Preventing Work Disability after Musculoskeletal Injuries: UNDERLYING ISSUES SURROUNDING POLICIES AND GUIDANCE

The two figures below provide a brief illustration of some of the common factors and processes that are known to influence musculoskeletal (MSK) work disability. The first figure describes some of the inherent challenges of managing MSK pain problems that are often fluctuating, subjective, and non-specific in terms of actual pain mechanisms. The second figure describes some of the processes that might affect whether a common MSK injury leads to permanent job loss and disability benefits. These MSK characteristics and processes point to several key issues in MSK work disability prevention that have policy implications:

Controlling pain vs. restoring function

One factor that may have contributed to the current opioid crisis was a more aggressive approach to early MSK medical care that focused more on controlling pain than on restoring function. An exclusive focus on pain control can impair return-to-work (RTW) efforts, as patients may be waiting for a full pain recovery before resuming daily activities, requesting job modifications from an employer, or participating in exercise programs and other active treatments. Also, some treatments that substantially alleviate pain (i.e., opioid medications) may be incompatible with work, driving, and other daily functions. At the same time, many patients show a full pain recovery with little or no treatment. Getting some patients focused on activity resumption as early as possible may help to improve SAW/RTW outcomes, and changes to policies and guidelines could support these efforts.

Incorporating individual differences in pain coping and motivation

Pain is, by definition, a subjective experience, and it has been difficult to set uniform policies and standards for care of MSK injuries because individuals experience pain so differently. Clinicians, insurers, and employers certainly recognize the vast individual differences in the abilities of workers to return to normal job responsibilities while coping with residual pain, but trying to address these differences in a clinical care model or insurance claims process can be challenging. For those patients who experience less motivation for treatment and more apprehension about returning to work, it’s easy to attribute these poor outcomes to characterological flaws or health literacy issues, but the research evidence more often points to the normal distribution of pain beliefs in the general population. When it comes to MSK injuries with persistent pain, there is a need for health care services and employer practices to recognize and address cases needing additional support, counseling, and encouragement.

Early psychosocial screening – opening “Pandora’s Box?”

There are a growing number of pilot programs and research studies supporting the use of brief self-report screening measures to identify psychosocial risk factors soon after the onset of MSK injuries. Several questionnaires have been developed and tested, but implementation of patient screening measures for MSK injuries in the primary care and occupational sectors has been slow. One fear is that asking too many psychosocial questions may open “Pandora’s Box” and unleash a whole new list of pathologies in need of treatment (and added insurance costs). Acceptability of brief screening measures has been good from the patient perspective, and insurers have shown some interest in adopting screening practices, but this practice has not been adopted widely by clinicians, and the appropriate methods of early intervention for high-risk patients are still being tested.

Addressing worker discouragement, worries, and depression

It’s no secret that even just a few days of severe back pain can affect mood, and there is strong research evidence that depression and chronic pain often go hand in hand. The relationship between pain and depression is probably bidirectional, and it is difficult to treat a
### Cascading factors that can affect musculoskeletal work disability

#### Onset of a common musculoskeletal disorder

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tenderness, spasm, other localized symptoms</th>
<th>Limited range of motion</th>
<th>Activity restriction or avoidance</th>
<th>Most cases judged not medically serious with good prognosis</th>
<th>Specific cause not always clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>pain intensity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 2 - 20+ years after initial onset of musculoskeletal disorder

1. **Onset**
   - Obtaining clinical care that emphasizes functional recovery?
   - Being assessed for comorbid conditions and other disability risk factors to take them into account for duration of care?
   - Receiving treatments compatible with SAW/RTW?
   - Receiving necessary employer support and job accommodation?
   - Experiencing rapid pain recovery within several days or weeks?
   - Coping with pain-related distress, discouragement, and frustration?
   - Overcoming fear of re-injury and escalating pain at work?
   - Feeling confident to manage pain flare-ups or periods of high job demands?
   - Committed to SAW/RTW or able to seek retraining in a less physical job?

2. **Stay at Work/Return to Work (SAW/RTW)**

3. **Permanent Job Loss and Disability Benefits**
Why are MSK injuries so difficult to treat and manage?

Highly variable outcomes
Many MSK injuries appear routine and non-serious from the start, and more than half of these resolve within a few weeks with little or no treatment. However, for others, MSK pain can remain as a troublesome symptom for months or even years, and the reasons are not always clear. For 10% of patients, it can become a lifelong problem.

Diagnostic challenges
For most medical conditions, a complete evaluation and diagnostic work-up is crucial for a successful treatment outcome. But for many routine MSK injuries, the exact cause of injury and pathology of pain can be unclear, even after multiple physical exams, imaging studies, specialist consultations, and invasive procedures.

Recurrent, episodic, or fluctuating symptoms
MSK disorders can produce pain symptoms that fluctuate dramatically, with occasional severe flare-ups followed by longer periods of more manageable achiness and discomfort or no pain at all. This is a problem for those who begin to fear that any slight increase in their physical or social activity may lead to a sudden pain flare-up.

Multiple treatment options and approaches
Many treatment options exist for MSK disorders including medications, pain management programs, physical manipulations, exercise, complementary and alternative treatments, psychological counseling, surgery, injections, and self-care. Shopping for curative treatments with repeated failures can be discouraging.

Psychological nature of coping with pain
Pain is the most common symptom associated with MSK injuries. Pain is a subjective experience, and beliefs about pain vary by age, culture, and life experience. Thus, there are substantial differences in the way people report pain, its effect on their daily behavior, and its psychological effects on mood and well-being.

Workplace implications of pain
Just as persistent pain can affect family roles and relationships, the pain associated with MSK injuries can also have an effect on working habits, productivity, and social relations in the workplace. This may be especially problematic for workers who lack strong workplace ties, job tenure, seniority, or organizational support.
persistent MSK pain problem without attending to its psychological effects as well. This is commonly done in the case of chronic pain of many years’ duration, but there is growing evidence that mood states are a prognostic issue even for MSK pain lasting only a few weeks. Developing ways to integrate behavioral health approaches into biomechanical and medical management models for MSK injuries is an important goal for future policies and guidelines.

Improving pain self-management and problem-solving skills

Another debate in the treatment of MSK injuries is the extent to which medical care should include individual health coaching and other advice and education about ways to effectively self-manage pain and regulate activity to improve overall functioning levels. There is growing evidence that self-efficacy, the belief in one’s confidence to perform daily activities and tasks (including work tasks), is of critical importance to regain function and SAW/RTW when MSK persists. In many cases, medical treatments will not be entirely curative, so the ability of individuals to gain some mastery over pain-related problems and to feel confident in managing future pain flare-ups is important to prevent work disability.

There is growing research evidence that cognitive-behavioral therapy, when focused on overcoming pain-related challenges at work, can improve RTW rates after MSK injury, but questions remain about who should provide patient education and counseling, and when these types of services should be introduced. Changes in policies and guidelines may help to make such services more available for further piloting and evaluation.

Employer support and job accommodation

One significant issue in pain management for MSK injuries is that workplace factors are rarely included in medical assessment and intervention and that employers lack incentives for providing needed accommodations, especially when injuries are nonwork-related. Medical providers often lack the specific workplace information necessary to make detailed recommendations for accommodation that are fair and appropriate. Highly valued employees with substantial skills, experience, and job tenure may receive adequate support from their employers for SAW/RTW, but there is growing evidence that support for other workers is variable. Policies and guidelines are needed to incentivize employers to train supervisors, plan accommodations, and communicate more effectively with workers and their healthcare providers.

The Stay-at-Work/Return-to-Work (SAW/RTW) Policy Collaborative was established by the U.S. Department of Labor’s Office of Disability Employment Policy (ODEP) to support the development of policies, programs, and practices that encourage the continued employment of workers likely to leave the workforce due to injury, serious illness, or disability. The Collaborative consists of a Community of Practice to provide input and real-time feedback on specific policy topics related to SAW/RTW, and Policy Working Groups (PWGs), led by Subject Matter Experts (SMEs) and supported by IMPAQ International who explore policies and practices that curtail long-term work disability and job loss due to injury and illness, provide policy recommendations to key stakeholders, and develop resources to support policy action. The 2017 PWGs focused on three topics: (1) Replicating and Adapting the State of Washington’s Centers of Occupational Health and Education (COHE) Model; (2) Musculoskeletal Conditions and Pain Management; and (3) Transition Back to Work. This document is a product of the Musculoskeletal Conditions and Pain Management PWG co-led by Bill Shaw (SME Lead) and Linda Toms Barker (IMPAQ Lead).

Preparation of this document was funded by the Office of Disability Employment Policy, U.S. Department of Labor, Contract Number DOLQ121A21885/ DOL-OPS-16-U-00178. This document does not necessarily reflect the views or policies of the Office of Disability Employment Policy, U.S. Department of Labor, nor does the mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

For more information about the work of the Stay-at-Work/Return-to-Work Policy Collaborative, see ODEP’s website at: https://www.dol.gov/odep/topics/SAW-RTW/research-publications.htm and IMPAQ’s website at: http://www.impaqint.com/stay-workreturn-work-policy-collaborative-swr2w