

Brief Summary

The Work and Life Readiness Empower Program prepares people who have suffered a substantial injury or illness, for their work and life roles. The goal is to achieve full pre-injury functional status and overcome all barriers that may be preventing successful return to full employment and/or full function.

Background Information

On September 21, 2006 a 40-year old male welder suffered a severe whiplash/cervical strain injury at work when his welding helmet struck a hanging exhaust vent. The concussion, nausea, dizziness and right ear tinnitus he sustained that day, potentially threatened his ability to successfully return to work.

The Clinical Challenge

Clinically, the client presented with limited cervical spine range of motion, forward head posture, deep neck flexor and scapular stability weakness. He reported difficulty sleeping due to the constant neck pain and paresthesia into the right hand and fingers. His movements were guarded and slow. The Neck Pain Functional Scale outcome measure of self reported function was 39/80 where 80 represents the least disabled. The Spinal Sort outcome measure of perceived functional abilities measured 62/200 which is consistent with a perceived physical work capacity of below sedentary. The client was in obvious pain and had little to no functional ability. On initial assessment, lifting from floor to waist was limited to 15 lbs and lifting from waist to shoulder was limited to 10 lbs. Dynamic reaching and positional tolerance tests were intolerable as the client was able to maintain only 1 min 17 seconds of reaching at various levels and postures. Tylenol 3's, Naproxen, Amitriptyline and Privacot were taken by the client to help with pain management. Prior to entering the Meridian Work Readiness Program, the client achieved only slight improvement with 5 weeks of active physiotherapy treatment and eventually reached a plateau and was not able to return to work.

The dedication, kindness, knowledge and discipline combined are a good recipe for success and wellness. The professionalism of the Spine & Joint team at Argyle is second to none and is the direct reason for my successful recovery from severe whiplash caused in an industrial accident!



An Integrated Approach to Health

The Solution

Phase 1 - The client was approved for 12 weeks in the Work Readiness Empower Program. An in-depth review of the referral information and vocational history was used to identify issues and specific outcomes.

Phase 2 - The program commenced with an objective assessment of the client's functional capacity to determine baseline functional abilities and deficits. This information was compared to the physical demands analysis of the client's pre-injury job to determine a suitable return to work plan, measure treatment progress, and apply appropriate work simulation. Pain control techniques during this time included self application of modalities and stretches.

Phase 3 - Short term and long term program goals with potential barriers were identified by both client and therapist to facilitate a return to work strategy and optimize client effort.

Phase 4 - A cardiovascular program with a general conditioning component of 8-10 exercises was initiated to restore strength and flexibility, improve posture and enhance cardio-respiratory endurance.

Phase 5 - Functional conditioning and work simulation training using the BTE (Baltimore Therapeutic Equipment) Work Simulator were implemented to mimic exact job demands and determine functional abilities. Work simulation tasks such as lifting, welding, hoist operation, push/pull, gross motor hand dexterity, and positional tolerance exercises were progressively introduced to continually challenge work tolerances and work behaviours in a safe environment.

Phase 6 - Return to Work commenced once the client demonstrated he could perform the essential duties of the job. This included a formal Job Site Coaching Session to ensure the skills taught in the clinic were applied and transferred into the work setting. Formal onsite instruction on proper body mechanics, ergonomic workstation set-up and job simplification techniques were addressed to ensure a safe return to work. Ergonomic interventions and recommendations involved increasing the height of the work station and choosing alternative bin design to accommodate the size of the client. This may have mitigated the effects of static neck flexion and recurrent neck pain.

Phase 7 - The client was functional at work full duties. Three week and three month follow up check on return to work status were conducted.

Conclusion: Case resolution.

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Program also included:

- Weekly education and empowerment presentations on neck pain and conditions, body mechanics and lifting, stretching and relaxation, core stabilization, and tissue healing.
- Functional testing every 4 weeks to measure progress and tailor treatment
- BTE testing every 2 weeks to measure specific work demands
- Coaching on pain and soreness control strategies.
- Final reports and recommendations
- Continuous communication between employer, employee and physician to promote efficient and timely case management.

The Outcome

Upon discharge of the 12-week Work and Life Readiness Empower Program and at time of the 3-month follow up phone call, the client was working full time, full duties at his pre-injury job. He reported feeling healthy, well, and glad to be at work again.

Physical Status on Discharge Summarized

- Full cervical spine active and passive range of motion
- Postural control remained much improved. Strength within normal limits
- Tinnitus and hearing loss remained unchanged.
- Floor to waist lifting – 50 lbs
- Waist to shoulder lifting – 40 lbs
- Reaching tolerance – no limitations
- Client lost 30 lbs
- Neck pain functional scale outcome measure of self reported function was 78/80 where 80 represents the least disabled
- Spinal sort outcome measure of perceived functional abilities was 189/200 which is considered to be a Heavy physical demands capacity.
- Significantly reduced intake of medication

*“Now I’m stronger
and healthier than I
was before my injury.
I’m now back to work
at full duties.”*



Conclusions

From almost completely disabled to completely functional, the Work Readiness Empower Program helped this client successfully return to work. The comprehensive program is unique, outcomes driven and effective.

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