

A SELF-LEARNING PACKAGE
FOR THE
ORIENTATION OF NURSE CASE MANAGERS
AT THE
WORKPLACE SAFETY AND INSURANCE BOARD OF ONTARIO

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Abstract

The purpose of this project is to improve the orientation program for Nurse Case Managers at the Workplace Safety and Insurance Board of Ontario. The role of the NCM and the significance of the project are explored in relation to the administration of the Workplace Safety and Insurance Act (1997). The project describes the development, implementation, and evaluation of a self-learning package, which is one component of a five-week orientation program. The curriculum is based on adult learning and critical thinking theory. The theoretical frameworks for this project are: The Miller-Seller Model (1990), the Health Care Educator: the Nurturing Link (1997) developed by Barer-Stein and Connolly, and the Context-Input-Process-Product (CIPP) model developed by Stufflebeam, et al, (as cited in Miller and Seller, 1990).

Based on the feedback to date, this project has already improved the orientation program for nurse case managers at WSIB. Further testing of the program can only strengthen the significance of the impact. This project concludes with recommendations to improve the orientation program for Nurse Case Managers.

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Chapter One

Introduction

1.1 Introduction to the Problem

The Workplace Safety and Insurance Board (WSIB), the provincial compensation system for injured workers in Ontario, has employed Registered Nurses in the role of Nurse Case Managers (NCM) since 1997. The role was implemented to aid in achieving the goal of early and safe return to work and minimize the debilitating effects of workplace injuries. It was part of a new service delivery model designed to build a client-focused operation that facilitates the elimination of workplace injuries and illnesses (Keatings, et al, 2000). This relates to Part II of the Workplace Safety and Insurance Act (1997), which regulates the functions of the board, including (but not limited to) promotion of public awareness of occupational health and safety, and to educate employers, workers and other persons about occupational health and safety.

Registered Nurses were chosen for case managers as it makes sense to have a health care professional in this role. "Through their education, nurses achieve knowledge of anatomy and physiology, disease and injury, treatment, complications and risk factors, health teaching, prevention, health promotion, psycho-social factors, ethical and legal issues, research, etc." (Keatings, et al, 2000, p. 1).

Implementation of the NCM role would also put registered nurses, with knowledge of disease and injury, in position to interface directly with front line health care providers and injured workers (Doran et al, 2001). This is accomplished through a case management process, involving continuity, collaboration, coordination, evaluation and communication (Keatings, et al, 2000).

At the same time the legislation changed from the Worker's Compensation Act to the Workplace Safety and Insurance Act. Consequently, the organization underwent massive change to its method of service delivery. A new model of service delivery was adopted that would build the foundation of a new corporate culture and articulate values that would guide staff (WSIB position paper, 1998). Business teams consisting of a manager, adjudicators, NCMs and account managers or service representatives were implemented. The teams have a workplace and a community focus, and work with claims and account issues. The teams work within specific business sectors such as transportation, services, auto and mining. There are also teams to deal with the unique needs of workers with claims occurring prior to 1990, small business, serious injury and occupational disease. There is also specialized staff such as return-to-work mediators, medical advisors and prevention specialists to assist the business team with more complex issues (WSIB position paper, 1998). Concurrently, there was also a major shift in

responsibility in regards to claims management. The workers and employers were now legislated to take more responsibility in the return to work process, i.e. by developing and participating in modified work programs and other means as outlined in Part V, of the WS&I Act, 1997.

The role of the NCM as part of the business team was implemented with a broad stroke across the whole organization, which employs approximately 5,000 staff. Needless to say, the implementation of the role was done in a manner to get as many NCMs into place as quickly as possible. Hence, orientation for NCMs has evolved over time, but is still inadequate to fully integrate new nurses into the organization. Further details of the orientation program are outlined in section 1.2.1 of this document.

With re-structuring of such massive proportions, it is not surprising that the introduction of the new role of NCM into claims management was not well understood. This resulted in frustration and strained working relationships in some service delivery teams. For example, when role expectations of the nurse case manager were not clear to other members of the service delivery team, feelings of frustration developed among team members (Doran et al, 2001).

Senior management at WSIB recognized the need to evaluate the effectiveness of the role of the NCM. A research team led by Diane Irvine Doran conducted a comprehensive project to evaluate the NCM role. A

descriptive, cross-sectional, multiple method design was used to collect data from 157 NCMs and 156 adjudicators. Additionally, 102 workplaces that received services either directly or indirectly from a NCM were surveyed. WSIB management also requested that other employees such as physicians, team managers, customer service representatives and account managers participate in the study. Finally, a sample of 86 injured workers was recruited for the purpose of pilot testing outcome measures (Doran et al, 2001). Thus, the views expressed in this study represent a comprehensive overview of opinions regarding the role of the NCM. The study encompassed opinions from major stakeholders at WSIB and its clients. External consultants conducted the study.

One of the recommendations of this evaluation was to implement strategies that would provide an understanding of the role within the WSIB (Doran et al, 2001). This was based on data obtained from focus groups with NCMs where they reported frustration over ambiguity of their role. Improving the orientation process to provide new nurses with a better foundation for their role is one way to do this. Case management is often a role that nurses have not done before. The culture of the organization is also different from the health care settings that most nurses are accustomed to. Therefore, a comprehensive orientation is essential. That way NCMs can develop a clear understanding of the case management principles, which are continuity, collaboration, coordination, evaluation and

communication. These are then related to the nursing process, which the students are familiar with (Keatings, et al, 2000). NCMs who are clear about the role they are stepping into and who are confident in their abilities stand a greater chance of success (Doran, et al, 2001).

This project will describe the development of a self-learning package as an integral component of a comprehensive orientation program for NCMs. Although the NCMs bring knowledge of nursing gained through education and prior experience, provision of case management rather than hands on nursing care and the new culture of the WSIB may make many nurses feel like they are in a beginner role. Similarly, NCMs who may not have up to date clinical experience, such as orthopedics, can feel the same way. Therefore, it is necessary to have specific learning strategies for the orientation program (Benner, 1984). The basic rules and processes that are necessary for beginning NCMs will be replaced, over time, with increased proficiency in their performance, by more complex clinical decision making patterns and practice (Benner, 1984). NCMs who have highly developed professional skills and confidence in the role are associated with improved role performance (Doran et al, 2001). The self-learning package will be one strategy to outline processes and procedures as a basis for making complex decisions and promoting confidence in the NCM role.

1.2 Rationale for the Topic

The author of this project is a Nurse Case Manager, and came to WSIB with sixteen years of clinical experience from hospital and community nursing, nursing supervision and case management positions. A firm belief in adult learning theory and personal positive feelings for the impact of the role of the nurse case manager on the lives of injured workers have stimulated interest in this topic. Therefore the development of this project is relevant to current expectations and the realities of the role. The current model for orientation is one with which the author has experience, and is keenly aware of how it can be improved upon. Development of a new curriculum will stimulate interest in adult education. The curriculum revolves around the job requirements for a NCM, and is based on principles of continuous quality improvement. A new approach to the orientation program clearly outlining the roles and responsibilities of the NCM will fit with the recommendations from previous research as well as opinions expressed by current NCMs during focus group sessions (Doran, et al, 2001).

1.2.1 Revision of the Orientation Program

The Nurse Case Manager (NCM) orientation program has been re-designed to meet the learning needs of newly hired NCMs. This program has been developed from evaluations of previous programs, focus group

discussions with current NCMs, and from the needs and expectations outlined by the Professional Practice Branch of the WSIB.

By the end of the six-month program, it is expected that the NCM will be able to integrate the nursing process and case management principles in the provision of appropriate, timely and effective rehabilitative case management to a full complement of workers. The NCM will establish a professional, supportive relationship with the worker in order to guide him or her through the health care, compensation and return to work process. In order to achieve these goals, effective partnerships will be developed with the worker, employer, health care practitioners, and the service delivery team (WSIB Position Paper, 1998).

It is anticipated that evidence-based approaches to practice will enhance client outcomes (Keatings, et al, 2000, Doran et al, 2001). Therefore, the orientation program is grounded in adult educational theory, critical thinking research and developed using a curriculum development model as a basis for NCMs to learn the necessary components of their role. In the performance of these activities, the NCM will function as a valuable member of the service delivery team in the Operations division of the WSIB. She/he will contribute to two key corporate outcomes: the promotion of optimal health and early and safe return to work (Keatings, et al, 2000).

The program is based on adult learning principles and will engage the participant in an interactive learning environment that will assist him/her in identifying learning needs and achieving program goals. Through the use of lectures, case studies, problem-based learning, self-study modules and a clinical preceptorship experience, the learner will have opportunities to explore his/her new role and to obtain the necessary knowledge, skill and competence to practice as a NCM at WSIB. A description of the NCM role is attached in Appendix A.

1.3 Models for Curriculum Development, Implementation and Evaluation

It is important that new employees of the organization be taught the various policies and procedures of the WSIB, and specifically the role expectations of the Nurse Case Manager. The Miller-Seller Model will be the basis for the development of the curriculum. This model will now be described briefly, and explored in greater detail in Chapter Four. The template or model used for implementation is outlined by Barer-Stein and Connolly (1997) in their chapter, *The Health Educator: Nurturing the Learning Link*. The latter was developed as a means of client teaching which built upon their strengths (Barer-Stein and Connolly, 1997). It will also serve as a basis for NCMs to provide client teaching and learning to injured workers. A full description of the relevance and implementation of the model is outlined in Chapter Five. Finally, a model for curriculum

evaluation, the CIPP (Context-Input-Process-Product) Model developed by Stufflebeam, et al (1971) as cited in Miller and Seller (1990) will be briefly described, and further explored in Chapter Five as it applies to the evaluation of the self-learning package.

1.3.1 Miller-Seller Model of Curriculum Development

The Miller-Seller model for curriculum development provides a theoretical base for the structure and style of the self-learning package. Curriculum is defined as "an explicitly and implicitly intentional set of interactions designed to facilitate learning and development and to impose meaning on experience" (Miller and Seller, 1990, p. 3). Curriculum development is seen as an ongoing, iterative process, i.e. it is like a cycle and can start anywhere. For purposes of clarity, the components will be described in the following logical order: orientations, development, implementation and evaluation (Miller and Seller, 1990). The model requires the curriculum developer to determine where their personal philosophy of education fits within one of three curriculum positions as set out by the authors: the transmission position, the transaction position and the transformation position.

Miller and Seller define a curriculum position in the following way:

At the root of individual perception is a particular world view or model of reality. Such models of reality shape each educator's personal belief structure about the purposes and methodologies of education. In this book, we refer to these basic beliefs about what schools should do and how students learn as *orientations to curriculum, curriculum positions, or metaorientations*. (Miller and Seller, 1990. p. 4).

The transmission position is a method to transmit facts, skill and values to students. It involves the teacher imparting knowledge to the students, and in turn the students internalize this knowledge. It is linked with rote learning methods that have been used since colonial times (Miller and Seller, 1990).

The transaction position is based in a problem solving approach using scientific methods (Miller and Seller, 1990). Students are seen to bring knowledge and experience to a situation and interact with the teacher to meet educational goals.

Historically, the transaction position can be traced back to the Enlightenment and its impact on such American thinkers as Benjamin Franklin and Thomas Jefferson who did not accept the predominant Calvinist view of education but argued instead for a curriculum that would develop the student's intellectual abilities (Miller and Seller, 1990, p. 7).

The transformation position is based on the premise that the student and the teacher interact and influence personal and social transformation (Miller and Seller, 1990). "The curriculum and the student are seen to interpenetrate each other in a holistic manner" (Miller and Seller, 1990, p.8).

The transaction position is selected as the basis for this curriculum unit. The transaction position's emphasis on scientific inquiry which requires the student to independently develop their hypothesis using evidence and then to verify it with collateral evidence provides the

experienced nurse with a framework to use prior knowledge to build on new expectations of the NCM role. The curriculum developed within the transaction position will support the learner's knowledge and experience and will emphasize their strengths (Miller and Seller, 1990). Given that problem solving methodology mirrors the latter scientific process and is the basis for the case management functions of assessment, planning, implementation and evaluation, it makes sense to use the transaction position as the basis for this educational unit (Woods, 1994). In addition, experiential learning methods (integral to problem-based learning) are the best fit for teaching adult learners skills and procedures (Tarnow, 1979).

The next step of the model is to develop aims, developmental goals and objectives. Aims should reflect the overall philosophy of the curriculum unit. They are a broad statement that will guide the development of the unit. Developmental goals are more specific. They will map out expected patterns of growth and learning to be accomplished by the learners. Instructional objectives describe specific student behavioural expectations. Finally, models for implementation, teaching and evaluation that are congruent with the aims and orientation of the curriculum unit are chosen (Miller and Seller, 1990).

1.3.2 Model for Implementation

In selecting models of teaching for the curriculum process, Miller and Seller (1990,) suggest that the model should be congruent with the

major position, or philosophy of the curriculum. Therefore in considering this, the model upon which teaching will be based for the unit is one proposed by Barer-Stein and Connolly, *The Health Educator: Nurturing the Learning Link* (1997). The model is written as a basis for teaching patients. It is a logical choice for this project, as it will be a format that the nurse case managers can follow in their practice. The emphasis of the model is placed on nurturing the learning process with a focus on the client taking responsibility for their whole health. The model incorporates principles of adult education in a learning framework developed through research (Barer-Stein and Connolly, 1997). Further details of the model as it applies to the self-learning package are presented in Chapter Five.

1.3.3 Model for Program Evaluation

A curriculum evaluation model provides a structured way or process used to implement evaluation of a curriculum. It provides a framework for the evaluator to follow and work within. Miller and Seller (1990) recommend the CIPP (Context-Input-Process-Product) Model developed by Stufflebeam, et al (1971) as one way to evaluate the curriculum based on the concept of transaction. The model is built on the premise that the purpose of evaluation is to improve the unit. The model examines key concepts in curriculum implementation and components of program evaluation (Miller and Seller, 1990). This model will be discussed in greater detail in Chapter Five.

1.4 Curriculum Content and Teaching Strategies

Currently, a three-week schedule of intensive classroom learning followed by up to a six-month probationary period for orientation is in place. This will be changed to a five-week schedule of structured learning. The first three weeks will cover the essential components of the NCM role. The fourth week is a "Sector Orientation Week." The NCMs will work independently with the self-learning package during this week, within the business team in the particular industry sector to which they are assigned. The fifth week will introduce roles of other services of the WSIB, such as physicians, return to work mediators and ergonomists, as well as serve to consolidate the learning. The NCMs will continue to have contact with the orientating team at regularly scheduled intervals over the probationary period. By the end of the six-month program, it is expected that the NCM will be able to provide case management services to a full complement of injured workers.

This project describes the development of a self-learning package to be used during the "Sector Week". The self-learning package will be explained further in Chapter Four.

1.4.1 The Participants

The orientation process is a teaching and learning situation. The teachers will be referred to as the orientation team. The team consists of Professional Practice Coordinators and preceptors. The Professional

Practice Coordinators are in a position for staff development. They are responsible for the orientation and ongoing professional practice standards for NCMs. They determine and deliver the content of the orientation program. The preceptors are experienced NCMs who act as mentors to the new NCMs. Ideally, they will work in the same industry sector. They are available to act as a role model and resource person to the new case managers throughout the six-month orientation period.

The learners are the new NCMs. The WSIB has a main office in Toronto, and several regional offices across the province. Weeks one through three and week five will occur in the main office. The sector week will take place in the home office of each NCM. Therefore, the new nurses are likely to be in many different locations during the sector week.

Although the new NCMs will be working independently, they do have support from their preceptors, as well as the orientation team by telephone. A time for debriefing will be incorporated into each day. This will allow for sharing information, answering questions, and giving and receiving feedback. The NCMs may also consult with each other at any time, whether in the same office or by telephone.

1.4.2 Content

The self-learning package will be a review of all of the material NCMs have been introduced to in the first three weeks of the intensive orientation program. It is composed of ten separate learning modules that

provide structured exercises for NCMs to work through. The learning modules are written in a problem-based format and grounded in adult educational theory. Examples and references to policy and prior learning are provided. The NCMs also have a reference binder with the information they will need to complete the exercises. The package will be developed so that each day builds on the previous day's work, and the skill level increases incrementally. Prior knowledge will first be reviewed, then applied to actual situations, and finally incorporated into case management strategies.

NCMs will be able to work in a self-directed fashion, however a schedule has been set for the week so that expectations are clear. NCMs will review and work on cases which will be chosen from either their own caseload (if one exists), or their preceptor's caseload. In the case that no appropriate example exists, a back up case will be given. This will ensure that the learning is real, applicable and meaningful.

The modules can also be completed more than once with different cases. This way, sections that may not be as clear can be reinforced. Preceptors are available to the NCMs if clarification is needed. The self-learning package is presented in Appendix C.

1.5 Summary

This project will describe the development, implementation and evaluation of the curriculum for the self-learning package at the Workplace

Safety and Insurance Board of Ontario as one part of the orientation program for NCMs. The literature pertaining to adult education and critical thinking will be reviewed as the basis for the project. The purpose of the project is to improve the understanding of the role of the NCM at WSIB.

Chapter Two

Review of Literature, Adult Education

2.1 Introduction

This chapter is a review of literature pertaining to adult educational theory. The educational philosophy underlying the project, characteristics of adult learners and their teachers, and methods of learning that will be employed are also discussed.

2.2 Principles of Adult Education

When the subject of adult education is raised, one cannot help but to think of Malcolm Knowles, a pioneer of adult education. Knowles recognized that the learning style of adults is distinctly different than that of children. He saw the need to develop adult teaching and learning strategies to be important due to the fact that adult education was becoming a mainstream part of society. It was no longer a luxury for a few, adults needed to continue learning to keep pace with the rapid change of technology in today's world. It was also important for learning institutions to adopt adult educational strategies. The large number of adults returning to school to continue their education meant a new area for growth (Knowles, 1975).

Knowles' work on adult education is centered on three assumptions about the characteristics of adult learners. Firstly, adults have a well-

developed self-concept. Secondly, adults have a wealth of life experience. Thirdly, adults' sense immediacy of the application of education differs from that of a child.

The most important difference between adults and children as learners, according to Knowles, is their sense of self. This is the fundamental basis for the terms andragogy and pedagogy. Andragogy, stemmed from Greek, with the root "andro" for adult, and "gogy" for education. Similarly, the word pedagogy was formed, with the root "peda" referring to child. Andragogy is based upon adults' need to be treated as an adult, and to be respected for their decisions and self-determination (Knowles, 1975). Conversely, children depend on others to direct and guide not only their learning, but in all areas of growth and development. Over time, they develop increased ability to make life decisions, and when the adolescent becomes fully independent in all areas, adulthood is reached (Knowles, 1975). Knowles sees this difference as key when the approach to teaching children or adults is considered.

This fundamental difference between adults and children must be acknowledged in the classroom. Knowles (1975) states that the physical set-up should be comfortable and informal. Rows of chairs facing a podium infers superiority of the teacher. Adults should be able to choose where they sit, and should be referred to by name.

The second assumption is that adults have a richer experience. Knowles (1975) outlines that a child will define himself in terms external characteristics such as his family, school, and community. Conversely, an adult is defined by his life experience. This experience must be respected so that the adult learner will feel worthy. This leads to use of teaching methods that are not considered part of the typical classroom. Techniques for transmission and experimentation are called for (Knowles, 1975).

Finally, Knowles puts forth the third assumption, as adults' perspective for learning is one of immediacy. Most adults are seeking education to better deal with life situations (Knowles, 1975). Thus, problem-centred learning is an appropriate method to use. Programs and curricula should be built around problems that are faced by adults, and aim to solve these problems.

Following the work of Knowles, others have expanded adult educational theory. Mezirow has further developed the notion of perspective transformation as central to adult learning.

Perspective transformation is the emancipatory process of becoming critically aware of how and why the psycho-cultural assumptions has come to constrain the way we see ourselves and our relationships, reconstituting this structure to permit a more inclusive and discriminating integration of experience and acting upon these new understandings. It is the learning process by which adults come to recognize their culturally induced dependency roles relationships and the reasons for them and take action to overcome them (Mezirow, 1981, p. 6-7).

Mezirow sees perspective transformation as filling a gap in adult learning theory by acknowledging the role played by critical reflectivity. It is a distinctly adult characteristic to be able to discriminate between conventional views and to develop a unique perspective based on inquiry and reasoning.

Mezirow continues his work on perspective transformation, or transformative learning, by stressing the importance of critical reflection as a means of re-examining ingrained beliefs about one's self and one's values. Adults undergo this process by using prior experience as a starting point, and then use education to reformulate new meanings. Experience and learning allow one to redefine assumptions (Mezirow, 1991).

The uniqueness of adults as learners has been examined. Many other educators have attempted to classify the principles of adult education. Boulmetis (1997) sees the impetus for learning with adults to be the transition from one life structure to another. People need assistance during such times of transition. It is also noted that adults have a strong motivation to learn. Commitment to learning is evident, and adults have clear goals after completion of educational endeavors (Wagschal, 1997). Learning becomes relevant for adults when it is seen as useful for solving meaningful problems (Case, 1996).

Brookfield (1992) argues from a different perspective in that teaching adults and children involves more a matter of degree of approach rather than any particular method. He cautions that it is misleading to think that all adults will find the learning process to be joyful; individual learning styles should be assessed and the degree of responsibility for learning should meet the students' level of comfort. Further, Brookfield notes that all adults are innately self-directed learners, and facilitators should determine expectations up front.

2.2.1 Philosophy of Education

If one agrees with the premise that adults are basically self-directed learners, and prefer a problem based approach to learning, than one's philosophy of education should reflect that premise. Draper (1997, p. 57) defines philosophy as that which "encompasses the principles, values and attitudes that structure our beliefs and guide our behaviours in our work as well as in the whole of our daily life." The individual student's philosophy of learning is crucial, as learning does not take place in isolation from other daily activities, feelings and emotions (Barer-Stein and Connolly, 1997).

The humanist philosophy outlined by Draper, best reflects the purpose of this project. Specifically stated, it is "Viewing individuals holistically, humanist philosophy valued the intrinsic, intuitive (right brain), ethical sense of people and their willingness and ability to take

responsibility for their own learning through a process of self-direction, self-evaluation and self-actualization" (Draper, 1997, p. 61). The purpose of humanistic adult education is to enhance personal growth and development and to enhance self-actualization. The learner is seen to be highly motivated and self-directed, needing guidance and facilitation from the teacher (Elias and Merriam, 1980).

Draper uses philosophy to discern between andragogy and pedagogy. He feels that either approach may be appropriate for any age group. The terms andragogy and pedagogy describe the way people relate to each other and to their learning.

"The differences between the terms "andragogy" and "pedagogy", described above, are traditionally described according to age groups. However, the differences between the two have nothing to do with age, but rather represent different philosophical orientations or approaches to teaching and learning." Draper, (1997, p. 255).

An exercise to determine one's personal theory for educational practice was completed by the author of this paper. The exercise consisted of answering a number of questions relating to one's assumptions about education, whether or not they were positive or negative, determining the sources of these assumptions, determining the consequences, determining if the assumptions were valid, and finally to revising those assumptions that were not valid. After completion of the exercise, it was determined that the humanist philosophy best reflected

the thoughts and views of the author. The humanist philosophy will guide the choice of learning strategies, theories and evaluative modalities.

2.2.2 Characteristics of Teachers

Characteristics of adult learners have been explored. How, then, do educators meet the unique learning needs of adults? Review of the literature reveals that there are many attributes for teachers of adults. Building on the work of Knowles, Galbraith (1994) writes that teachers have the opportunity and obligation to both enhance the adult students' self-esteem and reduce their fear. Students undergo a transition into an adult style of learning, such as problem-based learning, in which they assume an increasing responsibility for their learning. Teachers must help students through this transition, by building confidence and thereby fostering skills for life-long learning (Lunyk-Child, et al, 2001). Offering empowerment along with guidance meets the adult learners' needs (Case, 1996). In other words, it is not enough for the teacher to impart information. The teacher must stimulate the student to discover, share and search for information and methods of learning (Eason and Corbett, 1991). Teaching strategies such as active involvement, recognition of individual differences, relevance of subject and motivation are some ways to achieve empowerment for adult learners (Case, 1996).

Teachers must have an expert knowledge base in the subject matter of instruction, as well as in appropriate teaching strategies for

adults. Ismeurt et al (1992), after a review of the literature, propose that matching teaching strategies to learning styles will expedite learning. Schmidt and Moust, (1995) conducted a study to test effectiveness of tutors of small learning groups in health sciences at the University of Limburg, Netherlands. Data from 524 tutorial groups and their tutors were studied. Students were randomly assigned to small groups. A structural equation modeling approach allowed the authors to determine a causal relationship between tutor behaviours and student achievement and interest in the context of problem based learning. It was determined that subject matter expertise, a commitment to students' learning and their lives in a personal way, the ability to express oneself in a language understood by the students will improve student performance (Schmidt and Moust, 1995). In a qualitative study conducted for tutors in problem based learning at the University of Toronto Faculty of Medicine, it was determined that group dynamics is not given adequate attention. The study found that of the three tutorial groups studied, little time was spent on reflection. Although the sample was small, the importance of reflective practice for learning has been documented (Mezirow, 1981, Mezirow 1991, Schon, 1983). Recommendations from the study were to provide training in course content, cognitive processing and group dynamics to improve educational outcomes (Tipping et al, 1995).

Therefore, it is essential that both teachers and students are comfortable with the style of learning in which they are involved. The literature reviewed demonstrates that knowledge of subject matter and teaching strategies are key to success.

2.3 Self-Directed Learning

Self-directed learning is a preferred way of learning for adults, given the previously discussed characteristics of adult learners. There are a variety of definitions of self-directed learning in the literature. Self-directed learning is where “the learner takes the initiative and responsibility for the learning process” (Weinburg and Griffith, 1992, p. 392). Another definition is that the responsibility for the content, the learning outcomes and the learning process is that of the learner (Muscari, et al, 1993). The importance of student behaviours in the learning process is emphasized in self-directed learning, rather than the actions of the educator (Cooper, 1988). Although individuals may have different ideas of what it is to be self-directed, learner characteristics seem to be a common theme in the definitions (Candy, 1991). The importance of learner characteristics has been previously examined in this chapter.

Further to this, one must consider: are all adults self-directed? Knowles’ concept of andragogy assumes adults are increasingly self-directed in their learning (Muscari et al, 1993). Although Knowles writes adults have a need and a preference to be self-directed, he does not say

that all adult learners are self-directed (Cranton, 1992). Individuals move from dependency toward increasing self-directedness, “but at different rates for different people and in different dimensions of life” (Knowles, 1980, p. 43; Knowles, 1975). Candy (1991) admits individuals may vary in their ability, capacity and preference to undertake intentional learning. He also believes social and cultural factors can impede one’s personal freedom to become a self-directed learner. Cranton (1992) acknowledges some learners will reject the idea of being self-directed.

Although the process of becoming self-directed is a goal of this project, there may be times when the learners will prefer the educator as the expert (Cranton, 1992). This can be facilitated through daily debriefing sessions. The self-learning package will identify what needs to be learned, but the NCMs will choose how to learn it, as well as the order of modules in the package, and how often they need to be completed with different cases.

2.4 Problem-Based Learning

Problem-based learning is often used in conjunction with self-directed learning. Woods (1994) describes problem-based learning (PBL) as a process: start with a problem, identify what you need to know, learn it and apply it. Woods emphasizes “the key for PBL is that the focus is to use a problem situation to drive the learning activities on a need-to-know basis” (Woods, 1994, p. 2-2). This approach to learning differs from the

subject-based approach, which assumes the student knows little about a subject and provides the information in pre-determined sequence.

Problem-based learning is a method that gives recognition to the life experience of the student (Knowles, 1980). Literature reviews on problem-based learning indicate that students prefer this method of learning (Albanese and Mitchell, 1993; Vernon and Blake, 1993). In a meta-analysis of research from 1970 to 1992 comparing problem based learning in medical education, it was found that attendance was improved in relation to traditional study. It was also shown to foster a greater degree of independent study, as well as improved clinical performance, but also a possible disadvantage on tests of basic sciences (Vernon and Blake, 1993). In a similar meta-analysis of the literature, it was also noted that faculty satisfaction and study behaviours were more favourable in problem-based programs (Albanese and Mitchell, 1993).

The role of the teacher in problem-based learning is that of a facilitator, rather than a transmitter of knowledge. This requires the teacher to acknowledge and respect the contributions of the student. In turn, this equates to increased benefits for the student (Johnston and Tinning, 2001). This is congruent with the characteristics of teachers in adult education as discussed previously. Therefore, problem-based learning is a suitable method for adults, and will be employed for the self-learning package.

2.5 Conclusion

It is clear that the needs of adults must be considered when designing a curriculum for orientation for Nurse Case Managers. Nurses have to be life-long learners, given the changes occurring in health care today. The College of Nurses of Ontario states that registered nurses undertake some sort of education and reflective practice each year to maintain their certification with the College of Nurses of Ontario (Witmer, 1997). Therefore, use of adult educational theory is appropriate and necessary, not only for the development of the curriculum package, but also for ongoing nursing education at WSIB. By understanding the characteristics of adult learners, appropriate and meaningful curriculum can be developed. Problem-based, self-directed learning methods will be used to prepare NCMs to perform the expectations of the role. These methods will also be useful for NCMs to develop ongoing learning strategies for continuing professional development.

Chapter Three

Review of Literature on Critical Thinking

3.1 Review of Critical Thinking

Critical thinking is a subject that has received considerable attention recently in the nursing literature. It is seen to be an essential part of nursing practice. Maynard (1996) writes that it is inconceivable to consider that critical thinking ability is not related to the process of developing nursing expertise. This statement makes sense when one thinks of the volume, breadth and depth of knowledge that is needed to practice as a registered nurse. Nurses are in a position to make complex decisions for clients; they must ensure that these decisions are based on sound principles. It is extremely important, considering the rate at which new knowledge is being generated, that nurses not only learn the state of the art for current practice, but also know how to interpret and incorporate new knowledge into their realm of practice on a life-long basis. The College of Nurses of Ontario, the governing body for nursing practice in this province, specifies critical thinking as an essential element that the nurse must evaluate, as outlined in her or his Self Assessment Tool in order to maintain competence (Witmer, 1997). Facione and Facione (1996, p. 12) recognize critical thinking as the "cognitive engine driving the process of knowledge development and professional judgment in a wide

variety of professional practice fields.” This also reinforces the fact that nursing, as a self-regulated profession, must use critical thinking as a means of being accountable to the public that they serve.

A thorough review of models of critical thinking, including teaching implications and evaluation will be examined in this chapter. Specifically, application of the critical thinking literature to the development of the curriculum for the self-learning package will be discussed.

3.1.1 Teaching Critical Thinking

If one accepts that the notion of critical thinking is integral to providing intelligent, knowledgeable, and relevant and evidence based practice, the conclusion is that it should be taught (Crawford, 1988). It has been demonstrated that critical thinking *is* valuable for nurses. Research has shown that higher education and years of experience can increase critical thinking ability (Behrens, 1996, Howenstein, et al, 1996, Maynard, 1996, Schumacher and Severson, 1996). Can critical thinking be taught? Stephen Brookfield argues that it can.

“We can see that people are often prompted to become critical thinkers by an external circumstance or stimulus of some kind; only rarely does a change in thinking patterns happen because of a persons’ self-willed decision to become more critically reflective” (Brookfield, 1991, p.24).

Expertise in many every day activities such as thinking, comprehension, and problem solving can be improved with structured practice (Ericsson and Charness, 1994). Nursing students, though, do not always perceive

that critical thinking skills have been developed as a direct result of educational programs (Bethune and Jackling, 1997). How, then, does the nursing educator ensure that critical thinking is developed, rather than leaving the development to chance over the course of many years? A deliberate approach to teach critical thinking is needed to enhance this process.

Critical thinking can be taught to Nurse Case Managers by the following methods: (1) use of a model of critical thinking, (2) the case management process (which is reflective of the nursing process), and (3) a model for infusion of critical thinking into regular curriculum. The reasons for this approach are as follows. A basic model, which will guide the novice critical thinker through the essential steps of the critical thinking process, will ensure thoroughness as each situation is encountered. The case management process will overlap the critical thinking model in many ways. By using these two models together, nurses will connect the critical thinking process with the case management process, thereby incorporating it into their routine practice.

It is noted in the literature that a specific approach must be taken to ensure knowledge transfer occurs. Although some approaches to teach thinking are successful in the classroom, there is little or no transfer to other situations (Swartz and Perkins, 1990). Learners must have extensive practice in problem solving strategies to be able to develop

specialized knowledge. Once this specialized knowledge is developed, one must be able to identify situations in which it will be useful (Regehr and Norman, 1996). Development of cognitive skills should be taught together with specific knowledge (Perkins and Salomon, 1989). A model for the infusion of critical thinking into regular instruction is necessary in order to include strategies for developing critical thinking as part of the curriculum. Smith-Blair and Neighbours (2000) have found that identifying areas of strengths and weaknesses in critical thinking is beneficial when assessing needs for orientation programs for nurses. Teaching and evaluation strategies will also be explored.

3.2 Critical Thinking and Relevance to Nursing

How does one define critical thinking? Some prominent writers in the area define it in the following ways. Ennis (1996) writes that critical thinking is a process, the goal of which is to make reasonable decisions about what to believe and what to do. Swartz and Perkins (1990) interpret critical thinking as the critical examination and evaluation – actual and potential – of beliefs and courses of action. Nurses are faced with situations on a daily basis that do not necessarily have a clear course of action or an obvious right or wrong answer. Each situation to be dealt with is unique and will not fit into a pre-determined plan. For this reason, critical thinking is an essential part of nursing. A nurse must make reasonable decisions when providing care to clients. These decisions must be

examined and evaluated to ensure the clients best interests are being met. Critical thinking is what distinguishes a professional from a technician (Benner, 1982).

The concepts of critical thinking as proposed by Ennis and Swartz and Perkins are useful to help focus nursing education. The challenge for educators, as Baker (1996) states, is to assist nurses to develop greater critical thinking skills and to improve awareness of self and environment, and to facilitate nurses' ongoing learning from their daily practice. Nurses routinely encounter complex problems for which they attempt to find solutions.

There are typically many factors influencing any given situation, and these factors must be considered when making a decision. Experienced nurses develop critical thinking skills by dealing with these situations over the course of their career. Maynard, (1996), conducted a study to determine the relationship of critical thinking ability to professional competence. A positive correlation was not found. It is unclear what specific factors influence the positive effect that practical experience has on the development of critical thinking ability (Maynard, 1996). Using a group format to enhance critical thinking led to more sophisticated applications of the nursing process (Neill, et al, 1997). However, Benner, in her theory Novice to Expert, clearly outlines how cumulative experience

will lead to higher levels of function (Benner, 1982). This definitely applies to the role of the NCM at WSIB.

Research has shown that a broad knowledge base, rather than specific learning strategies, is the most important factor when developing expert knowledge and specific learning strategies can be beneficial to students who have not yet developed expert knowledge in a specific area of study (Glaser, 1984, Perkins and Salomon, 1989). A model of critical thinking is proposed with a step-by-step process for the novice to follow. A systematic approach to critical thinking that can be applied to the case management function is needed.

3.3 Critical Thinking Practice: A Model

A model of critical thinking has been developed by Ennis (1996), which proposes that the development of critical thinking involves skills such as observing, making judgments, planning experiments and developing ideas and alternatives. It also involves dispositions, which Ennis defines as combinations of attitudes and inclinations. Three basic dispositions, or virtues, that Ennis deems important to critical thinking are (1) to care about getting it right; (2) to be honest and clear about what is written, thought and said; and (3) to care about the worth and dignity of every person.

The elements of critical thinking as outlined by Ennis fits clearly relate to characteristics intrinsic to nursing practice. In an interpretation of

a national, cross-disciplinary consensus description of critical thinking skills resulting from a Delphi research project sponsored by the American Psychological Association, Facione and Facione (1996), propose the following statement:

The concern that nursing knowledge development should expect a search for best knowledge in a given context is a central concern to nursing practice. Nursing practice demands fair-mindedness to new evidence and a willingness to reconsider clinical judgments. It values a focused and diligent approach to ill-structured patient problems, and requires tolerance of multiple perspectives and interpretations when such perspectives and interpretations can be supported by reasons and evidence. All of these characteristics are identified as descriptors of ideal CT disposition. (Facione and Facione, 1996, p. 130).

Therefore, Ennis' model of critical thinking is appropriate and meaningful for nursing, and for use in development of the self-learning package.

Ennis has developed an acronym, *FRISCO*, which represents six basic elements for critical thinking. It stands for focus, reasons, inference, situation, clarity and overview. It provides the novice with a useful framework in which to consider a given situation. Critical thinking is a non-linear process that can be taught and strengthened with practice (Ennis, 1996). In other words, the critical thinking process, *FRISCO*, is a list of interdependent elements, not a sequence of steps. With ongoing practice, one can internalize this reference list and automatically recognize problems and strengths within a situation (Ennis, 1996).

Sub-skills to the major components of Ennis' model which are important to nursing and case management include, but are not limited to: evaluating the credibility of sources of information; observing and reporting accurately what one has observed; generate options on a decision-making situation; identifying considerations relevant to a given option in a decision-making situation; and, considering alternative points of view (Ennis, 1996).

3.4 Nursing and Case Management Practice

Nursing has existed since time began when people needed care for illness and infirmity. It has only existed as a science, however, for a little more than one hundred years. Florence Nightingale was the first nurse who applied theory and research to nursing, identifying it as a distinct profession. Even before the time that the pioneers of critical thinking explored and published their ideas, Nightingale emphasized the importance of observation, and thereby set the stage for critical thought in nursing:

“...What you want are facts, not opinions – for who can have any opinion of any value as to whether the patient is better or worse, excepting the constant medical attendant, or the really observing nurse?

The most important practical lesson that can be given to nurses is to teach them what to observe – how to observe – what symptoms indicate improvement – what the reverse – which are of importance – which are of none – which are the evidence of neglect – and of what kind of neglect.” (Nightingale, 1860, republished in 1969, p. 105).

Nightingale advocated for a process of critical thought with this advice to promising nurses.

A specific model for case management practice at WSIB has not been developed, however a framework consisting of assessment, planning and implementation, and evaluation is used (Keatings, 2000). This framework is based on the nursing process, which is defined as “the intertwining of thinking and doing in nursing” (Rubenfeld and Scheffer, 1999). The components of the nursing process, assessment, planning, implementation and evaluation, were first formalized in 1967 (Yura and Walsh, 1967). It is within the scope of this model that the critical thinking components will be taught. This approach will be taken for the following reasons. First, the nursing process is basically a problem-solving process, which is enhanced by use of a critical thinking model (Rubenfeld and Scheffer, 1999). The nursing process is familiar to all nurses; working with Ennis' more detailed critical thinking model within this process places critical thinking within the daily routine of the NCM. Critical thinking will be taught within the very essence of what case management is, not as an adjunct that the NCM may not connect with professional practice.

3.5 Infusion of Critical Thinking Skills

In their book “Teaching Thinking: Issues and Approaches,” Swartz and Perkins outline two major approaches which can be applied in the teaching of critical thinking skills (Swartz and Perkins, 1990). These are

either teaching critical thinking as a separate course in the curriculum, or infusing the skills of critical thinking into existing curriculum within specific subject matter. The infusion approach to teaching involves the integrating and blending of the critical thinking component into curriculum which is currently in use by restructuring the way the existing educational goals are met (Swartz and Perkins, 1990). The authors further elaborate that research shows that students who learn thinking skills, even those who do well in such course, tend not to use those skills in practice (Swartz and Perkins, 1990). Perkins and Salomon (1989) call for an approach to intermingle generality and context specificity in instruction of thinking skills. This is because skills learned are context bound, and to be able to transfer skills learned in one context to another is not something that students are able to achieve. This transfer can be achieved, however, if the critical thinking skills are taught in such a way that transfer to subject specific areas is possible. This involves the educator taking extra steps and having the skills to be able to help students to do this. If the critical thinking skills are taught imbedded into a subject specific curriculum, then the student will be able to use the skills in a broad, general sense. The ideal approach would be a blend of both methods; to teach critical thinking skills embedded into existing curriculum, but also highlight and reinforce critical thinking as a separate entity (Swartz and Perkins, 1990). Use of this approach to the self-learning package will be described next.

3.5.1 Application to the Self-Learning Package

For the purpose of this project, the infusion approach will be the most appropriate method. This method, rather than a separate course for teaching critical thinking, has been chosen because it places critical thinking into the day-to-day practice of the NCM. Regehr and Norman support this approach: "Only when the information is integrated into the individual's semantic network will it be available and functional for future purposes" (Regehr and Norman, 1996, p. 992). One must examine "the cognitive and epistemological integration of critical thinking and clinical judgment embedded in clinical practice and the development of nursing knowledge" (Facione and Facione, 1996, pp. 129-130). The NCMs will need to use the concepts of Ennis' model to complete the learning exercises in the self-learning package. Questions will be structured in such a way as to require the use of the elements of *FRISCO*. NCMs will be required to analyze a situation, develop a plan and evaluate its effectiveness. Infusing the critical thinking into the curriculum of the learning package is also for practical reasons; the NCMs are already given a large volume of information to absorb within the five-week period of formal orientation. An additional "course" would be overwhelming within the schedule.

The infusion of critical thinking skills has been used successfully within a nursing curriculum. Ming, Masoodi, Kopp and Klonowski (1998)

applied the infusion approach as suggested by Swartz and Perkins to teaching nursing students' critical thinking skills by way of the nursing process. Their students were able to work through clinical situations, evaluated and revised their thinking, and then applied the skills learned in the clinical laboratory. Although this article does not describe a research study, it does demonstrate that the infusion approach fit with nursing instruction. Measuring critical thinking abilities of students taught by this method compared to traditional teaching is recommended for validation of this approach.

Swartz and Perkins put forth the following concepts integral to the infusion of critical thinking skills into existing curriculum:

1. The active structured use of thinking skills;
 2. Creating an awareness of the thinking that students are doing;
 3. Varied reflective practice in applying the skill.
- (Swartz and Perkins, 1990, p. 86).

The NCMs will be involved in active structured use of critical thinking skills. This will occur during their application to actual situations that are incorporated into the self-learning package, and is therefore meaningful. By making the learning environment similar to the actual work setting, NCMs will be more likely to apply the critical thinking skills they have learned when faced with actual situations (Regehr and Norman, 1996).

The awareness of the thinking process is known as metacognition. The educator must ensure that the students are aware of the thinking process they are using in the course of the learning situation. This means that

students perform appropriate thinking tasks reflectively. They think about their own thinking as they work through the steps of the decision making process (Swartz and Perkins, 1990). Metacognition can have a dramatic impact on learning thinking when practiced within the given situation. The concept of metacognition is evident as a part of the Quality Assurance Program of the College of Nurses of Ontario, which stresses the use of reflective practice to self-assess and identify learning needs for continuous learning to ensure professional accountability (Witmer, 1997). Thus, students are learning skills that will help them to become life-long learners.

3.5.2 Writing Curriculum for Infusion

Three questions posed for the educator to ask in restructuring for infusion are: "1) What are the details of the kind of thinking I want to help my students learn?; 2) Where, in what I already teach, is there content that can be used for this sort of thinking?; and 3) How will I organize lessons in which I teach for this sort of thinking?" (Swartz and Perkins, 1990, p. 74). The kind of thinking that students are to learn is critical thinking. The details are embodied in Ennis' approach to critical thinking, described previously. This is a process on which the NCMs can apply what they already know about a clinical situation and incorporate new findings, thereby developing relevant information on which to base a decision. The content to be used to teach critical thinking will arise from specific clinical situations. In this way, the content is innately meaningful

and varied, thus reinforcing learning. Consultation from the educator will be organized in such a manner that Ennis' FRISCO approach is the framework by which critical thinking is taught. The educator will need a variety of teaching strategies that encourage the NCMs to use the critical thinking framework. Teaching strategies will be discussed in Chapter Four.

3.6 Evaluation of Critical Thinking by Nurse Case Managers

Evaluation is a critical component of the curriculum. Evidence that the students have improved their critical thinking ability as a result of the instruction needs to be measured. This can be done in terms of student outcomes and course and program evaluations. Norris and Ennis (1989) advise that the evaluation of critical thinking is an activity that requires the instructor to think critically. There are a number of methods by which critical thinking can be evaluated. Some of these methods will be described and discussed in terms of their suitability for this project.

Norris and Ennis (1989) discuss the variety of commercially developed critical thinking tests that are available. The advantages of this type of test are that they are usually reliable and valid, and have been developed over time by experts in test construction. The evaluator of critical thinking, in specific course subjects however, will have to be careful if selecting from the available commercial tests. We know from the literature that critical thinking skills taught in subject-specific curricula may not transfer to a broader framework of critical thinking (Norris and Ennis

.1989; Regehr and Norman 1996; Howell et al, 1996; Rane-Szostak and Robertson, 1996; Leppa, 1997). These tests have not reflected the discipline specific characteristics for critical thinking in nursing (Schumacher and Severson, 1996).

Multiple-choice tests can be constructed for four aspects of critical thinking: deduction, credibility, induction and assumption identification. The educator must ensure, though, that the questions on the test not only cover the subject matter and critical thinking skills, but also to consider what answers will be accepted as correct. Guidelines for writing these tests are available (Ennis and Norris, 1989).

Open-ended evaluations are useful for obtaining information about the critical thinking process. Examples of this are short answer testing, argumentative essays, interviewing students as they work on problems and carefully monitoring classroom discussions (Norris and Ennis, 1989). Oermann (1997) uses this multi-faceted approach. Her premise is that skill in critical thinking develops over time and through varied experiences. Therefore, evaluation strategies should reflect this. Her examination of clinical evaluation strategies for critical thinking demonstrates that the use of multiple evaluation techniques gives a truer reflection of critical thinking abilities (Oermann, 1997). The evaluation strategy should be selected carefully. It should truly measure the knowledge that the NCMs have gained.

3.7 Conclusion

This chapter has outlined an approach to infuse the teaching of critical thinking into the orientation curriculum for Nurse Case Managers at WSIB, by application of critical thinking frameworks, the case management process and infusion of critical thinking skills. The importance of critical thinking to the role of NCM has also been clearly stated.

The infusion approach is one that is supported by evidence as a method of learning higher order thinking skills such as critical thinking. It has been proven to be effective for the transmission of knowledge. It is a method that improves upon current course work, but does not add to the load of students because it is integrated into the curriculum content. The implementation of this approach as part of the orientation for NCMs in the WSIB system will assist them to be better prepared to assist their clients in the decision making process. It will also provide the foundation for continued learning as NCMs progress through their careers. Caring for the client's welfare is a central nursing concept. If this approach strengthens this central construct then it makes sense to take it.

Chapter Four

The Miller-Seller Model

4.1 Introduction

The review of the literature on adult education has outlined a broad scope of self-directed learning. One method of learning, which can incorporate self-directed and problem-based learning, is the development of a self-learning package. This method is best suited for the cognitive and psychomotor domains of learning (Weinberg and Stone-Griffith, 1992). The Miller-Seller Model of Curriculum Development is an example of a theoretical framework that may be used in developing a self-learning package (Miller and Seller, 1990). The package should consist of one topic, should take the learner no longer than two hours to complete and should be attractively bound (Weinberg and Stone-Griffith, 1992).

Self-directed learning packages may be suitable for some adult learners and not for others. Individuals should be able to choose the most appropriate learning activity based on their perceived learning needs. (Muscari, et al, 1993). Their learning needs are diverse and personal learning styles are variable. For some learners, self-learning packages may be more inviting if they are able to discuss what they have learned with a supervisor or their peers. Being self-directed also means seeking out appropriate learning resources. One of the major disadvantages of

utilizing a self-learning package is the lack of interpersonal interaction with an instructor and peers (Cooper, 1988).

4.2 The Miller Seller Model

The curriculum development model upon which the self-learning package will be based is the Miller-Seller Model (1990). This model emphasizes the importance of the curriculum developer exploring his or her particular philosophical view of education. Miller and Seller define this philosophical view as an orientation. Curriculum is defined as “an explicitly and implicitly intentional set of interactions designed to facilitate learning and development and to impose meaning on experience” (Miller and Seller, 1990, p. 3). The curriculum plan should start with a statement of its basic orientation, or focus. The model outlines aims/objectives, learning experiences/teaching strategies, implementation and evaluation.

The Miller-Seller model defines three major positions that educators should follow. The positions are really interactive processes for teaching and learning chosen by educators based on their particular orientation, or philosophy (Miller and Seller, 1990). They are the transmission, the transaction and the transformation positions. The transmission position is based on the transfer of knowledge from the teacher to the student. It is a one-way movement to convey knowledge. The transaction position is based on the premise that information flows from the teacher to the student and from the student to the teacher. This two-way flow of

information acknowledges the student for bringing experience and intelligence to the learning situation. Emphasis is placed on problem-solving strategies. The transformation position focuses on personal and social change. The teacher and the student are seen as equally important in the sharing of knowledge and the learning experience.

The underpinnings of the new curriculum unit will be grounded in the transaction position. Miller and Seller define a curriculum position as “basic beliefs about what schools should do and how students learn” (1990, p.4). The position is used as a framework for curriculum development. The student is viewed as being capable of intelligent interaction. This statement has been borne out in the literature, as discussed previously in Chapter 2 (Knowles, 1975, Draper, 1997, Elias and Merriam, 1980). The aim of this educational philosophy is the development of rational intelligence in general and complex problem solving skills in particular (Miller and Seller, 1990, p. 110). This is congruent with the aim of the self-learning package, which is to improve knowledge of newly hired nurse case managers about their role at WSIB. This approach fits well with the needs of adult learners, as outlined by Tarnow (1979). She stresses that adults demand recognition for their collective life experiences, and an atmosphere that supports the sharing of this experience in a collaborative manner will enhance learning.

The Miller-Seller model outlines the construction of a curriculum unit, but lacks specific guidelines about teaching. Therefore, Miller and Seller recommend a model of teaching be use concurrently with the curriculum model. The use of a teaching model is consistent with the orientations approach (Miller and Seller, 1990). The model of teaching used for the self-learning package is "The Health Educator: Nurturing the Learning Link" (Barer-Stein and Connolly, 1997).

4.3 Orientation for Nurse Case Managers

The nurse case manager orientation program has been re-designed to meet the learning needs of newly hired nurse case managers. This program has been developed after evaluating previous programs, focus group discussions with current nurse case managers, and from the needs and expectations outlined by the Professional Practice Branch and the WSIB (Doran, 2001).

By the end of the six-month program, it is expected that the nurse case manager will be able to integrate the nursing process and case management principles in the provision of appropriate, timely and effective nursing care to a full complement of workers. The nurse case manager will establish a professional, supportive relationship with the worker to act as an advocate to guide him or her through the health care, compensation and return to work processes. The nurse case manager will function as a valuable member of the service delivery team and will contribute to two

key corporate outcomes: the promotion of optimal health and early and safe return to work.

Through the use of lectures, case studies, problem-based learning, self-study modules and a clinical preceptorship experience, the learner will have opportunities to explore his/her new role and to obtain the necessary knowledge, skill and competence to practice as a nurse case manager at WSIB.

The orientation program consists of a formal component lasting five weeks, and an informal component, which is up to six months. The formal program is comprised of five main sections, which in turn are made up of teaching sessions and modules that address the specific components. The self-learning package is delivered in the fourth week of the formal component.

4.4 The Self-Learning Package

The self-learning package will be the tool to guide the new NCM's through independent learning in their home office during the sector week. The curriculum is developed using the Miller-Seller model of curriculum development, implementation and evaluation. Miller and Seller define the following as key components associated with curriculum development: (1) aims and objectives, (2) content, (3) teaching strategies/learning experience, and (4) organization of content and teaching strategies. (Miller and Seller, 1990, p.175). Evaluation of a curriculum unit is seen as a

separate component (Miller and Seller, 1990). Aims and objectives are further divided into aims, developmental goals and instructional objectives.

The learning package will consist of ten separate learning modules. These modules will be the basis for teaching a variety of functions of the nurse case manager. Each module will consist of a review of information pertaining to the particular subject learned previously, a self-learning exercise, and be followed by a debriefing session with professional practice co-ordinators.

4.4.1 Aims and Objectives

The aim of the self-learning package is to have the NCM's apply their new skills and knowledge through the use of self-learning modules in their home sectors. This process will develop proficiency in performance of the core components of the NCM role.

4.4.2 Developmental Goals

By the end of the week, the NCM will be able to:

1. Collect relevant information by reviewing client files and communicating with key participants involved with the worker's case.
2. Practice nurse case management skills by working through actual cases with guidance from the orientation team.
3. Communicate plans verbally and through documentation.

4. Begin to build networks with health care providers and WSIB clinical resources to promote health and facilitate early and safe return to work.

4.4.3 Organization of Content and Teaching Strategies

To develop appropriate strategies to use for the development of the self-learning package, one must consider the situation and context in which the learning is to take place. Learning should be meaningful. The learner must be able to retain and retrieve relevant information, and thus place the new information in a context that relates it to previous knowledge. The environment should foster learning and growth (Tarnow, 1979). Success in teaching critical thinking involves innovative strategies and active learning (Neill, et al, 1997; Youngblood and Beitz, 2001). Active learning strategies develop information processing skills necessary for critical thinking (Elliott, 1996). The following will describe the strategies employed in the self-learning package.

The self-learning package will be a review all of the material NCMs have been introduced to in the first three weeks of the intensive orientation program. The package will be developed so that each day builds on the previous day's work, and the skill level increases incrementally. Prior knowledge will first be reviewed, then applied to actual situations, and finally incorporated into case management strategies. NCMs will be able to work in a self-directed fashion, however a schedule has been set for the

week so that expectations are clear. The modules can also be completed more than once with different cases. This way, sections that may not be as clear can be reinforced.

Although the new NCMs will be working essentially on their own, they do have support from their preceptors, as well as the orientation team by telephone. A preceptor is a nurse case manager who teaches the new staff job related skills. Myrick and Yonge (2001) note the word preceptor means 'to tutor' and is not interchangeable with the functions of a mentor or apprentice. A time for debriefing will be incorporated into each day. This will allow for sharing information, answering questions, and giving and receiving feedback. The NCM's may also consult with each other at any time, whether in the same office or over the phone. Ultimately, the attitudes and actions of staff have a great impact on the new nurse case managers' ability to think critically about their role (Myrick and Yonge, 2001).

The debriefing period is a key concept. The educator is a role model for the student; a mentoring relationship exists where the student will benefit from the educator's critical thinking ability. Farquharson (1995) notes, "Group discussion and experiential learning exercises can provide a useful way to grapple with new concepts, attitudes, and skills, and group learning can help learners understand the material from multiple perspectives." Learning will take place not only with the learner, but also

the educator (Young, 1995). The nurse case managers will keep notes on their reflections throughout the day to be used in the debriefing session. This is essentially reflective journal writing, and is a way to increase self-awareness, sensitivity to the environment and to change conceptual perspectives (Baker, 1996). The debriefing session will also provide a sense of closure to the days learning activities (Elliott, 1996).

The learning modules are written in a problem-based format and grounded in adult educational theory. NCMs will review and work on cases which will be chosen from either their own caseload (if one exists), or their preceptor's caseload. In the case that no appropriate example exists, a back up case will be given. This will ensure the learning is real, applicable and meaningful. Learning which is based on experience enhances understanding and knowledge is better retained (Welch et al, 2001).

4.5 Conclusion

In conclusion, although the process of becoming self-directed should be a goal of education, there will be times when the learner will prefer the educator as the expert (Cranton, 1992). Self-direction really means that learners can choose to learn, chose what to learn, and choose how to learn it. Self-directed learning packages may be one option for staff orientation education at the WSIB.

The Self-Learning package was divided into modules so that each section could be completed in a morning or an afternoon session. The

modules allowed for individuality in learning styles by nature of the open-ended format. There was also provision for discussion, as this added support from peers and the orientation team.

The Self-Learning Package provides an opportunity for the orientating NCMs to use knowledge from previous experience, and combine it with new knowledge learned in the first three weeks of orientation. This acknowledges the unique contributions they bring to the organization as adult learners and experienced practitioners.

The implementation and evaluation of the Self-Learning Package will be discussed in Chapter 5.

Chapter Five

Implementation and Evaluation of the Self-Learning Package

5.1 Introduction

The purpose of this chapter is to explore the steps that were followed to implement and evaluate the self-learning package. The process of change for the entire orientation will also be discussed to increase understanding of how the different components of the orientation program enhance one another. Implementation and evaluation of the self-learning package are based on the curriculum development model proposed by Miller and Seller (1990). A model for implementation of teaching strategies developed by Barer-Stein and Connolly (1997) and a model for evaluation by Stufflebeam, et al, (1971) as cited in Miller and Seller (1990) are used for the specific details needed for these functions.

5.2 Implementation

Implementation is an important part of the curriculum development process, yet is often neglected by theorists. It should be viewed as multi-dimensional, reflecting materials, teaching approaches and beliefs (Miller and Seller, 1990). Development of curriculum is a dynamic process, and should involve interaction between the curriculum worker and the teacher. Shared ownership and mutual adaptation are necessary for a successful implementation (Miller and Seller, 1990).

Seven primary components are identified for curriculum implementation:

1. A study of the new program
2. Identification of resources
3. Role definition
4. Professional development
5. Timelines
6. Communications system
7. Monitoring the implementation

These seven steps were applied to the implementation of the curriculum for the self-learning package as follows (Miller and Seller, 1990, p.276).

5.2.1 A Study of the New Program

Change to a curriculum may be generated internally or externally. Internal stimulus for change is usually more readily accepted (Miller and Seller, 1990). This was the case in this project. A change to the orientation process had been advised, both from the professional practice branch and practicing nurse case managers. Thus, a strong commitment was established to revise the entire orientation program. Goals were developed to identify gaps in the present orientation format, and practice to be developed in the new program. The professional practice coordinators recognized a need to incorporate more problem-based learning into the curriculum.

5.2.2 Identification of Resources

Miller and Seller identify resource identification to include print and audiovisual resources, people resources, and financial resources. It was identified that the budget for print and audiovisual resources would not change significantly, as the same content was to be presented. The major change was the way in which the content was to be taught. A graduate student wrote the curriculum, and time was not generally paid. The student was, however, a nurse case manager at WSIB. Time spent at meetings and planning sessions was granted from her manager as an educational development expense. The overall cost of developing a new curriculum was seen as a means to decrease the cost of staff attrition. Nurse case managers who participated in focus groups cited an inadequate orientation program as one reason for lack of job satisfaction.

5.2.3 Role Definition

Role descriptions can help ensure that important tasks are not overlooked (Miller and Seller, 1990). The manager for recruitment and retention (for nurse case managers), four professional practice coordinators and the author implemented the changes to the existing orientation program. Although the professional practice coordinators would actually be implementing the program, the others were necessary to the process. The manager for recruitment and retention ensured that the goals of the program were within the scope of the professional practice

branch, and the WSIB as an organization. The author was responsible for development of the self-learning package, as well as to consult on the appropriateness of the program to the performance of the nurse case manager role.

5.2.4 Professional Development

The professional practice coordinators recognized a need to modify their teaching practice to include more problem-based learning. They also increased their awareness of adult learning theory. This was done by self-study and research presentations to one another in a group format. The professional practice coordinators were also provided with the theoretical frameworks and philosophy that were followed in the development of this project.

5.2.5 Timelines

The orientation group developed a schedule so that it was clear when various aspects of the project were to be completed. The schedule was developed at the beginning of the project, and was modified as work continued. Such a timeline is useful for setting intermediate goals, sequencing of events and allocation of adequate time to complete the various components of the program change (Miller and Seller, 1990).

5.2.6 Communications Systems

Clear communication for this project was essential, as the members of the working group were based in three separate offices in different

cities. Meetings were held in the head office in Toronto when needed, however teleconferencing and e-mail were used. Miller and Seller (1990) see an effective communication system as having two parts. The first is formal routing to ensure that essential information is conveyed. Apart from the communication among the working group members, a formal communication package was developed to explain the expectations and schedule of the orientation program to the respective manager of each newly hired nurse case manager. The second is by a network for the sharing of experiences and problem solving. Both types of communication were employed by the methods mentioned above.

5.2.7 Monitoring the Implementation

Implementation of the self-learning package was monitored via daily debriefing teleconferences. "The purpose of monitoring is to gather information related to the implementation and to use this information to facilitate and support the efforts of the teachers" (Miller and Seller, 1990, p. 292). For the purpose of this project, the concept of support was developed not only for the teachers, or the orientation group, but also for the students. Information was gathered that was used to improve the self-learning package. More importantly, the nurse case managers were able to relay concerns, and be assured that they were progressing with the work. This was essential as they were in the process of reforming their conceptions of the role.

5.3 The Health Educator: Nurturing the Learning Link

A model of teaching, selected to reflect the philosophy of the transaction position was selected to provide more detail for teaching and learning strategies. A model developed by Barer-Stein and Connolly (1997) was chosen. The rationale for this model is that it is based on adult learning theory, and is useful for health care practitioners. The model is grounded in the concept of nurturing. "The holistic nature of nurturing assumes that each person has the potential to develop, and eventually shift towards independence from that nurturing" (Barer-Stein and Connolly, 1997, p. 89). "Learning' describes both the outcome of a process as well as the process itself" (Barer-Stein and Connolly, 1997, p. 89). This concept of learning is important for this project, because not only do the nurse case managers need to learn, they will also employ teaching strategies on the job. The process of learning will become a template for daily function within the nurse case manager role.

This model does not focus on the content to be learned. That is not necessary for this project as the content is already established. What is needed is a way to convey the information that is meaningful and useful. This process focuses on the following form and sequence of the learning:

1. Being Aware
2. Observing
3. Participating

a. Rote Internalizing

4. Confronting Perceived Risk or Perceived Challenge

5. Reflective Internalizing

These five steps are seen as a pattern toward a change in behaviour. The learner can move through the steps in progression, move back for reinforcement, or exit the process at any time (Barer-Stein and Connolly, 1997, p. 92).

5.4 Sector Week

The self-learning package will be used during what is referred to as "Sector Week", or, the fourth week of the formal orientation program. The nurse case managers will spend the first three weeks in a classroom setting, using some lecture format sessions, but mostly problem-based, self-directed learning as a format for learning about the WSIB and the role of the nurse case manager. During these first three weeks, the nurse case managers will begin to develop an awareness of their new workplace that fits with the first step of the implementation model, i.e. that of being aware. The nurse case managers will also begin to observe and participate in small aspects of the role, such as simulated situations in the small group sessions.

The Sector Week is so named because nurses will be working at their own desk, in the industry sector to which they are assigned. The cases to be worked on for the self-learning package will be identified by

their preceptors, from actual caseloads. The nurse case managers will be able to work through these situations, with support from their preceptor, as well as professional practice coordinators by phone. At this point in the orientation, they will be more involved in the third step, participating and rote internalizing.

The self-learning package also provides the opportunity to confront the “perceived risk or challenge,” step five of the model. It is a much more independent setting, and the cases are real. This will help the nurse case managers to apply what they have learned during the earlier phases of learning.

Any perceptible change within the learner that occurs during the first three steps is due only to the learning that has been rotely accumulated. But that accumulated knowledge has not been changed in any way; the learner has acquired (added on) what seemed useful, relevant. The actual *transformation* of previously acquired knowledge and skills can only occur in Step 5 through Reflective Internalizing. It is in Step 5 that acquired knowledge becomes shaped and transformed, becoming personally meaningful and relevant (Barer-Stein and Connolly, 1997, p. 99.)

The self-learning package is key to the orientation process. The aim is that the nurse case manager will achieve transformative learning as a result of this model.

5.5 Evaluation

Evaluation must be considered during implementation of a curriculum for the self-learning package. There must be evidence that the students have improved their knowledge of the Nurse Case Manager role

as a result of completion of the unit. This can be done in terms of student outcomes and program evaluations. Norris and Ennis (1989) advise that evaluating critical thinking activity itself requires thinking critically.

Transaction-oriented evaluation focuses on the student's acquisition of complex intellectual frameworks and skills (e.g. analysis and synthesis) and on social skills that are important in a democratic context (Miller and Seller, 1990).

Open-ended evaluations are an approach that is useful in obtaining information about the critical thinking dispositions. Examples of this are short answer testing, essays which debate different points of view, interviewing students as they work on problems and carefully monitoring classroom discussions (Norris and Ennis, 1989). Oermann (1997) uses such a multi-faceted approach; her premise is that skill in critical thinking develops over time and varied experiences. Therefore, evaluation strategies should reflect this. Her review of critical thinking assessment tools demonstrates that the use of multiple evaluation techniques gives a truer reflection of critical thinking abilities. Use of methods such as observation of students in practice, questions for critical thinking, conferences, written assignments and problem-solving strategies can provide a means of evaluating students' critical thinking abilities. (Oermann, 1997).

The evaluation strategy should be selected carefully. It should truly reflect the knowledge that the students have gained about the nurse case manager role. The evaluation process should not be a burden to the newly hired nurse case managers of the staff of the professional practice branch.

Evaluation of the new case managers will occur through observation in small group sessions, participation in debriefing sessions and by information from preceptors. Formal evaluation is the responsibility of the professional practice coordinator, and a process is being developed concurrently with this project for that purpose.

A curriculum evaluation model provides a way to implement evaluation of a curriculum. It provides a framework for the evaluator to follow and work within. Miller and Seller (1990) recommend the Context-Input-Process-Product (CIPP) Model as appropriate to evaluate curriculum based on the transaction position. The model is built on the premise that the purpose of evaluation is to improve the unit. This model is appropriate for this curriculum unit, as the education around the content is not an option, but we seek to teach the unit in the best possible way. The model examines key concepts in curriculum implementation and components of program evaluation.

The CIPP evaluation model acknowledges the need for both summative evaluation, which is an overall assessment of a program, and formative evaluation, which focuses on revision of a program based on

information gathered during its implementation. The model was used for this project in the following way.

Context evaluation was carried out as part of the planning for the revised orientation program. The results of the focus groups in which nurse case managers gave feedback about the orientation process were used as a starting point. This information was useful in planning for the format of the program and developing the learning objectives.

Input evaluation is a means to identify and assess system capabilities, available input strategies, and designs for implementing the strategies (Miller and Seller, 1990). The content of the orientation was adequate. Revising the way in which the material was delivered by use of appropriate educational theories would strengthen the program.

Process evaluation was carried out as part of the debriefing sessions. The nurse case managers who participated in the process gave advice on the procedure for implementation and the design of the self-learning package. The results of the debriefing session will be summarized in section 5.5.1.

The purpose of product evaluation is to decide to continue, terminate, modify or refocus a change activity, and for linking the activity to other major phases of the change process (Miller and Seller, 1990). This was accomplished by conduction of daily debriefing sessions and development of a questionnaire that was distributed to the five nurse case

managers who completed the self-learning package. Results of the debriefing sessions will be discussed in section 5.5.1. Results of the questionnaire will be discussed in section 5.5.2.

5.5.1 Debriefing Sessions

The debriefing sessions were held toward the end of each day of the sector week, to discuss the content covered, any concerns from the nurse case managers and to provide guidance and support.

Notes were taken during each session to record the discussion. Summaries of the notes are listed in Appendix D. Some themes emerged from the sessions. Positive feedback included the preference of working in real situations for retention of learning, flexibility of working through the package and a good source of information. Constructive criticism of the package included more examples in each module, to have more time to complete the modules and better preparation for the preceptors.

5.5.2 Questionnaires

Questionnaires were used as a way of sampling the opinions of the NCM's. The questionnaire was developed following guidelines from Munn and Drever (1996). Questionnaires are one way to collect data if designed appropriately; they can be quick, concise and can be completed independently. Limitations of questionnaires are that the information can be descriptive rather than explanatory, and follow up may be essential in

order to access a reasonable response rate. The time needed to design the questionnaire may also be underestimated (Munn and Drever, 1996).

The questionnaire was designed to facilitate non-identifying investigation to elicit frank comments about the NCM's opinion of the self-learning package. Questionnaires were developed and distributed to the five NCMs along with a cover letter that indicated the purpose of the questionnaire, the person to whom it should be returned, and the date needed. The questionnaire was sent to the NCMs the week following sector orientation week. This was so that the experience would still be fresh, and events would be recalled better than if left to a later date (Munn and Drever, 1996). Three of the five questionnaires were returned.

The questionnaire collected data on the design of the self-learning package, the content, learning style and time for completion of the package. All NCM's responded that they agreed or strongly agreed that the self-learning package was easy to follow, covered information that was relevant and in sufficient depth, was esthetically appealing and allowed for incorporation of personal learning style. In regards to being able to complete the package in one week, one respondent agreed, one strongly disagreed and one had no comment.

A further section of the questionnaire elicited further comments to gain additional information that was not covered by the questions listed.

Each respondent to the questionnaire completed additional comments.

The comments that were received are listed next:

Did not have work examples for all modules in one week	n=3
Focused on the role of the NCM	n=1
I liked the format, objectives, mini-quiz, critical thinking	n=1
The hands on approach is good, better retention of material	n=1
Would like more examples for each module	n=2

The complete responses to the questionnaire are noted in Appendix E.

5.6 Conclusions

The implementation of the self-learning package as part of the new orientation for NCMs at the Workplace Safety and Insurance Board was a positive step toward overall improvement. The formative evaluation collected was used to re-write that package and reinforced the need to develop an information package for preceptors.

The self-learning package was reduced in size from twelve modules to ten. This was accomplished by combining two modules that were similar, and deleting the final module which was additional information. Although many examples of the work processes included in the package were distributed during the first three weeks of the orientation program, it was evident that these were not being used in conjunction with the package. Examples have now been added where appropriate. The content and format of the package were not changed.

The professional practice branch developed a preceptor's orientation package. This will be introduced by a tele-conference with all preceptors one month in advance of the sector week. This will allow the preceptors to become familiar with the package and identify appropriate learning examples.

Continued evaluation of the self-learning package will ensure that it changes as the organization changes. The revised package is included in Appendix C. This will be the final draft for the purpose of this project. It is difficult to develop a learning tool that will meet the needs of all who use it. The flexibility of use for the self-learning package increases the chance that NCMs will find it fits his or her particular learning style.

Chapter Six

Conclusions

1.1 General Conclusions

This project has described the development, implementation and evaluation of the curriculum for the self-learning package at the Workplace Safety and Insurance Board in Ontario as one part of the orientation program for NCMs. The literature pertaining to adult education and critical thinking was reviewed as a basis for the project.

The role of the Nurse Case Manager is an integral part of a team for the delivery of compensation services to injured workers in Ontario. Ensuring that the orientation to this role is relevant to the current realities and expectations of the workplace is crucial for NCM performance. The implementation of the self-learning package has been one way to improve the orientation program.

6.2 Recommendations for further Consideration

The self-learning package is only one part of the new orientation program for NCMs. The success of the self-learning package hinges on the successful implementation of the other components of the program, as described in Chapter One. The first component is a shift in focus to more problem-based learning during the first three weeks of intensive classroom study. This will give NCMs a good foundation in working through simulated

situations prior to working through real situations during the sector week. They will have a chance to work through the various functions that are in each of the modules of the self-learning package prior to the sector week. This component of the orientation was implemented concurrently with the self-learning package.

A fifth week is also planned for future orientation. The content planned for this week will introduce the NCM's other to WSIB departments. This information had been provided as part of the three-week orientation that was in place prior to revising the program. Moving this information out of the initial three-week period of the revised orientation program provides more time for learning about the role of the NCM. The fifth week will also be a time for consolidation of learning and clarification of issues that may not have been adequately addressed previously.

6.3 Limitations

There are two limitations of note for this project. The first is the small sample size of participants. Further testing will add to the quality of the self-learning package. Second, the questionnaire and debriefing sessions that were used to evaluate the self-learning package were not tested for reliability and validity. The evaluations gathered, however, were consistent with the feedback from the focus groups held previously by practicing NCMs (Doran et al, 2001).

6.4 Research Implications

This project is a result of previous research that identified a need to clarify the role of the NCM (Doran et al, 2001) and information gathered from focus group sessions. It is unreasonable to think about education, nursing or any kind of quality improvement without thinking about research. Research is the means to improve and strive for excellence.

Recommendations for future research are that a full formative evaluation of the restructured orientation program be carried out after it has been implemented.

A major evaluation of the orientation program will provide information in regards to the success of the program. The effectiveness should be measured by achievement of the goals of the orientation program. The goals are that the NCM will be able to integrate the nursing process and case management principles in the provision of appropriate, timely and effective nursing case management to a full complement of workers. The NCM will establish a professional, supportive relationship with the worker in order to guide him or her through the health care, compensation and return to work process.

Continuing focus groups with NCMs is a way to obtain ongoing information about the realities of the role. As the organization evolves, service delivery teams will also evolve. The orientation program must not

become stagnant. The program should be reviewed on a regular basis to reflect changes in practice, policy and attitudes.

6.5 Practical Implications

Meeting the needs of adults as learners is key to a successful curriculum for the orientation of NCMs. The basis of adult education and critical thinking theory for this project is a way to meet these needs. Infusing critical thinking skills into the curriculum leads to higher order thinking skills (Swartz and Perkins, 1990). It is a method that improved the effectiveness of the previous orientation program, without adding to the content.

In addition, the implementation of adult learning theory into the orientation program for NCMs at WSIB will assist them to be better prepared to make complex decisions for their clients. It will also give them the foundation for continued learning as they progress through their career.

6.6 Significance of the Project

Gaining a clearer understanding of the role of the NCM was the impetus for improving the orientation program. The success of the role of NCM depends on having nurses who are empowered in their position, and who feel they are a valued part of the organization. One such strategy is the restructuring of the orientation program.

The improved orientation program is part of an investment that the WSIB is making to be the best provider of disability management. For the organization to run well, each role must be filled to its best capacity. To ensure that the role of NCM is carried out most effectively, the organization has a responsibility to develop and nurture nurses. Providing a supportive and responsive workplace will maintain current staff and make the WSIB a preferred employer for nurses.

6.7 Summary

This chapter has discussed the results of implementing the self-learning package as part of the orientation program for NCMs at the WSIB. Recommendations for further consideration, limitations, practical implications, and the significance of the project have also been suggested. Although this project has now been completed, the work has really just begun. Success for NCMs at WSIB can only be realized in part with the continued support and recognition of the unique learning needs of adults and the commitment to a style of learning (problem-based learning) that supports these needs.

Bibliography

- Albanese, M. A. & Mitchell, S. (1993). Problem-based learning: a review of the literature on its outcomes and implementation issues. Academic Medicine, 68, 52-81.
- Baker, C. (1996). Reflective learning: a teaching strategy for critical thinking. Journal of Nursing Education, 35(1), 19-22.
- Barer-Stein, T., & Connolly, C. (1997). The health educator: Nurturing the learning link. In Barer-Stein, T. & Draper, J. (Eds.) The craft of teaching adults (pp. 85-103). Toronto: Culture Concepts.
- Behrens, P. J. (1996). The Watson-Glaser critical thinking appraisal and academic performance of diploma school students. Journal of Nursing Education, 35(1), 34-36.
- Benner, P. (1982). From novice to expert. American Journal of Nursing. 82, 402-407.
- Benner, P. (1984). From Novice to Expert. Excellence and Power in Clinical Nursing Practice. Menlo Park, CA: Addison Wesley Publishing Co.
- Bethune, E. & Jackling, N, (1997). Critical thinking skills: the role of prior experience. Journal of Advanced Nursing, 26, 1005-1012.
- Boulmetis, J. (1997). Helping adults through their career transitions. Adult Learning, Mar.-Apr., 11-13.

- Brookfield, S. (1991). Developing Critical Thinking. San Francisco: Josey-Bass.
- Brookfield, S. (1992). Why can't I get this right? Adult Learning, Jan.-Feb., 11-13.
- Candy, P. C. (1991). Self-Direction for Lifelong Learning. San Francisco: Josey-Bass.
- Case, B. (1996). Breathing AIR into adult learning. The Journal of Continuing Education in Nursing, 27(4), 148-158.
- Cooper, S. S. (1988). Teaching tips. The Journal of Continuing Education in Nursing, 19, 188-189.
- Cranton, P. (1992). Working With Adult Learners. Toronto: Wall & Emerson.
- Crawford, N. (1988). The Teaching of Critical Thinking Skills In Senior Division History. Hamilton: McMaster University.
- Doran, D., et al. (2001). An Investigation of the case manager role at the Ontario workplace safety and insurance board. Unpublished.
- Draper, J. A. (1997). Valuing what we do as practitioners. In Barer-Stein, T. & Draper, J. (Eds.) The craft of teaching adults (57-67). Toronto: Culture Concepts.
- Draper, J. A. (1997). Advice and empathy: Teachers talking with teachers about adult education. In Barer-Stein, T. & Draper, J. (Eds.) The craft of teaching adults (239-259). Toronto: Culture Concepts.

- Eason, F. & Corbett, R. (1991). Effective teacher characteristics identified by adult learners in nursing. The Journal of Continuing Education in Nursing, 22(1), 21-23.
- Elias, J. and Merriam, S. (1980). Philosophical Foundations of Adult Education. Malabar, FL: Robert E. Krieger Publishing Company.
- Elliott, D. (1996). Promoting critical thinking in the classroom. Nurse Educator, 21(2) 49-52.
- Ennis, R. (1996). Critical Thinking. New Jersey: Prentice-Hall, Inc.
- Ericsson, K. A. & Charness, N. (1994). Expert performance. Its structure and acquisition. American Psychologist, 49(8), 725-747.
- Facione, N. & Facione, P. (1996). Externalizing the critical thinking in knowledge development and clinical judgement. Nursing Outlook, May-June, 124-136.
- Farquharson, A. (1995). *Teaching in Practice*. San Francisco: Josey-Bass.
- Galbraith, M. (1994). Connecting instructional principles to self-esteem. Adult Learning. Jan.-Feb., 24-31.
- Glaser, R. (1984). Education and thinking. The role of knowledge. American Psychologist, 39(2), 93-104.
- Howell, M., Whitlow, J., Stover, L. & Johnson, K. (1996). Critical thinking as an educational outcome. Nurse Educator, 21(3), 23-32.

- Howenstein, M., Bilodeau, K., Brogna, M. & Good, G. (1996). Factors associated with critical thinking among nurses. The Journal of Continuing Education in Nursing, 27(3), 100-103.
- Ismeurt, J., Ismeurt, R. & Miller, B. (1992). Field-dependence / independence: considerations in staff development. Journal of Continuing Education in Nursing, 23(1), 38-41.
- Johnson, A. & Tinning, R. (2001). Meeting the challenge of problem-based learning: developing the facilitators. Nurse Educator. January
- Keatings, M., McCarthy, J., Thomson, G., Weatherbee, W. & Geary, J. (2000), Role of the Nurse Case Manager at the Workplace Safety and Insurance Board. Unpublished position paper.
- Knowles, M. (1980). The Modern Practice of Adult Education. Englewood Cliffs, NJ: Cambridge Adult Education.
- Knowles, M. (1975). Self-Directed Learning. Englewood Cliffs, NJ: Cambridge Adult Education.
- Leppa, C. J. (1997). Standardized measures of critical thinking. Nurse Educator, 22(5), 29-33.
- Lunyk-Child, D., Crooks, D., Ellis, P., Ofosu, C., O'Mara, L. & Rideout, E. (2001). Self-directed learning: faculty and student perceptions. Journal of Nursing Education, 40(3) 116-123.
- Maynard, C. (1996). Relationship of critical thinking ability to professional nursing competence. Journal of Nursing Education, 35(1), 12-18.

- Mezirow, J. (1981). A critical theory of adult learning and education. Adult Education, 32(1), 3-24.
- Mezirow, J. (1991). Transformative Dimensions of Adult Learning. San Francisco: Josey-Bass,
- Miller, J. P. & Seller, W. (1990). Curriculum Perspectives and Practice. Toronto: Copp Clark Pitman.
- Ming, W., Masoodi, J., Kopp, M., & Klonowski, E (1998). Infusing teaching thinking into subject area instruction. Nurse Educator, 23(4), 27-30.
- Ministry of Health (1997) Workplace Safety and Insurance Act. Queens Park: Toronto.
- Munn, P. and Drever, E. (1996). Using Questionnaires in Small-Scale Research. A Teacher's Guide. The Scottish Council for Research in Education.
- Muscari, E., Aikin, J. L., Bailey, W., Fitzgerald, B., Mings, D., Mitchell, S. & Rigby, B. (1993). Improving *ambulatory* oncology nursing practice, Cancer Nursing, 16, 53-62.
- Myrick, F. and Yonge, O. (2001). Creating a climate for critical thinking in preceptorship experience. Nurse Education Today. June.
- Neill, K., Lachat, M., Taylor-Panek, S. (1997). Enhancing critical thinking with case studies and nursing process. Nurse Educator, 22(2), 32.
- Nightingale, F. (1860, republished 1969). Notes on Nursing. What it is and What it is Not. New York, NY: Dover Publications.

- Norris, S. & Ennis, R. (1989). Evaluating Critical Thinking. Pacific Grove, CA: Critical Thinking Press and Software.
- Oermann, M. (1997). Evaluating critical thinking in clinical practice. Nurse Educator, 22(5), 25-28.
- Perkins, D.N, & Salomon, G. (1989). Are cognitive skills context bound? Educational Researcher, Jan.-Feb., pp. 16-25.
- Rane-Szostak, D. & Robertson, J. (1996). Issues in measuring critical thinking: meeting the challenge. Journal of Nursing Education. 35(1), 5-11.
- Regehr, G. & Norman, G. (1996). Issues in cognitive psychology: Implications for professional education. Academic Medicine, 71(9), 988-1001.
- Rubinfeld, M. G. & Scheffer, B. K. (1999). Critical Thinking in Nursing. An Interactive Approach. Philadelphia, PA.: J. B. Lippincott Company.
- Schmidt, H. & Moust, J. (1995). What makes a tutor effective? A structural equations modeling approach to learning in problem-based curricula. Academic Medicine, 70(8), 708-714.
- Schon, Donald A. (1983). The Reflective Practitioner. New York, NY: Basic Books, Inc.
- Schumacher, J. & Seversen, A. (1996). Building bridges for future practice: an innovative approach to foster critical thinking. Journal of Nursing Education, 35(1), 31-33.

- Smith-Blair, W. & Neighbours, M. (2000). Use of critical thinking disposition inventory in critical care orientation. The Journal of Continuing Education in Nursing, 31(6), 251-256.
- Swartz, R. & Perkins, D. N. (1990). Teaching Thinking: Issues and Approaches. Pacific Grove, CA: Critical Thinking Press and Software.
- Tarnow, K. G. (1979). Working with adult learners. Nurse Educator, 34-40.
- Tipping, J. Freeman, R. & Rachlis, A. (1995). Using faculty and student perceptions of group dynamics to develop recommendations for PBL training. Academic Medicine, 70(11), 1050-1052.
- Vernon, D. & Blake, R. (1993). Does problem-based learning work? A meta-analysis of evaluative research. Academic Medicine, 68(7), 550-563.
- Wagschall, K. (1997). I became clueless teaching the genXers. Adult Learning, Mar.-Apr., 21-25.
- Weinburg, L. A. & Stone-Griffith, S. (1992). Alternate methods of teaching: use of self-learning packets. Journal of Post Analgesia Nursing, 7, 392-397.
- Welch, J., Jeffries, P., Lyon, B., Boland, D. and Backer, J. (2001). Experiential learning. Integrating theory and research into practice. Nurse Educator, 26(5), 240-243.

- Witmer, D. (1997). Reflective practice. What does it mean for me? College Communique, March, 13-17.
- Woods, D. (1994). Problem-based Learning. How to Gain the Most from PBL. Hamilton: W. L. Griffin Printing Ltd.
- Workplace Safety and Insurance Board of Ontario Unpublished Position Paper, (1998). Service Delivery Model. Interim Operating Guidelines for Newly Created Business Teams.
- Young, J. A. (1995). Collaborative Learning Strategies. Registered Nurse, August/September, 28-30.
- Youngblood, N. and Beitz, J. (2001). Developing critical thinking with active learning strategies. Nurse Educator, 26(1), 39-42.
- Yura, H. & Walsh, M. B. (Eds.) (1967). The Nursing Process: Assessing, Planning, Implementing, Evaluating. The Catholic University of America Press, Washington D.C.



Workplace Safety & Insurance Board
Job Descriptions

Bargaining Unit Job Description

Status: Finalized

Salary Grade	Job Number	Job Table Number
870	822	5509

Job Title : Nurse Case Manager	Division : Operations/Health Services
Supervisor's Title : Manager, Small Business/Ind. Sector and Professional Practice Leader	Branch :
Date : June 6, 2002	

Job Summary :

To intervene early and facilitate the provision of appropriate, timely and effective health care to workers throughout the duration of a claim to achieve optimal recovery and early return to work.

To establish a professional, supportive relationship with workers as early as possible after an injury or diagnosis of a work related illness. To guide the worker through the health care process, through active case management.

To partner with the worker, employer, treating practitioner, adjudicator and other resources as required to develop a plan to facilitate early/modified return to work and ensure the worker's optimal recovery.

To perform the Nurse Case Manager role in a way that reflects its accountability to the worker and that is in accordance with the policies, standards and guidelines of the WSIB and the standards and guidelines of the College of Nurses of Ontario.

To participate in, promote and support research activities to enhance client outcomes.

Major Duties & Responsibilities

1. Initiate and complete an assessment of the worker by:
 - contacting the worker as soon as possible after referral (by phone or in person) and clarifying the role of the NCM and the expectations of the worker and WSIB
 - identifying, gathering and analyzing information regarding accident and/or exposure history
 - contacting the primary treating practitioner, if appropriate, as soon as possible and clarifying the role of the NCM and expectations of WSIB
 - determining cause and extent of injury or illness; assessing risk and reducing where possible
 - determining risk factors associated with delayed recovery, return to optimal health and return to work (RTW)
 - determining other health related factors which may influence recovery time and early and safe RTW
 - determining compatibility with work processes
 - completing a thorough work history, off site assessments as required
 - reviewing and interpreting objective medical findings, extent of previous injuries including previous claims.
2. Develop a plan in collaboration with worker and significant others, sector team, workplace parties, primary treating practitioner, community

resources, health care specialists for the worker's optimal recovery and return to work by:

- deciding on a health care plan which will achieve maximum recovery; setting short and long term objectives; determining the individual responsible for the action and setting timelines
- reaching consensus on the h.c. plan within the health care team; collaborating with the team to fit the h.c. plan with the overall return to work plan; communicating the plan to all stakeholders
- conducting onsite meeting with the employer, account manager/customer service representative and worker; clarifying and interpreting employer's return to work program; obtaining employer's accident history/exposure; ensuring a prevention plan is in place
- clarifying with primary treating practitioner the worker's medical findings and functional abilities and discussing RTW objectives; obtaining and interpreting h.c. information from other health care professionals to establish the treatment plan
- determining the worker's current and projected functional ability through interpreting reports and discussion with relevant parties; determining the need for formal functional abilities testing; determining the components of a functional testing based on worker's current and projected functional ability and knowledge of available jobs
- using evidence regarding best practices, data and findings from ongoing assessments; utilizing standard guidelines and healing times, when available
- determining and making appropriate referrals to RECs and specialty programs.

3. Arrange, implement and monitor worker's h.c. plan which includes:
 - collaborating with multi-disciplinary team and external stakeholders
 - ensuring appropriate treatment referrals
 - organizing and conducting internal and external case conferences
 - identifying needs for worker's job modification in the workplace
 - communicating with h.c. providers conducting functional abilities evaluations to ensure the needs of all parties are being met; interpreting the functional abilities reports and determining the appropriateness of the report to requests
 - obtaining regular verbal updates from worker re progress along the plan of care
 - resolving actual conflicts and avoiding potential conflicts regarding the h.c. plan to the satisfaction of all stakeholders
 - monitoring target dates for achievement of outcomes and/or clarifying why not met
 - educating the worker and workplace parties re prevention strategies and health promotion opportunities.
4. Evaluate and revise worker's h.c. plan as necessary by:
 - measuring the achievement of set outcomes; ensuring identified outcomes are met, and if not, revising the plan
 - communicating regularly with worker, adjudicator, health care team, external providers and employers regarding updates/progress of the plan
 - reporting appropriate information concisely in a timely manner
 - advising adjudicator and team members of worker's progress re h.c. plan
 - consulting with internal and external specialists as required
 - communicating with providers if functional abilities reports do not meet needs; ensure identified gaps are filled.
5. Facilitate early and safe return to work in collaboration with employer, worker and treating health care professionals and ensure timely and appropriate h.c. intervention by:
 - educating health care practitioners, workplace parties, and worker on the plan for return to work
 - educating, encouraging, explaining and providing direction to workers to assist them in understanding their injuries or illnesses, h.c. treatment, recovery, fitness to work issues and the RTW process
 - educating and informing employers to assist them with providing safe, early return to work for their workers based on the workers' functional abilities
 - educating, encouraging and assisting practitioners and employers' clinical

staff with respect to best practices for diagnosis, treatment and fitness to work; informing specific industry sectors and small business areas about best practices.

- 6a. Conduct, participate in, promote and support research activities to enhance client/program outcomes including utilizing research and quality improvement strategies to identify creative approaches to challenging situations, collecting data and measuring against key indicators in order to evaluate outcomes, ie., medical recovery rates, RTW rates, timeliness of referrals, can be evaluated.
- 6b. Promote best practices and encourage continuous improvement through shared learning by:
 - identifying trends by injury/illness type within industry sector(s) and small business area(s)
 - applying best practices (treatment protocols, drug/nursing intervention, expected recovery times); participating in the development of best practice guidelines where not available
 - identifying and analyzing service needs of workplace parties
 - identifying solutions to return to work challenges
 - contributing to ongoing education of self and team.
7. Act as a preceptor to students and new staff through leadership, role modeling and effective teaching strategies. Facilitate the clinical experience of students by ensuring a variety of opportunities, and employing other strategies appropriate to student learning.
8. Collaborate with customer services representative and Prevention Branch regarding workplace injury prevention strategies based on issues and trends identified through networking with peers and professional associations, reviewing literature, accessing database information.
9. Develop, promote and maintain effective relations with workers, workplace parties, health care professionals and providers. Work constructively and effectively with diverse cultural populations. Provide information and support to the h.c. community related to medical and/or treatment management issues and return to work; and facilitate effective h.c. management by encouraging discussion between treating professionals and WSIB physicians.
10. Respond to specific questions/concerns raised by a worker as a function of the ongoing involvement with those workers who are no longer actively case managed. Educate the worker re available health care resources.

Job Requirements

- Skill / Knowledge :**
- nursing theories and concepts, nursing science, including a comprehensive understanding of anatomy, physiology and pathophysiology and the human response to injury and disease and the effect on the health and functional ability of a worker; advanced physical and psychosocial assessment, critical analysis in order to develop a case management strategy; to make recommendations on treatment and best practices; to dialogue with h.c. practitioners on specific cases; and to provide education and assistance to h.c. community and other WSIB team members including adjudicators/managers/h.c. benefit adjudicators and other support staff
 - knowledge acquired through an academic background (B.Sc.N.), membership in RNAO, membership in other specialty professional organizations, on-going training/education/certification (e.g. Certified Occupational Health Nurse) coupled with an clinical background and/or practice in the community, industry, acute care, rehabilitation and multidisciplinary team environments as well as experience in research, teaching
 - occupational health principles and practices to provide advice and assistance related to treatment and return to work involving industrial, chemical and physical hazards and their effects
 - v.r. principles in order to assist/support, from a health perspective, return to work and labour market re-entry (LMR) plans and objectives; arrange for LMR assessment

- financial fundamentals to assess financial implications of h.c. plan recommendations and impact on the worker and employer
- adult education principles and approaches to facilitate health teaching with worker and to act as a preceptor to students
- the determinants of health and effective approaches to illness and injury prevention as well as health promotion
- the research process and the techniques necessary to critically evaluate literature and assess the research evidence regarding best clinical practices in order to apply to health care delivery
- quality/continuous improvement processes to promote best practices, identify creative approaches to challenging situations
- disability and rehabilitation case management, as well as effective therapeutic interventions, in order to manage and develop the h.c. plans of injured/ill workers; of the components and evaluation criteria of a functional ability testing process
- the overall health care system and how to access resources within it; a wide range of community resources in order to determine appropriate referrals
- a diverse range of cultures and how to incorporate cultural factors into the development and implementation of a plan of care
- small business or industry sector to appropriately customize services to meet employer/worker needs; RTW issues and trends, risks and hazards, available jobs associated with specific sectors and small business areas
- WSIB operations structure, other programs and services internal and external to the Board such as the claims adjudication process, health care/RTW providers and related community and industry resources
- imaging system, workers benefit system, and health care benefit system to access and review files, file documents, update information and prepare memos and file summaries; knowledge of software applications to author and type documents
- the Regulated Health Professions Act, Nursing Act, the College of Nurses of Ontario's Guidelines for Professional Behaviour (including ethical implications of care delivery), standards of professional practice, health care consent legislation to know and comply with requirements/expectations
- the Public Hospitals Act regarding the confidentiality of a worker's health care information; of the Mental Health Act re accessibility of a client to own health information
- the Workplace Safety and Insurance Act, policies and procedures relating to treatment and health care entitlement, RTW & LMR to understand parameters and authority within which to provide information, advice and recommended treatments based on specific cases while maintaining compliance, and to provide information and advice to workplace parties and health care practitioners

Skills

- interpersonal skills of tact, diplomacy, questioning/interviewing, listening, advising, counselling, conflict management to interview workers and their families, establish a therapeutic relationship, adapt approaches to culture of worker; consult with physicians and interprofessional team members with respect to health care treatment, recovery and the return to work; negotiating/mediating skills to provide clinical expertise, advice and direction related to h.c. treatment and fitness to return to work and possible courses of action/decision to accommodate and/or resolve issues/problems related to RTW and LMR outcomes
- contacts internally on a regular basis with Adjudicator, Return to Work Advisor, Customer Service Representative and WSIB physicians; externally on a regular basis with workers, significant family members, employers and h.C. providers/agencies, community resources
- communication skills: oral skills to dialogue with h.c. practitioners in specific cases on treatment and/or progress to date, medications used, etc.; to educate employers and health care practitioners related to the benefits of return to work, and best practices for treatment and fitness to work, educate workplace parties re Bill 99 legislation and stakeholder obligations under the Act; ensure workers are knowledgeable about the NCM role, other roles at the WSIB, and expectations of WSIB re early return to work, benefits, the treatment plan, etc.; participate as an effective member of an interprofessional team that includes providers, adjudicators, employers, customer service representatives; written skills to summarize cases and prepare other documentation for a file (being mindful of the access rights

of internal/external parties), correspond with a wide range of h.c./medical practitioners, workplace parties, workers, treatment facilities

- co-ordination/dexterity skills to use a keyboard to access and review claim files, drive a vehicle to visit workplaces, homes, hospitals

Responsibility :

- choice of action includes reviewing and analyzing a file, assessing the worker's case to identify risk factors which may contribute to delayed recovery, applying clinical expertise and conclusions from available h.c. information or a critical analysis of literature, making assumptions if information available is limited and discretion required to accommodate special circumstances, making recommendations on early and best recovery time/fitness for work/type of work based on discussions with medical practitioners and h.c. provider as well as participating in the development, implementation, monitoring and problem solving associated with a LMR plan
- independence of action includes independently applying best nursing practices and making recommendations regarding treatment and fitness for work; independently managing caseload, consulting with professional practice leader/manager when necessary; exercising independent initiative in the design of the appropriate h.c. plan, identifying risk factors, complications, side effects from treatment and taking action as appropriate
- impact of action: nursing actions and interventions will ensure the worker receives timely and appropriate h.c. treatment which will significantly impact the success of RTW and LMR outcomes, will result in cost savings for the employer by reducing the length of the claim
- planning/organizing includes managing the h.c. component of a caseload of injured/ill workers to facilitate the provision of timely, efficient and effective interventions which will ensure optimal recovery and early/modified return to work
- assistance to others includes providing expert clinical advice and guidance to internal team with respect to clinical issues and the health care management of the file; acting as a preceptor to students and new staff; participating in peer review and providing constructive feedback
- material resources: basic care of own office equipment; ensure the confidentiality of health information within the h.c. team

Effort : - physical demand includes using computer systems to access and review claim

- files (50%), updating information and typing descriptive information (50%)
- sensory demand includes reviewing medical information on imaged or computer screen or from hard copy files (50%) listening to injured workers, employers and health care practitioners

Working Conditions :

- general office environment (75%), requirement to visit workplace, worker's home, hospitals, health care agencies (25%)
- hazards include isolated highway travel/winter conditions; potential hazards when meeting with upset/angry workers in controlled/uncontrolled settings, e.g. worksite visits
- other work demands include requirement to stay updated in many aspects of nursing and with many technological changes of a highly computerized environment, dealing with displays of emotional behaviour from others, multiple work demands from multiple sources as a function of the team environment the NCM works within

Required Competencies 15 - Customer Focus, 17 - Decision Quality, 22 - Ethics & Values, 24 - Functional/Technical Skills, 27 - Informing, 29 - Integrity & Trust, 31 - Interpersonal Savvy, 35 - Managing & Measuring Work, 36 - Motivating Others, 52 - Process Management, 54 - Self Development, 60 - Building Effective Teams

Revised by : Maria Palmieri

Date : 06/06/2002

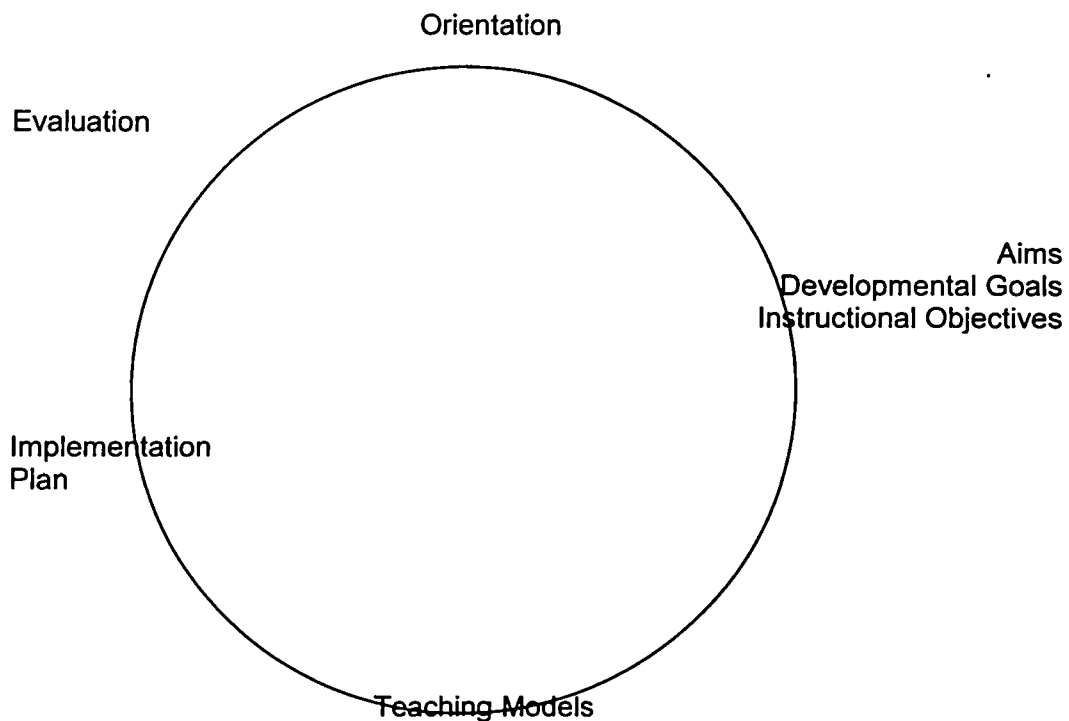
Evaluated By JJE 11/06/98
Committee :

JJE Committee

Reviewed by Management Co-Ordinator	Reviewed by Union Co-Ordinator
Signature	Signature

Revision History

The Miller-Seller Model



The Miller-Seller Model is depicted as a circular process, as the process is intended to start at any point on the circle (Miller and Seller, 1990). In interpreting the model, however, one could alternatively view the circle as a spiral, with arrows between each process. A spiral would give the depiction that after having implemented or improved upon a given curriculum, the finished product would be of a higher value than it was before the process began.

WSIB NCM Orientation Self-Learning Package



May 2002
Designed by Jo-Anne Bassett, NCM
(M.Sc. (T.) Candidate)

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Introduction to Self-Learning Package

The self-learning package will be the tool to guide the new NCM's through independent learning in their home office during the sector week. The curriculum was developed using the Miller-Seller model of curriculum development, implementation and evaluation (see Appendix 1). Miller and Seller define the following as key components associated with curriculum development:

1. Aims and objectives.
2. Content.
3. Teaching strategies/learning experiences.
4. Organization of content and teaching strategies.

Aims and objectives are further divided into aims, developmental goals and instructional objectives.

Aims and Objectives

Aims

The aim of this package is to have the NCM's apply their new skills and knowledge through the use of self-learning modules in their home sectors. This process will develop proficiency in performance of the core components of the NCM role.

Developmental Goals

By the end of the week, the NCM will be able to:

1. Collect relevant information by reviewing client files and communicating with key participants involved with the worker's case.
2. Practice nurse case management skills by working through actual cases with guidance from the orientation team.
3. Communicate plans verbally and through documentation.
4. Begin to build networks with health care providers and WSIB clinical resources to promote health and facilitate early and safe return to work.

Organization of Content and Teaching Strategies

The self-learning package will review all of the material NCMs have been introduced to in the first three weeks of the intensive orientation program. The package will be developed so that each day builds on the previous day's work, and the skill level increases incrementally. Prior knowledge will first be reviewed, then applied to actual situations, and finally incorporated into case management strategies. NCMs will be able

to work in a self-directed fashion, however a schedule has been set for the week so that expectations are clear. The modules can also be completed more than once with different cases. This way, sections that may not be as clear can be reinforced.

Although the new NCMs will be working essentially on their own, they do have support from their preceptors, as well as the orientation team by telephone. A time for debriefing will be incorporated into each day. This will allow for sharing information, answering questions, and giving and receiving feedback. The NCM's may also consult with each other at any time, whether in the same office or over the phone.

The learning modules are written in a problem-based format and grounded in adult educational theory. NCMs will review and work on cases which will be chosen from either their own caseload (if one exists), or their preceptor's caseload. Using actual examples ensures the learning applicable and meaningful.

Case Management

The service delivery model at WSIB was developed by senior management to incorporate the directives of the WSI Act. It is designed to ensure that team members work together to achieve a number of important outcomes. Keatings, et al (2000) outline the key role of the NCM:

“The NCM contributes to this outcome by coordinating the delivery of timely and appropriate health care, and by enabling the self-reliance of workers and employers in the achievement of early and safe return to work. When the best care is provided in a timely way and when complications and other risk factors are minimized, return to health and function and the prevention of a permanent impairment is more easily achieved.”

The specific objectives of health care and return to work as outlined by senior management are to:

- Guide the worker through the health care process, facilitating the delivery of the most appropriate evidence based care
- Facilitate continuity of care
- Educate the worker regarding the specific injury, recovery process, and WSIB
- Facilitate early and safe return to work (ESRTW)
- Contribute to the efficiency and effectiveness of the entitlement process
- Ensure a strategy is in place to prevent reoccurrence of the injury

NCMs use a specific framework in implementing their role. This framework includes assessment, planning, implementation and evaluation. The self-learning package will use this framework as a basis for the modules.

Contents

#	Module	Learning Experiences	Instructional Objectives
1	Clinical Review of Files	<ul style="list-style-type: none"> ✓ Review an injured worker's file including health provider reports. ✓ Find and be aware of the type of information in each section of the file. ✓ Navigate between sections within a file. ✓ Pull up documents to view. 	Will be familiar with types of information found in files. Will understand how a file review is part of assessment for case management.
2	Documentation	<ul style="list-style-type: none"> ✓ Use the format for documentation of initial NCM assessments. ✓ Review the memo with preceptor/PPC 	Will understand process for documentation. Will understand necessary content for documentation.
3	Form Letters	<ul style="list-style-type: none"> ✓ Review system 35 letters appropriate for NCM. ✓ Review other standard letters in sector provided by your preceptor. 	Will be able to implement and understand the use of various form letters for NCM's.
4	Drug Review	<ul style="list-style-type: none"> ✓ Conduct a medication review for an exception drug. ✓ Document with the appropriate memo format. ✓ Review standards for medication review. 	Will be familiar with policies and procedures for medication reviews.
5	Treatment Extensions	<ul style="list-style-type: none"> ✓ Do a clinical review including file review and assessment of a client by phone call. ✓ Review the criteria to allow a treatment extension. ✓ Document process with appropriate memo format. ✓ Communicate decision to appropriate parties. 	Will understand process of and decisions required for various treatment extension requests. Will incorporate clinical decision making skills in the assessment
6	Community Clinics	<ul style="list-style-type: none"> ✓ Review the referral criteria for Community Clinics ✓ Review reports from a community clinic program. 	Will be familiar with the discharge report following the CCP and will use the principles of case management for further follow-up

7	Functional Ability Evaluation (FAE)	<ul style="list-style-type: none"> ✓ Review the file of an injured worker who would benefit from a FAE. ✓ Review the process to make a referral for a FAE in your region/sector. ✓ Document using the appropriate memo format and referral forms. ✓ Communicate referral to the appropriate parties. 	<p>Will understand use and rationale for FAE.</p> <p>Will use assessment, planning, implementation and evaluation as part of the process.</p>
8	Regional Evaluation Centre (REC)	<ul style="list-style-type: none"> ✓ Review the file of a client who has been assessed at REC. Note the events leading up to the referral, the referral itself, the report and the follow up done by the NCM. ✓ Make a referral to REC including clinical review of file and worker, communicate with primary treating physicians, document process. ✓ Please remember that follow-up will be required upon receipt of the REC report. 	<p>Will be familiar with policies and procedures regarding referrals to REC.</p>
9	Working with Team	<ul style="list-style-type: none"> ✓ Review referral criteria for adjudicators to NCMs. ✓ Conduct a case conference with an adjudicator. ✓ Review the role of the following team members: adjudicator, HCPP, Account Manager (or CSR for Small Business), Return to work mediator, Business assistants, Manager and Director. ✓ Provide clarification of clinical issues as necessary and appropriate. 	<p>Will understand the unique contribution of each team member.</p> <p>Will understand how the role of the NCM, CA complement.</p>
10	NCM Caseload Management	<ul style="list-style-type: none"> ✓ Review criteria for inclusion of cases on a NCM caseload. ✓ Review AECL and work list to update caseload. ✓ Prioritize work on caseload. ✓ Incorporate time management strategies. 	<p>Will organize caseload and develop strategies for case management.</p>

Schedule

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	Module 1	Module 2	Module 5	Module 7	Module 9
	Break	Break	Break	Break	Break
	Module 1	Module 2	Module 5	Module 8	Module 10
	Lunch	Lunch	Lunch	Lunch	Lunch
	Module 2	Module 4	Module 6	Module 9	Module 10
	Break	Break	Break	Break	Break
	Debriefing Session	Debriefing Session	Debriefing Session	Debriefing Session	Debriefing Session

Evaluation

A written questionnaire to evaluate the learning package will be completed by newly hired nurse case managers.

A curriculum evaluation model provides a way to implement evaluation of a curriculum. It provides a framework for the evaluator to follow and work within. Miller and Seller (1990) recommend the CIPP (Context-Input-Process-Product) Model as appropriate to evaluate curriculum based in the transaction position. The model is built on the premise that the purpose of evaluation is to improve the unit. The model examines key concepts in curriculum implementation and components of program evaluation (Stufflebeam et al., 1971).

Summary

The self-learning package is a tool for NCMs to use to integrate the knowledge needed to perform their role. It is based on adult learning principles. It incorporates the nursing role and corporate outcomes, and is constructed on a case management framework.

MODULE 1: Clinical Review of Files

Instructional Objectives

Conduct a clinical review of files for workers on your caseload and observe the following:

- Be familiar with the types of information found on a file.
- Understand the rationale for a clinical file review.
- Incorporate the review into case management practice.



You have a caseload of injured workers that you are to provide service to. How are you going to get to know them? A good start is to review the information that is already on their files. This is not a new strategy for nurses, we use this frequently to save ourselves time and to keep from repeating questions that injured workers have already answered.

The difference at WSIB is that the file may not be what we are used to as a “chart”. The format is different, and the information is not necessarily health related. It will provide you, however, with what you need to know. Further information can be obtained by calling the worker and other health care providers.

First, get comfortable with the clinical file review and then you can dive right into the NCM role.

Learning Experiences

What kind of information would you like to know when you review the file? Make a list of things that would be important so that you are able to do your assessment of an injured worker.

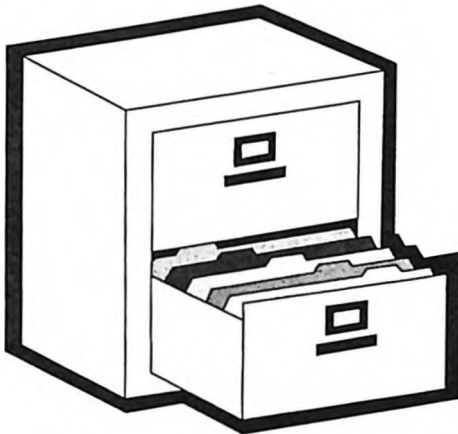
What I need to Know:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

MODULE 1: Clinical Review of Files

Here are a few things that we thought you should know:

- Client Profile/Accident History, Health Information: Demographic information, type of work, accident employer.
- Review forms 6, 7, and medical reports
- Review memos.
- Review correspondence.



Review Section 1 in the NCM Reference Tools binder in regards to Health Care Practitioners' Reports. Obtain a file number from preceptor's work list and review information on:

- ☐ Form 6
- ☐ Form 7
- ☐ Form 8
- ☐ Form 8C

- Review pertinent memos
- Review medical documentation

Think about how this information can help you to do your assessment and plan for case management of the injured worker.

Review

Be prepared to discuss review of files during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:

This image shows a full page of white paper with horizontal black lines, resembling notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

MODULE 2: Documentation

Instructional Objectives

Implement process for documentation by following the “Memo and Referring a Memo” exercise to do the following:

- Be aware of the purpose of documentation
- Understand necessary content for documentation.
- Write memo according to format
- Delete memo according to Windows NT
- Refer memo to the appropriate party
- Understand how memos are key to communication in NCM role.



What is a memo?

Writing a memo is one of the major ways to communicate and to document at WSIB. Think of a memo as your “narrative notes”. The difference is that you tailor each memo to suit the purpose of your documentation. You will give it a title to indicate what the memo is about. Be sure to include “NCM” in the title of the memo. This is useful as people will scan the list of memos in File Directory looking for something in particular.

Why write a memo?

Memos are written to document your conversations, interventions, assessments, medication reviews, treatment reviews and referrals, to name

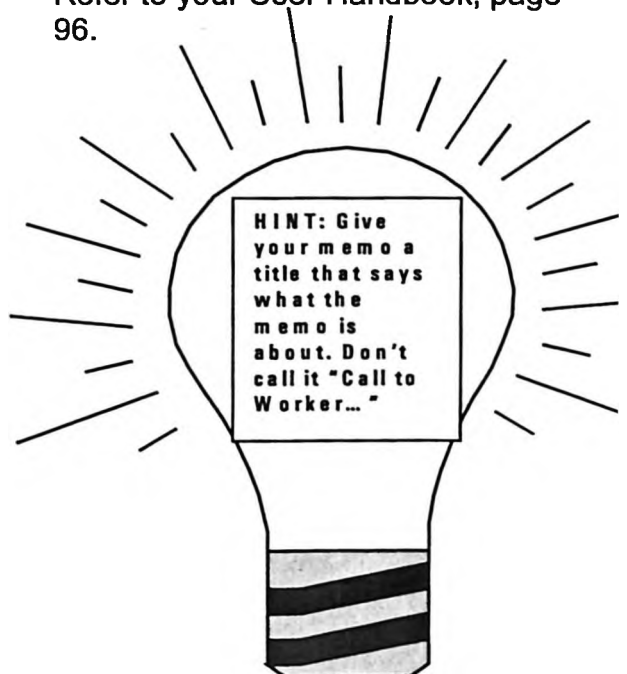
a few. You will soon be very familiar with this process!

Take some time to read a few memos that have been written on some of the files you will be working with. Get a feel for what type of information is recorded, and the format that different kinds of memos take. Are you ready for some practice?

Learning Experiences

What do you need to know to be able to write a memo? Are you able to do this? If not, follow the following steps:

- Refer to your User Handbook, page 95, for Creating a Memo and to page 98 for Referring a Memo.
- Write a memo to document a case conference with a colleague or a conversation with an injured worker. Press F6 once, your unfinished memo will appear in the MIPS screen. Refer to page 95 in your User Handbook.
- Review your memos with preceptor/PPC. Delete memos once reviewed. Refer to your User Handbook, page 96.



MODULE 2: Documentation



The processes to write a memo and to conduct a file review have been completed. The next logical step is to use these skills in performing an initial assessment.

The NCM initial assessment is a key piece of information on the file of an injured worker. It is the foundation of NCM intervention. Acquiring the skill to conduct a comprehensive initial assessment is essential to the NCM role.

A nursing assessment will assist the adjudicator to make decisions regarding benefits for the injured worker. Thus, a well written, clear and concise memo is essential to convey the information gathered by the NCM.

Learning Experiences

Take some time now to review some initial assessments that have already been completed. See file identified by preceptor.

- Review **“Format for Documentation of Initial NCM Assessments”** in section 7 of the NCM Reference Tools binder.

- Review the Format for Documentation of Initial NCM Assessments (attached).
- Obtain a file number from preceptor's work list and review information on file (refer to Module 1).
- Plan an initial assessment.
- Call injured worker and conduct an initial assessment using the standard format.
- Write a memo using the accepted format to document the assessment.

Resources useful when completing your assessment:

- Merck Manual
- Disability Advisor
- NCM page on CONNEX
- WWW.

MODULE 2: Documentation

Are you now confident about being able to document as a memo format?

If not



- Review the exercise until you are comfortable with the process.
- Discuss your questions or concerns with your preceptor or PPC.



Review

Be prepared to discuss creating a memo during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

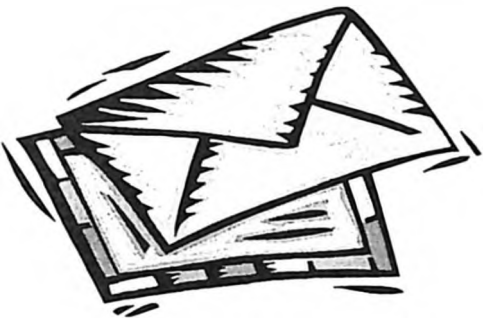
Notes:

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MODULE 3: Form Letters

Instructional Objectives

- Nurse case managers will know what form letters are available for their use.
- Understand the process for obtaining form letters.
- Locate, and send (if appropriate), a pre-printed form letter from the office.
- Send a System 35 letter to a worker on the CICS system.



There are several form letters that are available to make your life easier at WSIB. What is a form letter? It is a letter and/or form that contains standard information that is routinely sent to individuals with whom we do business. These letters are available for several purposes, and are found in different places.

Learning Experiences

What form letters are available for NCM's to use?

Do a scavenger hunt to find the following:

- ☐ REC Letters: Injured Worker, Physician
- ☐ Specialty Programs Referral Request Checklist
- ☐ Functional Restoration Program Referral
- ☐ Functional Restoration Program Letter to Physician

Your office may have different form letters that are used that can save you time. Your preceptor, medical secretary or program secretary may know what some of these are. Also, the different treating facilities in your area may have individualized referral forms.

List some of the other form letters/forms that are available for your use:

You may find it is useful to make a file in your desk with these form letters so that they are within reach when you need them.

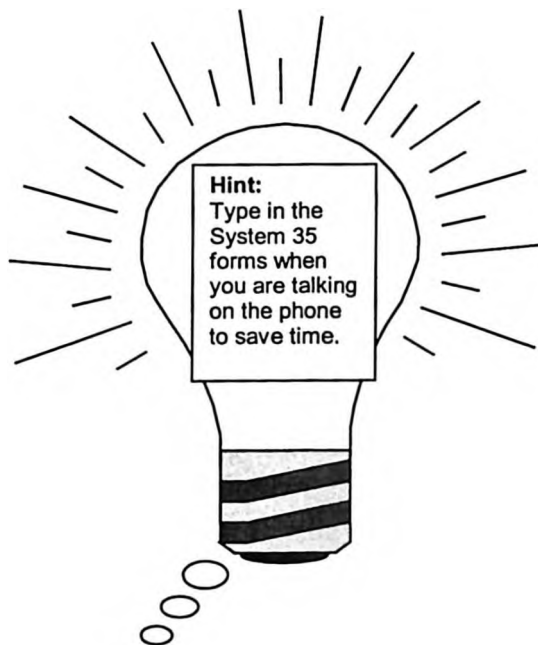
Identify a worker who needs a form letter sent. Locate the form letter and mail it out using the appropriate system in your office for outgoing mail.

MODULE 3: Form Letters

System 35 Letters

The CICS system on your computer also has a number of form letters for your use. You can access these in the following way:

1. Log onto the CICS system.
2. Key in option #29 FORR. This will allow you to request a form that will be automatically mailed to anyone on PARS.
3. Type the name of the form under column of appropriate individual.
4. Press enter and F6. Follow further instructions as prompted on the system.



5. Some examples of forms/letters that can be sent on System 35 are:

- 26 COV – Physician's Progress report & covering letter
- 41 – Worker's progress report
- TRAC – worker's travel and expense report
- MRRW – medical report waivers

Other examples of forms/letters that can be sent on System 35 are on the next pages.

Review

Be prepared to discuss form letters during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:

MODULE 4: Medication Review

Instructional Objectives

- Describe the policies and procedures and the rationale for medication review at WSIB.
- List clinical resources available for reference on medications to do assessment.
- Identify appropriate use of medication in the treatment of injuries, and impact on other health issues of injured workers.
- Communicate plans with physicians regarding medication use by injured workers.
- Counsel injured workers about medication use.
- Monitor effectiveness of medication use through evaluative follow-up.



Learning Experiences

Review Section 7 of the NCM Reference Tools binder in regards to Standards for Medication Review by a Nurse Case Manager. (See example at end of module.)

Mini-Quiz: Medication Reviews

1. What is the purpose of performing a medication review?

2. Where would you find the WSIB drug formularies and what are they used for?

3. What is an "exception drug", and are injured workers entitled to these?

4. What is the role of the Drug Verification Clerks (DVC)? How do you contact them?

MODULE 4: Medication Review

5. How would you determine if an injured worker is entitled to a particular medication?

6. What is the Drug Information & Research Centre (DIRC) and how would you access this information?

7. What other resources are available to you for drug information?

Answers to Mini- Quiz on medication on next page.



Obtain one or two file numbers for injured workers where a medication review has occurred and review the related memo.

Obtain a file number for an injured worker who requires a medication review to be completed. Use the information you learned and complete the medication review.

- ✓ Use the CPS and at least one reference from the NCM page on CONNEX, WWW or any other source for medication information.
- ✓ Set up a file for your drug reference printed material.
- ✓ Perform review according to Standards.
- ✓ Document the review in a memo.
- ✓ Make appropriate referrals: to HCPP, adjudicator if necessary, i.e. if medications are not to be paid for, DVC if medication needed urgently.
- ✓ Update page 3 of jacket, indicating medications to be paid for and memo #.
- ✓ Inform client of results of the review.

MODULE 4: Medication Review

Answers to Mini-Medi Quiz

1. *A medication review is conducted for the following reasons:*
 - a. *To determine entitlement- is drug taken for purposes of the workplace injury? If so, WSIB will accept payment. If not, is the medication appropriate for its intended use, and does its use or the condition for which it is prescribed impact on the recovery from the injury.*
 - b. *To determine safety of the drug for the worker, including a review of all other medications taken.*
 - c. *To provide health teaching related to medication use.*
2. *The WSIB formularies are found in the Health Care binder and are available on CONNEX. They are used to list commonly prescribed medications for categories of injuries. These commonly prescribed and relatively safe medications are automatically approved for payment by the DVC's.*
3. *An exception drug is a drug that is not included in the worker's formulary but is being used for treatment of the workplace injury.*
4. *The Drug Verification Clerks are authorized to automatically approve payments for medications within a formulary or for exception drugs, which have been approved by a NCM. They are located in Simcoe Place, and can be contacted via phone or by referral on their work list.*
5. *See the attached reference sheet with contact numbers for DVCs.*
6. *Entitlement to a particular medication is determined by its being prescribed for treatment of the workplace injury.*
7. *The DIRC is an organization that provides information and consultation by pharmacists about drugs and is available to NCMs. See resource sheet on page_.*
8. *Other resources for drug information are the:*
 - a. *CPS*
 - b. *On-line resources in CONNEX*
 - c. *DIRC Drug information newsletter*
 - d. *Web sites.*

Review

Be prepared to discuss Medication Review during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:

MODULE 5: Treatment Extensions

Instructional Objectives

- Describe the process and policies associated with treatment review.
- Demonstrate decision-making skills grounded in research-based practice and within the case management framework.

Learning Experiences

The majority of injuries incurred by workers affect the musculo-skeletal system. Consequently, physiotherapy and chiropractic therapy are commonly prescribed as part of the rehab plan.



Refer to section 3 of the NCM Reference Tools Binder. Review the information and policies regarding entitlement to physiotherapy and chiropractic treatment.

Mini Quiz: Treatment Extensions

1. What is the initial allowance period for either of these treatments?

2. What steps should be taken if you feel that an injured worker would benefit from physio or chiro treatment?

3. When is it appropriate to extend physio or chiro treatment?

4. What is the duration of a physio or chiro extension?

Answers on next page.

MODULE 5: Treatment Extensions

Answers to Mini Quiz: Treatment Extensions

1. *Twelve weeks.*
2. *Discuss with injured worker, worker's G.P*
3. *Treatment is extended when the goals of treatment have not been met and the worker is continuing to progress toward the treatment goal.*
4. *Extensions are often granted for four-week periods so that progress can be monitored. This can be individualized to the situation.*

Learning Experiences

Obtain from your preceptor one or two file numbers where a physio or chiro extension has been recorded. Review the memo and the corresponding medical documents.

Obtain a file number where there is a request to review a physio or a chiro extension. Follow the guidelines as outlined in Section 3, Physiotherapy and Chiropractic Requests. Work through a

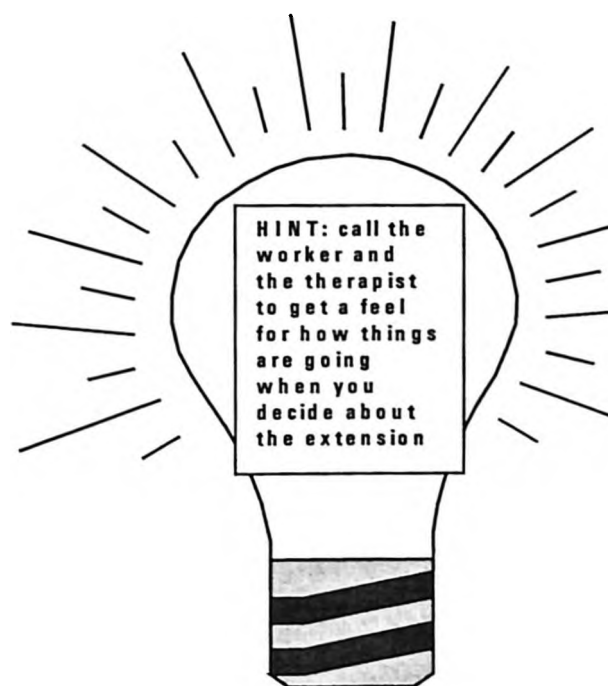
- ✓ Physio extension
- ✓ Chiro extension.
- ✓ Make referral to HCPP and adjudicator if appropriate (i.e. treatment not recommended).
- ✓ Update page 3 of the jacket.

Document in the appropriate memo format.

Review

Be prepared to discuss treatment extensions during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:



MODULE 6: Community Clinics

Instructional Objectives

- Differentiate between regular program of physio/chiro and the community clinic program.
- Describe referral process and guidelines for which injured workers can participate in this program.



Learning Experiences

Review Section 2 of the NCM Reference Tools binder in regards to Community Clinics.

Everything you wanted to know about Community Clinics and were afraid to ask.....

1. What is a community clinic? How does this differ from regular treatment?

2. In what places are the Community Clinics listed?

3. What are the referral criteria for the community clinic?

4. When is a referral to a community clinic not appropriate, and why?

5. Where are the community clinics in your catchment area?

Answers on next page.

MODULE 6: Community Clinics

Answers to everything you wanted to know about Community Clinics and were afraid to ask....

1. *A community clinic was developed in 1988 as an intensive program of physio or chiro. It can help when aggressive treatment is indicated for a particular injury.*
2. *Log onto CONNEX, click onto the NCM page. Find area for list of community clinics. Can also be found at www.wsib.on.ca. A list can also be found in NCM reference binder, or check your office for other areas.*
3. *A worker is appropriate for the CC program when they are 29-70 days post soft tissue injury.*
4. *The primary practitioner may refer a worker directly to a community clinic program or the referral may be for regular treatment. If the treatment facility offers a CC program and the worker meets the criteria (described in question 4), the facility may enroll the worker in the CC program. No WSIB approval is required. The NCM may suggest a CC referral to the primary practitioner and may facilitate the referral process.*
5. *Check list of C.C.'s. If still unsure, check with your preceptor.*

Review

Be prepared to discuss community clinics during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:



MODULE 7: Functional Activities Evaluation (FAE)/Functional Assessment

Instructional Objectives

- State the rationale and purpose of performing a Functional Abilities Assessment.
- Describe the type of information provided by a FAE.
- State the difference between a standard FAE and one with job matching.
- List the facilities in your area that can perform an FAE.

Learning Experiences

Review FAE package provided by Professional Practice Leader (Physiotherapy).



Mini Quiz: FAE

1. What is a functional abilities evaluation?

2. How does a FAE differ from a FAF?

3. What is the difference between a standard FAE and one with job matching?

4. When should you, as an NCM, recommend a FAE?

5. What facilities in your area perform FAE's?

Answers on next page

MODULE 8: Regional Evaluation Centres (REC)

Instructional Objectives

- State the type of services provided by the REC.
- State the purpose for a referral to REC.
- Conduct a referral to REC (based on case management) and document appropriately.
- State the REC(s) in your area.

Learning Experiences

Review Section 2 of the NCM Reference Tools binder in regards to REC reports, purpose of a MDHC assessment.



Mini-Quiz for REC

1. What is the purpose for an assessment at the REC?

2. When is it appropriate to make a referral to REC?

3. When is it not appropriate to make a referral to REC?

4. What alternatives for assessment exist if a referral is not appropriate?

5. Find the list of RECs on CONNEX or www.wsib.on.ca under "provider information."

6. Where else can you find the RECs listed?

MODULE 8: Regional Evaluation Centres (REC)

7. What is/are the REC(s) for your area?

Review

Be prepared to discuss Regional Evaluation Centres during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:

Answers to Mini-Quiz for RECs

1. *Workers are referred to a REC for a multi-disciplinary health care assessment. The purpose is to clarify the worker's diagnosis, establish prognosis and identify recommendations for future clinical management.*
2. *It is appropriate to refer up to one year post injury when: a) worker has not responded as expected, b) worker has reached a plateau in his/her treatment, c) worker is not progressing, or, d) assistance is required for treatment planning.*
3. *It is not appropriate to make a referral to REC after one year from the DOA or if the worker is scheduled to see a specialist in the near future.*
4. *Alternatives are: consultation with a WSIB medical consultant, referral to a specialist through the G.P., referral to a WSIB Specialty Clinic.*
5. *Look on the NCM page, and click on the box that says "Regional Evaluation Centres."*
6. *A list of the RECs is also in your NCM reference binder.*
7. *Dependent on your area. If you can't find out, ask your preceptor.*

MODULE 9: Working With Your Team

Instructional Objectives

- Describe the role of the Claims Adjudicator, and how the role complements and sometimes can overlap the role of the NCM.
- Identify the nature of referrals adjudicators will make to NCMs.
- Apply the criteria for inclusion of cases on the NCM caseload.

NCMs work closely and collaboratively with other members of the service delivery team to facilitate workers' return to health and function at work. As members of the team, NCMs provide valuable information and advice that contributes to fair and appropriate claims administration.

Learning Experiences



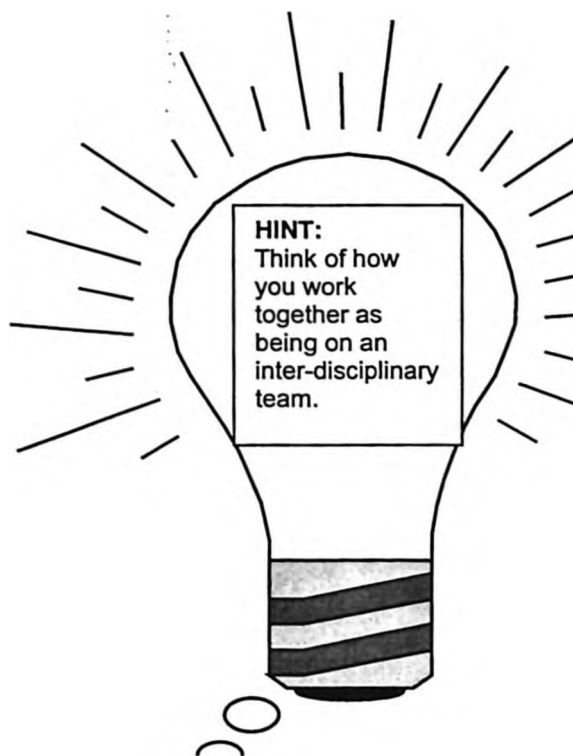
Review "Criteria for Adjudicators' Referral of Claims to Nurse Case Managers" and "Criteria for Inclusion of claims in NCM Caseload" in Section 7 of the NCM Reference Tools binder. Reflect on how this will be a part of your practice as an NCM at the WSIB.

Review roles of other members of the service delivery team from Sector Day in week __ of orientation.

Review

Be prepared to discuss Working With Your Team during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:



MODULE 10: NCM Caseload Management

Instructional Objectives

- Organize caseload and develop principles of case management.
- Identify the tools available to organize caseload.
- Develop a system that maximizes use of time and provides a framework for case management.
- Manage one-time referrals from adjudicators to the NCM caseload.



Learning Experiences

Caseload Management (not so) Mini-Quiz

1. Look at your preceptor's caseload, or your own caseload. How do you know where to find the cases assigned to you?

2. What is the AECL and how do you access it? (Refer to computer training package.) Find out from your preceptor how the AECL is being used on your team.

3. What is your work list, and how do you access it? (Refer to computer training package).

4. What is a caseload summary sheet? What is a kardex?

5. Where would you find these sheets?

MODULE 10: NCM Caseload Management

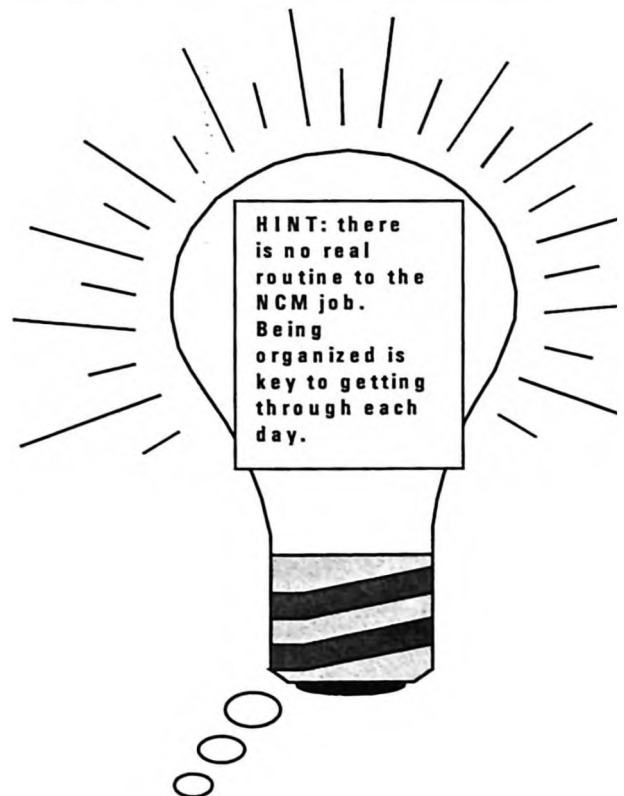
6. Ask your preceptor how the NCM Binder is organized. Organize your binder so that you know how to find the information.

7. What methods would you use to prioritize your work?

8. How do you know, from looking at your work list, what needs to be done for each of the injured workers?

9. How do you keep track of the case management for each of the injured workers?

10. How do you use your calendar (in Lotus Notes) as a case management tool?



MODULE 10: NCM Caseload Management

11. In what program must you be to access your calendar?

12. How do you put a new entry into your Lotus Notes calendar?

[illegible]

13. How do you move an entry in your Lotus Notes calendar?

Answers on next page

Review

Be prepared to discuss NCM Caseload Management during the debriefing session. Take a moment now to write down questions, or any tips you think may be helpful to others.

Notes:

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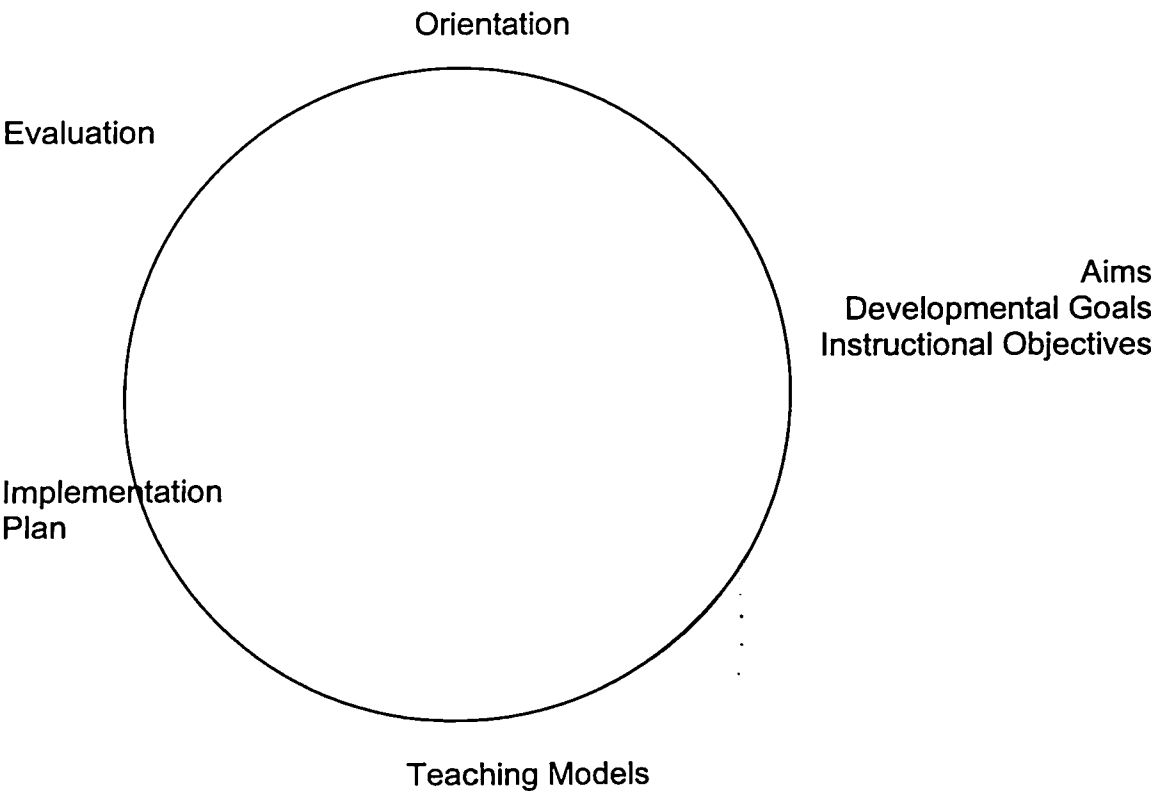
MODULE 10: NCM Caseload Management

Answers to Caseload Management (not so) Mini-Quiz

1. You would find the cases:
 - a. On your worklist,
 - b. on the AECL,
 - c. on the caseload summary sheet in the NCM binder.
2. This is a method of claim allocation. It is found in CICS. Claims are allocated through primary adjudicators to each desk number.
3. The worklist is a list of referrals that other people have sent you. It is found in TPX (see example on the following page.)
4. A caseload summary sheet is a list of injured workers on your caseload. It contains information regarding name, claim #, A/E, area of injury. The kardex is a list of interactions or memo for each worker.
5. The sheets are found in the NCM binder.
6. See your preceptor's binder. Ask your manager for your own binder so that you can start to organize it.
7. Read referrals from your work list. Review file and determine care plan. Discussion with adjudicator.
8. Look under the referral history (F19). This will give a brief explanation for the referral.
9. Log interactions onto the kardex (optional but recommended for new NCMs.) Update calendar in lotus notes.
10. Use the "reminder" function to make notes regarding case management on dates when intervention is needed.
11. Lotus Notes. Specifically, double click on the "calendar" icon on the lower left side of the screen.
12. Click on "new entry," then "reminder". Enter name, claim # and case management plan.
13. You can move an entry by placing the cursor on an item, holding down the left mouse button and dragging it to another location. You can also select "edit document" and change the date on the calendar.

Appendix 1

The Miller-Seller Model



MEMO TO: FILE

DESCRIPTION: MEMO#8 NCM INITIAL ASSESSMENT
OUTREACH WITH WORKER

MR. [REDACTED] WAS VISITED IN HIS HOME BY NCM AND CA [REDACTED]. MR. [REDACTED], [REDACTED], WAS ALSO PRESENT.

MR. [REDACTED] IS A 40 YEAR OLD CABLE INSTALLER WHO WAS EMPLOYED BY [REDACTED] ON 27 MAY 01, HE WAS WORKING ON THE SECOND STOREY OF A HOUSE INSTALLING CABLE WHEN A RAILING GAVE WAY WHICH WAS SUPPORTING HIS LADDER. HE FELL TO THE GROUND LANDING FLAT ON HIS BACK.

HEALTH INFORMATION

DIAGNOSIS: FRACTURE T11

CURRENT HEALTH STATUS: [REDACTED] IS IN PAIN ALL OF THE TIME. IT IS AGGRAVATED BY WALKING, OR ANY MOVEMENT WHERE HIS BACK IS AFFECTED. HE IS AWAKENED BY THE PAIN AT NIGHT. HEMATOMA ON PANCREAS.

FUNCTIONAL LIMITATIONS: MR. SWIFT IS RESTRICTED TO LIFTING UNDER 5 LBS. AND TO REFRAIN FROM ANY ACTIVITY THAT INCREASES PAIN IN BACK.

SUPPORT SYSTEMS: MR. [REDACTED] LIVES IN A HOUSE WITH HIS WIFE AND AN 11 YEAR OLD DAUGHTER. HE HAS REGULAR VISITS WITH HIS FAMILY DOCTOR, AND IS GETTING COUNSELLING AT THE FAMILY PRACTICE. MR. [REDACTED] FEELS DEPRESSED SINCE HIS ACCIDENT.

TREATMENT

MR. [REDACTED] IS UNDER THE CARE OF DR. [REDACTED], OAVILLE TRAFALGAR. DR. [REDACTED] IS WORKING ON A REFERRAL TO AN ORTHOPEDIC SURGEON IN THE [REDACTED] AREA AS MR. [REDACTED] NEEDS SURGERY TO REPAIR THE FRACTURED VERTEBRAE.

OCCUPATIONAL THERAPY ASSESSMENT HAS BEEN PREVIOUSLY CARRIED OUT FOR EQUIPMENT IN HOME. EQUIPMENT HAS SINCE BEEN RETURNED. MR. [REDACTED] HAD USE OF A VERSA FRAME FOR THE BATHROOM.

IS UNDER THE CARE OF DR. [REDACTED] AT MUMC FOR HEMATOMA ON PANCREAS.

MR. [REDACTED] IS CURRENTLY TAKING EXTRA STRENGTH TYLENOL FOR PAIN. HE HAD BEEN ON MORPHINE AND PERCOCET, HOWEVER HE WAS CONCERNED ABOUT TAKING NARCOTICS OVER A LONG PERIOD OF TIME, SO HE HAS DISCONTINUED THESE MEDICATIONS. HE IS ALSO TAKING ZOLOFT FOR DEPRESSION.

TEACHING COMPLETED

ROLE OF NCM, CA DISCUSSED. REVIEWED FORMS REQUIRED BY WSIB, MEDICATION REIMBURSEMENT FORMS LEFT, TRAC FORMS ISSUED.

REINFORCED IMPORTANCE OF MR. [REDACTED] STAYING WITHIN HIS MEDICAL RESTRICTIONS

ENTITLEMENT TO BENEFITS WITH WSIB REVIEWED IN DETAIL BY CA, INCLUDING HEALTH CARE, LOE, AND GOAL OF WSIB TO RETURN TO A JOB THAT WILL REPLACE

CLAIM # [REDACTED]

PAGE 2 OF 2

POST INJURY EARNINGS. INFORMED THAT THERE WOULD BE NO PROVISION FOR RETRAINING BASED ON PRE ACCIDENT EARNINGS.

WAIVERS OBTAINED FOR OAKVILLE TRAFALGAR HOSPITAL.

ACTION PLAN

MONITOR MEDICAL
CONTACT WORKER IN 3-4 WEEKS TO MONITOR STATUS.

[REDACTED] NCM
06 SEP 2001

CLAIM # [REDACTED]

PAGE 1 OF 1

MEMO TO: FILE

DESCRIPTION: MEMO#16 NCM REVIEW OF PHYSIO
EXTENSION REQUEST

I HAVE REVIEWED MR. [REDACTED] FILE IN RELATION TO A PHYSIO EXTENSION REQUEST. MR. CASLER HAS A TORN TENDON AND RUPTURED TRICEPS IN HIS LEFT ARM. HE HAS HAD TWO REPAIRS, AND THE TENDON IS PARTIALLY TORN AGAIN.

PHYSIOTHERAPIST [REDACTED] REPORTS THAT MR. [REDACTED] IS EXPERIENCING DECREASED ELBOW FLEXION AND 1/5 OF HIS TRICEPS ACTIVITY. FURTHER PHYSIO IS REQUIRED IF MR. [REDACTED] ELECTS TO HAVE FURTHER SURGERY.

MR. [REDACTED] HAS BEEN SEEN BY DR. [REDACTED] AT THE UPPER EXTREMITY CLINIC IN LONDON. DR. [REDACTED] HAS SUGGESTED A TRANSPLANT OF A TENDON FROM HIS KNEE TO THE ELBOW, WHICH WOULD AT MOST IMPROVE THE FUNCTION OF HIS ARM FROM A CURRENT 2/5 TO A POSSIBLE 3.5/5. FUNCTIONALLY, MR. [REDACTED] CANNOT HOLD HIS LEFT ARM OVER HIS HEAD, NOR CAN HE DO FUNCTIONS SUCH AS PUMP A BOTTLE OF SOAP. MR. [REDACTED] HAS BEEN ADVISED BY DR. [REDACTED] THAT THE SURGERY WILL NOT CREATE A LOSS OF FUNCTION TO HIS KNEE, BUT HAS CAUTIONED THAT THERE IS A HIGHER RISK OF INFECTION AND STIFFNESS WITH ANOTHER SURGERY.

BASED ON THE ABOVE, I RECOMMEND TO ALLOW FOR THE PHYSIO EXTENSION AS REQUESTED, TO 12 FEB 02. [REDACTED] REHAB NOTIFIED.

HAVE ARRANGED AN OUTREACH WITH CA [REDACTED] TO MEET WITH [REDACTED] AND OUTLINE HIS OPTIONS OF BENEFITS WITH WSIB. THIS MAY HELP HIM TO MAKE A DECISION REGARDING FURTHER SURGERY. MEETING ARRANGED FOR 10 JAN 02.

[REDACTED], NCM
03 JAN 2002

CLAIM # [REDACTED]

PAGE 1 OF 1

MEMO TO: FILE

DESCRIPTION: MEMO#31 NCM REVIEW OF MEDS
CODEINE CONTIN

I HAVE REVIEWED MR. [REDACTED] FILE IN RELATION TO PAYMENT FOR CODEINE CONTIN, NARCOTIC ANALGESIC AND DOCUSATE SODIUM, STOOL SOFTENER.

MR. [REDACTED] WAS REVIEWED BY DR. [REDACTED] AND REC, AND WAS RECOMMENDED TO BE PRESCRIBED A NARCOTIC ANALGESIC TO RELIEVE PAIN IN BACK. STOOL SOFTENER IS WARRANTED AS CODEINE MAY CAUSE CONSTIPATION. MR. [REDACTED] HAS DISCUSSED SIDE EFFECTS AND RISKS OF THIS MEDICATION WITH HIS FAMILY DOCTOR.

BASED ON THE ABOVE, I RECOMMEND TO ALLOW PAYMENT FOR THE CODEINE CONTIN AND THE DOCUSATE SODIUM TO 30 JUN 02.

[REDACTED], NCM
08 JAN 2002

Notes from Debriefing Sessions

March 4, 2002

- Used package to do a file review
- Did a LMR referral and drug review
- Got offers of help from other NCMs, adjudicators I work with are wonderful
- No problems with Modules 1 and 2
- Will call a new client for an assessment tomorrow
- Still unpacking desk, going through Lotus Notes
- Finished a memo with follow up for an injured worker
- Prefers narrative approach to memo writing
- Worked through Module 2, good as an application
- Examples of types of memos would be helpful
- Identified a lot of items for follow up after file review

March 5, 2002

- May not get through Module 11 by Friday
- Would be helpful to work through processes before completing self-learning package
- More preparation for preceptors would help
- Difficult for preceptors to choose examples for new NCMs
- Some nurses are more comfortable with the modules
- Outline of modules is good, but need more help from preceptors
- Would be better if preceptors had package ahead of time
- May need two weeks for self-learning package
- Modules very inclusive and selective. Having the Friday of each week as a self-study period would be good.
- Likes package, uses adult learning principles
- Would be good to share package with all NCMs in the organization, a good refresher

March 6, 2002

- Today was good, have worked on my own, going to preceptor only for clarification
- Did two treatment extensions and drug reviews
- Finding my way through the charts
- Adjudicators have been helpful
- Worked on my own this morning, answered phones
- Team is supportive
- Aware of form letters and how to access them
- Completed modules 1, 2, and 3. Working through Module 4.
- Completed modules 1-6 and 9. Need more work to feel comfortable.

- Completed a REC referral and talked with a worker
- Good working with “live” files
- Schedule is fine, package is self-explanatory and well organized
- Feel the need for back up from preceptor
- Need “to do” to remember
- Used modules for reflection at end of day to reinforce learning.

April 3, 2002

- The package is a good resource
- Put more details in each section, would like it more task oriented
- Discuss and explain self-learning package to preceptors prior to sector week orientation
- Introduce more steps in each module
- Would like more examples added to each module.
- A home visit to a worker during sector week would be good.

NCM SELF-LEARNING PACKAGE EVALUATION

March 20, 2002

Dear Orientating Nurse Case Manager,

I am a Nurse Case Manager, and work in the Hamilton office. I would like to take this opportunity to thank you for working with the self-learning package as part of your orientation to the Nurse Case Manager role at WSIB. I developed the package to meet the project requirement for the Master of Science (Teaching) degree at McMaster University.

Like any other project under development, this project needs to be evaluated. This is to ensure that the package will meet the needs of new NCMs. Please take a few minutes to complete the questionnaire. I appreciate any comment you would like to make.

Please print the questionnaire and return via inter-office mail. This way, your responses will be kept confidential. You may also e-mail your questionnaire if you don't mind my knowing who you are.

Good luck with your new position,

Jo-Anne Bassett

Please return the completed questionnaire by **27 March 2002** to:

Jo-Anne Bassett
1st Floor
Hamilton Regional Office

NCM SELF-LEARNING PACKAGE EVALUATION

Use the following scale to answer the questions:

1	2	3	4	5
strongly agree	agree	no comment	disagree	strongly disagree

Were the directions in the self-learning package easy to follow?

1	2	3	4	5
---	---	---	---	---

Was the material covered in the package relevant to your practice as a NCM?

1	2	3	4	5
---	---	---	---	---

Was the information covered in sufficient depth?

1	2	3	4	5
---	---	---	---	---

Were you able to complete the package in the 1 week time-frame?

1	2	3	4	5
---	---	---	---	---

If not, what factors contributed to this?

Was the layout of the self-learning package appealing?

1	2	3	4	5
---	---	---	---	---

Were you able to incorporate your personal learning style when completing the package?

1	2	3	4	5
---	---	---	---	---

What did you like most about the self-learning package?

What would you change?

How would you rate the self-learning package overall?

1	2	3	4	5
---	---	---	---	---

Thank you for completing this evaluation. Your comments will be used to improve the package for future orientation sessions.

Results of the NCM Self-Learning Package Evaluation Questionnaire

	Strongly Agree	Agree	No Comment	Disagree	Strongly Disagree
Were the directions in the self-learning package easy to follow?	1(33%)	2 (66%)			
Was the material covered in the package relevant to your practice as a NCM?	1(33%)	2 (66%)			
Was the information covered in sufficient depth?	1(33%)	1(33%)	1(33%)		
Were you able to complete the package in the 1-week time-frame?		1(33%)	1(33%)		1(33%)
Was the layout of the self-learning package appealing?	1(33%)	2 (66%)			
Were you able to incorporate your personal learning style when completing the package?	1(33%)	1(33%)	1(33%)		
How would you rate the self-learning package overall?		2 (66%)		1(33%)	

n=3