. Timing is a compromise between the benefits of person to person contact versus the cost of meeting after discharge. In most cases, the first contact between a client and CM occurs one-to-one in the hospital versus on the telephone when a client is at home. This initial contact in the hospital usually occurs between post-operative days three and five, however the exact time and day is dependant on factors like what is going

on with a client and the CM's availability. The preferred time for CMs is when a client's pain is controlled, a client is not experiencing complications, and a client is not going home that day. For the interviewed clients, the right time seems to be when it happens. A client can influence the contact timing by indicating to a CM that they are interested in talking to her. For some clients, how a relationship is initiated influences their decision to participate and / or their comfort with the CM. For instance one client expressed "...of course, we'd [client and family member] met her in the hospital and then you know what you're dealing with when you talked with her on the phone" (p. 1). "...Also, when you meet a person in the hospital or meet a person face-to-face, it's easier to talk to them afterwards." (p. 1). A person is more likely to participate if their first impression is good.

Fourth, each person's intentions and expectations, and the CM's presentation of the service influence the outcome of the initiation process. A CM initiates a relationship to inform a client of the service. CMs customize their presentation of the Case Management Service to fit an individual client. CMs inform clients of the service by trying to show clients how the service might fit for them. As a CM and client talk, different amounts and types of cardiac rehabilitation-related information are presented and discussed. However, what the CMs present and the way they present it, influences what clients understand CMs to be offering and what clients expect. This suggests that CMs tailor what they are offering based on client needs. **INITIATING RELATIONS** therefore overlaps with the subcategory *Developing a Tailored Plan*, which is within the category **COLLABORATING** (see Figure 2).

The strategies used by CMs and clients to bring about the process of **INITIATING RELATIONS** are: *seeking knowledge* and *supplying knowledge*. *Seeking knowledge*

involves hunting or looking for certain information, whereas *supplying knowledge* involves making available or providing information. Both parties seek knowledge from and / or supply information to the other person. During an interaction, the exact information sought or supplied is determined by what is going on during the interaction. CMs seek information about a client, such as his or her history, risk factors, and interest in participating. CMs supply clients with information such as what the program is about (e.g. the MSCR Program and its components); what the service is that CMs provide (e.g. the Case Management Service); and what their role as a CM is within the program (Interview 12). Clients seek information on specifics about the program and / or service and they supply CMs with the requested information such as their experience with risk factors and their interest in participating.

By **INITIATING RELATIONS**, clients show their interest in working on their cardiac risk factors and / or in being followed by a CM. When a client decides to take part, a CM interprets this to mean that a client wants to belong to the program and to be “...linked to a CM that will help them plot their course along the way...” (p. 4). In this early stage, clients learn about their cardiac risk factors and about the resources available to them. A CM also learns about a client’s risk factors. This initiation stage begins to lay the foundation for trust and respect upon which the rest of the relationship develops. The clients, who initiate their relationship with the CM that will be following them regularly, simultaneously begin the second stage in the process of **RELATIONAL CARING IN CARDIAC REHABILITATION, DEVELOPING A TRUSTING RAPPORT**. This is an example of how these processes are overlapping and not linear.

### Initiating relations – In summary

**INITIATING RELATIONS**, which is the second major category in the process of **RELATIONAL CARING IN CARDIAC REHABILITATION**, is a reciprocal process where CMs and clients realize that they have a mutual interest in improving a clients' situation. After CABG surgery, clients may be tired, in pain, and overwhelmed. Many clients are looking for help to manage their situation and problems. For example, one client commented: "... well, I think I was looking for something that, they were there to help me and I was there to gain as much knowledge as I could on how to improve my situation..." (p. 2). Clients see the CM as someone who can provide that help.

**INITIATING RELATIONS** is the process in which CMs and clients decide to engage in ongoing communications.

### Developing a Trusting Rapport

The third major category, **DEVELOPING A TRUSTING RAPPORT** is a reciprocal process in which a connection is being developed between the people in the relationship (Figure 5). Each person listens to the other person. Experiences are discussed and meanings are created. A person's knowledge increases. A client and CM build a trust in the genuineness and reliability of other person. Through this process each person feels that the other person is trustworthy. **DEVELOPING A TRUSTING RAPPORT** is the mechanism that enables CMs and clients to get what they need and want from the relationship, and is comprised of three subcategories: *Listening*, *Normalizing the Experience*, and *Respecting and Demonstrating Expertise*.

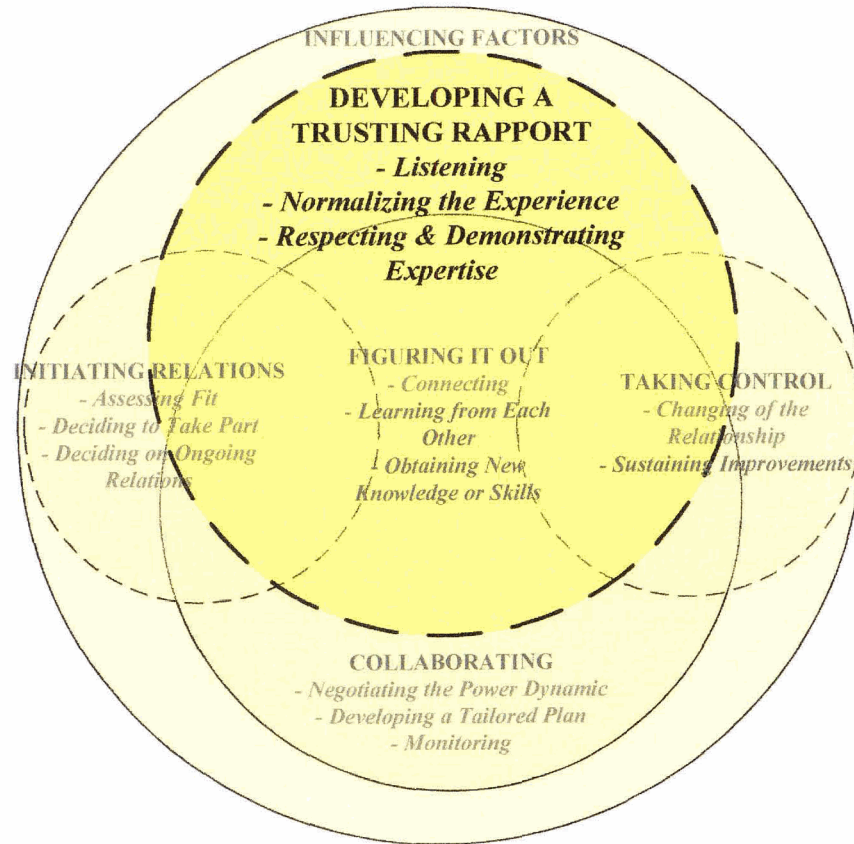


Figure 5 – Developing a Trusting Rapport

### Listening

*Listening*, the first subcategory in the process of **DEVELOPING A TRUSTING RAPPORT** (see Figure 5), is an active reciprocal process of being present during and being involved in a dialogue as it is occurring. During this process, ideas get introduced and realized, such as a client's goals or a CM's suggestion.

*Listening* is characterized by *hearing* and *paying heed*. *Hearing* is making an effort to perceive and understand what the other person is expressing as he or she is saying it.

For example a CM expressed:

...I have to hear what they are saying. ...Because they are not in front of me to see body language I have to use, hear their maybe their voice inflection if they're going through a hard time at home, if they are upset at the time, use good listening skills,

in order to use good listening skills one has to hear exactly what they are trying to say, and trying to communicate back to me .... (p. 5).

*Paying heed* involves noticing things, paying attention, and giving thought and consideration to what a person is revealing as he or she is talking. This involves picking up on verbal or nonverbal details and examining both the content of what a person is saying and the context. For example, a CM might notice that a person says he or she is well, yet he or she sounds very short of breath. Thus the CM needs to assess if the person has a reason for being short of breath at that moment.

For the process of *Listening* to occur, CMs and clients have to take active roles. Both parties need to use language that they mutually understand. This involves both people using and / or developing a mutual communication system or way of understanding to discuss aspects of a client's recovery and risk factor modification process. Commonly understood terms are often used, such as high blood pressure versus hypertension. Listening will likely cease if a person does not understand what the other person is saying or if he or she needs to regularly ask for clarification. Interactions need to occur at a time and in a location where each person feels able to talk. The best location is a place where a person feels they can talk openly and honestly. For most of the client participants, having time and flexibility to continue discussing an important topic, if need be, was essential. For example, a client commented: "...it is too important of a subject to get off (the telephone) and if it ever felt like that they were just trying to do this, then that would be a real turn off. We are not watching the clock here!" (p. 26). Flexible schedules during an interaction are essential.

Three factors influence the process of *Listening*, the first of which is each person's skill and style of communicating. A person's skill communicating, such as their ability to

articulate clearly or pick up on things, affects what the other person hears. In addition, most people prefer certain methods of communication. For example, a “detail person” may not appreciate a minimalist approach. A person with more skill is often better at adapting their communication style to fit the other person.

The second factor is that *Listening* is influenced by a person’s capacity to overtly or covertly recognize relevant expertise. People are more likely to listen to someone who respects their expertise and who has expertise that is pertinent to them. This suggests that this subcategory *Listening* interrelates with the subcategory *Respecting and Demonstrating Expertise*, which is within this same overall category **DEVELOPING A TRUSTING RAPPORT** (see Figure 2).

The third influencing factor is that *Listening* is affected by a person’s ability to negotiate the power dynamics in the relationship. Many people are more likely to actively listen when they feel like they have the control they want in a relationship. This suggests that the process of *Listening* is interconnected with the process of *Negotiating the Power Dynamic*, which is from the major category **RESPECTING EACH OTHER** (see Figure 2).

The strategies used by CMs and clients to bring about *Listening* are *letting the other speak* and *reflecting*. *Letting the other speak* involves allowing the other person to talk and direct the conversation and commenting only to keep a person talking or to explore something that was said. Each person lets the other person bring their ideas forward. Each person concentrates on the speaker and on what seems to be important. *Reflecting* involves using communication techniques to validate or clarify the meaning of what is heard. One needs to hear what is said in order to reflect. Therefore, both parties

are absorbed in the discussion and not doing other tasks while conversing. That is, each person's attention is on the conversation and not drawn elsewhere.

*Listening* by both parties is essential for establishing rapport. When people are listened to they feel understood, heard, validated, and respected. The following client's comment alludes to the importance of this: "...I am being heard and that is the biggest thing because if I am being heard, then I know that my concerns are being heard and are going to be dealt with..." (Follow-up Interview 1, p. 1). A person who feels heard develops trust in the other person.

*Listening* is also essential for feeling understood, which in turn creates a safe environment in which any topic or question can be raised. When a safe environment exists, a person brings up new ideas and / or feels comfortable bringing up important things even if they are private. For example one client expressed:

...it comes across that she's listening to what you say and she's giving you advice, her opinion on how you can handle this and that's reassuring and nothing is too little for her to...you know nothing too stupid, that you can ask a question and it's not going to be stupid. Even though it is stupid she's not going to tell you that because she comes across that she cares and that's the important thing. ... You're not judged by the silliness of your questions or anything like that. (p. 12).

When a CM listens to a client, it seems to grant the CM permission to provide advice and opinion, such as suggesting a client attend a service like the Heart to Heart program, which the client then considers. Through *Listening*, information is drawn out and this allows the process of *Normalizing the Experience* to occur (see Figure 2).

In most cases listening did occur, however, if a CM does not listen there are negative effects that, in turn, affect the relationship. First, a client may become frustrated and / or angry. Second, a client may wonder if the CM has not realized the client's knowledge level and understanding of that topic. Third, a client may speculate that the

CM does not believe him or her. Fourth, a client may assume that the CM has her own agenda. For instance one client stated: "...I just don't think she listened to me when I said I didn't need it. To me, no meant no. ... I was taking it as that was her push and she wasn't going to be happy until she'd convinced me to go her way and no, I wasn't going to" (p. 7). If *Listening* does not take place, a CM – client relationship may end with the client experiencing one or more unenthusiastic or unhelpful incidents. When discussing an important issue, one episode of a client not feeling heard can change a relationship. The effect can be that a client is left feeling distrustful, guarded and / or suspicious of a CM. This is illustrated in the client comment "... it would have been foremost in the back of my mind and the next time she, that there was the slightest suggestion of it I would have probably blown up" (p. 8).

#### Normalizing the experience

*Normalizing the Experience* is the second subcategory in the process of **DEVELOPING A TRUSTING RAPPORT** (Figure 5). *Normalizing the Experience* is a reciprocal process that involves discussing experiences that are common during the CABG surgery recovery and rehabilitation phase to create meaning.

*Normalizing the Experience* is characterized by *contextualizing experiences* and *exploring significance*. *Contextualizing experiences* involves discussing the relevant circumstances of the occurrence being considered. This includes discussing things that precede or follow that experience. This process entails a CM and client communicating back and forth to obtain details about an experience to try to understand if the experience is normal for the stage where the client is in his or her recovery process.

*Exploring significance* involves looking at the importance of an experience in relation to the commonness of the experience. For some clients, part of the recovery experience involves worrying and making “worse case” attributions regarding the cause of symptoms. By discussing common symptoms or experiences, a CM helps a client realize whether he or she needs medical attention to alleviate the symptoms. For example, one client expressed:

...I had a really hard, fast heart rate once when I was watching TV when the CM said that, that is something that, um, does happen and if it doesn't go away, then it's, ah, a problem. If it passes quickly, then it's usually not a problem so that was, um, kind of reassuring because you know. ... After it occurred the first time and she told me certainly come into the hospital if it persists, but if it passes fairly quickly then it's something that's, ah, the usual manifestation of the surgical consequences. (p. 14).

For the process of *Normalizing the Experience* to occur, CMs and clients have to take active roles. Each person needs to accept and acknowledge the other person's thoughts and ideas as valid and they must be willing to share their knowledge during the discussions. Normalizing can only occur when knowledge is conveyed. Each party also must possess some kind of specific knowledge on cardiac health, recovery, and / or risk factor modification. Clients have lived experiences and learnt knowledge about recovering from cardiac surgery and cardiac risk factor modification; whereas CMs have academic knowledge and accumulated secondary experience by working with clients' during their cardiac recovery and rehabilitation.

Two factors seem to influence the process of *Normalizing the Experience*. The first is a person's ability to hear and pick up on things which affects how well he or she works with the other person to normalize an experience. This suggests there is a link between this subcategory and the prior subcategory *Listening*. The second factor is that

each person's knowledge and experience of cardiac recovery and risk factor modification influences how well they normalize experiences. The more knowledge CMs and clients have, the greater their ability to normalize.

The strategies being used by CMs and clients to normalize the experience are: *sharing knowledge, eliciting information, and promoting understanding*. *Sharing knowledge* involves exchanging knowledge and understanding. Ideas are brought forward for the other person to consider. Clients discuss their personal experience, whereas CMs discuss their medical and academic experience. CMs help clients put their experiences in context with normal experiences. For instance a client commented:

...Oh, my left breast was very sore and I could remember that I was thinking but why? And she said the procedure I had was the one where they take and use the mammary artery and that was why it was sore. But that was reassuring! ...and my back was sore too and she answered that question too because those are things you don't realize. (p. 5).

When a CM states the common experiences that people have after surgery, this helps clients understand and create meaning about their experience. In this case, the client interpreted that what she or he was experiencing was typical. A CM often initiates discussions about common experiences before a client brings them up. By doing this CMs show their insight into things clients have not shared and thus expertise is demonstrated. This suggests a connection between this subcategory and the next subcategory, *Respecting and Demonstrating Expertise*.

*Eliciting information* involves each person drawing out knowledge or expertise from the other person without showing judgement. CMs elicit information from clients about their current state, overall progress, and changes they are going through. A CM tries to draw out whether a client is interested in other services, such as a community

exercise program. Some clients elicit from CMs how the CM might deal with a particular situation. A number of clients expressed that they bounced their ideas or interpretations off their CM to obtain a professional opinion. Clients often look to CMs to credit or discredit their thoughts or understandings. For example, a client stated that he used the CM to confirm that his interpretation was correct (Interview 10, p. 12). Clients often look to health professionals for advice and reassurance; so they use CMs to explore issues and as a source for answers, ideas, and reactions. For example, a client commented that the interactions with the CM were

a place where I can ask questions too. That, I don't like the way this is feeling or something and it's not important enough, or I don't feel it's important enough to go about getting a cardiologist appointment to discuss something, there's another sounding board. (p. 17).

A number of client participants used CMs to enquire whether their experience required immediate follow-up.

*Promoting understanding* can involve both parties actively discussing the client's specific experience to make sense of it. Ideas are put forth to help contextualize the experience. One client was concerned that he or she may be experiencing another health problem, such as an inner ear disturbance; however, by talking to the CM the client obtained new understanding of his or her experience.

... I had some, some dizziness, too, you know, and, ah, so she explained the difference between inner ear problems and, and just low blood pressure because I have low blood pressure. When I was at the recreation center yesterday, it was 96/60. ... Yeah, it's really quite low, you know, so if I'm, if I'm, if I'm going to pick a book up off the floor and I quickly get up fast, I'll be dizzy. ... so, ah, she explained that. She just said the only remedy is to not to raise your head too fast.... [I thought it was my inner ear] because that was my only understanding because I had never had blood pressure this low before. At least, I don't think I had. And I thought dizziness was usually caused by things like inner ear problems, but I didn't realize it could be caused by other things, too. (p. 16).

By talking, a client and CM came to understand that the client's dizziness could be related to low blood pressure as opposed to being a new health condition, i.e. an inner ear problem.

When experiences are normalized, a clients' self assessment becomes less based on fear and more based on an objective sense of where they are in the recovery process. Therefore, a client's ability to determine the importance of issues or problems is improved. Clients feel supported, understood, reassured, and encouraged. Clients keep their concerns in perspective by understanding what experiences are normal and important, because not knowing what causes certain symptoms is worrying for clients. When CMs explain the possible reasons for certain symptoms and why they occur, this is reassuring to clients. It is reassuring because the reason is not as bad as what the client imagined it might be. As well, clients make sense of the goings on and learn about their body. One client expressed:

...after the surgery there is lots of things that can, um, happen that, um, that are, are not, um, serious problems, but, ah, like I mentioned this rapid heart rate, so, and a little bit of dizziness, and, etc. maybe soreness, cause I know the incision is sore, so there's lot of little things that can happen that you would like to understand. Are they important or are they unimportant? By being able to phone, talk to the CM, she is able to say, well, yes, that's normal and it will pass. You have nothing to worry about. So that's very reassuring. So that, that does save you because, you know, as I said, um, whenever something happens that you think is a problem, your, your mind conjures it up in, into a bigger problem than it is. And then you start thinking about it. The more you're thinking about it, the bigger it gets. You know. And so, to, to defeat it right away is, is very, very important. (p. 33).

#### Respecting and demonstrating expertise

*Respecting and Demonstrating Expertise* is the third subcategory in the process of **DEVELOPING A TRUSTING RAPPORT** (see Figure 5). *Respecting and Demonstrating Expertise* is a reciprocal process that involves both people bringing to the relationship their special knowledge or skills in cardiac recovery and rehabilitation.

Respecting expertise involves having a good opinion about your own and the other person's knowledge or skill. Demonstrating expertise involves acting in a way that displays or makes visible one's knowledge or skill. This category is comprehensive and would require additional data to help fully saturate it.

*Respecting and Demonstrating Expertise* is characterized by *respecting the other person's expertise* and *acting out your own expertise*. First, respecting expertise involves a person recognizing him or herself and / or another person as having expertise and being willing to consider the other person's input. Second, acting out one's expertise involves behaving in one or more of the three following ways: (a) revealing knowledge, skill and capability through dialogue or action; (b) describing or explaining an idea or theory with the assistance of practical use or examples; (c) logically showing the truth as he or she understands it.

For the process of *Respecting and Demonstrating Expertise* to occur, CMs and clients have to take active roles. Each person needs to have confidence in the other person's abilities and knowledge. For instance, a client said: "...you have got to trust that they're on top of it and not just with the immediate thing that you have but what are the causes for it." (p. 21). The expertise is only valuable if it is considered relevant to the issue and it needs to fit with what a person already knows or it makes sense to them. The interview data clearly demonstrated that the client participants considered the CMs expertise as relevant. This is evident in the two clients' comments.

She "...knew what she was talking about" (p.4).

...I was prescribed by the doctor, um, a dosage of Lipitor [medication], which was quite high. ....and I understand that there, ah, there could be adverse effects so she [the CM] mentioned that if I had muscle pain that seemed to persist then that could be the Lipitor, so it was useful getting information like that. (p. 7).

This latter client found it useful to obtain information through the CM sharing her expertise on medications.

Some clients saw CMs as having both their own expertise and additional expertise by being part of an “expert” organization, which allowed CMs to bring additional resources to bear as necessary. The following comment demonstrates that one client saw the CM as valuable for her knowledge.

...if I phone the CM and I have a problem; if she couldn't answer the, my question, she could, she could, ah, ah, tell me who to access or she could find the information and she told me, too ... (p. 14).

CMs have knowledge themselves and they know of multiple other resources from which they can obtain knowledge. One client expressed that he wanted more than knowledge; he wanted a human being with whom he could discuss his experiences.

People like the CM and yourself, you are like. Well you know, if you [a patient] have a problem and you need a question answered. You [the CM] have different sources; you can go to the computer, you can go to a book, or you can go to someone human. [Someone] who is involved in that situation. It's all part of the. Sometimes the telephone is easier to – um - you feel better about talking to someone in person. I don't know how to put it, but that human contact is a lot better than just going into a computer or just going into a book. (p. 17).

For many of the client and family member participants, obtaining reassurance and encouragement was a vital part of recovery.

In spite of the information being relevant, part of respecting is considering information and making independent decisions. Considering information does not automatically imply following the expertise or advice. Each person needs an opportunity to demonstrate his or her expertise. Clients' expertise is in their lived experience and to some degree in their knowledge of cardiac recovery, risk factors, and modification.

Whereas CMs demonstrate their expertise by acting as educators, facilitators, and helpers

and through their knowledge of cardiac recovery, risk factors, and modification. One CM also has lived experience with risk factors expertise. Through CM-client interactions each person's expertise is brought out.

Four factors influence the process of *Respecting and Demonstrating Expertise*, the first of which is a person's capacity to listen. The ability to listen displays a person's respect for the other person's expertise. This shows there is a link between this subcategory and the previous subcategory *Listening* (see Figure 2).

The second influencing factor is a person's capacity to act. Prior life patterns affect how a person experiences CAD and recovery from surgery and his / her ability to act. A passive person before surgery will likely be a passive person after surgery, unless he or she has the support needed to make a change. Most of the client participants had some degree of prior experience taking action and implementing lifestyle changes. One client commented that she had limited recent experience exercising. "...I did not do anything, I was not even walking" (p. 3).

One's own confidence in her or his expertise is the third influencing factor in *Respecting and Demonstrating Expertise*. Confidence affects how people present their expertise. For example, people with greater confidence tend to present a stronger sense of expertise.

Fourth, *Respecting and Demonstrating Expertise* is influenced by the intellectual knowledge each person has in the subject area. The amount of knowledge people possess on a particular subject influences how they view their or another person's expertise. On each topic, a client or CM could have no, limited, moderate, or extensive knowledge. One client expressed his lack of knowledge (and experience) when he commented: "...I had

never taken supplements other than maybe a multi-vitamin in my life before, and I knew nothing about them really. As far as dosage and what they did and didn't do and all the rest of it." (p. 3). When a person lacks knowledge about a subject that he or she is interested in, he or she often looks to a trusted person for comment and that knowledge.

The strategies used by CMs and clients to bring about the process of ***Respecting and Demonstrating Expertise*** are: *listening, knowing limits, taking action, and advocating rights*. *Listening*, which was a previous subcategory within this same overall category, involves hearing what the other person is saying and considering thoughtfully what the other person is revealing. In listening to the other person both CMs and clients acknowledge the other person's expertise. This shows a connection between the processes of ***Respecting and Demonstrating Expertise*** and ***Listening***. The same strategies that are discussed in the previous ***Listening*** category also apply here.

*Knowing limits* involves people being aware of their and the other person's areas of control, knowledge, and experience. Neither CMs nor clients have expertise on all aspects of cardiac recovery and rehabilitation. By knowing their limit CMs help clients to find the relevant knowledge from other sources, such as literature or other health professionals.

CMs realize that clients make decisions for themselves and they know that they are in a professional relationship with clients. For example a CM stated: "...I have to remember that this is a working relationship... (p. 6). CMs recognize the boundaries of what they can do in that relationship. Most clients know their limits (e.g., physical and emotional) and realize that they have the final say about what is going to be done.

However, because they trust and believe CMs, they realize that CMs have knowledge and experience from which they can benefit.

*Taking action* is a strategy that clients and CMs use to show respect or demonstrate their expertise. In taking action, clients initiate activities, such as exercise, even if it is outside of their comfort and experience. For example, a client commented:

...I went outside for a brief walk and then, ah, that was really tiring because we live on a hilly street, but I carried on and eventually I went a little further and the CM called, ah, from the hospital, and asked me about exercises and how long I went out and then the duration, so, based on her suggestions I, I carried on and I increased it... (p. 1).

Clients will try things they are a little uncomfortable with because they trust their CM's expertise.

*Taking action* also includes acting in response to advice or a request. When a person does something as a conscious or unconscious reaction to a suggestion or as a reaction to something being asked, they show they are listening. A CM is acting in response when she provides medical information about a specific topic that a client requests. There are multiple sources from which a CM obtains information, such as her personal knowledge, research, and / or speaking with other health professionals for an individual client. This is seen in the following client comment:

... She did a lot of research for me on different things that I was really, especially on the medications. ...Yeah. I told her why I don't want to take anything and she sort of discussed that I should take at least one of them. And I said okay, and I told her the same story I told you about those medications. She said oh okay I see why. She said okay, why don't we try and figure out a way we can do it through diet. And blah, blah, blah. She said okay, let me do some research for you and what I find I will fax to you and that's exactly what she did. Um, she mailed it to me, actually and there was a lot of stuff. (p. 17).

In order to encourage a client, as in this case, CMs provide clients with relevant information to help them make an informed choice.

A client is acting in response to advice when a client tries to make changes suggested by a CM. For example, a client commented:

...The CM called me about the [one of the community] cardiac [exercise] rehabilitation programs and she gave me the name of the lady who was running the program, so I phoned the lady and she explained the program to me: a) How she evaluates you and she takes your blood pressure and heart rate and decides what kinds of tasks you can do in the exercise area. B) What is compatible with your ability, if you like. So, I went for the evaluation. (p. 1).

CMs provide clients with information about the various community cardiac rehabilitation services to help clients understand and see if they are a good fit.

*Advocating rights* is a strategy that CMs use to help clients understand and articulate what their rights and options are. CMs support and encourage a client's right to be the decision maker. As suggested in the following two clients comments:

...She (the CM) said after all it is your body and you make all the final decisions. Here's some information for you so you can be informed" and that's basically the way she put it. (p. 2).

...She said, you know, now this is what I would suggest. Now, you have to decide if this is for you, you know. That sort of thing. She didn't say do this or else, you know. So, she was like a coach. You know. (p. 17).

When someone supports and encourages a person regarding their rights, this is respectful.

By *Respecting and Demonstrating Expertise* trust develops or increases between those involved; trust is essential to develop a rapport. For example a client commented: "When a person feels they can really trust they open up" (p. 7). Trust is shown by people feeling comfortable with the relationship, by initiating interactions, by bringing issues up, and by not feeling judged. When family members trust a CM, family members stop interfering with a client's activity, treatments and / or the recovery process because they are reassured that things are okay.

Both parties contribute to and shape a client's cardiac rehabilitation program when they respect and demonstrate expertise. A program that is developed by both people is more likely to succeed than a program developed by a professional or a client alone. When a person works with someone he or she respects this often creates accountability. By taking an active role in their rehabilitation program, clients demonstrate their expertise and take back control over their health.

By *Respecting and Demonstrating Expertise* CMs demonstrate insight by operating within their recognized boundaries. A CM may accept what a client believes to be right in order to reach an agreement. For example, a CM stated, "there are some clients that you have to step back from and realize that their understanding of their condition is real and valid to them and pushing them otherwise would just create conflict" (Follow-up interview 12, p. 2). When CMs provide clients with what they need, such as reassurance and encouragement, CMs demonstrate insight into the client's mental and physical state.

With the participants in this study, the process of *Respecting and Demonstrating Expertise* did occur most of the time. However, when a CM tried to control something that was not hers to control or when she did not hear a client's limits, there were negative effects. A client would shut down and become disempowered. One client's past experiences of not being respected for his expertise was perpetuated when a CM did not recognize the client's limits with respect to exercising. For example, a client commented that:

... You know your own capacity. I knew that there was just no way I was going to walk; you just can't convince people of that. And I would probably have a hard job even if you were the, if I was in hospital now and you were the attending nurse, I

would say my legs are bugging me and you would say, you've got to get up and walk.... (p. 10).

This client seems to have had perpetual experiences of not being respected, thus, he now anticipates having unhelpful professional relationship experiences.

#### Developing a trusting rapport – In summary

**DEVELOPING A TRUSTING RAPPORT**, the third category in the process of **RELATIONAL CARING IN CARDIAC REHABILITATION**, is an interactive and reciprocal process that involves confirming experiences and connecting the people in a relationship. For example a client stated: "...if you develop the rapport which was definitely developed as far as I'm concerned, then they [clients] will feel good enough to ask the questions, their individual questions" (p. 16). During this process each person's knowledge, trust and / or confidence increased.

**DEVELOPING A TRUSTING RAPPORT** is characterized by the interrelated and nonlinear processes: *Listening*, *Normalizing the Experience*, and *Respecting and Demonstrating Expertise*. CMs and clients are *Listening* to each other. Cardiac rehabilitation and recovery after CABG surgery exposes clients to many new experiences, therefore it is beneficial when CMs and clients work together *Normalizing the Experience*. Each person's special knowledge or skills in cardiac recovery and rehabilitation contribute to the relationship when *Respecting and Demonstrating Expertise* occurs. **DEVELOPING A TRUSTING RAPPORT** influences the relative ease with which a CM and client can collaborate.

## Collaborating

The fourth major category, in **RELATIONAL CARING IN CARDIAC REHABILITATION**, is the process of **COLLABORATING** (see Figure 6).

**COLLABORATING** is the reciprocal process in which a CM and client work in partnership towards agreed upon goals. Collaborating implies sharing a common interest. By engaging in two-way conversations each person gains an understanding of what the other person offers and wants. Each person also considers the other person in their feelings and actions. **COLLABORATING** is characterized by three subcategories *Negotiating the Power Dynamic*, *Developing a Tailored Plan*, and *Monitoring*.

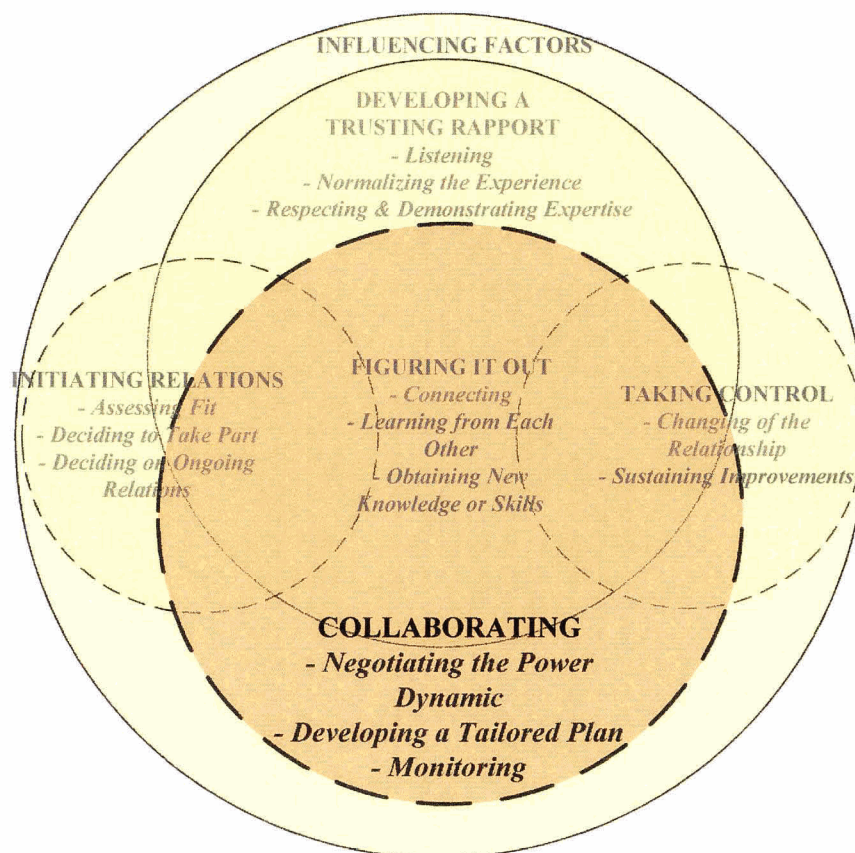


Figure 6 – Collaborating

### Negotiating the power dynamic

*Negotiating the Power Dynamic* is the first subcategory in the process of **COLLABORATING** (see Figure 6). *Negotiating the Power Dynamic* involves directly or indirectly working out the relative authority for each person. This process tends to occur implicitly rather than explicitly between a CM and client. This category is complex and would require additional data to help fully saturated it.

The reciprocal nature of *Negotiating the Power Dynamic* is characterized by: *communicating in an egalitarian style, changing authority roles, and being transparent in dialogue*. *Communicating in an egalitarian style* involves clients and CMs having two-way conversations during their interactions. For example a client stated:

...we were just talking back and forth and she was asking questions and I was giving answers and I was asking questions and she was giving answers and all the rest of it. So it was certainly a two-way conversation as opposed to I've got the phone on my ear and I was listening, listening and saying nothing! (p. 8).

The power experienced throughout the interactions is a power “with” as opposed to a power “over”. This power “with” approach creates positive energy and hopefulness as both people share their personal resources and learn from one another (Gallant, Beaulieu, & Carnevale, 2002). Agendas are not being pushed, as suggested in the client comment:

...she doesn't have a spiel ready to throw at you. She'll ask you how you're doing. Then we just talk like we are doing.... You don't feel like you're dealing with a health professional that has an agenda that you should be here at this specific time doing exactly what I tell you to do ... (p. 18).

*Changing authority roles* entails fluidity of leadership within the power dynamics of a CM – client relationship. The relationship is dynamic and the power balance between a CM and client shifts depending on the people involved, the context and conditions of an interaction occurring at the time. Different people want different things; one person wants direction while another wants information. Since each interaction is unique, power

dynamics are always being renegotiated. Both non-hierarchical and hierarchical roles can exist within the context of the relationship. Power dynamics shift with certain subject matters, phases of the recovery, and relative knowledge. Power is adjusted based on the dynamics of the interaction.

*Being transparent in dialogue* involves being open about one's intent. This helps each person learn and understand what the other person is about. For example, a CM commented:

...they [clients] have to realize what we have. And my intent is to communicate to them effectively and clearly what exactly we provide within the service and within the realm of the hospital setting and what else we can provide within the community. I realize this program is multi-site and I do let them know that of course it is just not my follow-up calls but to link them into the appropriate services as we deem necessary at a point in the time in the conversation. (p. 1)

Being transparent in dialogue also involves both people knowing where the relations are going (Interview 11). Over time a person learns what the other person wants, is capable of and can offer.

For the process of *Negotiating the Power Dynamic* to occur effectively, both parties must be able to act out their control. With the Case Management Service, the majority of the interactions take place via the telephone with clients in their home and CMs in their office. When clients are in a place where they have greater control in other matters, such as their home, some of the power imbalances in the CM-client relationship are reduced. To negotiate the power dynamics in a relationship each person must be open and be willing and able to deal with power shifts.

Five factors influence the process of *Negotiating the Power Dynamic*, the first of which is the nature of a CM – client partnership. The amount of rapport that a CM and client have established at the time of negotiation influences their ability to negotiate the

power dynamics. A person's intent also influences the negotiation process. For example, a CM needs to know if she is telling a client about a service for the client's interest or to fill a space in the program. When CMs are trying to fill a spot they have reported feeling a little like they are pushing clients. The second factor is each person's desire or interest in participating in the process. A lack of interest by either party will limit the amount of negotiation that takes place. The third influencing factor is a person's confidence level, which can positively or negatively affect their ability to negotiate power dynamics. For example, a client may feel insecure or intimidated by a CM with apparent greater knowledge and thus not share their knowledge or speak their mind. The reverse is also true; a CM could feel insecure or intimidated by a certain client's significant knowledge. The fourth influencing factor is a person's capacity to demonstrate their expertise. If a conversation is one sided, the other person does not have opportunity to show their expertise. How a person acts out their expertise influences the way power is negotiated. This shows a connection between this subcategory and the prior subcategory *Respecting and Demonstrating Expertise*, which is part of the overall category **DEVELOPING A TRUSING RAPPORT** (see Figure 2). Lastly, the degree of openness each person has can influence the outcome of the negotiation of power. When people are open and honest, each person can learn what the other person wants or offers.

The strategies used by CMs and clients to bring about the process of *Negotiating the Power Dynamic* are: *establishing principles*; *creating common language*; and *exploring wants, abilities, and goals*. *Establishing principles* involves instituting or creating an understanding of the standards of conduct that guide the relationship. Four shared principles exist, the first of which is that clients make the final decision. CMs and

most clients know that clients make the decisions about their own life. This is affirmed in the following client comment.

...I am the ultimate patient and regardless of what's suggested I'm the ultimate one that has the decision - am I going to do it or am I not - am I going to take it or am I not or whatever. (p. 12).

CMs acknowledge this principle when they advocate for client rights, which is a strategy in the prior subcategory *Respecting and Demonstrating Expertise*. A few client participants commented that their CM verbally reminded them that ultimately it is their decision as to what is done and that the role of a CM is to provide suggestions or recommendations that are based on current literature. CMs encourage clients to take control of situations (if the clients want control). For example, if a client wants to be assured that their cardiologist follow-up-appointment is booked a CM encourages a client to call to make an appointment versus waiting for the office staff to call them. Yet there are times when clients do not want to take the initiative or are not feeling up to taking control, in which case, a CM will help by taking direct action.

The second principle is allowing time. Both parties understand that in most cases there will be time during the interactions between CM and client for each person to bring their ideas forward and to ask their questions. Clients are not feeling rushed by CMs and they know that if there is something they need to discuss, there will be time to discuss it. For example, a client commented: "...I think that fact that they don't make you feel that they are rushing you out of it. They take that time to talk to you. ...." (p. 21-22).

Allowing time can result in longer conversations. For example, a client commented:

...actually, I enjoyed talking to her. It got out of control at times. I'd be talking to her for half an hour about things and, she didn't indicate that she had to go and to talk to somebody else although I know she probably had other people to talk to, but I, I just wasn't conscious of that fact, but just that she was nice to talk to. ....I, a

protracted conversation on things, you know, and when you talk to somebody nice, ah, sometimes you just would talk to them and so that, that can carry on. But as long as the CM didn't mind, ah, I enjoyed talking to her. (p. 18).

CMs are required to balance the pressure of providing clients the needed time with the need of keeping up and completing their workload.

Being receptive, honest, and authentic is the third principle. A number of client participants expressed that it was important to be honest to health professionals caring for them. For example a client commented:

...when she asks how things are going, as far as exercise goes. Well if I let myself go as far as diet goes or exercise goes, then what am I going to say to the person who is sort of looking after my case. Well you can't lie to them. What are you going to say to them, "oh I didn't do anything what I am supposed to do" uh but I'm feeling lousy. You have to work with people. (p. 17).

Several clients feel a responsibility to be honest about what they are actually doing.

Many clients (and family members) found the CMs to be real and sincere (Interview 2, p. 22). A CM commented "...I treat people the way I expect them to treat me" (p. 5). CMs try to be straightforward and informative. By doing this they help clients interpret the meaning, which is evident in the following client comments:

...I had also phoned pharmacists from time to time to ask questions about the drugs and they'd look it up in their drug information booklet, but they don't do any interpretations. They just tell you what's in their books. I guess it's just to cover their, themselves from liability in case they give you misinformation. So, but with the CM she was quite forthcoming. (p. 7).

...I was seeing the cardiologist on a regular basis, every six weeks, and every six weeks I have a blood test, so I sent a copy of the blood test result to the CM at the hospital and she looked it over and told me if she thought it was a big enough improvement or if it was in the right direction... (p. 11).

By being open and authentic, a person becomes trustworthy and approachable.

The fourth principle is being responsive. This involves being prompt and enthusiastic. By being responsive both parties were accessible. The following client

comments suggest that these clients knew they could call and / or reach the CM if need be.

... You hate to phone the doctor and I knew that you girls were there if I needed to call you, which was great. Because, like even now [1 year later], there are things that I could call about ... (p. 11).

...It was just a general feeling that she was there and I could talk to her very freely... (p. 1).

For some family members just knowing that the CM was there and available to answer questions was beneficial. This is seen in the following family member comment:

Marvellous. Absolutely marvellous. I don't know how I to describe it any better, it was just, just stupendous to know there was someone there I could talk to. She's wonderful this CM RN. She would ask questions you wouldn't expect her to ask and then answer if you asked a question, she would answer it beautifully. But mostly it was just that she was there because when I had this there was nobody. Absolutely nobody. And oh the difference is incredible because my husband is not particularly communicative and so I would talk to her now and again and I just though she was wonderful.... (p. 1).

For some family members, talking to the CM provided them with their needed reassurance.

All of the participants indicated that they tried to respond to calls from the other person in a timely manner; the only exception seemed to be when a client did not receive a CM's message. Both the principle of being responsive and the principle of being receptive, honest, and authentic are evident in the following CM comment.

By being honest; by being consistent with follow-up and telephone calls and say for example if I tell them I am going to call on a certain date that I follow through with that by being able to respond to them in a timely manner, if in fact they placed a call to myself. By being accessible. ...their needs at the time, I mean, there is sometimes people just, I have to respect it is not a good day for them to speak or I may have caught them at a bad time. I respect that rather than just sort of blindly ticking off my check boxes if its information I want to obtain. I, you know, I feel that - you have to be insightful to how people are during the time that I reach them. Because again I am calling them during the day, anytime and you know pick up the phone and they could be doing a number of things... (p. 4).

A CM's enthusiasm is beneficial to clients as noted in the following client comment. "...She [the CM] is a very personable individual, very enthusiastic, and that enthusiasm um comes off into you, you know...." (p. 17). A CM's enthusiasm helps motivate clients. By CMs initiating the telephone contact demonstrated to clients (and families) that CMs are interested in how they are doing.

The second strategy, *creating common language* involves both people using certain terms to discuss a client's recovery and risk factor modification process. CMs tend to introduce and teach clients new terminology related to cardiac recovery and rehabilitation. Clients often have to learn the medical language used by CMs or health professionals to understand what is happening to them. For example, a client stated:

...also on the blood test she, there were tests they conducted and they used cryptic descriptions of what the test was and I didn't understand what they meant. I didn't understand if, I know that when your taking the drugs there can be an effect on your liver and other, um, bodily aspects so I wasn't sure if the drugs were affecting me in other, other ways, so rather than have to phone the cardiologist or the MD or go see them, I just asked the CM what they meant and she just, she explained what the test meant and if it was an acceptable level, if there was improvement, or I needed to be concerned, or also if I needed to make an appointment to see the cardiologist about anything. (p. 11).

For a number of clients, knowing what the tests meant helped them make sense of what was happening. After new terms are defined then those that are understood by both are often adopted during the interactions. This system is utilized for two reasons: (a) so a CM can be assured that a client and CM understand each other, and (b) so a CM can measure progress.

*Exploring wants, abilities, and goals* is the third strategy that occurs throughout the interactions. This involves CMs and clients examining their and the other person's desires, knowledge, strength, confidence, and competence, any of which can change over

time. Through open dialogue, each person gains an understanding of what the other person is capable of, interested in and wants. This helps CMs understand what matters to a client and keeps a client centred process. Different clients want different things. Some clients want extensive information and detail so they can make informed choices whereas other clients want to be told what to do. Understanding what a person wants and is capable of is essential to tailoring a plan. This suggests a link between this process and the subsequent process *Developing a Tailored Plan*.

By *Negotiating the Power Dynamic* both parties engage in dialogue that allows a CM or client to modify, extend, and / or reduce the service being delivered. If there is real sharing, information is exchanged that would not otherwise surface. The plan has a greater degree of success because both parties have contributed. Through working out the power, a better quality case management service is being produced. A CM is often trying to balance the tension between responsibility and the understanding that power may lie within the hands of the client. For example a CM expressed "...if you have someone, a client that you are worried about, or just not doing right or whatnot then, I, the onus is on me to certainly follow-up with concern, rather than just sort of put the chart away into the next little spot" (p. 8).

In most cases, clients and CMs both respected the established principle: clients make the final decision about their lives. However, there is a negative effect if this principle is not respected. In the following example, it appears that a CM was not listening to a client's decision:

...it was because I had explained that I was well versed in how to eat, I didn't think to go to the dietitian but for some reason in the conversation it came back to it, three times, wanting me to go and take part in it. ... (p. 7).

This shows that this subcategory and the earlier subcategory *Listening* are interrelated (see Figure 2). Listening to clients shows respect. Not listening may be interpreted that the other person is trying to override the person's authority. Repetition can be useful in reinforcing ideas but also detrimental if it is used to obtain control.

If a CM does not fully explore a client's wants and abilities, then a plan becomes one sided and authoritarian. This is evident in the following client comment: "...She seemed to be pushing really, I felt really pushed on this exercise. It was like almost a demanding order that you have to do it..." (p. 6). Clients often become frustrated or resistant when pushed.

In addition, if a CM does respect a client's knowledge, a client may become frustrated. For example, a client stated: "they were just insisting that I had to have my cholesterol checked, which was never once anything but normal. I guess I was a little grumpy or something." (p. 6).

A potential unwanted effect from the principle of allowing time is that there are times when a client will engage in a discussion with the CM even if it is not the best time for the client. This is evident in the client comment:

...There were times after where I'd maybe be doing something every time a phone call would come I'd be doing something because I'm involved with other groups and I'd maybe be getting ready for a meeting, going out and there would be a phone call and I'd get to the point where I'd be just - I wish she'd get to the point and hurry up because I've got other things to do! So there was times where I wasn't in to the telephone conversation because I was thinking of other things and there were other times where I'd go right along and talk and discuss and so on and so forth. (p. 2).

In allowing time, it is clear that the appropriateness of the time needs to be negotiated; otherwise this can result in clients feeling obligated to talk to the CM when she calls.

Some CM report that they try to ask clients if this is an okay time for them to talk,

however, one CM stopped asking because she found that most of the time, the timing was fine (Interview 12).

#### Developing a tailored plan

***Developing a Tailored Plan*** is the second subcategory within the process of **COLLABORATING** (see Figure 6). ***Developing a Tailored Plan*** results from the prior subcategory ***Negotiating the Power Dynamic*** and is a reciprocal process in which a CM and client progressively reveal a cardiac rehabilitation plan that fits the client.

***Developing a Tailored Plan*** involves implicitly and explicitly bringing ideas to an active state. The purpose of ***Developing a Tailored Plan*** is to produce a program that meets the needs of a client so that there is a greater likelihood that a client has beneficial effects of recovery and risk reduction. ***Developing a Tailored Plan*** is often facilitated by a CM but is responded to by both a CM and client. It was noted by one of the CMs that the creation and documentation of client-tailored plans was improving with her improved skill and the program's evolution. In this research project this category was not fully saturated and would require additional data to do so.

***Developing a Tailored Plan*** is characterized by: *considering the client as whole, requesting support, identifying shared goals, being flexible, and creating a win-win plan.* *Considering the client as whole* involves both parties taking into account all facets of the client, and not just the disease process alone. Both people consider a client's needs and capabilities. Clients naturally view themselves as a whole being, whereas medical professionals can behave as though clients are only a disease process. That a CM considers clients as whole persons is evident in the CM comment:

...I may get a response from an individual that may not be what I expect, however I have to look and respect their whole belief, their philosophy, their background,

their past experience, their own family and living arrangements, and those around them. You know the illness in itself; it becomes very sensitive when someone has a disease process, and they are also trying to digest just what is happening to them.... (p. 4).

*Requesting support* involves each person bringing forward their needs or ideas and asking for them to be considered or supported. CMs offer explanations on the value of a healthy lifestyle and the benefits of certain cardiac rehabilitation services, and then they ask clients to consider their recommendations. Clients share their needs and wants and ask a CM to support them. For example, a client may say he or she is uncomfortable working on exercise until his / her diet is sorted out. Requesting support occurs as a consequence of the successful resolution of *Negotiating the Power Dynamic*, from the previous subcategory.

*Identifying shared goals* involves both parties jointly identifying the common goals, which become the focus of the partnership. A CM and client work together to identify specifically what a client wants to achieve. For example a CM states: "...it depends on what the person wants to work with, for example, if there are many risk factors then of course we can only start with a couple of things at a time" (p. 2). A CM facilitates this by asking a client to distinguish their main concerns. Clients identify goals that are based on their interests, conditions and abilities. In two follow-up interviews, the clients commented that their CM had them plot their own goals right from the beginning (Follow-up Interviews 1 & 6).

A CM also facilitates the process of prioritizing the goals and helps clients make them specific, measurable, attainable, realistic, and timely (Interview 12). By identifying shared goals each person becomes aware of what the partnership is working towards.

*Being flexible* involves each person being adaptable during an interaction to allow communication to move in a way that fits the client's needs. Flexibility occurs in relation to three things: the hours of availability, the number of things discussed during one interaction, and revisiting or changing of prior choices. For example, if a client wants to spend multiple interactions on one topic, there needs to be room for this to occur. CMs vary the Case Management Service format to each individual person and being flexible allows every client-CM situation to be unique. The following client comment implies CM flexibility:

She (the CM) did quite a bit of follow-up and I did go and see her once because I'm really anti-drugs, heavily anti-drugs. Cause they really screw me up so I went in and had quite a long chat and several long telephone conversations and she went and got me a whole pile of information about diet and what certain medications do and what they don't do, what you should be aware of...." (p. 1).

The CM spent extra time talking to the client about the medications, which was important for this client.

*Creating a win-win plan* involves discussing ideas and understanding the common goals to establish a plan that is beneficial to those involved. This does not occur in a linear fashion; the plan is created, implemented, and changed along the way. CMs and clients start by identifying strengths, concerns, and resolutions and then they establish a plan with strategies to carry out the plan. In a win-win plan, people can have widely diverse perspectives and still work towards a common goal. For example, a client might see weight loss as the benefit, whereas a CM might see the reduced risk factor as the benefit. To be effective, it is essential that both people feel like they are benefiting in some way. CMs benefit in two ways: first, they see that they have made a difference in some capacity, and second, they feel satisfaction that they have done their job the way it

should be done (Interview 12). Clients clearly benefit in that they progress in their rehabilitation and improve their personal health.

For the process of *Developing a Tailored Plan* to occur, both people must take an active role. They recognize their common interest and then form a partnership. In establishing a partnership there is an alignment of the shared goals. In addition, each person has to be open-minded and willing to work towards the common goal. For example, clients are saying ‘I am willing to do or try this’. Each person needs to keep up their part and be honest about what they have been doing. Established program protocols and management expectations around the delivery of the MSCR Program and the Case Management Service must allow flexibility for CMs to be able to do their part.

Four factors influence the process of *Developing a Tailored Plan*, the first of which is a CM’s willingness and ability to have a workload that allows each client to have some degree of uniqueness to their CR plan. For example a CM stated: “...I can never predict what that phone conversation is going to be like...” (p. 27). CMs need to be comfortable not having full control over what is covered during an interaction. Each person’s capacity to listen is the second factor that influences how a plan is developed. A person’s ability to listen affects how well they tailor a program. This indicates a link between this subcategory and the previous subcategory *Listening*, which is within the category **ESTABLISHING A TRUSTING RAPPORT** (see Figure 2). Third, the development of a tailored plan is influenced by how well each person understands what the client is capable of, interested in, and desires. A person needs to understand what is wanted or needed to tailor a plan. This suggests the importance of having *Negotiated the Power Dynamic* to enable a tailored plan to be developed. A fourth influencing factor is a

client's motivation for working on a specific goal. Each person may have individual reasons for working towards the shared goals. For example, a CM wants a client to lose weight because it is better for their health whereas a client wants to lose weight to look well. Certain reasons motivate a person more than other reasons, as evidenced in the following client comment: "...since I, I'd like to defer, or avoid any kind of surgical intervention again, it's a strong motivator to, to make, ah, changes" (p. 23).

The strategies used by CMs and clients during the process of *Developing a Tailored Plan* are: *discussing risk factors, setting limits, providing recommendations, customizing the program, and considering the timing*. *Discussing risk factors* involves both people talking about their understanding of the client's risk factors that predispose him or her to further heart disease. A CM facilitates the identification of a client's risk factors through use of a "Heart Disease Risk Assessment Form." (See Appendix D for a copy of this form). Clients discuss their risk factors; identify which they have some degree of control over and the priority they wish to set for those factors.

*Setting limits* involves each person identifying the boundaries and constraints on the relationship. Clients identify what they are willing to do or not do. An example is the client who did not wish to attend the evening education sessions because of not wanting to drive at night (Interview 1). CMs set limits by keeping relationships professional and by adhering to their professional ethics.

*Providing recommendations* is mostly done by CMs and involves suggesting a course of action or suggesting a fit with the client's goals. This is evident in the client comment "...she suggested B12 and Folic Acid..." (p. 2). In most cases the purpose and pros and cons of a recommendation are discussed. CMs often provide information and

recommendations to clients on how to continue to make progress and on other available services. CMs providing information about the Heart to Heart program is reflected in the following client comment: "...she mentioned the price and when it began and the number of weeks and that kind of information and ... She told me more about it. So I phoned, ah, the lady..." (p. 15). Some clients make recommendations by bringing their ideas to their CM for comment, to which CM either express support or make an alternate recommendation.

*Customizing the program* involves tailoring the MSCR Program to fit the client and establishing a way to obtain the shared goals. Both people work together to customize a plan that considers a client's medical needs and addresses the client's cardiac rehabilitation needs, other concerns, as well as their goals and preferences. After clients identify what they want to do, they identify how they want to do it. CMs contribute by helping identify realistic goals and by confirming that the client understands the plan. Each person then takes a role in executing the plan. For example, a CM provides information, reassurance, support, and guidance whereas a client implements the changes, such as exercising or reducing fat intake. CMs try to be fair in the amount of service they provide clients yet they allow differences to occur to meet a specific client's needs. For example, a CM commented:

...I personally try to give each of the individuals' fairness. There are some people that will get more follow-up phone calls; the reason being there may be an important issue that has arisen; this person may express wanting to be helped with something further, perhaps a week away. We may be looking at results that were not going to be in the know until maybe two weeks down the road. So again I do try to give most people seven to eight calls.... (p. 6).

One CM expressed that she offers all clients a clinic visit, but encourages clients who she has not met face-to-face to attend (Interview 12). Whereas another CM reports that she promotes the clinic for most clients (Interview 13).

*Considering the timing* involves CMs assessing if the current time or situation is appropriate. Depending on a CM's assessment, her action is adjusted to fit a client's needs. Generally for each interaction, a CM follows the general telephone guide<sup>3</sup> or contact checklist<sup>4</sup> sheet; however, variations are made according to a client's needs. The following CM comment is an example of considering the timing:

There are certain things you are not going to touch right away until later down the road. So timing is a factor, ...you have to take in consideration what the patient is experiencing at the time, whether it be pain, whether it be they're too tired, whether they are nauseated, and then of course you are going to back right up and cover appropriate things. It comes down again to being insightful and maybe right now, as much as I'm not voicing this, effectively understanding where they are at that point in their linear continuum and respecting that level and giving them the information they need at that time. (p. 12).

By *Developing a Tailored Plan* a client and CM work in partnership towards a common goal or goals, not against each other. A custom fit and individualized plan is developed that meets an individual client's needs as well as addressing his or her disease process. Both long and short-term goals, process, and result-orientated outcomes are considered. By tailoring, CMs show a willingness to meet the client's needs.

In some cases a client's good intentions are not realized as other things take precedence. This is evidenced in the client comment:

...They've really done their part for sure and it's been me that's been rather on the lax part of things. And sometimes it's just because of work related stuff, searching for work, looking for work, interviews and you're just trying to prioritize what it is

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<sup>3</sup> The Telephone Guide, titled: 1<sup>st</sup> Two Calls Telephone Guide, is a sheet used by CMs to guide the first and second calls to a client

<sup>4</sup> The Contact Checklist, titled: Call Three-Last Call Telephone Contact Checklist, is a sheet used by CMs to guide the third to last call to a client

I have to do right now in my life. And sometimes, you know, some things have to take back seat for a while. (p. 3).

Plans are not static; they are updated and modified to reflect the client's new priorities when identified during the regular interactions. This suggests a link between this subcategory and the next subcategory *Monitoring*.

In most cases the process of *Developing a Tailored Plan* was constructive, however, at times a few clients felt pushed to use specific services. Tailoring does not occur when clients are being pushed. When this occurs, clients often resent the pressure or they resist the activity. Some of the negative effects of pushing clients were discussed in the prior subcategories *Negotiating the Power Dynamic* and *Listening*. CMs are often trying to balance the pressures of clients' needs with effectively utilizing resources. One aspect of the CM's role is to link clients to the appropriate CR resources; another is to meet clients' needs. These competing responsibilities create tension for CMs. A number of CMs reported that they occasionally find themselves trying to persuade a client to use associated services particularly when they know a service has a space that needs filling (Interview 12). One CM commented she realizes she is doing this when she finds herself trying to 'sell' the service. Awareness of this tendency will naturally shift the balance back towards meeting the client's needs.

### Monitoring

*Monitoring* is the third subcategory within the process of **COLLABORATING** (see Figure 6). *Monitoring* which begins at hospital discharge is a process that entails reciprocal observation and assessment of progress towards the goals of a plan, and updating of a plan.

Discharge can be distressing for many clients and family members whether or not they were discharged with good physician support. A few client participants felt left to their own devices after being discharged from hospital after their surgery. However, a CM helps mitigate this when they contact a client within 72 hours of discharge. The result is that clients and family members feel more at ease during their recovery. For example two clients commented:

...well I felt, when I first came home, I felt you're sort of left out on a limb. I realized that's routine anyways, so it doesn't matter. Then with her phoning it made you feel a lot more comfortable. She, they were at least keeping tabs on you. (p. 4).

When I went out, when I went they told me to go and see my physician, and the Cardiac Surgeon said he did not need to see me; my cardiologist said he did not need to see me again, and when I went to see my own doctor he said oh well that's fine then. So you were lost, I felt, and I know a lot about what was happening, that I was left on a string here. And I thought ah. So emotionally was the thing that I got dangled somewhere ... (p. 2)

A family member stated: "I certainly found it reassuring when he got called; to me it was, ah, like, he felt, ah, far left and, you know, you didn't feel as left to your own devices" (p. 33).

**Monitoring** is characterized by: *communicating regularly* and *focusing dialogue*. *Communicating regularly* involves interacting repeatedly over a specified period of time. Clients expect a Case Management Service nurse to initiate calls as discussed, that is approximately weekly for two to three weeks and then monthly for four to six months. One client recalled that "... they [the calls] were once a month and it was usually toward the end of the month ..." (p. 1). The majority of interactions take place over the telephone although about 60% of clients also participate in a face-to-face clinic visit with a nurse CM and dietitian. CMs initiate most of the planned exchanges whereas clients often initiate additional unscheduled interactions. Many client participants expressed their

preference for CM initiated planned calls. For example a client commented "... cause if it was left up to me and if you are feeling well you get a little bit lazy and you don't get around to it. And with her calling it sort of keeps you on your toes." (p. 17). Another client commented that It also makes sense that the CMs initiate the calls for practical reasons, for example:

...if it was incumbent upon me to call the CM when, ah, on a regular basis to discuss heart issues and so forth and if, ah, she was on the phone talking to other people, she probably has a large number of people she calls, then that, that would have been a, an impediment, to, ah, getting in touch with her and so forth. So, from a practical point of view, I would say that the CM calling me made more sense because I have more time than she does. And then she can organize her, her time better. (p. 18).

The participants all expressed the opinion that the duration of the service and the number of calls was appropriate for their needs. This is supported in the following two client statements.

...The way the CM called me, I think she used to call me just about every month. It was just right. (p. 17).

For me personally, it seemed to be just right. But that's mainly because my recuperative period was consistent with the call durations and, like, if I had been a very sickly individual when I went to pre-surgery, like the diabetes and the problems, if the recuperative period was a lot longer then perhaps, um, the period of six months may not have been long enough, you know? But for me, it seemed to do pretty good, so, I, I would say that for my, for me as an individual with my particular, ah, situation it was just about right. (p. 18).

*Focusing dialogue* involves centring the conversations on cardiac recovery, lifestyle changes, and items that affect a client's health. A CM's focus is twofold: first to ascertain how a client is recovering and second, to ascertain how clients are proceeding with reducing their risk factors. As a result, risk factor reduction is spoken about during each interaction (Interview 12, p. 5). One client participants commented that he realized

that he was in a professional relationship with the CM so he tried to keep their discussions relevant.

For the process of *Monitoring*, clients need to know that calls will be occurring and CMs must initiate the expected calls. For most clients, it was essential that CMs have expertise on cardiac recovery, risk factors, and their modification. Being honest was also vital to the relationship. This is noted in the two clients' comments:

...Don't say something just to placate me because that is not what I want to hear, I want to hear the real thing. (Follow-up interview 10, p. 4).

...be honest with the nurse. ...With the feelings and emotions. I think that that really helped me, telling her that I'm just so emotionally distressed about this whole thing, I can't remember what she answered to be honest, whatever it was; it was the right thing at the time. (p. 3)

Three factors influence the process of *Monitoring*, the first of which is that each person should believe that no issue is too trivial to make contact to discuss. Second, a CM's confidence in a client breeds a client's self-confidence. For example, a client asserted, "...yeah, because good telephone confidence tone from them breeds good confidence on the other end. The pats on the back and keep up the good work, everything sounds good, doing great, keep at it, keep plugging away, keep trying..." (p. 9). The third influencing factor is the relevancy or importance of the partnership. This is influenced by what the CM offers to a client or family member. The degree of importance a person places on the partnership influences how readily and whether a person responds to a message left or a request made by the other person. For one client, even though he or she had no problems, it was very important to that person to have an accessible CM to turn to for support. This is evident in the comment:

...I felt good and there was nothing wrong but I thought, my goodness there's no back up here. So when you (a CM) called, I felt great relief because I thought ah

here's somebody and even though there was nothing wrong it's just a voice knowing that somebody out there knows. Even though you've got all these doctors and I think I'm fairly well educated I just felt I was left on a string. (p. 2).

It seems that those clients who really valued what their CM offered had the CM's telephone number readily accessible.

The different strategies used by CMs and clients during the *Monitoring* process are: *answering questions*, *discussing the recovery progress*, *evaluating progress*, and *modifying the plan*. *Answering questions* involves both people responding to queries or problems, and helping solve problems if need be. After CABG surgery, clients have numerous questions and CMs attend to and address many of them and the related concerns. For example a client commented: "...it was very useful because I had some questions that I was going to ask my doctor and I didn't have to see my doctor. ...I was able to ask the CM..." (p. 7).

*Discussing the recovery progress* involves talking about what is occurring to a client. CMs ask clients about their recovery progress, risk factor modification, and adherence to the plan. Clients bring up their experiences, progress, and problems or issues. During this process information is being repeated and reinforced and sometimes experiences are being normalized. This suggests that for monitoring to occur appropriately, clients likely have had to go through the process of *Normalizing the Experience*.

*Evaluating progress* involves assessing how and what clients are doing to make progress towards their goals. This includes reviewing changes made and comparing them against the plan. It also involves identifying which aspects of the plan are working, which are still appropriate, and which need to be changed. During the interactions, both parties

review the client's recovery experience and explore how the client thinks he or she is doing towards recovery and risk factor modification. For example a client commented: "...there were lots of times when we were talking and, they [a CM] ask where do you think you should be? They would ask that and I would say, too slow, too slow, gotta get going; I want to get back to normal." (p. 18).

Clients often monitor themselves so they can provide their CM with information on how and what they are currently doing. For example a client stated:

...I found that through the calls, I was more concentrated and saying to myself, well I better weigh myself on a daily basis, which I did as an example because the CM would ask that periodically, you know, has your weight fluctuated or whatever? So I thought well I've got to do it or make the effort to do it so you, let me run to the scales and I'll see, you know or what ever. Likewise she was talking about blood pressure and heart rate. We do have a blood pressure machine so I was taking that on, initially I was taking it probably two, three maybe four times a day but in the literature I've read since that you do it once a month in essence, that's enough, you know, but I didn't realize that at the time.... (p. 1)

During the last interaction, a CM works with a client to evaluate what changes or accomplishments a client has achieved over the course of the service. A CM summarizes the changes and accomplishments and sends a copy of the written report to the client's physicians.

*Modifying the plan* involves adapting or changing the plan as needed to reflect changes in a client's goals, conditions, needs, and abilities. Modifying the plan is often done after an evaluation to keep the plan useful.

*Monitoring* provides clients and family members with access to a health professional with whom they can comfortably discuss their recovery or concerns. Not knowing what causes certain symptoms is worrying for clients and their family members. It is reassuring when CMs help clients understand. For example two clients commented:

Reassuring. Reassuring. I would just think what's going on and all of a sudden she'd call and I'd ask her a question and I'd say oh the answer's right there; because she had experience; she knew. It wasn't something I would think of calling her about, it was just that she had brought it up. So it was really good. (p. 2).

...With contact with the hospital, like through the CM, it, um, it was very, um, very useful, very reassuring, too. As I said, part of the problem you have is just mental, your anxiety level, and you know you always magnify things in your mind. Problems are always bigger than what they are. So, ah, she, she's able to put things in perspective. (p. 15).

What is so reassuring is that often the explanation of the symptom is not as bad as clients or family members imagine it might be. This suggests that for some people, part of the recovery experience is worrying and making "worse case" attributions as to the cause of symptoms. This indicates the importance of having gone through the previous process of *Normalizing the Experience*.

*Monitoring* helps clients improve their ability to proceed on their own by increasing their confidence, self-awareness, and competence. For example a client stated: "well it just gave you that much more confidence..." (p. 19). Clients become more competent through having support, reassurance, guidance, and knowledge, as well as through experiential learning, i.e., having taken action. For some clients, talking to a CM provided them with a much needed moral boost as reflected in the following client comment:

...I do think that it's very important to be kept in touch with. It's the sense that yes I'm doing as I'm told and some days it seems as though it's not working quite the way that you think it should; so you need that little moral boost every so often. Hey you're going to have some highs and lows and there's going to be some depression in there and whatnot. I never believed that of course when people told me that there was going to be a few shots of pretty severe depression. (p. 8).

For a number of client participants, their CM was a catalyst for their experiential learning; the interactions give clients extra incentive to change behaviour, such as exercising. This is evident in the three clients' comments:

...actually the phone call, um, was like a catalyst. ... Because, ah, when you, when you come home the only thing you think about is just sleeping and doing nothing because every time you move it's an effort. You know, even just getting out of the chair to go to the bathroom wears you out. So, when the CM called to ask about my exercise, I, ah, it reminded me that, ah, it needed to be done. (p. 11).

...It sort of got you back into oh yeah; I got to look after this. You know? Instead of really slacking off and disregarding your health again. Sort of a reminder that you had to get back on to the straight and narrow here and start doing things that I had let slide. (p. 4).

...everybody's situation is different but when I'm trying to look for work, and I'm worrying about this and I'm worrying about that, you forget to go for your walks or you don't have, you don't seem to have time or whatever it is. You know. So this sort of brings you back to what that is, oh yeah, jeez been letting that slide. (p. 8).

By being monitored, clients were reminded to continue working on their plan to improve their health. The calls reminded most of the client participants of what needed to be done.

As a result of *Monitoring*, family members often stopped "interfering" with a client's recovery and rehabilitation process. For example a family member stated: "...I think it shut me up. I no longer kept him from doing too much..." (p. 9). Some family members become so nervous about the client that during the client's recovery they would limit or stop a client's progress. Reassurance from the CM can reduce this effect and is evidenced in the following family member quote:

If there was something bugging him, little tiny pain or something, he could speak to her about it and she would either wash it away or say what he could do about or something like that. That was very positive. She was happy with the progress he was making and that offset what the rest of us thought which was good because she knew what she was taking about. I can only repeat that for me it was that she was there. (p. 4).

For a few client participants, *Monitoring* induced feelings of guilt. The guilt stems from clients not doing or keeping up with their part of the plan. Guilt can arise from self or from other people's expectations. For these clients their guilt became the instrument that motivated them. This is evidence in the following client comment.

...I just felt that that person on the other end of the phone was listening to me. Was and also, was making me feel guilty to make me get on and do things because I thought, Ah you know I don't feel like walking today but I know that she's going to call so I better get walking. You know and doing these kinds of things.... (p. 2).

The frequency with which *Monitoring* occurs has an effect on the CMs' workload. The more frequent the calls, the greater the workload. In addition, the more calls initiated by clients or family members increases a CMs workload. CMs are always trying to balance the number of calls they can handle. There are times when a CM's workload gets so heavy that after leaving a first message, which if not returned, a CM does not always get a chance to leave a second message in a timely manner. For example, a CM commented: "you know the down side of this is, if I leave a message, I'm not able to get back to them, sometimes for a good two to three weeks, to four weeks so then again a call could be missed..." (p. 6).

#### Collaborating – In summary

**COLLABORATING**, which is the fourth major category in the process of **RELATIONAL CARING IN CARDIAC REHABILITATION**, is an interactive and reciprocal process in which CMs and clients work in partnership towards agreed upon goals. **COLLABORATING** is characterized by the three subcategories *Negotiating the Power Dynamic*, *Developing a Tailored Plan*, and *Monitoring*. CMs and clients engage in open two-way conversations and learn what each person wants and / or offers by *Negotiating the Power Dynamic* of the relationship. At the same time, CMs and clients

are slowly *Developing a Tailored Plan* for a client's cardiac recovery and if applicable, risk factor modification. Assessing progress and updating plans as necessary occur throughout the course of *Monitoring*. **COLLABORATING** influences what a person figures out.

### Figuring It Out

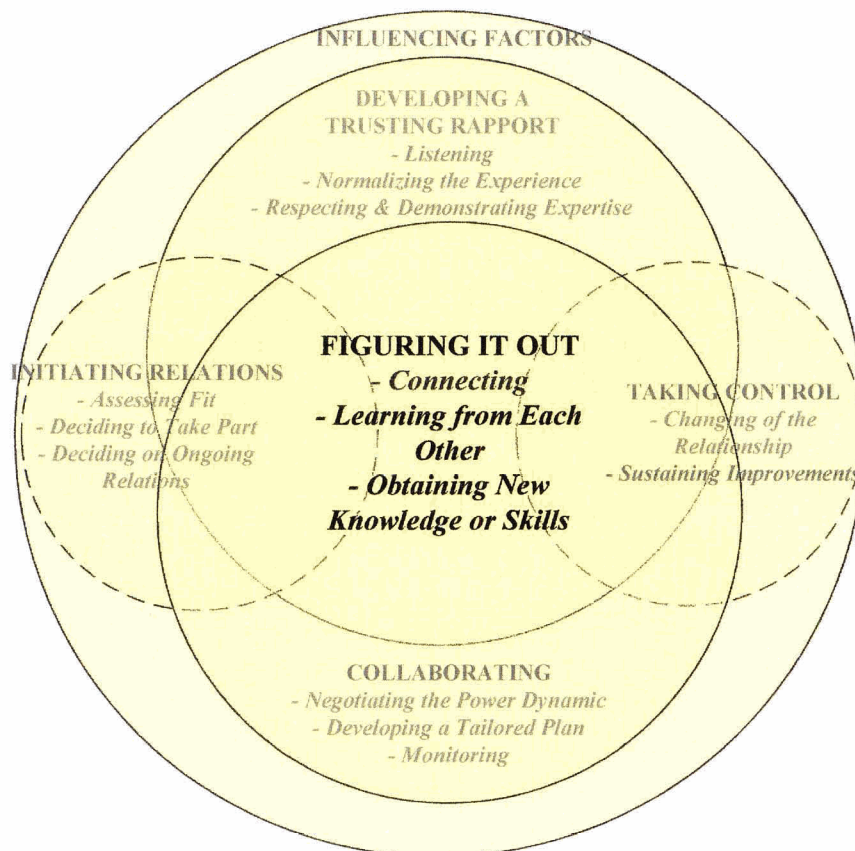


Figure 7 – Figuring It Out

The fifth major category, in **RELATIONAL CARING IN CARDIAC REHABILITATION** is the process of **FIGURING IT OUT** (see Figure 7).

**FIGURING IT OUT** is a reciprocal process that is the culmination of the major categories **INFLUENCING FACTORS**, **INITIATING RELATIONS**, **DEVELOPING A TRUSTING RAPPORT**, and **COLLABORATING**. **FIGURING**

**IT OUT** can occur quickly or slowly develop as the relationship develops. What ends up being figured out is slightly different for everyone. **FIGURING IT OUT** is personal and related to each person's life situation. Some people appear to figure out more things than other people.

**FIGURING IT OUT** is characterized by *Connecting, Learning from Each Other,* and *Obtaining New Knowledge or Skills*. *Connecting* involves interacting in a way that makes the relationship effective. The connection experienced is specific for those involved. It tends to occur when a CM and client have gotten into the "right" way of interacting with each other. Connecting is evident when the relationship feels easy to both parties. According to one CM, connecting is present when a client's response is positive, when they speak at ease, and they appear comfortable (Interview 12). For some clients, connecting is recognized when the CM-client relationship / partnership feels somewhat like a friendship. For instance a client stated:

...Being a professional myself I thought, you think that you know everything but you don't. These, so talking to another professional like she was a friend, because that's basically what I thought and that she knew the answers, helped me and I'm sure that it was much different for some of the other people but for me I could talk to a professional without having to go through doctors or anything like this. That I can just talk to her and say oh you know this bothers me and that bothers me, we do this or we do that or we do the next thing. It helped me that way. (p. 8).

For other clients, connecting appears to occur when those involved feel they are benefiting from the relationship. Connection is acknowledged by some clients at the end of a relationship, when a client makes a comment like, what am I going to do now without these calls! For example, one client commented: "... as things unfolded it definitely was a service that I appreciated there's no question about it and I got a lot out of and would highly recommend that it carry on and all the rest of it..." (p. 9).

*Learning from Each Other* involves gaining knowledge that would not have occurred otherwise. As a result of the complex interactive process, from clients, CMs learn about new or other resources that are available and about particular activities that work for clients. CMs gain knowledge about clients' experiences and strategies they used to deal with their disease, including reactions, responses, and interpreted meanings. In addition, CMs gain insight into how the Case Management Service is working through client feedback. Clients gain knowledge concerning their specific risk factors, medications and supplements, resources, living with their coronary artery disease, and about their response to recovery and risk factor modification.

*Obtaining New Knowledge or Skills* involves acquiring new information, understanding, or skills that a person did not have before. Many clients gained new knowledge on the latest cardiac rehabilitation and recovery treatments. Clients learned new things about heart disease, recovery, and risk factors. By taking action, many clients became more competent in managing their own health and improving their lifestyle, such as exercising. By talking with the CM, clients felt they could trust that information. For example a client commented: "I probably would have found the same material, but can I trust it?" (p. 18). In addition, the talking helped clients "...take [their knowledge] to another level, to a higher level of understanding" (p. 14). CMs gained new knowledge when they researched or acquired information for clients. CMs improved their skills as a practitioner, first in helping clients meet their goals (Interview 12) and second, by learning better and new ways of effectively working with clients (Interview 13).

**FIGURING IT OUT** is influenced by the processes **INITIATING RELATIONS**, **DEVELOPING A TRUSTING RAPPORT**, and **COLLABORATING**. Knowledge of

the anticipated end of the relationship also influences the process. Even though CMs try to individualize the length of the service, their workload can limit the extent to which they are able to extend the service. Clients who need or want significantly longer service may not receive it. How much a person is able to improve their personal situation influences how much they appear to have figured it out. **FIGURING IT OUT** is also influenced by the fact that certain people and personalities make a connection more than other people (Interview 12). The amount of information a client receives influences the process.

Through **FIGURING IT OUT**, the client participants improved their personal situation. Improving a personal situation is person-specific and often involves feeling better in some way after surgery than before. It also involves living through or solving immediate problems and improving aspects of one's life or lifestyle, such as improving diet, exercising regularly, and reducing weight. In addition, it frequently involves regaining personal control, feeling confident, making informed choices, and gaining a better understanding and knowledge of CAD and healthy living. CMs interpret the effectiveness of the service by clients' feedback and by the information they compile and place in the final reports which are sent to a client's physician. For example a CM commented:

...I'm relying on their communications to tell me exactly if I made a difference. Not only what they say, but their actions; what they are doing. ... When I do the final report I can see if there is improvement. If they are happy doing what they are doing. If they overall feel better. I go with all of those things.... (p. 9).

Some of the outcomes considered are physiological changes experienced by clients, client satisfaction, improved client confident, and self-management.

In the section below, I discuss how clients improved their personal situation through making informed decisions, improving their ability to proceed on their own, and / or improving their lifestyle. Making informed decisions involves clients making choices that best suit them. For example, one client stated: "...yeah so she really helped me along the way to make some informed decisions rather than just you know, making a decision based on how I feel." (p.1). CMs try to provide clients with the information they need and want to make informed decisions. When a client has information on a topic or issue he or she can understand his or her options. This helps a client make an informed decision which leads to the next major category **TAKING CONTROL**.

Making an informed decision, however, does not necessarily entail following CM recommendations. It involves deciding what information to disregard, what to pay attention to, what action to take on, and what to relinquish. This is seen in the client comments: "...I decided not to go. I opted not to go. I am not a great joiner of anything and I tend to want to change too many things at once..." (p. 17). The client knew what was in his or her best interest.

In most cases it seems that CMs provided clients with enough information however, in one situation the information was not provided together. For clients to make informed decisions it was important that the information and recommendations be presented with all the necessary information because not all clients will seek additional information. For example a client suggested: "...that when you [a CM] are making a recommendation, that effectively the recommendation would be followed by ... the reason for it or the benefit and the exact dosage or broad range dosage" (p. 16). If a

recommendation does not include all the necessary information this can be frustrating for a client, as evidenced in the following client comment:

...I was a little bit sarcastic with the CM in saying well this was in two separate sessions ... and my next comment was well, what are you going to give me next week on my next call? Is there anything else coming along this way; you're giving me it out in dribs and drabs? .... (p. 3).

Complete information must be provided at the client's level.

Improving clients' ability to proceed on their own involves clients gaining confidence and increasing their personal resources, like knowledge and skills. Many client participants became more competent by having taken action. For example one client states: "I went to the exercise program. ...one of the girls at the exercise group had her surgery the day after me so we kind of compare notes. ... That's helpful" (p. 11). This client found a new and effective way to help herself with her questions and concerns.

For a number of clients, the CM's guidance helped them take action. For example a client commented:

...I found it was very helpful because obviously through the supplements if nothing else, as well as making sure that you did keep track of your weight because I did lose, I think, it was about 12-14-15 pounds just before I went in to the hospital and by the time I came home. And I lost in the first week I lost more too. So that was helpful from the point of view of saying well hey this is going to help the heart, help the cholesterol, it's going to help every thing so effectively I'm going to make sure I don't, within a range, I guess I'm higher than what I was yesterday. [Client laughs] So I kept the records and it made me think about it because I was going to get a call as opposed to just - oh yeah yeah, you're calling me again, ya good-by. Ya good-by, see ya and all the rest of it, a bang and away I go with my wife and all the rest of it. I found it very good quite frankly. (p. 4).

The guidance and monitoring helped keep clients focused on improving their lifestyle. A client who had a prior sedentary lifestyle pattern found that the Management Service contact encouraged him to walk and keep the walking up. This is evident in the client comment:

...Well, it encouraged me to keep walking. Uh I improved a lot in the first three months, just by walking. You know I got my stamina back and I got everything else. And then after that it sort of slowed down, it didn't stop but it sort of slowed down after the first three months. And uh, it really encouraged one to get out and do something to improve yourself. (p. 6).

Improving client lifestyle is seen in the compilation of research project clients' file pre hospitalization and Case Management Service completion data (N=10) on the five modifiable risk factors (abnormal lipid levels, inactive lifestyle, excess weight, smoking, and stress) (see Table 4). This data shows that all the clients made lifestyle improvements. Even though other modifiable risk factors exist, the above mentioned five were only examined to be consistent with prior VIHA MSCR Program pooled outcome data. The five risk factors include:

- ♥ Abnormal lipid levels. Identified as levels not within the recommended target range listed on the Heart Disease Risk Assessment Form (Appendix D). To reach target levels means all five sub-values are within the listed target range.
- ♥ Inactive lifestyle. Identified as a sedentary or mild pre-hospital exercise pattern. To reach target levels means clients exercise more than 30 minutes three times per week.
- ♥ Excess weight. Identified as a Body Mass Index  $> 25 \text{ kg/m}^2$ . To reach target means a BMI is  $\leq 25 \text{ kg/m}^2$ .
- ♥ Smoking. Identified as currently smoking and as having quit less than 6 months prior to hospitalization. To reach target means that smoking cessation has occurred for  $> 6$  months.
- ♥ Stress. Identified by a rating of  $\geq 7$  on a 0 – 10 scale. To reach target level means the stress rating is  $< 5$ .

Coronary artery disease is known to be more prevalent in people with multiple risk factors. Each client has his or her own set of risk factors, however the majority of the client participants (N=9; 90%) had two or more of the above five risk factors (average 2.4). This was consistent with the MSCR Program 2002 findings compiled by Basham (2003) in which 88% of the clients had two or more of the five risk factors. In this project, the percentages of the client participants with each risk factor are as follows: 70% had abnormal lipid levels, 70% had inactive lifestyles, 80% excess weight, 10% a smoking risk factor, and 10% a stress risk factor (see Table 4).

Table 4 – Comparison of Client Participants with VIHA 2002 Findings

	<b>Abnormal Lipids</b>	<b>Inactive Lifestyle</b>	<b>Excess Weight</b>	<b>Smoking</b>	<b>Excess Stress</b>
<b>Client participants (N = 10)</b>	70%	70%	80%	10%	10%
<b>VIHA MSCR Program 2002 data (N = 76)</b>	86%	37%	49%	7%	32%

Table 4 compares this research project's client participants' pre-program self-reported data, (e.g., the percentage with the five identified risk factors), with the MSCR Program 2002 findings (Basham, 2003). It appears that more of the client participants in this project had excess weight and inactive lifestyles as risk factors than the VIHA cardiac rehabilitation program sample population. This difference between the client participants and the program sample population may be due to the fact that the VIHA sample was inclusive whereas this project sample was not. Or it may be due to how the risk factors were defined. I used the same definitions; however, an error could have

occurred since different people compiled the two data sets. It is possible that clients who had an inactive lifestyle and excess weight as a risk factor may have self selected themselves because they gained from the service. My sample pre-selected people who survived post surgery and who identified themselves as having experienced the service.

Table 5 – Summary of Client Participants' Risk Factors and Outcomes

<b>Risk Factor</b> (# of clients with the specific risk factor)	<b>Improvement</b> (decreased risk)	<b>Reached target levels</b>	<b>Increased risk</b>	<b>No change</b>	<b>Other</b>
Abnormal Lipids N=7	N=5, 71%	N=0	N=0	N=1, 14% cholesterol levels were at target prior to hospitalization N=0	N=1*, 14% unknown
Inactive lifestyle N=7	N=7, 100%	N =6, 86%	N=0	N=0	N=3**
Excess Weight N=8	N=4, 50%	N=0	N=1, 12.5%	N=3, 37.5%	N=2***
Smoking N=1	N=1, 100%	N=1, 100%	N=0	N=0	Not applicable
Excess Stress N=1	N=1, 100%	N=0	N=0	N=0	Not applicable

\*no repeat lipid panel available to determine change

\*\*for 3 clients exercise was not a risk factor; all 3 clients resumed healthy exercise patterns post-hospitalization.

\*\*\*for 2 clients weight was not a risk factor; both clients maintained a healthy Body Mass Index of  $\leq 25$  kg/m<sup>2</sup> post hospitalization.

Table 5 reflects the self-reported outcome data compiled from participant clients' files on the number of people with the five identified risk factors upon entry to hospital and the changes in the risk factors by service completion. Since goals of many cardiac rehabilitation programs are ideally to help clients obtain target level risk factors, a

column was created titled, 'Reached target levels'. This column represents the number of clients that achieved the risk factor target level at program completion. The column titled 'Other' contains additional comments or data.

Table 5 also shows that improvements were made in most of the reported risk factors. However, target levels were only reached with exercise patterns and smoking cessation. One client increased their cardiac risk through weight gain<sup>5</sup>. The Case Management Service seems to have the biggest effect on clients' exercise patterns.

Table 6 contains pooled outcome data that shows the differences between the self-reported improvements made by the research client participants with the improvements identified by Basham (2003) made by the MSCR Program clients. Both groups made similar improvements except clinically significantly fewer research project client participants reduced their weight. I am unsure how to explain this difference, although, it too could be related to the fact that my sample was not inclusive or that my participants self-selected.

Table 6 – Comparison of Improvements

	<b>Abnormal Lipids</b>	<b>Inactive Lifestyle</b>	<b>Excess Weight</b>	<b>Smoking</b>	<b>Excess Stress</b>
<b>Client participants</b>	71%	100%	50%	100%	100%
<b>VIHA MSCR Program 2002 findings</b>	68%	96%	74%	100%	96%

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<sup>5</sup> I defined increased risk as a weight gain of  $\geq 4$  lbs.

### Figuring it out – In summary

**FIGURING IT OUT**, which is the fifth major category in the process of **RELATIONAL CARING IN CARDIAC REHABILITATION**, is an interactive and reciprocal process that is the culmination of the categories: **INFLUENCING FACTORS, INITIATING RELATIONS, DEVELOPING A TRUSTING RAPPORT**, and **COLLABORATING**. **FIGURING IT OUT** is a very personal experience. However, when CMs and clients connect, **FIGURING IT OUT** is enhanced through the relationship. CMs and clients learn from each other and both gain new knowledge and skills. Clients gain confidence. After CABG surgery, most clients improve their personal situation. For many clients **FIGURING IT OUT** is the identified when clients take control of their health and situation.

### Taking Control

The sixth and final major category in **RELATIONAL CARING IN CARDIAC REHABILITATION** is the process of **TAKING CONTROL** (see Figure 8). **TAKING CONTROL** is the outcome of the entire process. It is a reciprocal process in which both CMs and clients begin the process of letting go and most clients become proactive in managing and taking charge of their life. The degree of proactiveness is individual and not every client to the same degree takes initiative to control or create their situation.

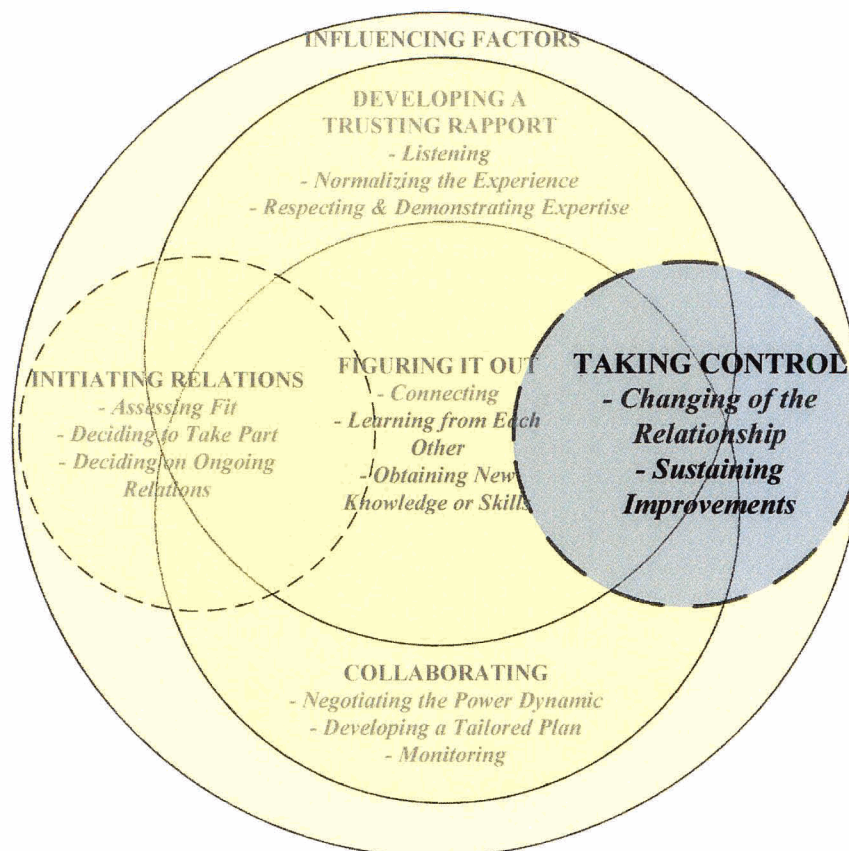


Figure 8 – Taking Control

**TAKING CONTROL** is characterized by *Changing of the Relationship* and *Sustaining Improvements*. *Changing of the Relationship* involves altering or letting go of the CM-client relationship as it exists. CMs often facilitate the process of letting go; yet both parties let go. CMs and clients may let go at different times. CMs use the formal length of time of five to six months post surgery as an indicator that its time to let go.

This is evident in the CM comment:

I know when to end when it comes down to the five or six month of a program ending. So I think that question how do I know when to end it – unless there is a problem with a relationship with both of us or unless the client indicates to me that they do not no longer want follow-up and have voiced that they prefer not to have it. (p. 6)

Sometimes the CM lets go or initiates the letting go before a client is necessarily ready to let go. This is evident in the following client comment.

I would like to emphasize this, when [the CM] said, I think it was June the last time she called me; she said well I'm not going to call you anymore, this is the last call. I said geez, are you cutting the umbilical cord? What am I supposed to do, flounder around here? (p. 14)

For other clients the letting go for the client appeared to occur somewhat before the relationship ended. It appears to have occurred after the client met his needs, for example, a client stated:

I was quite surprised it went on that long. The final phone call was great. We had been through what I wanted to get through and the rest was just sort of okay, from now on you should be feeling...and then of course she said if you have any questions or concerns by all means please call. So the door was always open. (p. 19).

During the stage of letting go, clients usually reduce their dependence and reliance on their CM.

Even though the formal aspect of the Case Management Service has ended the relationship often does not. As a result of the process of **FIGURING IT OUT**, there was a positive transition from a situation of clients wanting and needing help to a situation in which they feel independent and in some sense safe. At the time of the interviews, most of the client and family member participants expressed still feeling connected to their CM. This connection seems to have provided them with a sense of ongoing support and reassurance; they know that they could telephone the CM if issues or questions arose.

One client explained:

...even at this stage if I ran into a problem I would have no qualms whatsoever about picking up the telephone and calling the CM again and saying hey, what about this or can you give me some information about that or get me in the right direction or whatever (p. 9).

The CMs reported that they often receive calls from past clients who have questions or concerns six months to one year after the service has finished (Interviews 12 & 13).

*Sustaining Improvements* involves a client and CM acknowledging that a client has made or resumed one or more aspects of a health lifestyle. During this process a client also shares his or her plan to sustain the lifestyle or behavioral improvement(s) that were developed over the course of the relationship. At the time of interview, most of the client participants reported that they had sustained the lifestyle improvements that they had made during the Case Management Service relationship.

**TAKING CONTROL** is influenced by how a client feels they have recovered by the end of the relationship. It is also influenced by the formal length of the Case Management Service.

A strategy used by CMs to facilitate the process of *Changing of the Relationship* is that CMs let clients know at the relationship onset that the service is for a finite period of time. When the CM anticipates that the next call will be the last formal call, the CM lets the client know during that call that formal CM initiated regular call will cease after next call (Interview 13). However, also CMs inform clients know that they can call back at anytime. For example, a CM stated: "...we would start making a plan to know that would be the ending point. With the idea that they could call back in if they had a problem or question." (p. 2)

#### Taking control – In summary

**TAKING CONTROL**, which is the last category in the process of **RELATIONAL CARING IN CARDIAC REHABILITATION**, is a reciprocal process in which either a CM or client start the process of changing the client-CM relationship. During this process many clients expressed that they were sustaining the changes they have made.

## Summary

In general, the client and family member participants found the Case Management Service to be an extremely helpful and valuable experience. One client stated:

...[the CM] saved me the trouble of having to make an appointment with my MD. And to ask some questions and to deal with the stitches and the medications and all those kind of things. And the drowsiness and the rapid heart rate and that sort of thing. So it was handy being able to just phone, you know (p. 27).

They felt positive about the hospital and case management experience. One hundred percent of the client and family member participants expressed their appreciation for the service and 82% claimed that the case management experience helped them greatly. All of the participants highly recommended that the service continue. This is seen in the following three client comments:

...and I would highly recommend that it carry on and all the rest of it.... (p. 9).

...And would I recommend it for anyone else, definitely, there's no question about that.... (p. 14).

...It certainly should never be cut. It's a wonderful program. (p.1)

The findings from this research project suggest that clients and CMs engage in a process of relational caring. The participants described a process that contains the following categories: influencing factors, initiating relations, developing a trusting rapport, collaborating, figuring it out, and taking control. These processes are interrelated and overlapping, although each person experiences the process somewhat differently. The influencing factors create the context within which the rest of the process occurs. Initiating relations generally occurs early in the relationship and involves a client and CM realizing that they have a mutual interest in improving the client's situation. Thus they both decide to engage in ongoing relations. Through the process of developing a trusting

rapport, trust is increased as a client and CM listen to each other, normalize the experiences, and respect and demonstrate expertise. By collaborating, a CM and client work together as partners to improve a client's health. Collaboration involves CMs and clients negotiating the power dynamic, developing a tailored plan, and engaging in a monitoring relationship. Based on a person's individual framework, figuring it out is the culmination of the four processes: influencing factors, initiating relations, developing a trusting rapport, and collaborating. For clients, figuring it out involves gaining confidence, deciding what information to pay attention to or disregard, and what action to take on or relinquish. Taking control involves changing the CM-client relationship and clients proactively managing and sustaining health improvements. Table 7 below provides additional data which further supports the process.

Table 7 – Relational Caring in Cardiac Rehabilitation: Additional Data

1 <sup>st</sup> Level Category	2 <sup>nd</sup> Level Category	Quotes
Influencing Factors		<ul style="list-style-type: none"> <li>◆ “So as far as these risk factors go, I guess hypertension would be one. .... I think high blood pressure is in our family. ... I had a really bad knee, right knee; I had a knee-replacement done. ... I have a little bit of Gout that comes in from time to time. But I've got that pretty well controlled and so they don't know if my kidneys (problem) are from untreated high blood pressure over a long period of time or whether [a medication]....” (Interview 5, p. 5-6).</li> <li>◆ “Well, the whole ... right before when I went to the doctor and it wasn't my own doctor it was a twelve-year old I'm sure, she was a locum and she asked me, and I don't take any pills, I had not taken any kind of pills of any description. That's a lie; I took Lipitor because my cholesterol is high but nothing else. You know, even an aspirin, I bet you I never took one in ten years. So I felt very healthy and when I went in she asked me something and I said oh well I get tired and sometimes when I'm sleeping and sometimes when I first go to bed you know I feel my heart's</li> </ul>

		<p>going to jump out my mouth or something. But for what ever reason she picked up on something and gave me, startled me by saying I'm worried about your heart. I say oh no, I'm very healthy there's nothing wrong with me. And indeed gave me a prescription for nitroglycerin and spray and I came home and I must confess and I really did not fill that cause I felt this little girl's just not got any experience and the next thing, I got a call from the office that she had made an appointment with a cardiologist called _____ . At one point I was going to cancel it but decided to go anyway, and he then also said this and I got really very distressed and really everything happened very quickly after that. Had an angiogram and had [cardiac surgeon] come in who said he was going to do me right away..." (Interview 7, p. 1).</p> <ul style="list-style-type: none"> <li>◆ "You see I have these girls and they love me and they support me but they're not a lot of help as far as answering questions goes." (Interview 3, p. 8)</li> <li>◆ "... Well probably everyone comes out of the operation; it sure changes your look on things. It's like I was going to live till I'm ninety and all this stuff. Now, wait a minute, I think I'm just going to change my outlook; I might not live until I'm seventy or sixty-five." (Interview 4, p. 3)</li> <li>◆ "Well, I never really bothered exercising before surgery. I'd go about my day and when I got tired I quit and that would be it." (Interview 2, p. 4)</li> <li>◆ "If I had known that the surgery was going to be so straightforward and without any, um problems ...short-term or long-term, then it would have reduced my anxiety level somewhat." (Interview 6, p. 20)</li> </ul>
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1 <sup>st</sup> Level Category	2 <sup>nd</sup> Level Category	Quotes
Initiating Relations	<ul style="list-style-type: none"> <li>◆ <i>Assessing Fit</i></li> <li>◆ <i>Deciding to Take Part</i></li> <li>◆ <i>Deciding on Ongoing Relations</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ "When I first contact them and if it is the first time I've spoken to them, then of course my intent is to let them know about the program..." (Interview 12, p. 1)</li> <li>◆ "It was pretty much explained to me like when I was in hospital. Like what was going to happen afterwards with the follow-up, and so on and so on and so on, within six months. That sort of thing. So I was expecting it. And they did follow-up just like they said they would..." (Interview 4, p. 1)</li> <li>◆ "So my first contact was on the telephone and I think it was a week or two after I got home. I must admit I think one of the questions [The CM] asked me was how was I feeling? I said fine. How's your</li> </ul>

		concentration? I said my concentration isn't worth a damn because in essence all I want to do is be entertained. I'm not interested in reading or conversing. I said I'm a slave to the squawk box right now, that's my entertainment..." (Interview 11, p. 1).
Developing a Trusting Rapport	<ul style="list-style-type: none"> <li>◆ <i>Listening</i></li> <li>◆ <i>Normalizing the Experience</i></li> <li>◆ <i>Respecting &amp; Demonstrating Expertise</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ "You just do not know how far to go. And how far you can push yourself" (Follow-up interview 1, p. 3)</li> <li>◆ "...even though you can read the books, and play what if, what if, what if. But you know there was still a number that if you needed the opinion before you went running to the doctor crying wolf, that you could talk to somebody first." (Follow-up interview 10, p. 3).</li> <li>◆ "I think it is just that the rapport is always going to be there. ...I think that it is really incumbent upon [the CM] to really foster it. Because everybody is going to be an individual". (Follow-up interview 10, p. 3)</li> <li>◆ "You develop a rapport that you can talk openly and easily with an individual" (Interview 11, p. 12).</li> <li>◆ "...I confirmed that my interpretation was correct with the individual [CM]... (Interview 11, p. 12).</li> <li>◆ "Initially letting them know what I did. I would usually identify with them that I was not there as the big stick person, the enforcer, this is all voluntary. I am there as tool for them to use, to help them not to come back into the hospital hopefully anytime soon.... (Interview 13, p. 1).</li> </ul>

1 <sup>st</sup> Level Category	2 <sup>nd</sup> Level Category	Quotes
Collaborating	<ul style="list-style-type: none"> <li>◆ <i>Negotiating the Power Dynamic</i></li> <li>◆ <i>Developing a Tailored Plan</i></li> <li>◆ <i>Monitoring</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ "...that it was good to have 2-way conversations"</li> <li>◆ "...there is a basic understanding that we are equal..." (Interview 12, p. 14)</li> <li>◆ "I felt [the CM] and I were working together towards agreed upon goals" (Follow-up interview 6, p. 1)</li> <li>◆ "...I would try not to let what I wanted to drive the conversation... (Interview 13, p. 3).</li> <li>◆ "I think you have to be genuine, I think they [CMs] have to be engaging. I think they have to recognize the fact that they are not in control, that it is really the client." (Interview 13, p. 6).</li> <li>◆ "I think at one stage [the CM] mentioned that these things were available to you if you need them and that's how I sort of viewed it. It's there if I need it. I mean I wasn't going through anything; mine was pretty simple as a heart surgery. I was in and out in two hours. Real smooth. Like my surgeon said I wish</li> </ul>

		<p>I had more like you. You were easy.” (Interview 4, p. 20).</p> <ul style="list-style-type: none"> <li>◆ “They were really good about, you’re you and everybody else is everybody else and you should be within this general range, see how it comes along.” (Interview 4, p. 13)</li> <li>◆ “It changes in the sense that their needs change, then of course what changes is my intent” (Interview 12, p. 2)</li> <li>◆ “...sometimes you could feel a resistance, or they would always be identifying barriers to doing something’s. Eventually when you would say to them, I am hearing lots of reason why not. So let’s look at it from a different perspective. What is going to help break down those barriers? I understand those are your challenges. Lets try to work around those and I will help you. I think that certainly became, a time when, if they were comfortable at that point, if they could explore, rather than just being a barrier, they would start working around a problem in a more constructive manner rather than just identifying barriers...” (interview 13, p. 3)</li> <li>◆ “I think the way they have it set up and where [frequency] they’re phoning is just about exactly where it should be. Cause it just, it sort of, every once and a while you get a call to remind you that wait a minute, you’re still a work in progress, you know....” (Interview 4, p. 6).</li> <li>◆ “The telephone calls were exactly what the doctor ordered” (Interview 3, p. 13).</li> <li>◆ Absolutely. ... To have someone whose main job was just to keep in touch with people? It isn’t exactly warm and fuzzy but it’s just so comfortable. Yep, I liked it.” (Interview 3, p.5)</li> <li>◆ Oh yeah, for sure. Oh yeah, no doubt. Cause you tend to get lazy. You know when you’re trying ... everybody’s situation is different but when I’m trying to look for work, and I’m worrying about this and I’m worrying about that, you forget to go for your walks or you don’t have, you don’t seem to have time or whatever it is. You know. So this sort of brings you back to what that is, oh yeah, jeez been letting that slide. (Interview 6, p.8).</li> <li>◆ “I think that it helped me emotionally as I say and spurred me to get on with it because you wanted to please” (Interview 7, p. 5)</li> </ul>
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1 <sup>st</sup> Level Category	2 <sup>nd</sup> Level Category	Quotes
Figuring It Out	<ul style="list-style-type: none"> <li>◆ <i>Connecting</i></li> <li>◆ <i>Learning from Each Other</i></li> <li>◆ <i>Obtaining New Knowledge or Skills</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ “We’ve done diet changes...” (Interview 5, p. 11)</li> <li>◆ “I felt comforted by the phone calls and it seems silly to say a comfort but a comfort is a great thing when you’re needing it. And I felt comforted.” (Interview 7, p. 16).</li> <li>◆ “It was very helpful for my wife. She found it kept her on an even keel. She didn’t get uptight ...” (Interview 2, p. 6).</li> <li>◆ “I would probably have made out alright, but I would not have had that kind of confidence in my, in how I was going to recover. You know if you have that sort of a safety net. If there is information, say something did not work out right or if I had a question to ask, [the CM] was always there for you. I don’t think I ever phoned her at all. But she sort of informed me that if here was anything that did not work out right or I needed any kind of help, she was there to help me. And that makes you sort of, it gives you confidence and it takes the pressure off you. I think that it all helps, it cuts your stress level down and it helps in your recovery.” (Interview 5, p. 14).</li> </ul>

1 <sup>st</sup> Level Category	2 <sup>nd</sup> Level Category	Quotes
Taking Control	<ul style="list-style-type: none"> <li>◆ <i>Changing of the Relationship</i></li> <li>◆ <i>Sustaining Improvements</i></li> </ul>	<ul style="list-style-type: none"> <li>◆ “...They wanted me to take it a little slower so I did. I opted to go a little further. Walk slower, go further.” (Interview 10, p. 3).</li> <li>◆ “...What ultimately happened was certainly good as far as I was concerned no question about it” (Interview 11, p.15).</li> <li>◆ “I didn’t have a full appreciation of the ultimate outcome. I do now. And would I recommend it for anyone else, definitely, there’s no question about that.” (Interview 11, p. 15).</li> <li>◆ “It’s a lifestyle change where you say, and your day and daily things that you have to do, that just one of the daily things that you have to do like going to work, you have to go.” (Interview 7, p. 7)</li> </ul>

## CHAPTER 5 – DISCUSSION

The findings from this research project demonstrate that through the delivery of the Case Management Service both Case Managers (CMs) and clients actively participated in a mutual reciprocal process of relational caring. This process, which is influenced by multiple factors, starts with the effect of the influencing factors, then CMs and clients initiate a relationship, develop a trusting rapport, collaborate, figure it out, and end by participating in the process of taking control. This reciprocal relational caring process helped the research project clients consider, alter, and / or change their responses and thus improve their personal situation. Relational caring became a complex and essential process in facilitating clients' recovery and risk factor modification after their CABG surgery.

In this chapter I first discuss the findings in relation to associated literature. Then I review the implications for nursing, the implications for health care policy and delivery, and the implications for research. I end by providing recommendations to improve the MSCR Program and its Case Management Service.

### Related Literature

The process of Relational Caring in Cardiac Rehabilitation reflects and incorporates other theories, such as caring theory, health promotion, relational practice, empowerment, the health belief model, social cognitive theory, and self-efficacy. In this section, I briefly discuss how these other theories relate to my theory.

### Caring theory

For more than a quarter century nursing has developed and expanded knowledge related to caring; from which many articles and books have been written (Huch, 1995 cited in Smith, 1999). Nursing literature contains numerous conceptualizations of caring; however, there is no agreement on the definition of caring (Morse, Solberg, Neander, Bottorff, & Johnson, 1990). Opposing opinions exist as to whether caring is a core and a defining concept unique to nursing (Morse et al., 1990; Smith, 1999).

Regardless, relational caring was vital to the participants who experienced the MSCR Program Case Management Service. The establishment of a reciprocal caring relationship between a client (and / or family member) and CM was essential to helping a client improve his / her situation.

Morse et al. (1990) identified five perspectives of caring in the nursing literature: “caring as a human trait, caring as a moral imperative or ideal, caring as an affect, caring as an interpersonal relationship, and caring as a therapeutic intervention” (p. 3). Sourial (1997) later identified eight conceptualizations of caring which she titled: ethics; instrumental and affective; traits; patients’ and nurses’ perception of caring; holism; humanism; organizational; and quality. In her analysis of caring, Sourial (1997) referred to three essential components of caring: respect, protection of human dignity, and competence.

According to Morse et al. (1990) there are three major theories of caring: Watson’s Theory of Human Care, Orem’s Self-care Deficit Theory of Nursing, and Leininger’s Theory of Transcultural Care Diversity and Universality. In addition there are other

midrange theories of caring. In this chapter, I discuss only Watson's Theory of Human Care.

In her theory, Watson (1979) assumes that caring is vital to nursing practice. "For Watson [1995], nursing is a human science focusing on the study of the relationship of caring to health and healing" (cited in Smith, 1999, p. 15). Watson's theory of caring illustrates the kind of relationships necessary to enhance, preserve, and protect human dignity (Morse et al., 1990; Sourial, 1997; Watson, 1979). According to Morse et al. (1990) Watson's theory explicitly views 'caring as a moral imperative or ideal' and implicitly views 'caring as an interpersonal relationship'. Watson's theory is based on ten interactive and interrelated *carative* factors "...that are enacted in the context of a caring [nurse-client] relationship" (Morse et al., 1990, p. 8). How the factors are implemented is relative to those involved (Neil, 2002). All ten of Watson's factors seem apparent in the process described by participants and titled Relational Caring in Cardiac Rehabilitation.

The first of Watson's ten factors, is that the *formation of a humanistic-altruistic value system* is a value system that a nurse possesses which guides his or her practice (Watson, 1979). The values incorporate kindness, concern, and respect for differences to name a few. Watson's first factor was identifiable throughout the participants' comments. For instance, the nurse CMs expressed that they gained satisfaction by giving to clients and by respecting that clients are individuals who pave their own way.

The second factor, *installation of faith-hope*, involves nurses facilitating effective client-nurse interactions to promote positive health and "...wellness by helping the patient adopt health-seeking behaviours" (Neil, 2002, p. 149). The participants described

how the reciprocal process of relational caring and a CM's positive attitude helped clients improve their personal situation.

Third is the factor *cultivation of sensitivity to self and others*, occurs when a nurse is herself in a relationship and thus she acknowledges her feelings to a client. A client therefore sees the nurse as authentic and genuine. According to Watson (1979), with this factor empathy develops. One CM commented she does not put on a front. Many of the client and family member participants expressed that they perceived the CMs to be authentic and genuine.

The fourth factor, *development of a helping-trust relationship*, which is dependant on the prior three factors (Watson, 1979) "...promotes and accepts the expression of positive and negative feelings" (Neil, 2002, p. 149). The helping-trust relationship involves nurses using processes, such as effective communication, openness, altruism, congruence, empathy, and non-possessive warmth (Neil, 2002; Watson 1979). Watson notes that 'a patient / client who feels that the nurse really cares about and really sees the person's individual needs and concerns is likely to establish trust, faith, and hope in the nursing care...' (1979, p. 25). One CM commented that she helped build a rapport by talking from her own standpoint of having risk factors. From the data it was evident that a 'helping-trust relationship' developed between a client (or family member) and CM.

The *promotion and acceptance of the expression of positive and negative feelings* is the fifth factor. A number of client and family member participants expressed that through the relationship they were able to share both positive and negative feelings they had with the CM. For one client this involved the experience of sharing feelings with the CM that she had not shared with another health professional before.

The sixth factor is the *systematic use of the scientific problem-solving method for decision making*. This incorporates the nursing process which consists of assessment, planning, intervention, and evaluation and also incorporates the scientific research process (Watson, 1979). CMs use this approach to promote client decision making and to work with a client to identify a problem or issue and possible solutions, develop and then implement a plan, evaluate the outcome and modify as needed.

The seventh factor, *the promotion of interpersonal teaching-learning*, is a joint process where both parties play an active role in teaching and learning. According to Watson “the nurse’s role in health care requires that she or he assess what a person needs to know, understands what the perceptions of the person are in relation to the presenting stressors, and the person’s need and ability to learn” (1979, p. 78). Relational caring promotes interpersonal teaching and learning; clients received information they wanted which supported clients’ decision making and responsibility; at the same time learning takes place for the CMs.

The eighth factor, *provision for a supportive, protective, and (or) corrective mental, physical, sociocultural, and spiritual environment*, recognizes that the internal and external environment are interdependent and influences the health of a person. Through the process of relational caring internal and external factors, such as depression, beliefs, and family history, were identified that as factors that influence a client’s health and recovery.

*Assistance with the gratification of human needs* is the ninth factor. This involves the nurse recognizing the needs of her or himself and a client and the different order of

priority each need holds. CMs understand that basic needs, like obtaining employment, usually take precedence for clients over other needs, like exercising daily.

Lastly, the factor *allowance for existential-phenomenological factors* is a complex process that involves nurses helping clients find their meanings or their personal frame of reference and their sense of responsibility (Watson, 1979). Through this process clients feel understood. CMs commented that they try to explore with clients, the clients personal drives and reasons for making changes. A number of client and family member participants expressed that they felt understood by their CM.

In the literature, criticisms exist about Watson's complex theory. One criticism is that the caring process is too theoretical and thus a large gap exists between the theorized process and clinical practice (Morse et al., 1990). Relational Caring in Cardiac Rehabilitation provides an example of how Watson's theory of care can be delivered in a clinical context. Another criticism is that the ten factors focus primarily on psychosocial versus physical caring. However, in cardiac rehabilitation and recovery from CABG surgery, psychological care was important to many clients and is the primary aspect of the care delivered by CMs. Occasionally CMs provide physical care, such as incision care or checking vital signs.

As with Watson's theory, the process of Relational Caring in Cardiac Rehabilitation is unique to the individuals involved; all parties are active participants. However, missing from Watson's theory is the display of the reciprocal nature of the interpersonal relationship, which is present in Relational Caring in Cardiac Rehabilitation.

### Health promotion, relational practice, and empowerment

In this section I discuss caring in the context of health promotion. I also include Hartrick's notion of relational practice and empowerment.

In the literature, health promotion has many definitions. Mabel and Macleod Clark, (1995) identified six uses of the concept health promotion in the new and traditional paradigm perspectives. Relational Caring in Cardiac Rehabilitation fits within the two new paradigm perspective definitions identified by Mabel and Macleod Clark (1995). The first of which is that health promotion is '*health education plus*', which is health education with skill training (Maben & Macleod Clark, 1995). The second definition is that health promotion is an approach comprised of a collection of values (Maben & Macleod Clark, 1995).

In 1986 the Canadian Ottawa Charter on Health Promotion document defined health promotion as the "process of enabling people to increase control over and to improve their health" (World Health Organization, 1986). Maben and Macleod Clark (1995) put forward that implicit in this Ottawa Charter definition are the concepts of collaboration, empowerment, and equity. The charter marks the commencement of the new paradigm of health promotion (MacDonald, 2002).

From their concept analysis, Mabel and Macleod Clark (1995) proposed the following definition of health promotion:

...health promotion is an attempt to improve the health status of an individual or community, and is also concerned with the prevention of disease, though this is not its only purpose, as health is not merely the absence of disease. At its broadest level it is concerned with the wider influences on health and therefore with the policy and legislative implications of these. Health education through information-giving, advice, support and skills training is a part of, and necessary prerequisite to, health promotion, attempts to raise awareness of the issue in question and fosters an ability to cope with illness or disease. More radically, health promotion is in itself

an approach to care through empowerment, equity, collaboration, and participation, and may involve social and environmental change. (p. 1163).

Hartrick (2002) discusses health promotion through the notion of relational practice which is based on work by Buber (1958). Buber (1958) perceives humans as being in relation with their world on three spheres: nature, people, and spiritual beings. For Hartrick relational practice is the notion that the interpersonal relationship a nurse has with a client can have an effect on a client's overall health. From a holistic approach, the caring nurse-client relationship promotes client capacity, which creates healing.

Hartrick (2002) sees relational practice as health promoting when professionals engage in a relational way of being, which creates a meaningful connectedness between a client and practitioner that can transform the experience. This entails creating an egalitarian and participatory partnership between nurse and client. "Practitioners do not just act collaboratively, they become collaborators" (Hartrick, 2002, p. 50). A health promoting relationship is based on the assumption that there is mutuality in relationships and that each person is actively involved (Hartrick, 2002). In this kind of relationship, the goal is to act to get a certain relational flow, not to act for a particular outcome. Hartrick argues that often the assumptions on which a disease-focused treatment perspective is based hinder health promotion. "Although relationships may well promote certain outcomes, their most significant value is the intrinsic connectedness people experience when they are in-relation" (Hartrick, 2002, p. 52). According to Hartrick, "...the ability to be in 'caring-relation' requires far more than the refinement of behavioural communication skills" (2002, p. 52). Understanding of the essential aspects of the relationship is a key element for nurses to be able help clients.

Relational practice as described by Hartrick is the essence of the Case Management Service and it is clearly evident in the CM-client relationship. The process of Relational Caring in Cardiac Rehabilitation as described by the participants is a relational practice. Relational caring seems to occur in face-to-face or telephone interactions and in long or short-term relationships. With minimal or no face-to-face contact, strong CM-client relationships can still be developed. Relational caring seems to occur when the relationship is really important to both parties. The process of Relational Caring in Cardiac Rehabilitation adds to the caring literature in nursing by providing a concrete example of relational practice.

A criticism in the nursing health promotion literature is that a service, like the Case Management Service is based on a reductionist perspective (in general this perspective "...assumes that everything is caused by something in a predictable way" [Johnson, 1995, p. 77]) and fragments the care of the individual by creating organized systems and endorsing individual responsibility. According to Northrup (2002):

practice methodologies consistent with this view guide professionals to assess client readiness for change as well as their self-care progress or lack of, to provide and / or direct persons to self-care programs and tools designed to effect change, to support strategies for self-care, to monitor individual commitment to self-care practices, and to measure behaviour change and health status" (p. 132).

Northrup sees this approach as one that protects a system that relies on professional expertise and individual responsibility. Yet by looking at the Case Management Service in context, one can see that it is a health promoting service and it does not fragment care. The clients with whom a CM works are people who, prior to their cardiac event were living their lives in the community. Then after surgery, clients experience new and unfamiliar sensations while recovering from a major event. For many this was

worrisome. Thus for a period of time, CMs focus is on what is most important to clients, i.e. their heart and the recovery from surgery. The Case Management Service intervention supports and honours the significance that the surgery had in these people's lives.

A similar criticism in the nursing health promotion literature relates to the use of monitoring, which is considered a surveillance technology (MacDonald, 2002).

MacDonald writes that:

the surveillance critique, as defined by Nettleton and Bunton (1995), draws from the writings of Foucault (1972, 1975, 1979) and argues that the technologies of health promotion serve to monitor and regulate populations on the one hand, and on the other, to construct new identities (MacDonald, 2002, p. 38).

While, Foucault does not necessarily condemn surveillance as a technique, MacDonald remarks that:

Foucault might argue that through the discourses of health promotion and the application of health promotion technologies, a subtle coercion takes place as individuals internalize rules of behaviour. The power in this internalization is that it results in a form of self-censorship and self-regulation, thus eliminating the need for governments to censor and regulate (2002, p. 38).

As a reaction to the surveillance provided by the CM, some of the client participants reported engaging in behaviour so that they could report to the CM that they did it. Behaviour becomes internalized once a client persists with the behaviour change after the CM stops phoning. From the interviews, it seemed that most, if not all, of the client participants internalized some of the lifestyle or behaviour changes.

As a result of the technique of monitoring or surveillance, a few of the client participants expressed having feelings of guilt by being monitored. Were these feelings of guilt from coercion or just a client's desire to make changes? To answer these questions CMs need to reflect on their interactions with clients and they need to confirm their reflections with clients. As nurses and nurse CMs, we should not coerce clients into

making lifestyle or behaviour changes. We need to self-monitor and reduce our use of guilt inducing language, such as 'should' and 'must' statements (Clark & Dunbar, 2003). CMs have much information that they could share with clients, thus CMs need to constantly check with clients to see what information clients need and want. As nurses, we need to be aware of the potentially unhelpful and possibly harmful consequences of our relational caring approach (MacDonald, 2002).

Empowerment, which is an attribute of health promotion, is a complex concept and interpretations are dependent on the theories and beliefs in which it is grounded. Empowerment is often defined by what it is not, that is oppression, powerlessness, helplessness, and hopelessness. Empowerment as a concept is associated with the terms power, control, choice, advocacy, authority, enabling, and motivation. Empowerment is both a process and an outcome (Ellis-Stoll & Popkess-Vawter, 1998; Fulton, 1997; Rissel, 1994).

Many authors refer to empowerment as a single focus; however, Rissel (1994) separates empowerment into two forms, psychological and community empowerment. Psychological (or personal) empowerment focuses on a win-win process where a person experiences an increased sense of personal power in their life resulting in a greater personal sense of self-esteem and self-determination (Fulton, 1997; Rissel, 1994). Whereas, community (or political) empowerment focuses on a group of people or community. Group members gain an even greater sense of psychological empowerment from being involved in collective social or political conflict and action. A second gain from community empowerment is the attainment of some amount of resource control that enhances the group's collective action (Gutierrez, 1995; Rissel, 1994). Psychological

empowerment is a prerequisite for community empowerment (Ellis-Stoll & Popkess-Vawter, 1998; Fulton, 1997).

Empowerment is a context specific process. The process of psychological empowerment is thought to involve four components. First, personal development occurs. A person identifies their experiences and concerns. Second, the process advances through support and mutual participation from being a member in a group or organization (Fulton 1997; Rissel, 1994). Knowledge and critical understanding is gained through dyadic dialogue or group dialogue. Third, skills are developed to communicate with or to confront others or to make personal changes. Fourth, an action is taken and integrated into the reality of a person's life.

Falk-Rafael (2001) studied the meaning of empowerment with twenty-four public health nurses and six clients. The findings reflected a process of evolving consciousness in which "public health nurses conceptualized empowerment to be an active, internal process of growth that was rooted in one's own cultural/religious/personal belief system, reached toward actualizing one's full potential, and occurred within the context of a nurturing nurse-client relationship" (p. 4). This conceptualization involves both parties being actively involved. Through a reciprocal and iterative nurturing nurse-client relationship, client empowerment occurs when clients are active participants who increase their awareness as to their right, control, strengths and limitations (Falk-Rafael, 2001). In the interactions nurses facilitate relationship building, advocacy, knowledge and skill development, and capacity building (Falk-Rafael, 2001). The outcome of the process is changes in a client, relationships, and / or behaviours. Falk-Rafael adds that this whole process is influenced by what each person brings to the relationship, such as

his or her personal or cultural values and beliefs. This conceptualization of empowerment is very similar to what was described by the participants in this project which lead me to conclude that the Relational Caring in Cardiac Rehabilitation is an empowering process.

Finfgeld (2004) provides an excellent summary of becoming empowered in her comment:

...becoming empowered involves an interpersonal process that is characterized by active and equal participation of 2 or more individuals. Interactions are characterized by respectful mutuality, power sharing, and participatory decision making, which requires relinquishment of professional power, collaboration, and negotiation. All parties come with unique perceptions and knowledge, and everyone is placed in a position to learn from each other. Although professionals may bring expert teaching, counselling, or lobbying skills to the table, the mutual exchange of ideas is axiomatic to the empowerment process" (Finfgeld, 2004, p. 46).

Nurse CMs participating in Relational Caring in Cardiac Rehabilitation are engaging in a health promoting practice. Through this process both clients and CMs are becoming empowered. The Case Management Service, even though it does not encompass all aspects of health promotion, is health promoting since it enables clients to take control over things that influence their health.

#### Health belief model

The health belief model, which was originally developed in the 1950's by a number of social psychologists, has evolved and expanded over the years. It is a conceptual framework that explains both health behaviour change and maintenance and is used to guide intervention (Strecher & Rosenstock, 1997). According to Strecher and Rosenstock (1997), the health belief model is a value expectancy theory that is based on the following understanding.

In general, it now is believed that individuals will take action to ward off, to screen for, or to control an ill-health condition if they regard themselves as susceptible to

the condition, if they believe it to have potentially serious consequences, if they believe that a course of action available to them would be beneficial in reducing either their susceptibility to or the severity of the condition and if they believe that the anticipated barriers to (or costs of) taking the action are outweighed by its benefits. (Strecher & Rosenstock, 1997, p. 44)

Key concepts within this model are: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, other variables, and self-efficacy.

There are numerous strategies, based on the health belief model, evident in the process of Relational Caring in Cardiac Rehabilitation that are used to influence client behaviour. First is the strategy of targeting the service to a defined population (e.g., clients who have had CABG surgery). Second, the strategy is personalizing risk factors to each individual client. Discussing clients' condition, risks, and perceived susceptibility of their risk is a third strategy. Fourth, is the strategy of discussing the realistic effects from behaviour change. Establishing an action plan is a fifth strategy. Sixth, is the strategy of identifying barriers and reducing them by means of providing reassurance, clarification, information, or assistance. The seventh strategy is using monitoring as a reminder system. The final strategy is providing guidance or linking to specific training, establishing progressive goals, and giving verbal reinforcement.

#### Social cognitive theory and self efficacy theory

Miller and Dollard (1941) originally developed social learning theory which, in 1986, Bandura further developed and renamed it as social cognitive theory (Baranowski, Perry, & Parcel, 1997). Social cognitive theory by Bandura (1977) is a comprehensive theory of human behaviour change that also focuses on intervention methods to promote behaviour change (cited in Houston Miller & Taylor, 1995). The major concepts within this theory include: environment, situation, behavioural capacity, expectations, self-

control, observational learning, reinforcement, self-efficacy, emotional coping response, and reciprocal determinism (Baranowski, Perry, & Parcel, 1997, p. 157). The theory emphasizes that behaviour, cognitive, other personal factors, and the environment interact which, in turn, affects an individual's behaviour (Baranowski, Perry, & Parcel, 1997). The interactions determine each person's unique behaviour (Baranowski, Perry, & Parcel, 1997).

Among the crucial personal factors are the individual's capabilities to symbolize behaviour, to anticipate the outcomes of behaviour, to learn by observing others, to have confidence in performing a behaviour (including overcoming any barriers to performing the behaviour), to self-determine or self-regulate behaviour, and to reflect and analyze experiences (Bandura, 1986 cited Baranowski, Perry, & Parcel, 1997, p. 153)

A significant part of Social Cognitive Theory is managing outcome expectations.

Through the Case Management Services and during the process of relational caring, CMs manage clients' outcome expectations.

The design of the MSCR Program Case Management Service implicitly incorporates concepts from this theory. A few examples are that the Case Management Service telephone follow-up was designed to:

- ◆ provide opportunity to correct client / family member misconceptions
- ◆ promote client mastery of skill through guided and skill practice learning
- ◆ facilitate opportunities for client self-monitoring, setting goals, and problem solving.

Social cognitive theory considers self-efficacy to be an important element in behaviour change. Self-efficacy is defined as "the confidence a person feels about performing a particular activity, including confidence in overcoming the barriers to performing that behaviour" (Baranowski, Perry, & Parcel, 1997, p. 164). Self-efficacy as

a process is used with stages of change theory to determine clients' readiness for change so that small successful steps can be taken. In the Relational Caring self-efficacy becomes an outcome when clients increase their confidence.

### Implications for Nursing

The findings demonstrated that a number of the client (and family members) participants saw the CMs supportive role as vital to their recovery. Many clients and family members expressed their fears and concerns in the early recovery period. CMs helped alleviate these by providing clients and family members with positive reinforcement, encouragement, and reassurance.

The findings from this research project have important implications for nursing. The implications are: early CM involvement, CMs attend to questions and concerns, CM awareness of a client emotional state, CM support informed decision making, CMs build client and / family member capacity, and CMs increase their skill at capacity building. The first implication is that nurses and nurse CMs need to be aware of the importance of early CM involvement. The findings support that the early establishment of relational caring between a client (and family member) and the CM is key to the effectiveness of the Case Management Service. Houston-Miller and Taylor (1995) acknowledge that "...it is clearly important to support and reassure patients early in the recovery period when they are experiencing heightening anxiety and fear" (p. 28).

The second implication for nursing is that nurses must attend to client questions and concerns. The CMs played an important role in attending to clients' and family members' specific questions and concerns during the early recovery period. Many clients and families are faced with and must deal with much uncertainty in the early recovery

period (Keeling & Dennison, 1995). Even though the majority of concerns are self-limiting and the risk of major complications and long-term problems are low (Dafoe & Koshal, 1999), many clients still wonder and worry. Nicklin (1986 cited in Houston Houston-Miller & Taylor, 1995) found that 55% of the post-myocardial infarction client-initiated calls occurred in the first two weeks post discharge. Dafoe and Kashal (1999) report that clients often "...have difficulty attending to risk factor reduction or exercise programs if their concerns are focused on physical problems" (p. 235). Beckie (1989) found an inverse relationship between anxiety and knowledge levels after CABG surgery. The Case Management Service provides clients and some family members with a venue to discuss their concerns and, when appropriate, for their concerns to be normalized. A number of client participants commented that through discussion with a nurse CM, they were able to determine the significance of their concern and whether immediate physician attention was required. By virtue of the CMs being there and hearing client (and family member) participants during the early recovery period after CABG surgery, CMs helped clients and family members gain knowledge, problem solve, and identify common or normal experiences.

CMs must watch for a sign of depression in a client is the third implication. Helping identify when clients are clinically depressed is a role that CMs have. It is well documented in the literature that clients with depression and coronary heart disease are at a greater risk of further cardiac events (Charlson & Ison, 2003). Depression is a significant problem. According to Charlson and Isom (2003), only half of the pre-operative CABG surgery clients who have symptoms of depression experience symptom resolution by six months after surgery. Of the clients that did not have pre-operative

depression, eighteen percent experienced significant symptoms of depression post-operatively (Charlson & Isom, 2003). Oxman and Hull note that clients “who perceive themselves as having more social support report fewer depressive symptoms and less functional impairment at six months” (as cited in Charlson & Isom, 2003, p. 1457). Having support is such a vital part of recovery and health. The Case Management Service should provide support to the client participants and link them to other resources that could help them to increase their social support.

A fourth implication is that nurses and CMs must realize that helping a client make informed decisions is important because it respects the client. Some clients who received the Case Management Service made a choice not to undertake or follow through with lifestyle changes, medical treatments, or participate in other services. In these situations, the Case Management Service is still beneficial by helping clients make informed decisions about what they choose.

The fifth implication is that nurses and nurse CMs need to recognize that they can be change agents for their clients. CMs should play a significant role in helping clients learn to manage their cardiac condition. It is widely known that education itself does not change behaviour. In self-management, “education must assist [clients] in gaining both skills and, more important, the confidence to apply these skills on a day-to-day basis. It must also help the [clients] to cope with changing roles and changing emotions” (Lorig, 2001, p. XIV). After a significant cardiac event, such as CABG surgery, many clients are interested in improving their health and lifestyle. Yet, while trying to learn about new medications and interpret new sensations, clients often do not know what they should or can do. Most clients do not know how much to push themselves or how to identify when

they have done too much. Nurse Case Managers are in an excellent position to educate clients by answering questions, providing information, clarifying misconceptions, reinforcing information, and helping clients interpret the information. In addition, CMs should help clients by prompting and reminding clients to continue to work toward their goals. Through the regular contact, CMs should help clients to develop skill as they apply their knowledge to their daily life.

Since some clients do not know other people who have had CABG surgery, CMs can help clients by linking them to peer support groups if appropriate. Involving volunteer peer support groups is a way that CMs can extend the service and provide value at a low cost.

Nurses and CMs also need to ask family members if they have questions and concerns. Different family members had different needs. Some family members talked frequently to a CM whereas others did not. Some family members felt supported and reassured just by knowing that their loved one was being followed by a CM. Even if a family member had limited contact with the CM, they seemed to know they could contact the CM if need be. One family member reported that they had limited contact with the CM because they felt that the recovery was mostly the client's issue. Whereas another family member expressed that she had regular contact with the CM because her husband was a poor communicator.

Nurses and nurse CMs should work at improving their skill and ability at helping increase client and family member capacity is the sixth implication. Nurse CMs can expand their ability at illuminating client / family capacity by asking client questions, such as:

...How has this (person or) family been successful in living with [CAD], what capacities have fostered this success? In what ways have the [person] or family actively chosen to make / not make changes in response to living with [CAD]? What has led to these choices? In what ways could the health experience of a person, family members and the family be transformed and enhanced? For example, in what ways has this family discovered its members' own capacity to live with, and manage [CAD] in their lives? How could this capacity be supported and enhanced? (Hartrick, 1997, p. 65).

CMs should incorporate these questions into CM-client interactions. Through this kind of dialogue, clients (and family members) would build on their existing strengths and skills.

### Implication for Health Care Policy and Delivery

The findings from this research project have important implications for health care policy and delivery. The implications are that Relational Caring in Cardiac Rehabilitation provided during the Case Management Service: is an inexpensive service, facilitates high participation rates, has specific requirements to be an effective CM, provides access to interdisciplinary team members, and creates productive interaction between the client and CM. Another important implication is that CMs need caseloads that allow for flexibility.

A major implication is that the Case Management Service provides a relatively inexpensive alternative and complementary approach to health care delivery. Nurse case-managed telephone follow-up intervention with the option of face-to-face clinic contact has a profound effect on clients and to some degree family members after clients' CABG surgery. The relative cost of the service is small when compared to the cost of calling a physician or the cost of CABG surgery. Currently it costs a patient thirty five dollars to call a physician, where it is only costing the VIHA about nine dollars<sup>6</sup> for a patient to call a CM. In addition, in our current fee for service system, clients can only ask their physicians about one problem per visit, whereas they can ask CMs about multiple issues.

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<sup>6</sup> Eighteen dollars if the CM and client talk longer.

In this health region, in the 1999/00 fiscal year, the average cost for CABG surgery based on a specific Case Mix Group<sup>7</sup> was calculated to be \$11, 286<sup>8</sup> per patient (Rinzema, 2001). Using a nurse's wage at that time (plus 18.5% for benefits), the cost for six months of Case Management Service is \$440 per patient (Rinzema, 2001). This is less than 4% of the cost of bypass surgery. Based on this research project's findings and the VIHA MSCR Program findings compiled by Basham (2003), the region should spend a little money to support and help clients recover and improve their health in hopes of delaying or preventing further heart disease.

The rate of participation in cardiac rehabilitation programs has an implication for health care policy and delivery. In the cardiac rehabilitation literature it is often recognized that "...only 11-38% of eligible patients with cardiovascular disease participate in cardiac rehabilitation programs" (Southard, Southard, & Nuckolls, 2003, p. 341). Harris and Record (2003) report that the lowest participation rates are among older clients, women, single people, and clients living in the outskirts of the community [e.g., not near the cardiac rehabilitation program(s)]. In this program CMs provided service to about 73% of the clients who had coronary bypass graft surgery living in the local region, of which approximately 23% were female. In addition, to having good participation rates, a higher percentage of females are participating than the traditional 17%.

Based on the 2003 VIHA MSCR Program outcome evaluation (Basham, 2003) and this research project's findings, the MSCR Program helped clients improve their lifestyle and health. For example, both of these reviews found that during the recovery period

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<sup>7</sup> Case Mix Group is a group of diagnoses that have a similar clinical problem and similar expected resource use, as measured in days of patient care.

<sup>8</sup> The determination of the cost of a CABG surgery or another cardiac procedure varies depending on what is included and excluded in the costing process.

more than 95% of the clients that were identified as having a sedentary or mild pre-hospital exercise level improved their exercise patterns by the end of the Case Management Service. This suggests that this Case Management model in which clients and CMs engage in relational caring is effective in helping achieve good health outcomes. In addition, it also suggests that the MSCR Program model of delivery through the community is effective. The CM model should be used to as a method to improve client participation in cardiac rehabilitation.

Another implication for policy and delivery is the recognition as to the requirements to be an effective Case Manager. The process of relational caring could not occur without a strong practitioner; a person with strong skills who understands the nursing perspective and the MSCR Program model. Such a person must have a depth of clinical knowledge related to cardiac recovery and rehabilitation as well as knowledge of the program, community, and other resources available. Client and family member participants acknowledged important CM characteristics, such as someone who is genuine, warm, friendly, non-judgmental, keen to help, cheerful, personable, gentle, nice, and someone who respects client choice. These CM qualities helped the clients and family members feel cared about and optimistic about the future. CMs also saw these qualities as important and they reported striving to provide high standards of care by adhering to professional standards, codes of ethics, and cardiac rehabilitation best practice guidelines. The nurse CMs in the program should understand their boundaries and give clients reassurance but not false reassurance. They should know when to link or refer clients to a physician, other health professionals, or services. To be effective, a CM needs to apply, in the context of the MSCR Program and this community, the required

skills, her personal characteristics, and understanding of boundaries. Yet the success of this kind of service is also contingent on having a nurse CM who can engage in relational caring.

CMs should be an integral part of the interdisciplinary team providing clients with care. After their acute cardiac event, many of the client participants initially anticipated that their physicians would be their primary health advisor. Yet most physicians don't have time, nor are they funded to provide the education and follow-up that many clients need and want. In this study, nurse CMs alone and / or with the assistance of other health professionals, such as a dietitian or pharmacist, were able to attend to many of the clients' post-surgery issues and concerns. By receiving the Case Management Service, many clients reported seeing their physician for medical issues only, and thus much of the clients' education and support was provided by less costly and more appropriately trained health professionals. In the end, all of the client participants, both those who saw very little of their physician and those who had more regular follow-up with their physician, felt very satisfied with the Case Management Service and their care.

Another implication for health care policy and delivery is the recognition that the model Relational Caring in Cardiac Rehabilitation is an example of 'productive interactions' between clients and health providers. The relational caring model also fits with the chronic disease management model that the province of British Columbia is moving towards. The value of the relational caring type of interactions are being recognized to aid client self management. New initiatives are being undertaken to improve client and health care provider relationships.

In May 2003 the VIHA signed up to participate in the one year *Province-wide Chronic Disease Collaborative for Patients with Congestive Heart Failure in British Columbia*, hereafter called the Collaborative. The long range goal of the Collaborative was to help the health authorities build infrastructure to improve the quality of care for clients with chronic conditions and their family members while sustaining or reducing health care costs (Collaborative Steering Committee, 2003). It was understood that the goal would be “achieved by implementing a system-wide model that focuses on improving interactions between patients and providers” (Collaborative Steering Committee, 2003, p. 9).

The frameworks applied by the Collaborative included: the *Chronic Care Model* (Wagner, 2003), the *Expanded Chronic Care Model* (Barr, Robinson, Marin-Link, Underhill, Dotts, & Ravensdale, 2003), the *Institute for Health Care Improvement (IHI) Model for Improvement*, which uses plan, do, study, and act (PDSA) cycles to improve care, and the *IHI Chronic Conditions Breakthrough Series Learning Model* (Collaborative Steering Committee, 2003). In addition, the *Evidenced Based Clinical Guidelines for Heart Failure Care* (British Columbia Medical Association & British Columbia Ministry of Health, 2003) was also applied.

The MSCR Program Case Management Service model in which clients and CMs engage in relational caring is in keeping with the Collaborative and the frameworks used. First, the CMs and clients engage in a productive relationship to promote client self management of their care. Second, CMs are continuously trying to improve their component of the relationship. Currently, IHI quality improvement techniques, such as the plan-do-study-act (PDSA) cycles are being implemented to improve the Case

Management Service. Small changes are being tested to see if they make improvements. Third, as with the Expanded Chronic Care Model, CMs consider both clients' individual aspects as well as the determinants of health. Fourth, CMs provide guidance and recommendations to clients and family members based on the 2003 congestive heart failure guidelines. Finally, the Case Management Service supports the use of interdisciplinary team approach to care.

If physicians are taking on chronic disease management, then they need to engage in relational caring. If they do not or if it is not feasible that they do, then other health providers need to be utilized to provide relational caring. Clients and health professionals / providers participating in the process of Relational Caring in Cardiac Rehabilitation are engaging in effective interactions. Systems should be changes so that one or more health professional engages in relational caring with a client. If this were done, we would have a system-wide model that would enhance the interactions between client and provider and client self management.

The CM's caseload is the final implication for health care policy and delivery. CMs caseloads need to be kept at levels that allow time and flexibility during the interaction with clients. Allowing time involves the Case Management Service being set up and carried out so that clients have time to ask their questions and to discuss their issues. It also involves CMs initiating calls to clients. For many of the client participants, being contacted early in the recovery period and in an unhurried manner was very important. CMs must try to balance providing a service in an unhurried way with efficiency. Flexibility is also important. There needs to be flexibility in the length of the service provided, the frequency of the calls, in what is covered during an interaction, and in what

services a client is linked to and utilizes. Flexibility allows the service be individualized to meet client and CM needs.

A CM's caseload also reflects their workload. The American Health Consultants (2001) report that CMs caseloads range from 16-100 active cases. Active cases include those clients currently in a CM's practice. The number of cases one CM has is dependent on factors, such as how the CM role is defined, the case management service goals, the acuity of the client population, a CM's experience, and the availability of additional resources to assist a CM (America Health Consultants, 2001). Houston-Miller (2000) reports that in the twelve month MULTIFIT program model, a nurse CM's caseload is generally about 200-250 clients, although the exact number of cases is determined by the complexity of the client condition. In the MSCR Program, the CM who follows clients after their CABG surgery (and works with minimal to no support staff) has a caseload of 75 active clients; this equals approximately 150 clients per year. This caseload should continue based on the current model implemented and the support staff available.

Determining the right caseload balance is always a challenge. An American Health Consultants (2001) article quotes Sandra L. Lowery as saying: "in addition to being a primary factor in the outcomes of case management, caseloads also are a measure of workload and productivity. They can negatively impact outcomes if they are set too high, and the cost of case management services if set too low." (p. 2). If a CMs caseload was increased beyond the workload of the model I would recommend that the service be re-evaluated. The MSCR Program Case Management Service current length was designed based on best practices guidelines found in the literature.

### Implications for Research

The research process utilized in this project has implications for the findings and for future research. The major methodological implications identified include: use of a third party recruiter and an internal evaluator. To carry out this study, the two ethics review committees required that a third party recruiter be used to minimize the risk of participant coercion. The use of a third party recruiter and the need for randomized sampling processes to address the potential coercion / power-over situations affected my ability as researcher to do theoretical sampling. In grounded theory, the emerging data and / or theory guides the researcher to identify the additional data needed and where to find it. The use of a third party recruiter limited my ability to identify specific clients to provide the data required for this study.

The second methodological implication of concern was that I, an internal evaluator, would have a negative impact on the participants in terms of their providing both positive and negative information. To attend to this, during each interview I made a point of being critically reflective as to the impact I was having on the participant. I paid attention during and after the interview by recording what influence I thought I had on a participant. In addition, with some client (and family member) participants, I had been involved in their care, so I talked to them about that before the interview. In general I found clients to be open and honest with both their positive and negative feelings. Although, because the participants were generally very pleased with the service they received, there were a limited number of negative comments.

During one interview I noticed the interview was obviously having a negative impact on the participant. The participant reported being uncomfortable having the interview tape-recorded. Recognizing the participant's discomfort, I suggested we cease

the interview or tape recording, but the participant chose to continue with both. After the interview, I reflected on what I thought was occurring. I followed up with the participant and we debriefed the interview. Through this discussion we clarified and verified what was occurring for the participant. I learned that the issue was not about my power position as I had thought, it was about the participant's own personal issue of how she presented herself.

Through doing this research project I have identified ten areas related to the Case Management Service that would benefit from further study. The first set of suggested studies would involve reproduction of this study and the latter would involve further study.

To produce more variability a number of reproductive studies on Relational Caring in Cardiac Rehabilitation should be done. First, since I did not fully saturate three of the categories, additional follow-up with research would be useful to explore these areas. Further exploration of relational caring with more family members would also be beneficial. Second, the sample of client participants in this study contained a higher percentage of people with grade twelve or greater education levels. Thus a study that examined the Case Management Service and relational caring with a less educated population would add important information. Information from this kind of study will tell us if the service needs to be different for this population. Third, since the results of this research project come from a retrospective approach, further study is needed to learn how the process of relational caring develops over the course of the Case Management Service in a prospective way. This could be done with a longitudinal study that incorporates sequential interviewing to help identify whether there are linear or sequential stages to

this process of relational caring. Fourth, since the Case Management Service model involves providing service to clients over a four to six month period of time, determining whether the process exists with a different delivery model, such as a delivery model that offers a variety of CM contact, from one to six calls. An exploration of how this kind of service model affects clients would be beneficial. Fifth, since the MSCR program had only three CMs, it would be valuable to do a study in a similar context (e.g. using a similar model) with more CMs to see if the experience is consistent with more CMs.

Further study is also needed in the following areas. First, since much of the MSCR Program and Case Management Service outcome data are self reported, it would be valuable to obtain physiologically measured outcome data to see if the results are the same. This could be done by sampling. Second, a study that examines more specifically how the Case Management Service is a health promoting service would be informative. This could include further exploration on how the processes “negotiating the power dynamic” and “developing a tailored plan” are health promoting. Third, another study opportunity would be to learn whether clients who participate in Relational Caring in Cardiac Rehabilitation have better outcomes than clients who do not receive this kind of care. This would require a study that uses a control group to make comparisons. Fourth, in accordance with the current chronic disease management focus, a study that determines whether and how the Case Management Service complements the services of general practitioners would be useful. This would provide information on how both services could be used effectively. Lastly, understanding why clients chose not to participate or ceased participation in the Case Management Service follow-up would provide valuable information. This would provide information on opposing experiences.

## Recommendations

Based on participants' comments and the research project findings I strongly recommend that the Case Management Service model continue as it is currently provided to post CABG surgery clients and family members. CMs should continue to provide regularly scheduled calls, e.g., weekly for a first few weeks and then monthly for four to six months as per client needs. Client and family member participants clearly expressed that the service was sufficient and made a difference to them during their recovery. For example, the service helped clients by reminding them to continue to get out and improve their lifestyle and health and by providing information, guidance, and support. Some of the outcomes experienced by clients were increased confidence, informed decisions making, and improved lifestyle.

Listed below are recommendations that should be considered and possibly tested through a plan-do-study-act cycles to see if they would improve the Case Management Service and / or the MSCR Program. Recommendations for the Case Management Service are:

- ◆ The MSCR Program should adopt a more health promoting definition of case management, like the one used in this thesis. A clear definition of the Case Management Service would help CMs and others clearly understand the role of CMs.
- ◆ Since the program no longer has a medical director, the program needs to identify a medical director who has knowledge and a strong interest in cardiac recovery, rehabilitation, and chronic disease management. The medical director should review the policies and procedures and the standard medication related

handouts used in the program. This would help ensure consistency of the core practice and information provided and consistency with current best practice cardiology guidelines.

- ◆ In that CMs may provide recommendations to clients on the use of supplements, such as antioxidants and folic acid, they should provide all necessary information including rationale and dose range. One client felt that he / she received a supplement recommendation over the course of a few interactions. It would have been helpful to get the recommendation with all the associated information at one time (Interview 11, p. 2 & 3).
- ◆ All CMs should be comfortable accessing online information and training should be provided if required. This would provide clients with immediate information. One client commented that he really appreciated that his CM answered his questions immediately by accessing online information. Lowery (cited in American Health Consultants, 2001) stated that accessing online information "...is quickly becoming a fundamental skill for case managers, not only for operational efficiency to know how to access information on the internet but how to evaluate and use it, as well" (p. 4).
- ◆ The same CM should provide the majority of the follow-up for each client. It seems that consistency aids the development of a stronger relationship. Two clients who received early follow-up from another CM did not recall receiving it. Their perception was that they had not received early follow-up and they wished they had. After CABG surgery, clients (and family members) are

exposed to numerous health professionals and during this stressful time it is often difficult for clients to keep straight who is who.

- ◆ CMs and clients should regularly assess / reassess clients' goals and update the plan as need be. Reassessment would include having discussions to determine if a goal still applicable? Realistic? How is a client succeeding at meeting at the goal? What are barriers to meeting goals? What are the possible solutions? A literature search needs to done to determine how frequently reassessments should occur.
- ◆ The Manager should complete the policy and procedure manual for the Case Management Service so the CMs have documented guidelines. One CM commented that she currently obtains her direction and guidance on her role from the manager. A completed policy and procedure manual would formally document some of this guidance and direction.
- ◆ Those less proactive clients who had a first CM clinic visit should be offered a second CM clinic visit option to review any outstanding questions and concerns. For some clients, a second face-to-face clinic visit with the nurse would be valuable. One client reported wanting to have a second follow-up with the nurse CM. Even though the client knew he could make such an appointment, he never did because he was not sure why he wanted to talk (Interview 9, p. 25). By offering service, a client can choose to accept or decline the clinic option.

- ◆ The Manager should develop a screening tool to help identify whether clients with a lower education or social economic status are participating in the Case Management Service at the same rate as others.
- ◆ The program manager should consider collecting outcome data on participants six months after the last scheduled CM call to see if lifestyle changes are being sustained / internalized. Questionnaires could be mailed out in self-addressed envelopes or random telephone contact could be done.
- ◆ An external evaluation of the Case Management Service should be done.

The general recommendations for the MSCR Program are:

- ◆ The clinic option of seeing a dietician should continue to be offered. Those clients who accessed the dietician found it valuable by providing new information and ideas and reinforcing what they were currently doing well.
- ◆ That linkage should continue to other community services, such as Heart to Heart and the community exercise programs.
- ◆ Cardiologists and cardiac surgeons' offices should provide or carry information about the resource center and names of volunteer or contact numbers for volunteers that have gone through the experience. One client requested that information about the resource center be available (as a flyer or business card) in these specialists' waiting rooms so clients who are in the office seeking information know where to look. (Interview 6, p. 21). This client commented that he would have found the resource center useful in the months prior to his surgery; this was the time he was struggling to decide if he would go ahead with surgery.

- ◆ The cardiac surgeons' office should consider providing pre-operative clients with a list of peer support groups available. A list of the peer support groups, such as the First Open Heart Society may be beneficial if it was included on the forms mailed to clients from the surgeon's office. One client had wished he could have accessed a local peer to obtain information on the peer's experience with bypass surgery. An internet chat group was this client's only source of peer information and the information provided increased the client's anxiety.
- ◆ Consider moving the clinic location to a non-hospital setting where there is ample parking and easy access. One client suggested that maybe a mall, community recreation centre, or a walk-in clinic type setting would be a better setting (Interview 9).

#### Conclusion:

This grounded theory evaluation research project revealed a complex process which moved client and family member participants from a state of wanting and needing support to feeling independent during the period of cardiac recovery, rehabilitation, and risk factor modification. The reciprocal process of Relational Caring in Cardiac Rehabilitation helped client and family member participants' work through recovery problems and issues and it provided support, guidance and information. Clients gained knowledge, skill, confidence, and they made lifestyle improvements.

The findings show that Relational Caring in Cardiac Rehabilitation is an effective relationship that helps clients make lifestyle changes and improve their health. The process of initiating relations, developing a trusting rapport, collaborating, figuring it out, and taking control, sheds light on an area traditionally not addressed in cardiac

rehabilitation literature. An understanding of Relational Caring in Cardiac Rehabilitation will help health professionals better understand the reciprocal nature of relationships and how the CMs are effectively working with and helping cardiac clients.

The findings from this research project provided me with information that increased my understanding of the Case Management Service. The process of Relational Caring in Cardiac Rehabilitation provides a model of what an effective Case Management Service might look like to support clients, assist them to improve their health, and manage their own care.

As the manager of the VIHA MSCR Program, I will use this model as a teaching tool to educate new CMs and others about the Case Management Service. I will also use the model as a framework to evaluate the work performance of CMs working under this model. In addition, I will use the findings to improve the Case Management Service and to help me complete the Case Management Service policy and procedure manual.

This research project provided me with knowledge and understanding that the process of relational caring in the context of the MSCR Program Case Management Service is more than just having good communication skills; it is a way of communicating and relating. Communication is the essence of most human relationships. Behavioural skills aid this process but vital to the process is hearing and validating clients and working with them (Hartrick, 2002).

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## **Appendix A – Cardiac Risk Factors**

As emphasized in the Framingham studies, the risk factors for cardiovascular disease are divided into two categories: 1) fixed or non-modifiable; 2) definitely modifiable, probably modifiable and speculative risk factors (Wilson, 1994). Risk conditions also exist.

The fixed or non-modifiable risk factors include a personal history of heart disease, positive family history of premature heart disease, age, and gender. The definitely modifiable risk factors include cigarette smoking, diabetes, abnormal lipid levels, elevated blood pressure, obesity, and sedentary life-style. Probably modifiable risk factors include hematological and some genetic factors, elevated blood homocysteine levels and excess alcohol intake. The speculative risk factors include Chlamydia pneumonia (a bacterium), inflammatory and autoimmune disorders (Heart and Stroke Foundation of BC & Yukon [HSF of BC], 1997; Wilson, 1994). Risk conditions include stress, depression, lack of social support, self esteem, and low income. Data supporting these risk conditions as risk factors remains inconclusive and inconsistent.

## **Appendix B – Cardiac Rehabilitation Program Models**

Cardiac rehabilitation (CR) programs vary in style, according to the needs of the specific community, although most programs resemble or include components of traditional, non-traditional and / or intervention cardiac rehabilitation program models.

Traditional program models involve GP or specialist(s) referral of clients to a CR program for one-to-one and / or group exercise with education on exercise and modification. Referred clients receive a medical assessment, a stress test and, if deemed suitable, are given an exercise prescription and an exercise program. At the end of an exercise program, clients often receive a stress test, follow-up assessment, and further recommendations (CACR, 1999).

Non-traditional programs consist of home-based and case management models. Home-based program models offer clients a limited amount of hospital/clinic visits and they primarily involve regular telephone / mail contact and follow-up by a case manager (CACR, 1999). Kavanagh (1999) reported that home-based exercise programs were shown to be very effective for low risk clients. The complex or high-risk clients would benefit from formal cardiac rehabilitation exercise programs. Some home programs, however, use home telephone ECG monitored exercise for high-risk clients (Fletcher, 1998). Clients using home programs will and often take part in education programs with other people (CACR, 1999).

A case management program model is "...a system where a case manager, usually a nurse coordinates the activities of various healthcare disciplines, on behalf of the client. ...This model has been shown to be significantly more effective than usual physician-

based care in programs of smoking cessation and cholesterol reduction” (CACR, 1999, p. 279).

Interventional program models, which are similar to traditional programs, include 11 key components according to CACR (1999): “patient referral, intake assessment clinic, risk stratification, exercising training, education, lifestyle management, behavioural counselling, patient follow-up, outcome assessment, and staff &/or professional development” with ongoing monitoring and treatment modification (p. 277). The CR specialist and GP share client management, therefore, program success requires extensive communication between these physicians.

### **Appendix C – Identification Criteria for Participation**

The emerging data and theory advancement influenced the number and types of participants interviewed. Participants were identified through the VIHA MSCR Program.

Identification criteria for clients or family members included:

1. Cardiac clients who have recently had coronary artery bypass graft surgery themselves and / or family members of these cardiac clients who:
  - Identify themselves as having experience with the Case Management service
  - Have been followed by the MSCR case manager for a minimum of four months, excluding those people who had the evaluator as their primary case manager
  - Have completed the case management telephone follow-up aspect of the CR program in the last seven months
  - Live in the old Capital Health Region geographic area
  - Identify themselves as being emotionally stable to participate
  - Consent to participate
2. Case managers were identified by having worked in the MSCR Program (excluding the evaluator). Identification criteria include:
  - Identify themselves as having experience with the Case Management service
  - Having worked as a CM for more than four months
  - Consent to participate

## Appendix D – Heart Disease Risk Factor Assessment Form



### Heart Disease Risk Factor Assessment Form

All that apply

Name: \_\_\_\_\_

DOB: \_\_\_\_\_

**Non-Modifiable** (these risk factors cannot be changed)

- Male > 45
- Postmenopausal female (e.g. female > 55) \_\_\_\_\_
- Family history of premature coronary artery disease (father/Brother before age 55 yrs; Mother/Sister before age 65 yrs)
- Personal history of coronary artery disease

<input checked="" type="checkbox"/> if applies	<b>Modifiable</b> these risk factors can be changed	<b>Recommendations</b>
<input type="checkbox"/> Yes	<b>Hypertension</b> # of Years _____ BP: _____ <input type="checkbox"/> Taking BP medication	Aim for a Blood Pressure (BP) <sup>1</sup> of < 130/85. Target blood pressure will be different if you have high blood pressure, diabetes (<130/80) or kidney dysfunction (< 125/75). Modify your lifestyle including control your weight, be physical active, use alcohol moderation and restrict salt intake. Medication is required if blood pressure is consistently high.
<input type="checkbox"/> Yes	<b>Abnormal Cholesterol</b> On cholesterol med: <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Lipid values - date: _____ Tg _____ TC _____ LDL _____ HDL _____ TC/HDL Ratio _____	Triglycerides (Tg) <1.7 mmol/L <sup>1</sup> , Total Cholesterol (TC) <4.5 mmol/L, TC: HDL Ratio <4, Low Density Lipoprotein (LDL) cholesterol <2.5 mmol/L & High Density Lipoprotein <sup>1</sup> (HDL) cholesterol > 1.2 mmol/L. Follow a low fat diet, increase physical activity, control or decrease body weight, and use alcohol in moderation. Most people will require medication to reach these targets.
<input type="checkbox"/> Yes	<b>Impaired Glucose Tolerance or Diabetes Mellitus</b> <input type="checkbox"/> Type 1 <input type="checkbox"/> Type 2 Controlled by: <input type="checkbox"/> Diet <input type="checkbox"/> Pills <input type="checkbox"/> Insulin FBG _____ HbA1c _____	Control blood sugar levels through diet, exercise and/or medications. Monitor sugars as required. Monitor sugars before and after exercise. Ideal fasting blood glucose <sup>1</sup> (FBG) 4.0-7.0 mmol/L & ideal HbA1c 0.040- 0.070. <b>NOTE:</b> People without diabetes or impaired glucose tolerance should have a FBG between 3.8-6.0 mmol/L; HbA1c 0.040-0.060
<input type="checkbox"/> Yes	<b>Exercise Pattern (pre hospital)</b> <input type="checkbox"/> Sedentary (0 days / wk) <input type="checkbox"/> Mild (1-2 days / wk) <input type="checkbox"/> Moderate (3-4 days / wk) <input type="checkbox"/> Very Active (5 -7 days / wk)	Establish an exercise routine including a minimum of 30-60 minutes of moderate-intensity activity 3 - 7 days weekly (walking, jogging, cycling or other aerobic activity) supplemented by an increase in everyday activities (i.e., stairs, gardening, household work, etc.) Consider attending a medically supervised exercise cardiac rehabilitation program (e.g. community cardiac exercise program)
<input type="checkbox"/> Yes	<b>Excess Weight</b> Height _____ Weight _____ Body Mass Index (BMI) _____ Waist (cm) _____	It is important for people with hypertension, elevated triglycerides, or elevated glucose levels to lose weight. A weight loss of 10% from baseline significantly reduces risk. Start an appropriate diet and exercise program. Ideal BMI is 20-25 kg/m <sup>2</sup> . A BMI > 27; a waist circumference <sup>9</sup> of ≥100 cm men; ≥88 cm women are associated with increased health risks.
<input type="checkbox"/> Yes	<b>Alcohol Intake</b> <input type="checkbox"/> Non-drinker Average # drinks /week _____	Limit alcohol intake to one to two drinks per day, if you already drink.

<sup>9</sup>Note: metabolic syndrome is identified if a person has three or more of the following risk factors: waist circumference - men >100cm, women >88cm; Triglycerides level ≥1.7 mmol/L; HDL-C men < 1.0, women < 1.3mmol/L; BP ≥ 135/80; fasting glucose level 6.2-7.0.

<input type="checkbox"/> Yes	<b>Smoking</b> <input type="checkbox"/> Never <input type="checkbox"/> Ex-smoker (quit >6 months) <input type="checkbox"/> Current Quit Date: _____ # per day _____; # Yrs _____	Stop smoking by Initiating a plan to quit smoking; obtain counselling. See GP regarding various nicotine replacements or medication options. Find a smoking cessation program offered in your community.
<input checked="" type="checkbox"/> Yes	<b>Stress</b> (subjective) scale. 0 mean no stress & 10 mean very high stress <input type="checkbox"/> Stress level pre hospitalization 0-1-2-3-4-5-6-7-8-9-10	Recognize your stressors and stress reactions. Recognize the things that you can control and those things that you can't. Learn to relax. Manage and reduce your stress by choosing a healthy lifestyle (being active, tobacco free and chose food lower in fat), work on developing a positive attitude, become involved. Practice stress reduction techniques, e.g., deep breathing. Join a stress reduction program
<input checked="" type="checkbox"/> Yes	<b>Other</b>	

PLAN: \_\_\_\_\_

Nurse: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Distribution: Patient/GP/Cardiologist/Chart

## Appendix E – Sample Telephone Script

Hello \_\_\_\_\_,

This is \_\_\_\_\_, and I'm calling you to tell you about an evaluation being done by Sonya Rinzema on the Telephone Follow-up service that is being provided to people after their or their family member had coronary bypass surgery. Sonya Rinzema is a University of Victoria Master in Nursing student and she is the manager of the program providing the telephone follow-up service. Sonya is doing this evaluation to satisfy her requirements for a Masters degree in Nursing through the University of Victoria.

I was hired by Sonya Rinzema to recruit participants for the evaluation which is being done on the Telephone Follow-up service, which is part of the VIHA cardiac rehabilitation program, by Sonya Rinzema. I understand that you recently completed receiving this service from a nurse Case Manager at the Royal Jubilee Hospital.

Sonya is doing an evaluation of the telephone follow-up service, because it is a new service and the program wants to improve this service, if necessary. Sonya wants to explore:

- (a) clients experience with the nurse telephone follow-up that they received;
- (b) how the telephone service affects the process by which clients recover and, if applicable, modify their risk for further cardiac problems;
- (c) what is working well and what needs to be improved in the telephone service.

Can I take a few minutes of your time to tell you about the evaluation project to see if you are interested in participating?

- If no** – the recruiter would thank the person for the opportunity to tell them about the evaluation and they would wish them a nice day / evening.
- If yes** – the recruiter would explain:
  - the project and its purpose;
  - what is expected of a participant if they participate (e.g. need to participate in one 45-90 minute tape recorded interview and be open to possibly being contacted a second time if required, and, if appropriate, to give the evaluator permission to access and review their CR file which may be used as data in the evaluation);
  - the potential risk to participants;
  - that Sonya, the evaluator, has obtained permission from the VIHA and the MSCR Program to have access to your name and CR file, if applicable;
  - to potential participants that their participation is voluntary, that they should not participate out of obligation or gratitude to the MSCR Program and that their agreeing to or declining to participate will in no way affect their current or future support from the program nor will anyone from the program be informed if that they declined;
  - To ensure confidentiality not everyone is being contact. The evaluator will only be informed as to who is participating and to the total number of people who declined participation.

**If a participant is not interested** – the recruiter will thank them for the opportunity to tell them about the evaluation and they would wish them a nice day / evening.

**If a participant is interested:**

- The recruiter would inform them that they will be mailing a copy of the information letter and the consent form for the evaluation.
- The recruiter would ask the person if they could contact them again in about two weeks after they have had a chance to review the information letter and consent that will be mailed to them today. If yes – the recruiter would call them in two weeks to answer questions and obtain their final decision. If in two weeks the potential participant has not read the information, the recruiter will review it with them and contact them again in 1 week to answer questions and to obtain their final decision on participation.

## Appendix F – Letter of Information (For Persons with Heart Disease or Family)

(Date)

(Name)

(Address)

Dear \_\_\_\_\_,

As follow-up to our telephone conversation on \_\_\_\_\_, I am \_\_\_\_\_ . I was hired to recruit participants for a project being conducted by the University of Victoria graduate student, Sonya Rinzema, as part of the requirements for a Masters in Nursing degree from the University of Victoria. Sonya Rinzema is also the manager of the Multi-site Cardiac Rehabilitation Program at the Royal Jubilee Hospital

**You are being asked to participate in this project because you had coronary artery bypass surgery or are a family member or friend and have experienced the Vancouver Island Health Authority (VIHA) Case Management Service (i.e. nurse contact and follow-up). Participation in this evaluation project should be completely voluntary. You should not participate if you feel obligated out of duty or gratitude to the program to participate. Whether or not you participate in the project will, in no way, have an effect on your family's or your future care and treatment in the cardiac rehabilitation program or any other VIHA service.**

In the consent letter enclosed, Sonya invites you to participate in project entitled: How Case Management Service Affects Clients' Recovery and Risk Factor Modification – an Evaluation Project. Please read the enclosed consent letter for information about the evaluation and your participation in the project.

As mentioned during our telephone conversation, I will be telephoning you in approximately two weeks to answer any questions you have about this letter, the consent form, or about the project. As the recruiter, I have randomly contacted people about their participation in the project. Neither Sonya nor anyone else will be informed as to whom I have or have not contacted or who agreed or who declined to participate. Sonya will be given only the names of those people who have consented to participate in the project and the total number of people who declined participation. If you agree to participate, Sonya will be contacting you to arrange an interview date and to obtain the signed consent form.

I understand that Sonya is trying to recruit approximately fifteen people to participate in an interview for the evaluation. People who participate will be asked to engage in one face-to-face tape-recorded initial interview with Sonya Rinzema. The initial interview will last approximately 45 to 90 minutes, depending on how extensively the questions are answered. Sonya may contact you for a second 10-20 minute telephone interview, if clarification is required.

The initial interview will take place at a mutually determined time and private location sometime between February 2003 and July 2003. During this interview you will be asked to talk about your experience with the nurse contact and telephone follow-up. Below are sample questions you may be asked.

1. In light of that fact that you received telephone contact and follow-up by a cardiac rehabilitation nurse for approximately three to six months after you or your family member / friend had coronary artery bypass surgery, would you tell me in as much detail as possible, what it was like for you to receive regular nurse telephone follow-up and contact, and, if applicable, for you to attend a cardiac clinic with the nurse?
2. Tell me how the nurse contact affected your process of recovering from a cardiac problem?
3. If applicable, tell me how the nurse contact affected your process of modifying your risk of further cardiac problems?
4. For you, what were the most and least helpful aspects of the nurse telephone contact?
5. Is there anything else I should know about your life circumstances that may have influenced your recovery or risk factor modification?
6. Is there anything else I should know about how the nurse contact and clinic visit affected your process of recovering or modifying your risk of further cardiac problems?
7. What advice would you have for someone experiencing the nurse contact during their recovery and risk factor modification?
8. Is there anything you want to add or ask about before we finish the interview?

If you are a person who had coronary artery bypass surgery, Sonya Rinzema is also requesting permission to assess and review your Cardiac Rehabilitation file which was kept by the program during the telephone contact and follow-up. If you give permission, Sonya would use data from your file as part of the evaluation.

All information you share will be kept confidential and it will be secured in a locked filing cabinet. The information will be destroyed upon completion of Sonya's Thesis. Transcription of the interview tape recording will be done by Sonya Rinzema or a transcription clerk and will be read only by Sonya Rinzema, the transcription clerk and Sonya's supervisor, Dr. Marjorie MacDonald. To aid Sonya in the data analysis process, the data may be discussed at the University of Victoria's Grounded Theory Club and with Sonya's University of Victoria project committee. Be assured that your name or identifiers will not appear during those discussions, on the transcription or on the written report.

Sonya anticipates that the findings will be written up and bound as a thesis document and as a final summary report. The findings will be shared with others in the following ways:

- A copy of the thesis will be placed in the University of Victoria library and the University's Human and Social Development administration office.
- A copy of the final summary report will be given to the Vancouver Island Health Authority.
- The findings will be presented at Sonya's thesis oral defense, as a requirement for a Masters Degree in Nursing.

- Once Sonya completes the written report and thesis, you will be invited to attend a special meeting in the winter of 2003/04, which will be open to the public, where Sonya will present the findings.
- The findings or information from the final report or thesis may be written up as an article for publication, presented at a conference, or released by VIHA.

Please note that your name, telephone number and address were obtained with permission from the Vancouver Island Health Authority and Sonya has obtained permission from the VIHA and the Cardiac Rehabilitation Program to have access to your program file if you give her permission. If have you any questions or concerns about your participation, please contact me at \_\_\_\_\_.

On half of Sonya Rinzema and myself, I would like to thank you in advance for considering participating in the evaluation.

Sincerely,

Recruiter's Name (with Signature)

### **Appendix G – Consent (For Persons with Heart Disease or Family)**

I am being invited to participate in the project titled: How Case Management Service Affects Clients' Recovery and Risk Factor Modification – an Evaluation Project, conducted by the graduate student Sonya Rinzema, as part of the requirements for a Masters in Nursing degree from the University of Victoria. I understand that Sonya Rinzema is also the manager of the Multi-site Cardiac Rehabilitation Program at the Royal Jubilee Hospital.

The purpose of this evaluation is to explore: 1) my experience (as a person who had coronary artery bypass surgery or as a family member or friend) with the Vancouver Island Health Authority (VIHA) Cardiac Rehabilitation Case Management service (nurse telephone contact and follow-up), 2) how the Case Management service affects recovery from a cardiac event, and, if applicable, risk factor modification, and 3) what worked well and what in the service can be improved.

I understand that an evaluation of this type is important because the telephone follow-up is a new service offered by the Royal Jubilee Hospital and an evaluation of this type may provide information to acknowledge benefits of the service and or to support modifying and improving the Multi-Site Cardiac Rehabilitation (MSCR) program case management service for future clients. In addition, I understand that a dialogue with me about my or my family member /friend's recovery and risk factor modification will help current and future case managers and other health care professionals to realize and acknowledge the challenges and experiences faced by clients. With an increased understanding of how the case management service affects clients in both their cardiac recovery and cardiac risk modification, case managers will be in a better position to support and assist future clients as they recover from their recent cardiac event. Further, the evaluation may provide other organizations with insight into the case management service as it is provided by the Cardiac Rehabilitation program.

I understand that my name, telephone number and address were obtained with permission from the Vancouver Island Health Authority. I understand that if I participate I will be asked to engage in one 45 to 90 minutes face-to-face tape-recorded interview with Sonya Rinzema and that Sonya may contact me a second time if clarification is needed. The face-to-face interview will take place at a mutually determined time and private location sometime between February 2003 and July 2003. During the interview I will be asked to talk about my experience with the nurse contact and telephone follow-up. I understand that if I participate and I am the person who had coronary artery bypass surgery, I will also be asked if I want to give permission to Sonya to review and access my Cardiac Rehabilitation program file which may be used as data in the evaluation.

I understand there are no known or anticipated risks or benefits to me by participating in this evaluation project. An unlikely, but a potential risk is that I become uncomfortable during or after the interview discussion. If I become uncomfortable during the interview, Sonya will offer to stay with me until I have calmed down, or a trusted family member or friend can come to be with me. If I become uncomfortable after the interview, I can

contact Sonya Rinzema at XXX-XXXX or srinzema@uvic.ca. In either situation, if necessary, Sonya will assist me to identify a free or low cost counsellor or support service, which I will use at my own cost. The potential benefits are that my involvement may contribute to the improvement of the Case Management service, which will benefit future clients. In addition, a dialogue with Sonya may benefit my overall health state through my reflection on the case management experience, recovery and risk factor modification process.

I understand that the evaluation is being done under the supervision of Dr. Marjorie MacDonald from the University of Victoria and has been approved by both the University of Victoria and the Vancouver Island Health Authority (VIHA). If I have any questions or concerns regarding this project I may contact the student, Sonya Rinzema at XXX-XXXX or srinzema@uvic.ca or call Sonya's University of Victoria supervisor Dr. Marjorie MacDonald at 472-4265 or Marjorie@uvic.ca. I may also contact the University of Victoria Associate Vice President of Research at 721-7968 if I have concerns that the student and supervisor can not help me with. If I have any questions regarding my rights as a client, I can contact Dr. Ernie Higgs from the Vancouver Island Health Authority at 727-4110.

**In consenting to participate, I understand and agree that:**

1. I have been told why an evaluation of this type is important.
2. My participation in this evaluation project is completely voluntary and informed. I do not feel coerced, obligated out of duty or gratitude to the program to participate in the evaluation. Whether or not I participate in the project will, in no way, have an effect on my family's or my future care and treatment in the cardiac rehabilitation program or any other VIHA service.
3. I will not receive any money or other material rewards for participating in this evaluation.
4. I will be involved in one tape-recorded face-to-face interview which will be transcribed and analysed as project data and that I may be contacted for a telephone interview with Sonya, if clarification from the initial interview is needed. During the initial interview I will be asked to talk about my experience with the nurse telephone follow-up service, and how this follow up affected my recovery and risk factor modification and what I thought worked well and what could be improved in the nurse telephone contact and follow-up. In addition, if I am the person who has had the coronary artery bypass graft surgery, Sonya will also be asking my permission to access and review my Cardiac Rehabilitation file, which may be used as data in the evaluation. I understand that based on my permission the VIHA has also given Sonya permission to my CR file.
5. I am free to refrain from answering an interview question or to stop the interview at any point and I am free to terminate my participation in this project at any point without negative consequences. If I withdraw from the evaluation my data will be removed to the extent possible.
6. All my personal information will be kept confidential and when being used will be locked in either a file cabinet or in a password-protected computer file. A copy of the

transcript will be offered to me for my review. If I choose to review a copy of the transcript, I know that I can remove or change any information that I feel identifies myself. I also know that I may be asked to comment on findings/theory from the research project for clarification, correction, and / or validation.

7. My anonymity will be protected by removing my name from my transcription, written reports or documents. An alias name will be used to replace my name on the interview transcription. All persons reading the transcript will have consented to keep my information confidential; only the evaluator, a transcription clerk and the evaluator's supervisor will have access to my interview transcription. Sonya, the evaluator, will be discussing the data analysis with her committee and with the University of Victoria Grounded Theory Club members, but no names or identifiers will be in that data.
8. The evaluator will keep all interview data and tape recordings until completion of her Masters Thesis and oral defence and by November 2005 the interview transcriptions and tape recordings will be destroyed.
9. The results of this project will be used only for the purpose stated in the information letter.
10. Near the completion of this project (approx. winter 2003/04) I will be invited to attend a special meeting, which will be open to the public, to hear Sonya present the project findings.
11. There are no known risks to me for participating in this project. The potential benefits have been explained. In the unlikely event that I become uncomfortable during or after the interview discussion, I can talk to the evaluator, Sonya Rinzema, and if necessary Sonya will assist me to locate a free or low cost counsellor or support service, which I will use at my own cost.

**My signature below indicates that I understand the above conditions of participation in this project and that I have had the opportunity to have my questions answered by the evaluator and that I agree to participate in an interview.**

Printed Name of Participant	Signature	Date
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**My signature below indicates that I give Sonya Rinzema permission to review my cardiac rehabilitation file.**

Printed Name of Participant	Signature	Date
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***A copy of this consent will be left with you, and a copy will be taken by the evaluator.***

## Appendix H – Letter of Information (For Case Manager)

(Date)

(Name)  
(Address)

Dear \_\_\_\_\_,

As follow-up to our telephone conversation on \_\_\_\_\_, I am \_\_\_\_\_. I was hired to recruit participants for a project being conducted by the University of Victoria graduate student, Sonya Rinzema, as part of the requirements for a Masters in Nursing degree from the University of Victoria. Sonya Rinzema is also the Manager of the Multi-site Cardiac Rehabilitation Program at the Royal Jubilee Hospital

You are being asked to participate in this project because you (a program Case Manager) have experience with the Vancouver Island Health Authority Case Management Service (i.e. nurse contact and follow-up). Participation in this evaluation project should be completely voluntary. You should not participate if you feel obligated out of duty or gratitude to the program or the Manager of the Cardiac Rehabilitation Program to participate.

In the consent letter enclosed, Sonya invites you to participate in project entitled: How Case Management Service Affects Clients' Recovery and Risk Factor Modification – an Evaluation Project. Please read the enclosed consent letter for information about the evaluation and your participation in the project.

As mentioned during our telephone conversation, I will be telephoning you in approximately two weeks to answer any questions you have about this letter, the consent form, or about the project. As the recruiter, I am contacting people about their participation in the project. If you agree to participate Sonya, will be contacting you to arrange an interview date and to obtain the signed consent form.

I understand that Sonya is trying to recruit approximately fifteen people to participate in an interview for the evaluation. People who participate will be asked to engage in one face-to-face tape-recorded initial interview with Sonya Rinzema. The initial interview will last approximately 45 to 90 minutes, depending on how extensively the questions are answered. Sonya may contact you for a second 10-20 minute telephone interview, if clarification is required.

The initial interview will take place at a mutually determined time and private location sometime between May 2003 and March 2004. During this interview you will be asked to talk about your experience with the nurse contact and telephone follow-up. Below are sample questions you may be asked.

- In light of that fact that you provide telephone contact and follow-up to people who have had coronary artery bypass surgery and or their family member or friend for approximately three to six months, would you tell me in as much detail as possible,

what it was like for you to provide regular nurse telephone follow-up and contact, and, if applicable, provide a cardiac health clinic?

- Tell me how you think your contact affected clients or their family members /friend's recovery process?
- If applicable, tell me how your contact affected clients or their family members /friend's risk factor modification process?
- For you, what were the most and least helpful aspects of the nurse telephone contact?
- Is there anything else I should know about how the nurse contact and clinic visit affected clients' recovery or risk factor modification process?
- What advice would you have for someone experiencing the nurse contact during their recovery and risk factor modification?
- Is there anything you want to add or ask about before we finish the interview?

All information you share will be kept confidential and it will be secured in a locked filing cabinet. The information will be destroyed upon completion of Sonya's Thesis. Transcription of the interview tape recording will be done by

Sonya Rinzema or a transcription clerk and will be read only by Sonya Rinzema, the transcription clerk and Sonya's supervisor, Dr. Marjorie MacDonald. To aid Sonya in the data analysis process, the data may be discussed at the University of Victoria's Grounded Theory Club and with Sonya's University of Victoria project committee. Be assured that your name or identifiers will not appear during those discussions, on the transcription or on the written report.

Sonya anticipates that the findings will be written up and bound as a thesis document and as a final summary report. The findings will be shared with others in the following ways:

- A copy of the thesis will be placed in the University of Victoria library and the University's Human and Social Development administration office.
- A copy of the final summary report will be given to the Vancouver Island Health Authority.
- The findings will be presented at Sonya's thesis oral defense, as a requirement for a Masters Degree in Nursing.
- Once Sonya completes the written report and thesis, you will be invited to attend a special meeting in the winter of 2003/04, which will be open to the public, where Sonya will present the findings.
- The findings or information from the final report or thesis may be written up as an article for publication, presented at a conference, or released by VIHA.

Please note that your name, telephone number and address were obtained with permission from the Vancouver Island Health Authority. If have you any questions or concerns about your participation, please contact me at \_\_\_\_\_.

On half of Sonya Rinzema and myself, I would like to thank you in advance for considering participating in the evaluation.

Sincerely,

Recruiter's Name (with Signature)

### **Appendix I – Consent (For Case Manager)**

I am being invited to participate in the project titled: How Case Management Service Affects Clients' Recovery and Risk Factor Modification – an Evaluation Project, conducted by the graduate student Sonya Rinzema, as part of the requirements for a Masters in Nursing degree from the University of Victoria. I understand that Sonya Rinzema is also the manager of the Multi-site Cardiac Rehabilitation Program at the Royal Jubilee Hospital.

The purpose of this evaluation is to explore: 1) my experience (as a Case Manager) with the Vancouver Island Health Authority (VIHA) Cardiac Rehabilitation Case Management service (nurse telephone contact and follow-up), 2) how the Case Management service affects recovery from a cardiac event, and, if applicable, risk factor modification, and 3) what worked well and what in the service can be improved.

I understand that an evaluation of this type is important because the telephone follow-up is a new service offered by the Royal Jubilee Hospital and an evaluation of this type may provide information to acknowledge benefits of the service and or to support modifying and improving the Multi-Site Cardiac Rehabilitation (MSCR) program case management service for future clients. In addition, I understand that a dialogue with me about how my position affects clients' recovery and risk factor modification will help current and future case managers and other health care professionals to realize and acknowledge the challenges and experiences faced by clients. With an increased understanding of how the case management service affects clients in both their cardiac recovery and cardiac risk modification, case managers will be in a better position to support and assist future clients as they recover from their recent cardiac event. Further, the evaluation may provide other organizations with insight into the case management service as it is provided by the Cardiac Rehabilitation program.

I understand that my name, telephone number and address were obtained with permission from the VIHA. I understand that if I participate I will be asked to engage in one 45 to 90 minutes face-to-face tape-recorded interview with Sonya Rinzema and that Sonya may contact me a second time if clarification is needed. The face-to-face interview will take place at a mutually determined time and private location sometime between May 2003 and March 2004. During the interview I will be asked to talk about my experience with the nurse contact and telephone follow-up.

I understand there are a few anticipated risks to me by participating in this evaluation project. The anticipated risks are that the evaluation findings may lead to changes in the Case Manager role. Unexpected negative information, such as inadequate work performance may be discovered during an interview that the evaluator (who is also the manager) did not know about the Case Manager. This new information may change the relationship between the Case Manager and her manager, the evaluator. Further, there is a risk that VIHA decides to delete the Case Management service, based on the evaluation finding, which could affect the Case Manager's job. An unlikely, but a potential risk is that I become uncomfortable during or after the interview discussion. If I become

uncomfortable during the interview, Sonya will offer to stay with me until I have calmed down, or a trusted family member or friend can come to be with me. If I become uncomfortable after the interview, I can contact Sonya Rinzema at XXX-XXXX or srinzema@uvic.ca. In either situation, if necessary, Sonya will assist me to identify a free or low cost counsellor or support service, which I will use at my own cost.

The potential benefits are that my involvement may contribute to the improvement of the Case Management service, which will benefit future clients. In addition, a dialogue with Sonya may benefit me as I reflect on the case management experience with clients.

I understand that the evaluation is being done under the supervision of Dr. Marjorie MacDonald from the University of Victoria and has been approved by both the University of Victoria and the Vancouver Island Health Authority (VIHA). If I have any questions or concerns regarding this project I may contact the student, Sonya Rinzema at XXX-XXXX or srinzema@uvic.ca or call Sonya's University of Victoria supervisor Dr. Marjorie MacDonald at 472-4265 or Marjorie@uvic.ca. I may also contact the University of Victoria Associate Vice President of Research at 721-7968 if I have concerns that the student and supervisor can not help me with. If I have any questions regarding my rights as a client, I can contact Dr. Ernie Higgs from the Vancouver Island Health Authority at 727-4110.

**In consenting to participate, I understand and agree that:**

1. I have been told why an evaluation of this type is important.
2. My participation in this evaluation project is completely voluntary and informed. I have been told the potential risk to me and I do not feel obligated out of duty or gratitude to the program, or pressure because my supervisor asked me to participate. Whether or not I participate in the evaluation will, in no way, have an effect on ability to work for the VIHA.
3. I will not receive any money or other material rewards for participating in this evaluation.
4. I will be involved in one tape-recorded face-to-face interview which will be transcribed and analysed as project data and that I may be contacted for a telephone interview with Sonya, if clarification from the initial interview is needed. During the initial interview I will be asked to talk about my experience with the nurse telephone follow-up service, and with recovery and risk factor modification after a cardiac event and what I think works well and what could be improved in the Case Management Service.
5. I am free to refrain from answering an interview question or to stop the interview at any point and I am free to terminate my participation in this project at any point without negative consequences. If I withdraw from the evaluation my data will be removed to the extent possible.
6. All my personal information will be kept confidential and when not in use will be either locked in a file cabinet or in a password-protected computer file. A copy of the transcript will be offered to me for my review. If I choose to review a copy of the

transcript, I know that I can remove or change any information that I feel identifies myself. I also know that I may be asked to comment on findings/theory from the research project for clarification, correction, and / or validation.

7. My anonymity will be protected by removing my name from my transcription, written reports or documents. An alias name will be used to replace my name on the interview transcription. All persons reading the transcript will have consented to keep my information confidential; only the evaluator, a transcription clerk and the evaluator's supervisor will have access to my interview transcription. Sonya, the evaluator, will be discussing the data analysis with her committee and with the University of Victoria Grounded Theory Club members, but no names or identifiers will be in that data.
8. The evaluator will keep all interview data and tape recordings until completion of her Masters Thesis and oral defence and by November 2005 the interview transcriptions and tape recordings will be destroyed.
9. The results of this project will be used only for the purpose stated in the information letter.
10. Near the completion of this project (approx. winter 2003/04) I will be invited to attend a special meeting, which will be open to the public, to hear Sonya present the project findings.
11. I have been told the potential risks and benefits to me for participating in this project. In the unlikely event that I become uncomfortable during or after the interview discussion, I can talk to the evaluator, Sonya Rinzema, and if necessary Sonya will assist me to locate a free or low cost counsellor or support service, which I will use at my own cost.

**My signature below indicates that I understand the above conditions of participation in this project and that I have had the opportunity to have my questions answered by the evaluator and that I agree to participate in an interview.**

---

Printed Name of Participant

---

Signature

---

Date

*A copy of this consent will be left with you, and a copy will be taken by the evaluator.*

### **Appendix J – Interview Guide**

1. Tell me about your recovery experience in the first six months after surgery?
2. What have you done to change your health state?
  - How has your health state changed since your cardiac surgery?
3. Would you tell me what it was like for you to receive regular nurse telephone follow-up, and, if applicable, for you to attend a cardiac clinic with the nurse?
4. What was the most helpful in the nurse telephone contact?
5. What would you like to see changed in the service?
6. Is there anything else I should know about your life circumstances that may have influenced your recovery or risk factor modification?
7. Is there anything else I should know about how the nurse contact and clinic visit affected your process of recovering and / or modifying your cardiac risk factors?
8. What advice would you have for someone experiencing the nurse telephone follow-up and clinic visit (if applicable) during their recovery and risk factor modification to help them change their behaviour to reduce their cardiac risk?
9. Is there anything you want to add or ask about before we finish the interview?

### Appendix K – Sample Transcriptionist Contract

Project: How Case Management Service Affects Clients' Recovery & Risk Factor Modification – An Evaluation Project

Sonya M. C. Rinzema, RN, BSN  
Masters in Nursing Student, FHSD  
XXX XXXXXXXX.  
Victoria, B.C., XXX-XXX

Telephone: (XXX) XXX-XXX  
Email: srinzema@uvic.ca

The goal of the proposed project is: to gain a theoretical understanding of the clients' experience of the Multi-Site Cardiac Rehabilitation (MSCR) Program case management service (and the influences on the experience); and to determine the process by which the case management service affects clients' cardiac recovery and, if applicable, cardiac risk factor modification.

Agreement between Sonya M. C. Rinzema, principal investigator and \_\_\_\_\_, transcriptionist.

In agreeing to this contract, I accept the following statements:

- Audiotapes are to be transcribed according to the format directions of the evaluator, to prepare the data for analysis by the NUD\*IST computer program.
- Rate of pay: \$ \_\_\_\_\_ per hour, plus 4% holiday pay and 7% GST.
- I will maintain the confidentiality and privacy of the participants. No part of these discussions will be repeated by me and I will not reveal the identity of any participants to anyone.
- When not being used by me for transcription, the audiotapes and computer disks will be kept in the locked box supplied to me. Once the tapes and transcript files on disk are given to the primary evaluator, I will erase any and all copies of the transcript file from my personal computer's hard disk.

Signed:

Transcriptionist \_\_\_\_\_ Date \_\_\_\_\_

Transcriptionist Address \_\_\_\_\_ Telephone \_\_\_\_\_

Evaluator \_\_\_\_\_ Date \_\_\_\_\_

### Appendix L – Contract for Recruiter

Evaluation Project: How Case Management Service Affects Clients' Recovery & Risk Factor Modification – An Evaluation Project

Sonya M. C. Rinzema, RN, BSN  
Masters in Nursing Student, FHSD  
XXX XXXXXXX  
Victoria, B.C. XXX-XXX

Telephone: (XXX) XXX-XXX  
Email: srinzema@uvic.ca

The goal of the proposed project is: (a) to gain a theoretical understanding of the clients' experience of the Multi-Site Cardiac Rehabilitation (MSCR) Program case management service (and the influences on the experience); (b) to determine the process by which the case management service affects clients' cardiac recovery and, if applicable, cardiac risk factor modification; and (c) to seek to better understand the MSCR Program Case Management service as a method to improve the implementation of the service.

Agreement between Sonya M. C. Rinzema, evaluator and \_\_\_\_\_,  
recruiter.

In agreeing to this contract, I accept the following statements:

- The recruitment process will be done according to the directions of the evaluator.
- Honorarium of: \_\_\_\_\_.
- I will maintain the confidentiality and privacy of the participants. No part of these discussions will be repeated by me and I will not reveal the identity of any potential participants who declined to participate to anyone.
- When not being used by me to recruit participants, the names of potential participants will be kept in the locked box supplied to me. Once the clients have been recruited and the names given to the evaluator, I will shred any and all copies of the potential participants from my personal records.

Signed:

Recruiter: \_\_\_\_\_ Date \_\_\_\_\_

Recruiter Address \_\_\_\_\_ Telephone \_\_\_\_\_

Evaluator \_\_\_\_\_ Date \_\_\_\_\_

### **Appendix M – Plan to Deal with Feedback about the Case Manager**

The following is the plan on how the evaluator / Manager of Cardiac Rehabilitation will deal with positive or negative feedback that emerges about the Case Manager as a result of evaluation interviews or the file review.

First, it is important to note that to date, anecdotal feedback about the case management service is that the case manager is providing exemplary case management service to the post coronary artery bypass clients. Second, since this is a new service and since the Case Manager works independently, the Manager of Cardiac Rehabilitation plans to do annual quality assurance / performances review of the case management service.

The evaluator will compile and pool the feedback into the following categories: a) positive and negative feedback; b) isolated and common feedback. The evaluator will group the feedback to identify if the issue is an educational issue, system or policy issue, or other issues.

Once the information is grouped and pooled, the evaluator will present the Case Manager with a summary of pooled and grouped positive and negative feedback that was an isolated case and that which was common feedback. Before receiving the pooled /grouped feedback all identifies will be removed to ensure that the Case Manager can not identify the participants

The evaluator and the Case Manager will use the evaluation feedback to develop a plan and strategies to work collaborative to improve the program, staff knowledge, practice, and policies.

Signed:

Case Manager \_\_\_\_\_ Date \_\_\_\_\_

Evaluator/ Manager of Cardiac Rehabilitation \_\_\_\_\_ Date \_\_\_\_\_

## Appendix N – VIHA Heart Health Program Permission Letter with Response

Sonya Rinzema  
 XXX XXXXXX  
 Victoria, BC  
 srinzema@uvic.ca

January 25, 2003

Robert Myers  
 Director, Acute & Tertiary Care Services  
 Vancouver Island Health Authority – Heart Health Program  
 1952 Bay Street, Victoria, BC V8R 1J8

Dear Robert Myers:

I am completing my Masters program at the University of Victoria and I intend my thesis project to be about the VIHA Multi-site Cardiac Rehabilitation (MSCR) Case Management Service. Therefore, I am requesting written permission to have access to the VIHA Cardiac Rehabilitation program client files. I plan to use some of the information from program client files as data in my thesis project - How Case Management Service Affects Clients' Recovery and Risk Factor Modification – An Evaluation Project. The proposed thesis will be a qualitative evaluation of the Case Management Service. However, the intent is to use the finding to improve the service, not to evaluate the effectiveness of the service. The proposal is presently under review by both the VIHA and University of Victoria research ethics committees.

The purpose of the thesis evaluation project is three-fold.

1. To gain a theoretical understanding of clients' experience of the MSCR program case management service (and the influences on the experience).
2. To determine the process by which the case management service affects clients' cardiac recovery and, if applicable, cardiac risk factor modification.
3. To seek to better understand the Multi-Site Case Management service as a method to improve the implementation of the service.

The project will be guided by the following two questions: a) what is the process by which the case management service affects clients' recovery and risk factor modification? b) What aspects of the Case Management service work well and what could be improved?

There are three sets of participants in this project: cardiac rehabilitation program participants, cardiac rehabilitation program participants' family members or friends, and the cardiac rehabilitation case manager. I will be asking the cardiac rehabilitation program participants for permission to access to their program file. Prior to accessing the files, written consent will be obtained from each program participant.

The files will be reviewed by the evaluator to identify the health professionals' perspective on how a client was progressing. Information from the file may be used to confirm or disconfirm a client's perspective as expressed during the interview. If inconsistency exists between a client's interview data and the file data, then that would indicate that the area needs further investigation.

For your reference, attached is a copy of my thesis proposal.

Sincerely,

Sonya Rinzema