

# Reduce Risk, Cost and Loss Time with MSD's in the Workplace

## *A Comprehensive Look at the Fit2WRK Concept and Care Model*

R.GAGNE, EET, CFE, NADEP

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### ABSTRACT

***It is no mystery that there are significant costs and loss time associated with soft tissue injuries in the workplace. Sprains and strains account for 41 percent of all workplace injuries and illnesses requiring days away from work.\* The musculoskeletal disorders or MSD's as they are called in the Industry, are difficult to assess and ultimately are handled differently by providers across the country. With little standardization and consistency of care delivery, the outcomes are varied from one provider to the next. The solution is the development of an integrated approach that manages and reduces risk throughout the continuum of care.***

Every Industry has a job that is simply a difficult one that has historically run an increased rate of injury occurrence. These jobs for the most part have been reviewed from an ergonomic hazard standpoint, but they cannot be easily changed. This leaves the question, how do we be proactive and go about reducing risk of injury in this type of environment? Quality care after injury is certainly important, but are there other areas where we can minimize exposure going forward? These injuries, and these high risk jobs make up for the majority of the premium costs and need to be looked at from all aspects. A general review of past injuries and claim duration will help to direct you to the high risk jobs in question.

***"The high risk job is responsible for the majority of cost and concern"***

All programs for employee care begin with the details of the job demands. If job demands are not clearly stated, then in the course of evaluation, individuals may be over or under-tested, rehab will be misdirected and there will always be a potential for re-injury upon return to the workforce. The first place to start in the development of an integrated program for reducing risk is to update and/or redo existing job demands, specifically for the high risk jobs. They need to properly reflect essential and high risk duties of the work environment. In accordance with the ADA and EEOC, the Uniform Guidelines on Employee Selection Procedures states that a thorough job analysis is needed for supporting a selection procedure. Remember "garbage in – garbage out" – if the job demands analysis is not concise, then your testing and treatment protocols will not be properly representative of your employee's work environment. You can certainly have a general laborer which represents a multitude of jobs or for that matter a series of jobs on rotation represented by a single JDA, however in both the above cases, you need to include the highest risk and or essential duties for all jobs included. The most essential duty may not always be the highest risk – for instance you may sit all day, but at the end of the day you lift your 30lb files over the shoulder to store them away. The seating task may be your essential duty, but the highest risk component is the lift. Stresses on the joints due to excessive force, repetition, sustained posture or simply "awkward" movements involving twisting or rotating could increase risk of injury.

In the development of an Integrated Model you need to take into account not only how to reduce cost and loss time with existing injured employees, but you also need to look at all individuals who may find their way into working in that high risk job environment. This means looking at new hires, transfers and, of course, the present aging workforce already on the job.

The following illustration depicts the Fit2WRK model of care and it clearly displays the way all the individual services need to work with each other.



***"No one service will suffice in the continuum of care, instead you need to be prepared to handle all situations that may arise with both the employees in the high risk job and those coming into it. Furthermore, you need to ensure all aspects of testing and treatment are in tune with existing legislation and that your approach is legally and ethically sound."***

One of the most common practices to reduce risk of injury is to review the work environment for areas that may be causing increased strain on the employees. Start with reviewing the type of injuries found in that particular job detail and then begin a thorough review of equipment, tools and processes that may increase risk through perhaps repetition, force, sustained posture or unique tasks such as twists or turns. This is essentially the foundation for a more formal ergonomic hazards analysis. If the environment cannot be changed then move on to the next phase of management.

New Hires can be effectively managed with the incorporation of a post offer pre-employment screening protocol. If not previously incorporated into your risk management model, then a formal validation study needs to be completed and you need to ensure both ADA and EEOC compliance. This evaluation qualifies any pre-existing conditions that may hinder his/her ability level and also provides a solid baseline of abilities to compare with if a future injury occurs.

Understanding that you most likely already have a relationship with a qualified Occupation Health Group or Urgent care Delivery Model, the Physical Therapy component needs to be seen as a separate entity.



It is well established that combining the two components in the same entity results in increased rehabilitation referrals and subsequently higher costs and loss work time. Once defined as a provider of choice, the Physical Therapy program for handling your employees' MSDs needs to be driven by the job demands analysis. Start with functional restoration and then focus on simulated essential work demands as are dictated by the job demands analysis. This combined work simulation model helps to build endurance for activities considered to be high risk and subsequently allows for an expedited return to a sustained and safe work environment.

Rehabilitation Baseline Evaluations will display actual injury loss and help to direct treatment while ongoing progress evaluations will display range of motion and strength changes of the employee. This method provides immediate real time data to determine changes in treatment direction or for that matter an assessment of when the employee has reached Maximal Medical Improvement (MMI) or a return to work target (full duties and or transitional/modified duties).

Return to Work and or Fit for Duty evaluations need to be directed to a match with existing full duty requirements or transitional/modified duties as is directed by the employer. The purpose of this evaluation is to ensure a safe and sustained return to duties. There are two very important considerations in this evaluation; first, it needs to be relational to both the essential job demands and any previously designed post offer pre-employment screen protocol, and secondly, the protocol needs to be medically legally sound and designed in such a way as to not over or under test the employee.

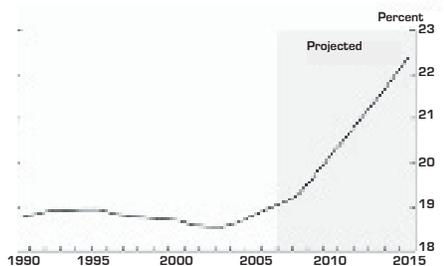
Transitional or Modified Duties can be developed to allow for early re-entry into the work environment. It is well documented that time on the job provides an expedited return to full function and also that the more time off from the job the less chance the employee will return back.

Job Transfers are a significant risk if an employee is moving from a low risk (low weight, low repetition) job environment to that of a higher risk job. This has become increasingly apparent with employees with seniority wanting extended overtime hours that workers in other departments are getting. Going from a white collar to a blue collar environment is a concern due to de-conditioning and change in function. Of course individuals cannot be fired, but a transfer can be stopped if it poses a risk of injury to themselves or their fellow co-workers.

One of our primary concerns is that of the aging workforce already involved in the high risk job. With the existing workforce an evaluation qualified as a "Preventative Maintenance" evaluation can be developed and implemented. It is essentially designed to prevent injury and maintain the worker on the job.

The purpose is to monitor patterns of degradation for both range of motion and strength of the employee in comparison to themselves versus the job. Example: Meat packer with extensive historical hand/wrist injuries: Test the wrist range of motion and hand/pinch grip strength

Population Aged 62 and Older as a Share of the Population Aged 16 and Older, 1990-2015



\*Source: Bureau of Labor Statistics

every three months to review any significant changes in function.

Strengthening and exercise can be a positive factor either onsite at the place of employment or offsite after hours at a local clinical facility. As we are aware more and more employers are embracing the Industrial Athlete concept and are incorporating programs during and after the work day to assist the employees on high risk lines in keeping Fit for Duty. Like an athlete they are involved in training their body to be able to effectively and safely manage their required tasks.

Education of the employee base in topics ranging from tool handling and lifting to nutrition can assist the employer in keeping the wellness directive on track. Wellness coaching as part of this model provides increased interest on the employee's part to participate.

Throughout the entire process it is important to maintain and increase communication with all parties involved. From the Treating Physician to the Occupational Health Team and the Physical Therapist, communication is the key to early re-entry into the workforce and ultimately positive interaction with the injured employee. The primary goal with any risk management program is to minimize loss work days and to reduce overall direct and indirect medical costs. By incorporating a program such as the one above, versus individual services, we ensure all aspects from "Hiring to Retiring" are accounted for in the continuum of care for the employee.

*The program noted above is a summary of the Fit2WRK model by USPh. This integrated model is available through USPh in close to 400 facilities and 44 states nationally. For additional information on how the Fit2WRK Model could help your organization, visit; [www.Fit2WRK.com](http://www.Fit2WRK.com) or call 1-877-Fit-2WRK*

## REFERENCES:

- Lindsay, R., Watson, G., Hickmont, D., Broadfoot, A., & Bruynel, L. (1994). Treat your own strains sprains and bruises. New Zealand: Spinal Publications.
- Lovering, R.M. (2008). Physical therapy and related interventions. In P.M. Tiidus (Eds.), Skeletal muscle damage and repair (pp. 219-230). United States of America: Human Kinetics.
- Subotnick, S. (1991). Sports & exercise injuries. California, USA: North Atlantic Books.
- Flegel, M.J. (2004). Sport first aid: A coach's guide to preventing and responding to injuries. Hong Kong, Japan: Human Kinetics.
- Bureau of Labor Statistics: The Injuries, Illnesses, and Fatalities (IIF) program provides annual information on the rate and number of work related injuries, illnesses, and fatal injuries, and how these statistics vary by incident, industry, geography, occupation, and other characteristics. (BLS). Workplace Injuries and Illnesses in 2003. BLS News. Publication No. 04-2486, Dec 14, 2004.
- BLS. National Census of Fatal Occupational Injuries in 2003. BLS News. Publication No. 04-1830, September 22, 2004.
- Leigh, J.P., and Robbins, J.A. Occupational disease and workers' compensation: Coverage, costs, and consequences. *Millbank Quarterly* 82(4):689-721, 2004.
- Steenland, K., et al. Dying for work: The magnitude of US mortality from selected causes of death associated with occupation. *American Journal of Industrial Medicine* 43(5):461-482, 2003.
- Liberty Mutual Research Institute for Safety. 2005 Annual Report of Scientific Activities, Research Spotlight, Workplace Safety Index.10. More information available at [www.libertymutual.com/research-institute-report2005/html/Research\\_AR\\_2005FNL.pdf](http://www.libertymutual.com/research-institute-report2005/html/Research_AR_2005FNL.pdf); Oct31,2006
- National Institute for Occupational Safety and Health (NIOSH), NORA. More information available at [www.cdc.gov/niosh/nora](http://www.cdc.gov/niosh/nora); accessed October 31, 2006.

\*BLS. Incidence rates for nonfatal occupational injuries and illnesses involving days away from work per 10,000 full-time workers by nature of injury or illness and selected sources of injury or illness, 2001/2005(\*)