INTRODUCTION TO

SquareONE Rehabilitation

OCCUPATIONAL REHABILITATION PROGRAM

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EXECUTIVE SUMMARY

This manual was created by Dr. Capitano, DC. It's a culmination of his 25 years of work in the field of Disability Medicine. This document has been developed to address the specific barriers faced by persons who consider themselves to be disabled from there occupation either partially or totally.

This document provides cost effective and comprehensive recommendations, which upon implementation provide viable solutions.

The suggested *Occupational Rehabilitation* interventions described in this document are managed and facilitated by a comprehensive **interdisciplinary** team and therefore ensure positive, cost effective outcomes.

These programs would consist of;
1. Work Hardening Program
2. Functional Restoration/Chronic Pain Program
3. Complex Based Program

The reconditioning program would be unidisciplinary, meaning, a physiotherapist would perform it. However, the same principles that are found in the manual would apply.

GENERAL OVERVIEW OF SQUAREONE REHABILITATION.

SquareONE Rehabilitation includes a 2,900 square foot facility dedicated to providing the highest quality of rehabilitation and disability management services.

SquareONE Rehabilitation's primary purpose is to provide comprehensive rehabilitation and disability management programs, which effectively and safely assist in returning participants back to the labor force and back to their family roles.

At **SquareONE Rehabilitation** we emphasize an interdisciplinary approach that is cost effective. We recognize that no single health profession has the answers to treating chronic musculoskeletal problems. Instead, we realize that uniting different disciplines is essential to successfully treating the clients who suffer with these problems.

At **SquareONE Rehabilitation** we continually strive to update our skills both academically and clinically as new medical and rehabilitation research is continually advancing. We are dedicated to providing the best possible care and to promoting wellness and rehabilitation of the *people* in our community.

The clinic provides numerous medical, disability management services including chiropractic, physiotherapy, sports injury rehabilitation, massage therapy, acupuncture, occupational rehabilitation programs, chronic pain rehabilitation programs, as well as a variety of products that treat or manage physical pain.

Our resources enable us to provide a full range of services for patients while offering a number of uniquely individualized treatment programs. **SquareONE Rehabilitation's** experienced team of professionals offer optimum patient care in a compassionate set-

ting while providing the highest quality of innovative resources in the most cost effective manner.

By implementing an interdisciplinary team approach, and integrating individualized programs of specialized treatments, exercise, education combined with the resources of multi-disciplinary consultants, will dramatically give all patients with elevated perceived disability and low levels of physical capability the chance they deserve to improve there personal and social functioning.

The programs provided by **SquareONE Rehabilitation** focus on enhancing a person's functional abilities and teaching them how to maintain their enhanced status of health and fitness, thus achieving a higher quality of life.

The **SquareONE Rehabilitation team** demonstrates that '***teamwork works***'**.**

THE PROBLEM

Persons who consider themselves partially or totally disabled from participating in active living and from returning to the workforce face significant barriers due to social, economic, medical and functional restrictions. Individuals who have been in receipt of financial benefits in excess of 6 to 12 months face significant barriers to actively returning to the work force.

This manual gives the reader detail information on **SquareONE Rehabilitation** program description of what makes us so successful. It provides unique Occupational Rehabilitation Programs for individuals suffering from conditions, that impairs their ability to function in the work place or completely disables them from employment, and disables them in the rest of their lives. SquareONE Rehabilitation has been working towards a methodology that has important implications for how employers and insurers, as well as health care professionals, can best deal with these individuals in a manner that is consistent with the patient's degree of suffering, and yet yields the highest rate of effective resolution both for the patient and for the third parties.

PROPOSED SOLUTION

We have learned that the key to helping these types of patients involves a **paradigm shift** from the **Disease Model** to the **Illness Model**.

Disease Model (Biomedical) vs. Illness Model (Biopsychosocial)

The distinction between the disease model and the illness model is crucial to understanding the chronic illness syndromes and their assessment and clinical management. **Disease** is defined as an "*objective biological event" that involves disruption of specific body structures or organ systems caused by pathological, physiological or anatomical changes*. **Illness** is defined as a "*subjective experience or self-attribution" that a disease is present; it yields physical discomfort, emotional distress, behavioral limitations and psychosocial disruption*. In the context of the programs we offer it is assumed that disease results from a specific claim related injury. Based on the definition a disease process has objective pathology that follows a predictable course. An illness is the sequelae of a disease that results from both pre-injury and post-injury learning and social reinforcement. As long as an illness is treated as a disease the illness is reenforced and the subsequent symptoms and resulting disability persists.

The method we use is called **Cognitive Functional Therapy (CFT)** an **Exercise Modality** approach for all our programing. This approach targets the beliefs, fears and associated behaviors (both movement and lifestyle) of each individual. It leads the patient to be mindful that pain is not a reflection of damage, but rather sensitized structure that is fueled by hyper vigilance and negative beliefs, fear, lost hope, anxiety and avoidance, linked to maladaptive (provocative) movement and lifestyle behaviors.

This approach is integrated by using a motivational interview to communicate where it identifies discrepancies between beliefs and behaviors and acknowledge that the solutions that "stick" is usually found by the patient themselves. It is strongly behaviorally oriented and explores different movement options using visual feedback in order for people to reestablish their body schema and relearn the basic building blocks of relaxed normal movement. It empowers the person to do the very things they fear and/or avoid, but in a graduated relaxed and normal manner. It conditions them if they are weak. It motivates them to engage with exercise and active living based on their preferences and goals.

At SquareONE Rehabilitation the medical model is confined to the identification and medical management of identifiable pathology or known disease processes. The key role of medicine is to bring the patient under optimal medical management such that there is nothing further that can be implemented in the way of medical or surgical intervention. Medicine must provide a clear statement of the issues of harm and irreducible limitations tied to actual medical contraindications based solely upon definable disease or pathology. The patient must then be told that medicine per se has no further contribution to make in terms of diagnosis or treatment. If a specific disease process has been ruled out and all medical interventions have been completed than the process of demedicalization can commence. This step is crucial because any continued medical assessment, referral, or treatment would undermine the rehabilitation process and only reinforce the claimant's perception of disability.

This proposal will address the existing problems of inadequate services for this population and present recommendations which when implemented will provide viable solutions.

OCCUPATIONAL REHABILITATION PROGRAM OBJECTIVES

The goal of the program treatment is to increase function and decrease and/or bring about resolution of pain related disability as evidenced by;

Objectives

1) Increased activity levels
2) Increased functional tolerance
3) Reduced pain behaviours
4) Improved coping strategies
5) Decreased emotional distress secondary to pain related difficulties
6) Reduction in the use of medication and health care services to cope with pain

7) Increased productivity as evidenced by a return-to-work and/or improved performance of activities of daily living
8) Pain is acknowledged and treated sympathetically but *function* drives the program.

POPULATION SERVED

A claimant referred for the Occupational Rehabilitation Program would need to demonstrate at least, four (4) of the following features:

- Persistent pain beyond the expected healing time
- Marked pain expression and behavior
- Continuing use of multiple health care services in pursuit of medical solutions when found to be medically plateaued
- Predominant reliance on medication and passive modalities.
- Increased reliance on others in carrying out day-to-day social and health care responsibilities
- Marked alteration in mood and emotional functioning
- Pronounced and larger than medically expected reduction in physical activity
- Lack of Medical Closure
- Marked reductions in vocational, social, daily and recreational functioning

INTERDISCIPLINARY OCCUPATIONAL REHABILITATION PROGRAM OUTLINE

An Interdisciplinary Occupational Rehabilitation Program consists of the following components:

1. Interdisciplinary medically directed team approach, frequent team conferences and low patient-to-staff ratios
2. Formal, repeated assessment of physical deficits to monitor guide and individualize physical training
3. Development of an Individualized Interdisciplinary Rehabilitation Plan consisting of a Problem
4. List Methods and Treatment Goals
5. Ongoing outcome assessment utilizing standardized objective criteria
6. Progress Report summarizing progress towards goals, current levels of functioning, further treatment recommendations if necessary and vocational status
7. Discharge Report summarizing progress, current levels of functioning, and vocational status, and return to work status.

INTERDISCIPLINARY ASSESSMENT

At the beginning of the Occupational Rehabilitation Programs, each claimant is assessed. The purpose of an interdisciplinary assessment is to evaluate a candidate for their appropriateness for ability to benefit from rehabilitation and to develop a rehabilitation plan. Claimants are reassessed upon completion of the program to determine their progress towards rehabilitation goals as reflected in their personal rehabilitation plan, current levels of functioning, further rehabilitation recommendations (if necessary) and work status.

MEDICAL, PHYSIOTHERPY AND CHIROPRCTIC ASSESSMENT

The assessment starts with an in-depth review of the claimant's medical records and assessment by a the skilled clinician's at **SquareONE Rehabilitation** to rule out the possibility of the presence of an unresolved disease process or need for further medical assessment or intervention. If a specific disease process is identified appropriate treatment recommendations will be made. If a specific disease process has been ruled out and all medical interventions have been completed than the process of demedicalization can commence. This step is crucial because any continued medical assessment, referral, or treatment would undermine the rehabilitation process and only reinforce the claimant's perception of disability.

The next step in the assessment process is to develop a base line of the claimant's functioning. This is done through interview of the patient and having the patient fill out key questionnaires, a comprehensive physical examination, a living functional movement screen, followed by a Functional Performance (abilities) Evaluation all performed by our experienced clinicians. The primary referral question directed to us is can the patient/claimant return to work? To answer this question we must determine the physical abilities and limitation in relation to critical job demands, which was gathered during the assessment process. If there is no match we than must come up with an action plan to achieve this goal so we successful reintegrate the patient/claimant back into the workforce. We will develop what we call Key Therapeutic Indicators (KTI) and compare this with Key Work Indicators (KWI). KWI's assist us in identifying what the essential duties of the job are. KTI's assist us in identifying what physical restrictions compromise the ability for the patient to perform his/her duties. This will help us develop treatment protocols to address the KTI or to develop strategic movement alternatives that will be effective for the patient to succeed in performing his/her job duties. Having KTI allows us to develop a starting point for rehabilitation as well as a yardstick to measure improvement. The tracking of improvement serves two purposes. The first is to verify progress is being made in rehabilitation as well as a tool for reinforcing the progress the claimant is making and thus serve as a tool for educating the claimant that they can get better.

The treatment program that we implement is designed to be comprehensive. It will include ensuring that the patient receives optimal medical management. Intervention will include a significant educational component about the patient's *illness* and helping the patient to distinguish "hurt from harm", that is "discomfort" from "risk of actual damage". This is an ongoing process and not something that can be accomplished on a single occasion. The method we use is the **Cognitive Functional Therapy** approach. The goal is to demedicalize non-medical issues, and gradually move the individual's perception away from being treated as a *disabled patient* to being an individual restoring themselves to *normal functioning persons.*

We believe in making decisions based on what really works best for the client and patient, not based on what we think should work best for you. This is client-patient centered, rather than clinician-therapist centered, approach.

Functional Capacity Evaluation

A Therapy Baseline Evaluation is designed to establish baseline functional levels following an injury, and at the onset of a rehabilitation program. In essence, it is designed to compare the injured employee to himself or herself. Readiness to return to work will ultimately be based on objective demonstration of functional improvement when the results of Therapy Baseline Evaluations are compared to the essential duties of the job or specifically to the physical demands of the said occupation.

PSYCHOLOGICAL ASSESSMENT

All claimants **maybe** assessed psychologically. A psychological assessment is designed to evaluate the claimant's current pattern of coping with pain, psychological sequelae resulting from their injury and subsequent experiences and to determine if the claimant is an appropriate candidate for treatment in a Occupational Rehabilitation Program. It also allows the Occupational Rehabilitation team to acquire an in-depth understanding of the claimant's psychological functioning**.** This is needed to facilitate the development of a rehabilitation plan that defines the problems a claimant is experiencing as a result of their pain and develop appropriate rehabilitation goals. A psychological assessment consists of a diagnostic interview and the administration, scoring and interpretation of a battery of psychometric instruments when required. In addition to gathering information pertaining to their coping style as it relates to their pain, a brief psychosocial history, and review of emotional functioning, personality style, lifestyle patterns, current stressors and resources is also obtained. The evaluation also addresses the claimant's understanding of his/her perceived barriers in returning to a more functional and productive life. Special attention is paid to perceived disability, coping and motivational issues. Psychological problems give rise to goals and plans that are developed and incorporated into the interdisciplinary rehabilitation plan.

OCCUPATIONAL HISTORY ASSESSMENT

This involves a review of the claimants occupational history, an assessment of the claimant's current ability to perform prior work-related activities and activities of daily living. The claimant's motivation and ability to return to work will be determined through the history. The assessment will also result in the development of treatment goals and recommendations.

MULTIDISCIPLINARY WRITTEN REPORT

The team meets to synthesize results, identify barriers for return to work, and develop goals and action plans to overcome the barriers. Each claimant's status is reviewed by the team on a weekly basis. Once barriers for the claimant's return to work are identified in the initial assessments, the therapy team develops a plan and specific programs to overcome these barriers. A schedule of activities is formulated by the team, based upon the findings in the initial assessments. Recommendations regarding appropriate modified duties with options are provided, taking into account the physical demands of the employment as these relate to the physical capabilities of the individual.

PROGRAM STRUCTURE

The program duration is between **4-12** weeks with the average being 6-weeks, depending on the ongoing assessed needs of each claimant. Each rehabilitation day is 2-7 hours.

Much of the Occupational Rehabilitation program takes place in a group context since we believe that this helps facilitate change. The core team members consist of a physician, physiotherapist, chiropractor, and exercise therapist. When required a psychologist would be involved. The "core" components of the Occupational Rehabilitation Programs are:

General Preparatory Phase (GPP)

GPP is rehabilitation that is general and performed with the goal of preparing the body for the more specific demands as it relates to the clients occupation.

Phase 1

Below are the components that make up phase 1 and has been designed in the order presented to maximize both physical and psychological success.

1. Warm-up or Cardiac Output
2. Controlled Articular Rotations (CAR's);/DNS
3. Activation exercises
4. Strength Level 1
5. Passive Stretching/Recovery

Cardiac Output (warm-up) – The warm up promotes physiological effects such as increasing muscle temperature causing muscle to contract with more muscle fibers and at a faster rate. It also leads to psychological increases in focus and attention whilst decreasing stress, anxiety, and tension. **Research has demonstrated that a warm-up decreases the fear of injury and more confidence in there ability.**

Cardiac output is a training method we use to assist with developing someone's cardiovascular efficiency thereby improving his or her stamina and endurance in a safe and effective manner. We will provide the correct training intensity, thereby allowing the patient a much high percentage of the maximum effort for longer, generating more strength, power and endurance. By measuring the exact dosage we can progress them in a safe and effective manner assuring success in our goals.

We call this the **minimum dosage effect**, preserving their physical and cognitive capacity so that other components of the program can be administered thereby enhancing his or her productivity. Patients will be hooked up to our heart rate monitoring system and begin to learn what there heart needs to be for the best results. The **purpose** of using this technique is to assure their heart rate to be in the best zone thus minimizing adverse muscular side effects.

Controlled Articular Rotations (CAR's) — by definition is a movement enhancement system that develops maximum body control, active flexibility and **usable** ranges of motion (**convert passive ranges of motion into active)**. It can be administered individually or in a group setting that creates better joint health, mobility and move-

ment needed for the demands of life, sport, exercise, and work. The exercise will focus on giving there body the **prerequisite mobility** to enhance there movement patterns in order to do all the **necessary activities you want and/or required to do,** while at the same time decreasing the risk of injury. This decreased risk of injury comes from greater movement variance (the ability to move in different ways), so if something unexpected happened, such as rolling your ankle on a stick during walking or picking up an unmarked box your tissues would able to absorb more of those forces and hence be more resilient. We have certified FRC instructors.

Dynamic Neuromuscular Stabilization (DNS) and Human Optimization —Here you will learn how to activate your core something we call "restoring the canister". This is the foundation of any good rehab program. Without a good solid canister or stabilized base of support all extremity movements coming from the hip, or shoulder will not be supported well causing compensation of the muscle and joints that will lead to overuse and potential injuries. Once the canister has been learned we than move to fundamental movements, which activate the deep intrinsic stabilizers closest to the joints causing a good solid support system thus allowing the prime movers such as the pecs, and quads to actually move the joint.

Activation exercises - This involves dynamic activation, which neurologically excite and awaken muscles. These types of activities neurologically prime the pump by activating more fast-twitch motor unites. The jumping or throwing exercise used in this phase will be low level since the goal is to prime the nervous system thus delivering the most thermogenic body response in preparation for the next phase.

Strength Lift level 1 - Everyone is expected to go through our level 1 program to assure you understand and familiarize yourself with functional movement patterns. Using your individual movement ability, this session is ID'd on your specific needs to show your current limitations and what is required to break through them, or rehab around them, thus forming a solid base before performing more complex movements and loading those movements. This could be one sessions or multiple sessions.

We use a functional system to build strength not a nautili's system approach. **The literature tells us that increasing muscle strength is not linked to work performance when using non-specific strength tools such as seen in the typical gym when using nautili's equipment.** By using functional exercises we are assured that the strength attained through the rehab process is **transferred** to the home and work setting.

The program will focus on learning these patterns;

1. Hip Hinge Pattern (Deadlift, KB swings)
2. Squat Pattern (Goblet Squats, Split Squat)
3. Lunge Pattern (Forward and Lateral Lunge)
4. Horizontal Push (Bench Press, Push Ups)
5. Vertical Push (Overhead Press, Landmine Shoulder Press))
6. Horizontal Pull (1 Arm Dumbbell Row, Bent Over Variations)
7. Vertical Pull (Pull Up, Chin Up)
8. Loaded carries (Farmers Walk, Sled Pull/Bear Crawl)
9. Anti Rotation Core Exercises (Pallof Press, Bird Dog Variations)
10. Isometric Core Exercises (Forearm Plank, Side Plank)

Passive Stretching/Recovery – The case against static stretching before rehabilitation is substantial with most research pointing towards inhibited stretch reflexes, slower reaction times, is not associated with injury reduction and 5 to 30% decrease in strength. Thus our stretching is performed post exercise. Many people find comfort and relaxing with prolonged, low-load stretching calming tissue overload down and assisting with the recovery process.

Another important point is that through the exercise process certain hormones are released. It can be assumed that the stretching of muscles increases the pores in the membranes, and through them quickly begin to take hormones and other substances necessary for stimulation of the synthesis of muscle fiber.

Phase 2

In this phase we will use **High Intensities Strength Training (HIST)**. This should not be confused with high intensity interval training, which is a cardiovascular training method and not a strength training method. Because of high intensities the volume and frequency goes down, which means the risk of injury goes down.

Phase 2 is made up of the same components as phase 1 with the exception the strength lift level 1 is replaced with strength lift level 2.

Strength Lift level 2 – Once everyone understands, and is able to get into the required positions (Strength lift level 1), we than start to load the positions with weights, which is level 2. Getting stronger not in just one movement position but multiple positions respecting **variability principle** which has demonstrated superior results in not just building capacity but resiliency thus protecting you from future injury.

The program will know focus on putting strength on these patterns;

11. Hip Hinge Pattern (Deadlift, KB swings)
12. Squat Pattern (Goblet Squats, Split Squat)
13. Lunge Pattern (Forward and Lateral Lunge)
14. Horizontal Push (Bench Press, Push Ups)
15. Vertical Push (Overhead Press, Landmine Shoulder Press))
16. Horizontal Pull (1 Arm Dumbbell Row, Bent Over Variations)
17. Vertical Pull (Pull Up, Chin Up)
18. Loaded carries (Farmers Walk, Sled Pull/Bear Crawl)
19. Anti Rotation Core Exercises (Pallof Press, Bird Dog Variations)
20. Isometric Core Exercises (Forearm Plank, Side Plank)

Specific Physical (work) Preparation

Phase 3

The relationship between muscle strength and physical work performance is nonlinear. Meaning that workers may not explicitly learn how to transfer increased muscle strength to the demands of your occupation or activities of daily living when the training primarily focuses on increasing muscle strength.

Put another way becoming stronger does not translate into successfully being able to perform the specific demands of your job. When the muscle strength has reached a certain threshold, a further increase in muscle strength does not add to better work performance. Therefore, work preparation should be designed according to the **laws of specificity** to maximize transfer to work activity.

In this phase specificity is the main prerequisite for transfer of exercise into the work environment. What is important is how these exercise improve the patient's quality thus enhancing success in returning them to work, over long period of time and reducing future setbacks.

So the question we asked ourselves is how does this transfer best happen.

1. Similarity in muscle action to the conditions found in work. This can be met if the exercises are technically well executed.

2. Similarity in the external structure of the movement to those found in the work place.

3. Similarity in the dominant energy system to what is used at the work place. Sedentary vs. heavy demands have different energy system requirements.

In this phase we will focus on **strength endurance** and **power**. In this phase we will use **lower intensities strength.** The intensities here are 45-55% of one repetition max strength. Because of lower intensities the volume and frequency goes up. This is much different than phase 2.

Phase 3 is made up of the same components as phase 2 with the exception the strength lift level 2 is replaced with strength endurance and power based on the law of specificity.

Key literature based techniques that make a difference to success

Theme 1: Clinician/Therapist Interpersonal and Communication Skills

1. **Active listening.** One of the most common aspects to emerge regarding clinician/therapist communication skills was active listening. Both clinician/therapists and patients felt that it was important to listen and to allow patients to tell their stories. This approach allowed a bond to develop between the patient and the therapist, as the patients felt that they were valued. Patients were unhappy when they were interrupted and could not tell their story. Patients also felt that not just listening but also understanding what the patient was saying was very important.
2. **Empathy.** Patient's felt it was important for clinician/therapist to realize how much of an impact pain could have on their lives and for clinician/therapist to empathize with them about this issue. We found and the research tells us that, lack of empathy was a major barrier to a positive interaction, and patients did not develop a bond with therapists who could not empathize with them.
3. **Friendliness.** Patients believed that being able to chat with their clinician/therapist in a friendly manner was important for positive interaction. Talking with the clinician/therapist in an open way helped deepen the relationship between the patient and the clinician/therapist. Clinician/therapist mentioned that a pleasant greeting from their clinician/therapist every day encouraged further in-

teraction. Both clinician/therapist and patients mentioned that having a sense of humor was another way to develop a positive relationship. Patients found it difficult to engage with clinician/therapist when they were not as friendly, and the interaction suffered as a consequence.

4. **Encouragement.** Motivation and encouragement helped patients feel that the clinician/therapist cared about them and that they had a strong relationship with their clinician/therapist. These skills were important for many reasons, as the encouragement motivated some patients to adhere to the prescribed rehabilitation and strive to improve. The reassurance also provided emotional support to patients, which further deepened the bond between the patient and the clinician/therapist as they shared personal feelings and experiences.
5. **Confidence.** Patients reported that feeling confident in their clinician/therapist was an important factor and meant that they could respect their clinician/therapist and trust his or her opinion. However, some patients felt that their clinician/therapist was too confident and behaved in an arrogant manner, which was a significant barrier to a positive patient-clinician/therapist interaction.

Theme 2: Physical Therapist Practical Skills

1. **Patient education.** Patients felt more comfortable when they knew what their treatment plan was and felt interaction with their therapist was enhanced as a result. On the other hand, patients did not like when the education given to them was technical and felt that this factor had a negative impact on the patient-clinician/therapist relationship
2. **Clinician/therapist expertise and training.** Patients believed it was vital that clinician/therapist possessed excellent technical ability and skills. This expertise and training enhanced the trust between the clinician/therapist and patient, and patients felt they could rely on their clinician/therapist, which helped develop a positive interaction.

Theme 3: Individualized Patient- Centered Care

1. **Individualized.** Patients reported that they felt a stronger bond with their clinician/therapist when their treatment was individualized and related specifically to their presentation. Patients appreciated when their clinician/therapist made an effort to adjust the treatment when they experienced problems and made it easier for them. Patients who did not receive individual care and reported being treated like just another patient felt they did not have a positive interaction. At SquareONE Rehabilitation we acknowledged the need to provide individual care for each patient and to answer any specific questions that the patient may have as opposed to providing generic information.
2. **Taking patient opinion and preference into consideration.** SquareONE Rehabilitation felt it was important to consider the patient's point of view and opinions. This consideration encouraged patients to engage in the treatment process and interact with their clinician/therapist. It also showed patients that their opinions were important to the clinician/therapist, which encouraged a better interaction between the clinician/therapist and patient and helped form a stronger bond. We experienced that patients found it annoying when their clinician/therapist ignored their preferences and abilities when prescribing exercises, which had a negative impact on the patient-clinician/therapist interaction.

Theme 4: Organizational and Environmental Factors

1. **Time.** At SquareONE Rehabilitation we give our patients time to describe their problem, and having the time to be listened to. This is an essential factor in positive patient-clinician/therapist interactions. Patients appreciated having the time to sit down and interact with someone and not being rushed during appointments.

In Summary

Clinician/therapist and patients both acknowledged the importance of communication and interpersonal skills. Patients appreciated a clinician/therapist who listened and who was empathetic, friendly, humorous, confident, and encouraging and had a good "bedside manner." These findings are in line with other qualitative studies on health care professionals' (HCPs') relationships with patients. **For example, Laerum et al investigated patients' opinions of medical specialists and found that being "seen, heard, and believed" was crucial to the quality of the interaction. In particular, patients wanted professionals who expressed interest in what they said and who showed signs of empathy, active listening, and understanding of their problem.**

Clinician/therapist practical skills also were highlighted to be of importance. Patient education (what the clinician/therapist says) and expertise and training (what the clinician/therapist does) were the main practical skills perceived to be significant. The importance of patient education is in line with other qualitative and quantitative literature. **A recent systematic review concluded that cognitive reassurance (giving knowledge) is important for treatment outcomes and satisfaction in primary care settings.**

The finding that clinician/therapist training and expertise are important is also in line with the literature. **Peersman et al, who investigated patients' priorities in outpatient clinician/therapist, found that the clinician/therapist being experts in their professional field was the most important aspect for patients. Similarly, Strutt et al found that clinician/therapist have to be competent in their treatment approach and have to be thorough, knowledgeable, and dedicated.** It is not possible to differentiate from the findings of this review whether it is actually greater technical expertise and technical skills that are needed or merely the perception that physical therapists are technical experts that is important.

This review showed that it also was important that clinician/therapist individualize treatment to the patient and take patient opinions and preferences into account. This finding is in line with literature showing that patients health outcomes and patients' satisfaction benefit from a patient-centered approach. **Laerum et al explored patients' opinions of a good consultation with medical HCPs found that patients appreciated patient-centered management where the professional actively sought the patients' perspective in terms of thoughts and expectations.**

It is our experience that patients who receive education in conjunction with exercise tend to have a better attitude towards the rehabilitation program. The patient who has a perception of increase disability will be hindered in their recovery. Changing their beliefs, education and reassuring them that movement is required for health, is the first steps to patient recovery.

All of our educational programs consist of spinal anatomy, pain science, and first aid for acute recurrences, body mechanics and exercises. We place the most important areas to cover into four categories. First, reassurance that the natural history of most pain syndromes is toward a speedy resolution. Second, body mechanics that are universally applicable. Third, the importance of focusing on function and reducing the patient's fear about movement are critical to success. Finally, explaining the difference between "hurt vs. harm" so the patient is less likely to immobilize themselves and become deconditioned in their attempt to achieve pain relief. For chronic and high-risk patients a biopsychosocial approach is definitely indicated.

Exercise, education and encouragement are the mainstays of our success.

Carefully explaining that hurt does not equal harm is an important prelude to rehabilitation. In chronic pain management it is essential to focus on control and not cure. We do this by placing ourselves in the role of helper rather than healer. Reassuring patients that their problem is calming pain sensitive structures and not a sign of something pathological is an important step in patient education.

At SquareONE Rehabilitation we employ a **Cognitive Functional Therapy (CFT)** approach. This strategy targets the beliefs, fears and associated behaviors (both movement and lifestyle) of each individual. It leads the patient to be mindful that pain is not a reflection of damage, but rather sensitized structure that is fueled by hyper vigilance and negative beliefs, fear, lost hope, anxiety and avoidance, linked to maladaptive (provocative) movement and lifestyle behaviors.

Patients need to know the exact goals of exercises. When proper goal setting is accomplished and these goals are accepted, patient adherence and compliance is easier to achieve. At SquareONE Rehabilitation each patient is required to keep a diary of his/her program, which the team evaluates on a weekly basis. This helps us monitor the patient's subjective and motivational levels and thus make necessary changes.

At SquareONE Rehabilitation motivation is incorporated into all of our exercise programs.

It consists of four interventions;

1. Informational strategies are employed to ensure patients receive clear instructions, emphasizing the importance of regular and consistent exercise in reducing episodes. Our therapists also explain to the patient that rehabilitation depends in large part on the patients' attitude and behavior.
2. Reinforcement is used by the therapists giving positive feedback and commending the patient for their efforts, i.e. rewards for exercise compliance.
3. At SquareONE Rehabilitation the patient signs a "treatment contract". The contract explains who we are and what we the clinic is responsible for and what you the patient is responsible for. There is much information regarding what you can do as a patient to help yourself in this rehabilitation process. Patients are asked to post the treatments contract in a prominent place at home to remind them of the exercises.

4. Finally, patients are involved more in their care by reporting all exercises they have done in their exercise diary. At the completion of the program they will be given a home exercise program.

   The positive effects of compliance-improving measures usually evaporate rapidly after treatment has stopped. We strive for long-term goals. We do this by changing a person's perception and attitude but also by taking the patient seriously. **Studies have shown that long-term compliance cannot be achieved by bringing pressure to bear on the patient or displaying one's full authority, rather, we must dismantle prejudices and give patients the feeling that they are being taken seriously and that the therapist is aware of their suffering.**

Psychology

If necessary, psychological intervention is a key component in the rehabilitation of claimants with persistent pain. The psychologist is responsible for the coordination of all psychologically based treatment including but not limited to: CBT, Pain management, anxiety based treatments, psycho-education, relaxation training, biofeedback training and individual therapy.

Occupational Rehabilitation/psychological counseling via individual and group treatment sessions is aimed at reducing psychological barriers to allow a return to a higher level of functioning. Fundamental to this aim is the development of self-responsibility and adaptive coping, as well as positive attitudes and behaviours. Individual counseling sessions will be provided on an as-needed basis.

Clinic Director

The Clinic Director functions as the case manager and works closely with claimants, referring agencies/employers and other team members to monitor and guide the process of the program. The Clinic Director assists in monitoring and ensuring efficient internal and external information transfer between SquareONE Rehabilitation team members and external providers. The clinic director will arrange internal and external professional consultation where applicable and assist with rehabilitation planning and program design. The Clinic Director reviews the claimant's progress reports and weekly summaries. They also assist in crisis management and interventions, generates reports regarding claimant progress and monitors treatment/rehabilitation plans to ensure timely progress of the claimant towards program goals.

Education

Education sessions are provided with an emphasis on active claimant participation. Education sessions are presented concerning pain (chronic and acute), methods of coping with pain, self-management, benefits of activity, basic anatomy, medications, medical investigations, nutrition, psychological issues, and goal setting. The emphasis is on the claimant taking an active role in managing their pain problems and reducing passive treatment methods.

Goal Setting

Each rehab plan sets functional goals in the areas of return to work planning, daily activity, medication reduction, understanding of medical/physical condition, exercise, relaxation, leisure/recreational activity, family/relationships, and social activity.

Outcome

The tracking of claimants during the rehab program is essential to the continued success of the program. Program follow-up information includes the claimant's use of medication, pain ratings, health care use related to their pain, difficulties with sleep, and return to/maintenance of gainful employment or reasons for being unable to work. The follow-up data is reviewed by the by team to determine program effectiveness and to aid in program development.

Program Evaluation

Program evaluation includes: Treatment outcome measurements, claimant satisfaction surveys, and statistics regarding the percentage of claimants completing the program.

Occupational Rehabilitation Program Reports

The Clinic director or delegates meets with the claimant every week after the completion of the progress note. This information is placed in the claimant's file and reviewed with the interdisciplinary team weekly. The Occupational Rehabilitation team generates an assessment, a rehabilitation plan, an interim progress report, a weekly-summarized report with patient comments, and a discharge report for the referral source. The Clinic Director communicates with the referral source through regular email or telephone consultations. The referring agent or employer is encouraged to contact the Clinic Director to discuss claimant progress at any point in the program.

Discharge Criteria

a) Completion of the program
b) Return-to-work
c) Persistent non-compliance
d) Non-attendance
e) Medical/psychiatric condition which compromises safe participation in treatment

COMMUNICATION

The **SquareONE Rehabilitation** team understands the importance and benefit of ensuring ongoing collaboration between our team members, the health care professionals involved with the patient, the insurer and the employer.

To ensure clear and accurate communication between all parties, including the patient, and to carefully and appropriately integrate everyone's roles, a '**Meeting of Understanding**' is coordinated whenever p[ossible. The claimant, The SquareONE Reha-

bilitation team, employer (if applicable) and all involved third parties are invited to participate.

Team Meetings are scheduled at specific transition points in the patient's rehabilitation activities. Significant transition points include: returning to work, changing the administration of financial benefits or in re-organizing the flow of rehabilitation services.

COMPLIANCE AND RESISTANCE ISSUES

Patients with chronic pain are reluctant to "work through" their pain. This is related to their fears of re-injury, or psychosocial barriers to recovery. In the early stages of treatment, when fear and trust are usually major issues for the patient, non-compliance or failure to progress is dealt with in a supportive and educational manner. Significant time and effort are spent explaining the treatment rationale to patients, and working with them in a collaborative manner. At the same time, however, the rehabilitation team members must establish their roles as trained and experienced professionals and experts and encourage patients to increase physical activity.

Achieving successful rehabilitation outcomes is dependent upon constructively organizing environmental contingencies, which will inspire an individual to participate in the necessary activities, which will restore a reasonable level of function and return them back into the work force.

The **SquareONE Rehabilitation** team is skilled in facilitating the activities which enhance motivation and participation: communicating a consistent message from health care professionals; information regarding illness; information related to demedicalization of a disability; coordinating employment incentives and ensuring access to financial benefits during rehabilitation combine to successfully progress the case to resolution.

Input by the patient is valued and a written plan, which has been discussed and agreed upon by all participants involved in the rehabilitation plan is signed by the patient, their family physician, and an **SquareONE Rehabilitation** representative. The patient and team's motivation is founded on commitment.

SPECIFIC FEE SCHEDULE

Please visit the website for this information.