

GREETING OHSIG MEMBERS!

We hope this finds you well, enjoying the first days of summer...or nearly summer! A few updates from the Occupational Health SIG.

Announcing the First International FCE Research Meeting

The First International FCE Research Meeting in Haren, The Netherlands will take place October, 25, 2012. This is a great opportunity to participate with top researchers and others in the area of FCE.

A brief look at the agenda and speakers:

- New research
 1. Does test evaluator's fear of injury influence maximal lifting capacity? A triple blind RCT. *Sandra Jorna-Lakke*
 2. Cost-benefit of work-related multidisciplinary rehabilitation for patients with MSDs: does employment status matter? *Marco Streibelt*
 3. Can submaximal physical and functional capacity be detected in patients with chronic pain? A systematic review. *Suzan van der Meer*
 4. Reliability, agreement and safety of FCE in patients with WAD. *Maurizio Trippolini*
- Pros/Cons for normative values for FCE. A debate. *Remko Soer and Paul Kuijer*
- FCE as outcome
 1. Gender differences in capacity ratings predicting RTW for patients with MSDs. *Marco Streibelt*
 2. Decline of functional capacity in healthy aging workers. *Remko Soer*
 3. Longitude assessment of physical capacity in a cohort study on early osteoarthritis of the hip and the knee. *Andre Bieleman*
 4. Does the performance of an FCE lifting test differ between employees on sick leave due to MSDs in physically demanding work and their health counterparts? *Paul Kuijer*
 5. Deconditioning in workers with chronic MSD pain: does work matter? *Remko Soer*
 6. Client's perspective on the utility of FCE for the assessment of physical work ability, prognosis for work participation and advice on RTW. *Willemijn Pas*
- Pre-employment FCE
 1. Pre-employment functional assessments predict MSD injury risk associated with manual handling in coal miners. *Jenny Legge*
 2. Job-specific FCE protocols for household waste collectors: development and reproducibility. *Vincent Goutteborge*
- One for all, or all for one?
 1. Debate
 2. Generic or specific FCE protocols? *Vincent Goutteborge and Doug Gross*

- Where do we go from here?
 - o 1. Open discussion
 - o 2. FCE research agenda. *Doug Gross and Michiel Reneman*

Please find a Message from Michiel Reneman:

Dear colleagues,

I am happy to announce that we will hold the FCE research meeting on October 25th, 2012, in Haren, The Netherlands. The program will consist of a mix of oral presentations and discussions, as well as 2 lively debates, each introduced by 2 colleagues who have agreed to disagree with another.

Note: Details on the program, directions to our rehab center, and dinner are posted on our Web site at: <http://www.umcg.nl/nl/umcg/afdelingencentrumvoorrevalidatie/researchonderwijs/postwdpimeetingfce/Pages/default.aspx>

All new information will be posted on this Web site. Shortly, we will also have a link on the WDPI Web site. Registration is required. Hope to see you all!

On behalf of Berry van Holland, co-organizer, and Doug Gross, co-chair,

Regards,
Michiel Reneman

Announcing Second Scientific Conference on Work Disability Prevention and Integration; Healthy Aging in a Working Society

October 22-24, University Medical Center Groningen, The Netherlands

The FCE Research Meeting will follow the WDPI meeting. For more information on WDPI, go to the following:

http://wencke4.housing.rug.nl/documenten/medici/Internationale_Conferenties/WDPI%202012/WDPI_2012.htm

Announcing Human Factors and Ergonomics Society Annual Meeting

The Human Factors and Ergonomics Society announces the 56th Annual Meeting to be held October 22-26, 2012 at the Westin Boston Waterfront in Boston, MA. Additional details are available at <http://www.hfes.org/Web/HFESMeetings/2012annualmeeting.html>.

OHSIG Election

The office of President is up for election later this fall. The term is 2013-2016. If you are interested in running, contact Jill Galper, Nominating Committee Chair at Jill.Galper@imxmed.com.

Thank you to Doug Flint, DPT, OCS, for his article in this issue of OPTP on Post Offer Pre-Employment Testing

In his article, Doug describes the benefits of a post offer testing program. If you are not involved in post offer testing for employers in your area, it is well worth your consideration. Post offer testing needs to comply legally, needs to objectively represent the job functions, and be consistently applied. Thanks to Doug for a look at the benefits of such a program.

YOUR OHSIG BOD

As always, your BOD members are listed on the Orthopaedic Section Web site. We welcome your feedback!

*Professional Regards,
Margot Miller, PT
OHSIG President*

Post Offer Pre-employment Testing

Douglas P. Flint DPT, OCS
Intermountain Health Care, Ogden, UT

Musculoskeletal disorders involving employees have represented the leading cause of injury and illness in American Industry. In 2003, according to the Bureau of Labor Statistics, there were 374,700 work-related back injury cases alone.¹

Since Don Chaffin's work in the early 1970s at the University of Michigan, post offer pre-employment testing has been a popular strategy for reducing injuries and lost hours due to musculoskeletal disorders. Chaffin found workers were 3 times more likely to be injured on the job when not having demonstrated the required physical work demands for a specific job.²

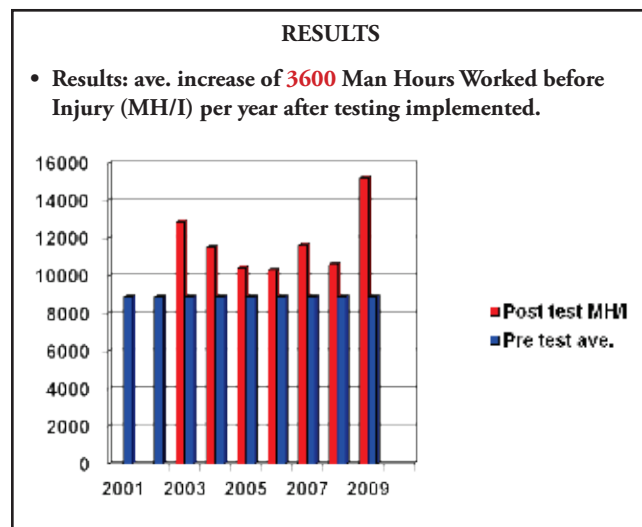
Surprisingly, until now, there has been little formal research since the early 1970s in evaluating the outcomes of physical capability employment screening and how it affects specific company costs and lost time due to injury.

This paper will show how post offer pre-employment testing can benefit employers in 3 specific ways. First it can reduce the cost of work related injuries by increasing the man hours worked without an injury and decreasing the health care costs related to work related injuries by helping to hire the right person at the right time for the right job. Second this test creates clear objective criteria for workers to return safely to their job following an injury. Third it can be used in conjunction with "fit for duty" testing which can assess whether a worker demonstrates behaviors that question their physical ability to do their job.

In 2000 I was asked to work with a local food warehousing company to help reduce the number and severity of injuries in their Order Selector job position. We reviewed the types of injuries and the rate of turn over for this specific job position by reviewing their OSHA logs. We identified that the largest number of injuries were indeed musculoskeletal and mostly low back related. We looked at the man hours worked per injury data and averaged it for the previous 3 years. This average was found to be 8600 man hours worked without an injury. With this information, we could compare the effect of implementing a post offer pre-employment test for the Order Selector job position.

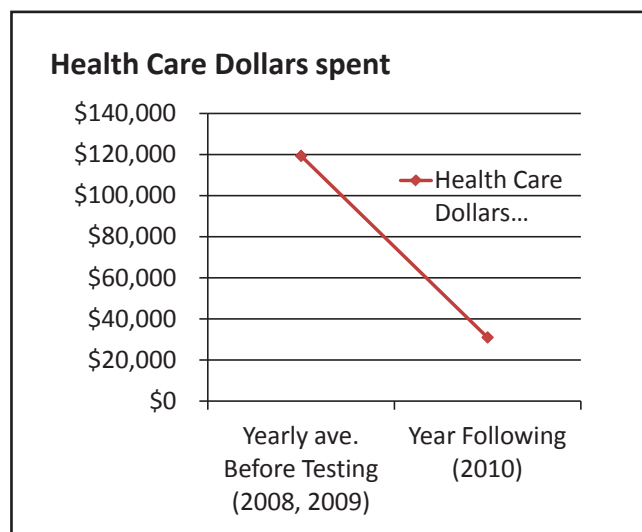
The job specific physical demands were identified by a job-site analysis. From this analysis a post offer test was created and implemented in 2003. In 2009 we reviewed the results of testing with the company. We had tested over 1200 people. We reviewed the man hours worked without an injury for the years after testing and found that it increased to an average of 3600 hours without an injury. This is important because it equates to over 1½ full time employee equivalents and thus significantly increases their productivity (Table 1).

Table 1.



In 2009, I was approached by a local school district that was having a high number of injuries with their food service technicians. We reviewed the health care cost of their work related injuries and found that for the 3 previous years the health care cost averaged \$119,343. By following the same process of performing a job analysis as the food warehousing company, the job specific physical demands for this job were identified, and a post offer pre-employment test was created and implemented in 2009. In 2010 their health care costs for work related injuries dropped to \$30,964 resulting in an \$88,379 reduction in cost (Table 2).

Table 2.



We are waiting for 2011 data to be collected to validate this trend of lower costs.

The next benefit of post offer pre-employment testing is the clear criteria for return to work following an injury. This might be better understood by considering what employers will be faced with in the near future.

“The new Americans with Disabilities Act as amended will effect over 880,000 employers across the United States. In its analysis of the cost of the new legislation, the Equal Employment Opportunity Commission (EEOC) estimated that these employers will experience an incremental increase in requests for reasonable accommodation of between 2 million to 6.1 million over the next 5 years. Each of these requests must, by law, be responded to in writing, documented, and resolved. Ergonomic evaluation experts will play a significant role in an employer’s response to these requests.³

When companies have implemented a valid post offer pre-employment test that clearly identifies the core essential job specific physical demands of a particular job position, it has already addressed what the return-to-work (RTW) criteria for a specific job involves. This will help companies focus their resources on accommodating tasks that are not core essentials rather than trying to determine what the core essentials are at that time. A post offer pre-employment test also creates a consistent fair process for evaluating these requests for reasonable accommodations.

The third benefit of post offer pre-employment testing is the ability for it to be used for fit-for-duty (FFD) testing. Many employers have stated that they have a significantly higher rate

of injury with employees returning to their jobs following a leave of absence. Although it is not allowed to mandate that an employee must perform a FFD test prior to returning to work following a prolonged leave of absence, it is within the employer’s right to request a FFD test on any employee who demonstrates reasonable suspicion of being unable to safely perform their job duties. For example, this could be evidenced by a supervisor observing a recently returning employee having difficulty going up stairs or bending or lifting. This would be considered reasonable suspicion and could trigger a FFD test.

In summary, these studies have shown that post offer pre-employment testing can be beneficial to the employer by reducing costs and increasing man hours worked without an injury. To develop a competent post offer pre-employment test, it is essential to have a valid job description that identifies the core essentials and job specific work tasks of a particular job. This will, in turn, set the foundation for an objective and clear Return-to-Work criteria and Fit-for-Duty testing. Post offer pre-employment testing is also beneficial to the employee by ensuring the employee is physically capable to safely perform the duties of their job.

REFERENCES

1. Bureau of Labor Statistics. 2003.
2. Chaffin. The Effectiveness of Pre-Employment Strength Testing for Manual Materials Handling Jobs Proceedings of the Human Factors and Ergonomics Society Annual Meeting. July 1976;20:17-23.
3. ADAAA sec. 12111. Definitions (2) Covered entity, (5) employer.