Managing the Risk Factors (and Economic Costs) of Musculoskeletal Disorders:
Understanding how Discomforts, Sprains and Strains Impact your Bottom Line!
Agenda

Welcome

Discussion:

- Introduction and Term Definitions
- Types of Preventable Musculoskeletal (MSD) Injuries
  - Identify MSDs and Recognizing the Discomfort Signals
- Traditional Approach
  - Gaps
  - Defining Cost to Severity and Impact to Bottom Line
- Rational Approach
  - Industrial Sports Medicine
  - Benefits
  - Return of Investment

Q & A session
In Partnership with Briotix Health

Kimberly Hansen
Solution Advisor and
Industrial Sports Medicine Professional
Briotix Health

“Building relationships with you and your workforce to deliver meaningful results in employee health.”
What is Acheonomics™?

The potential cost to an employer for employees' neglected aches and pains from their work and daily lives.
Term Definitions:

Injury vs. Discomfort:

“Injury” is an instance of being physical damage.

- Synonyms: wound, bruise, cut, gash, laceration, scratch, graze, abrasion, contusion, lesion, trauma

“Discomfort” is the awareness of being uncomfortable, not quite an injury but having the feeling that something is not right.

- Synonyms: aches, pain, soreness, tenderness, irritation, stiffness, twinge, pang, throb, cramp

Chronic vs. Acute:

“Chronic” is having a condition persisting for a long time or constantly recurring.

“Acute” is a condition that is brief or “of sudden” onset, such as, a broken bone.
Types of Preventable Musculoskeletal Injuries

- Nerve Impingement
- Strain
- Sprain
- Tendonitis
- Bursitis
- Meniscus Tear
Traditional approaches is **reactive** and addresses the issue after the injury has occurred.
The Gaps in Traditional Approach

Costly

- Addressed once functionality is lost
- Impacts your bottom line

Treats the Injury not the Individual

- Limited educational components
- Injury is treated from a GENERIC treatment prescription

It is NOT relational

- Does not know the work or know the worker

People will participate in health, safety & ergonomic initiatives *only* when *they understand* what it will do for *them.*
## Defining the Cost to Severity

### Average Workers’ Compensation Cost of Common Musculoskeletal Injuries

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>$3,066</td>
<td>$9,197</td>
<td>$27,591</td>
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<tr>
<td>Neck</td>
<td>$7,022</td>
<td>$21,067</td>
<td>$63,201</td>
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<tr>
<td>Shoulder</td>
<td>$4,945</td>
<td>$14,834</td>
<td>$44,502</td>
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<tr>
<td>Elbow/Forearm</td>
<td>$3,066</td>
<td>$9,197</td>
<td>$27,591</td>
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<td>Low Back</td>
<td>$3,070</td>
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<tr>
<td>Wrist</td>
<td>$2,540</td>
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<tr>
<td>Knee</td>
<td>$3,909</td>
<td>$11,728</td>
<td>$35,184</td>
</tr>
</tbody>
</table>
The Impact on the Bottom-Line

The Cost

Estimates have been made that employers pay almost $1 billion per week for direct workers' compensation costs nationwide.

*(2015 Liberty Mutual Workplace Safety Index)*

The Type

38% of all injuries with days away from work were due to sprains, strains and tears.

The Mechanism

63% were due to overexertion and bodily reaction.
Relational Approach

Is a proactive approach based on forming connections between the employees and the individuals providing care with the goal of injury prevention.

- Knows both the worker and their work
- Highly educational in nature
- Works directly with the individual to address discomforts before they become injuries
- Increases compliance to the “Duty of Care” clause by mitigating risks and, potentially, eliminating hazards
- Incorporates a collaborative “team approach” to employee’s care
  - Employee, EHS, HR, Management, Department head, Ergonomist, Engineer, Injury Prevention Specialist
Relational Approach: Industrial Sports Medicine

Industrial Sports Medicine is an **efficient** and **effective** field of healthcare that is dedicated to the **prevention** and care of **injuries** and disorders that are related to participation in the **workforce**.

- Discomfort and injury evaluation, care and management
- OSHA first aid care for minor traumas
- Manual hands-on care for discomforts
  - Targeted therapeutic massage
  - Taping and non-rigid bracing
  - Cold and heat therapy
- Individual and group education initiatives
  - Health and wellness
  - Injury prevention programs
    - *stretching, strengthening, posture and biomechanics*
- Functional movement and physical performance screening
What Is an Industrial Sports Medicine Professional?

An Industrial Sports Medicine Professional (ISMP) is a Certified Athletic Trainer, Athletic Therapist or Physical Therapist (Physiotherapist).

Part of their role is to implement an Industrial Sports Medicine and Ergonomics program to promote injury prevention and safe work performance.

Industrial Sports Medicine professionals address, assess and alleviate work-related and non-work-related discomforts.
Benefits of the Relational Approach

1. High employee utilization and approval rate
   • Discomforts reported before injury occurs
2. Increase in employee retention and morale
3. Increase in productivity
4. Reduction in musculoskeletal:
   a) recordable injuries
   b) lost time and restricted days
   c) work-related musculoskeletal medical costs
   d) non-work-related musculoskeletal medical costs
5. Decrease in workers’ compensation costs
Return of Investment

SHOULDER
$4,711.65 - $44,268.65

Mild
$4,945

Moderate
$14,834

Severe
$44,502

AVERAGE ISM ENCOUNTERS 5.6
AVERAGE ISM COST PER ENCOUNTER $41.67
AVERAGE ENGAGEMENT COST $233.35

Y-O-Y Impact on Worker’s Compensation Costs

$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000

Year 1 Year 2 Year 3 Year 4
Questions?

Come join the discussion at the EHSQ Community
Navigate to community.intelex.com

Welcome to the EHSQ Community

A place where EHSQ Professionals from around the world can network, collaborate, and share their knowledge and expertise.

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✓ EHSQ best practices and resources,
✓ Industry current and knowledge events, and
✓ Regulatory changes

All in one place.
Contact

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About INTELEX


An OSHA Co-Sponsor

EHSQ Software, over a million users Worldwide.

Increase customer’s profits and protect goodwill.

Peer reviewed as a best managed company.

Intelex@Intelex.com
OSHA Statistics and Financial Impact of MSK to the Workforce & US economy

<table>
<thead>
<tr>
<th>Part of Body</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
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<tbody>
<tr>
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<tr>
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<td>Chest</td>
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<td>Hip</td>
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<td>Lower Leg</td>
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<td>Mid Back</td>
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<td>Skin Wound</td>
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https://www.osha.gov/dcsp/smallbusiness/safetypays/estimator.html