



News on
Obesity
Management
for Employers

Brought to You by Eisai

This newsletter is published by Eisai Inc. and produced by The Benfield Group in collaboration with Eisai, which provided input and sole financial support.

Issue Number 8

Getting Serious About Musculoskeletal Conditions and Obesity Management

Welcome to the 8th issue of Closing the Gap-the first issue to debut on Eisai's relaunched [Closing the Gap website](#). If you haven't seen the website recently, please take a few minutes to visit and explore it. For over a year, CTG has been assembling a wealth of useful information on obesity and weight management for employers. Now we have worked with Eisai to create a new design for the site that will make it easy to find the information and tools. Let us know what you think.

In This Issue

[Employers are concerned about MSK conditions because they contribute heavily to healthcare costs.](#)

[Employers are also concerned about lost productivity and disability costs.](#)

[There is a direct relationship between employee obesity and the prevalence and severity of MSK conditions and related costs to employers.](#)

[Maintaining a healthy body weight can help reduce health and productivity costs associated with MSK conditions](#)

Musculoskeletal (MSK) conditions are the focus of issue #8. MSK conditions are injuries or disorders of the muscles, nerves, tendons, joints, cartilage, and spinal discs.[1] Here are the key takeaways from this issue[2]:

1. Managing employee MSK issues has become a top priority for employers. MSK conditions have become one of the largest and fastest growing drivers of healthcare, lost productivity and disability costs to employers.
2. There is a direct relationship between employee obesity and the prevalence and severity of MSK conditions and related costs to employers:

- Obesity contributes to MSK issues and drives earlier surgical interventions.
- Obesity can complicate MSK treatments such as knee replacement surgery and surgical recoveries.
- Weight loss can reduce MSK issues and help patients avoid surgeries and surgical complications.

While we suspect these takeaways ring true, we also understand that our readers need facts to support taking action. So in this issue we have pulled together the evidence, and we expect you will find it as compelling as we do.

Implications for Employers

The implication is clear: An effective strategy for helping employees achieve and maintain a healthy weight will also impact MSK-related health and productivity costs to your organization.

Another way to summarize the implication is to frame it as we did the relationship between excess weight and cardiometabolic risk (CMR) in [issue #6](#) and that is:

If you are serious about.....	Then effective, evidence-based <u>weight management</u> should be....
Managing CMR and MSK conditions in your employee population	A core element of your disease management and case management programs for CMR and MSK
Slowing and reversing the growth trends for CMR and MSK conditions	Central to your preventive health and wellness efforts

If you are already thinking this way, we hope the facts highlighted below will reinforce your commitment to weight management. If you have not yet taken a strategic and comprehensive approach to helping employees achieve a healthy weight, we hope the evidence assembled in this issue encourages you to take concrete steps toward doing so.

Yours in health,
 Chuck Reynolds and Jack Nightingale

[1] Centers for Disease Control. Work-related musculoskeletal disorders (WMSD) prevention. October 23, 2013. <http://www.cdc.gov/workplacehealthpromotion/implementation/topics/disorders.html> Accessed August 4, 2014.

[2] See the rest of this newsletter for evidence supporting each of these statements.

Employers are concerned about MSK conditions because they contribute heavily to healthcare costs.

- Jumbo employers frequently rank MSK as one of the five conditions they consider most important. [3]
- Recent analysis found that MSK conditions are the costliest and most rapidly growing diagnostic category in the United States, illustrated by how per

member/per month (PMPY) spending on osteoarthritis (OA) conditions rose notably from 2006 to 2011(see Figure 1).[4]

Figure 1: Per Member Per Year Spending on MSK Conditions



Source: Huse DM, Marder WD. What are the leading drivers of employer healthcare spend growth. Truven Health Analytics, April 2013.

[3] Benfield Research. Employer & coalition manufacturer relationships. 2013:28-29.

[4] Huse DM, Marder WD. What are the leading drivers of employer healthcare spend growth. Truven Health Analytics, April 2013.

Employers are also concerned about lost productivity and disability costs.

- Researchers estimate that MSK-related lost-productivity costs exceed the conditions' medical and pharmacy costs. Researchers calculated that MSK resulted in \$61.2 billion in U.S. productivity losses in 2002. [5]
- A 2001 study showed that those out of work for a MSK condition miss a median of 8 days compared with 6 days for all nonfatal injury and illness cases. [6]

[5] McDonald M, DiBonaventura MD, Ullman S. Musculoskeletal pain in the workforce: The effects of back, arthritis, and fibromyalgia pain on quality of life and work productivity. JOEM. 2011;53(7).

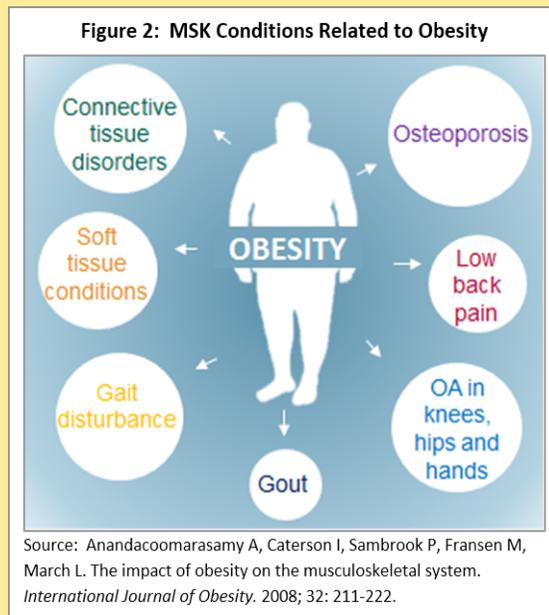
[6] Centers for Disease Control. Work-related musculoskeletal disorders (WMSD) prevention. October 23, 2013. <http://www.cdc.gov/workplacehealthpromotion/implementation/topics/disorders.html> Accessed August 4, 2014.

There is a direct relationship between employee obesity and the prevalence and severity of MSK conditions and related costs to employers.

Obesity contributes to MSK conditions (See Figure 2) and exacerbates the functionality and quality-of-life limitations that MSK already imposes.

Consider knee osteoarthritis (OA) as an illustrative example:

- Obesity has been strongly linked to the development of OA of the knee. Several studies report a direct correlation between obesity and OA.[7]
- Obesity increases the likelihood of knee replacement surgery. An increase of BMI of 5 kg/m² (e.g., going from a BMI of 30 to a BMI of 35) nearly doubles the risk of knee replacement surgery.[8]
- Obesity increases the risk that working age adults will need knee replacement surgery. Knee OA prevalence peaks around 50 years of age and obese patients on average require knee replacement surgery seven years earlier than non-obese patients. [9] [10]
- The number of obese knee replacement patients is increasing. The proportion of knee replacement surgery patients that were obese nearly doubled from 11% in 2002 to 20% in 2009. Knee replacement surgeries are expected to rise dramatically over the next 15-20 years. [11]
- Obese patients (those with a BMI greater than 30) undergoing joint replacement surgery are at increased risk for perioperative complications. [12] Possible complications include: wound healing complications, superficial and deep infections, prosthetic loosening and poor functional outcomes.[13]



[7] Odum SM, Springer BD, Dennon AC, Fehring T. National obesity trends in total knee arthroplasty. *The Journal of Arthroplasty*. 2013; Suppl1: 148-1451.

[8] Odum.

[9] Cross M, Smith E, Hoy D et al. The global burden of hip and knee osteoarthritis: estimates from the global burden of disease 2013 study. *Ann Rheum Dis*. 2014; 73:1323-1330.

[10] Odum.

[11] Ibid

[12] Workgroup of the American Association of Hip and Knee Surgeons (AAHKS) Evidence Based Committee. Obesity and total joint arthroplasty: A literature based review. *The Journal of Arthroplasty*. 2013; 28:714-721.

[13] Odum.

Maintaining a healthy body weight can help reduce health and productivity costs associated with MSK conditions.

The evidence presented in this issue of Closing the Gap demonstrates the critical importance of addressing obesity as part of a comprehensive employer approach to MSK management. Effective, evidence-based weight management tactics should be

integrated into MSK care management programs. More broadly, employers should take steps to ensure that weight management is integral to employer wellness programs and medical and pharmacy benefit design to lessen the burdens associated with obesity-related MSK conditions.

info@ctgobesity.com

