The Holistic Approach to Management of Musculoskeletal Injuries

Presented by:
Eric Bader, DPT, MS, CEAS II

Speaker Background

• 2014 DPT UW-Madison
• MS Mechanical Engineering
• BS Biomedical Engineering
• Bellin Health in 2014
• Currently a team facilitator overseeing >50 Employer Clinic therapy services (OT, PT, PTA, LAT)

269 Employer Partners;
Generating 75,709 Annual Visits;
Managing 40,806 Bellin Lives;
Delivering One Mission.

“Saving lives before they know they need saving.”
Main Points of Today's Presentation

• Steps to manage musculoskeletal health
  — The Why
  — The How
    • Prevention Considerations/Services
    • Early Intervention Program
    • Medical Treatment
  — The Results

Start with WHY

• Right for the employer
  — Control work comp spend
  — Control health care insurance spend
  — Attract healthy employees
  — Keeps employees high performing and engaged

Start with WHY

• Right for the employee
  — Person (family, friend, community, church)
  — Occupation (self care, career)
**WHAT** will be included in delivery of service?

- **Prevention is Key!!!**
- **Early Intervention**
- **Medical Treatment**

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**Prevention: Non-Clinical Factors on the Significance of Health**

### Six Domains of Social Determinants of Health
- Economic Stability
- Education
- Food
- Neighborhood and Physical Environment
- Community and Social Context
- Health Care System

### Health Factors Influencing the Length of Life

- **Social and Economic Factors**: 40%
- **Physical Environment**: 10%
- **Clinical Care**: 20%
- **Health Behaviors**: 30%

85% of Physicians reporting that unmet social needs lead directly to poorer health outcomes.

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**Prevention: Dimensions of Health – Holistic Medicine: Healing the whole person**

- **Sleep**
- **Stress**
- **Diet**
- **Fitness**
- **Smoking**
Prevention: MSD Risk Factors - Sleep

- Sleep is critical for the proper functioning of the body.
- Without Adequate Sleep:
  - Increased pain perception
  - Increased depression, anxiety
  - Decreased memory
  - Reduced ability to learn new motor skills
  - Increased risk for accidents, injuries, and falls
- Too Much or Too Little:
  - Recommend >7 or <9 hours of sleep per day.
  - Insomnia was significantly associated with workplace and non-workplace injuries among workers having no comorbid conditions.

33% of the US population suffer from sleep disturbances.

Prevention: MSD Risk Factors - Smoking

- Smoking:
  - 1.5 times more likely to have a motor vehicle crash
  - 1.4-2.5 times more likely to be injured at work
- What Can Be Done:
  - Knowing workforce – percentage of tobacco users
  - Readiness to change
  - Offer tobacco cessation programs
  - Understand insurance benefits
  - Offer incentives

Readiness to Change:

<table>
<thead>
<tr>
<th>Readiness to Change</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>Nicotine Use</td>
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Prevention: MSD Risk Factors- Emotional Health

- **Emotional Health**
  - Patient-reported symptom severity in carpal tunnel syndrome (CTS) is significantly and positively associated with anxiety, depression, health-related quality of life, and NHS and societal costs even when adjusting for age, gender, body mass index, comorbidities, smoking, drinking and occupational status.

- **What Can Be Done?**
  - Know workforce – percentage of population with mental health concerns
  - Understand benefits
  - Offer free counseling services (EAP)

**Preparation: MSD Risk Factors- Exercise**

- **Exercise**
  - Performing > 150 min of aerobic activity/week, risk of MSD injury decreases.

- **What Can Be Done?**
  - Know workforce
  - Readiness to change
  - Offer incentives
  - Workplace fitness centers
  - Reduce barriers
  - Offer group classes

**Prevention: MSD Risk Factors- Body Mass Index**

- **Body Mass Index (BMI)**
  - Affects Worker’s Compensation Costs and Outcomes
  - Obese (BMI>30) Average Cost: $470,000
  - Overweight (25≤BMI≤30) Average Cost: $270,000
  - Normal Weight (BMI<25) Average Cost: $180,000

- **What Can Be Done?**
  - Know workforce – percentage of obesity
  - Readiness to change
  - Offer weight loss programs
  - Offer of incentives
Free Resource

- Year long program
- Wellbeing education & activities to increase awareness

Prevention: Company Specific Services to Consider

- Physical job descriptions
- New hire functional testing to insure new hire is safe to work in a physical demanding job
- New hire or new to job within company orientation: standard procedure
- Fitness center orientations
- Physical risk screen
- Wellness plan that is job specific – annual competency
- Ergonomics

Prevention: Job Description and New Hire Functional testing

Bad hiring decisions can be costly. When you select the wrong people for physically demanding jobs, you risk losing a substantial amount of money in lost time claims each year.
Prevention: New Hires

- New hire orientations
- New hire or new to job within company orientation: standard procedure
- Fitness center orientations

Prevention: Existing Employees

- Fit for duty
- Physical risk screen
- Wellness plan that is specific to the job
  - Incorporate into annual competency
- Ergonomics
  - Incorporate reports and recommendations into a process that already exists within employer

FIRST AID: Early Intervention Program

- Employees with minor musculoskeletal discomfort may benefit from early intervention services.
- Provides non-medical first aid measures
- The goal is to address these problems as soon as they develop, before they become more severe and costly.
- A method for employers to be proactive and provide services and care to their employees without the issue becoming recordable.
- Allows for employees to be seen sooner than scheduling an off-site appointment and can limit the expense of time away from work for appointments and follow-ups.
- Appointments typically last 15-30 minutes and may include follow-ups at the job site for further monitoring of symptoms and job coaching recommendations.
FIRST AID Versus Medical Treatment Definitions

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<tr>
<th>FIRST AID</th>
<th>MEDICAL TREATMENT</th>
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<td>• Using a nonprescription medication at nonprescription strength.</td>
<td>• Using prescription medicine or nonprescription medicine at prescription strength.</td>
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<td>• Drinking fluids for relief of heat stress.</td>
<td>• Use of IV fluids for heat-related illness.</td>
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<td>• Cleaning, flushing, or soaking wounds on the surface of the skin.</td>
<td>• Surgical débridement or draining of bruises by needle.</td>
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<tr>
<td>• Using wound coverings such as bandages, gauze, Steri-Strips, liquid bandages.</td>
<td>• Using sutures, staples, or surgical glue to close a wound.</td>
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<tr>
<td>• Using hot or cold therapy.</td>
<td>• Any condition that is or should be treated by a means not listed on the First Aid list.</td>
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<td>• Using non-rigid means of support, such as ACE bandages, non-rigid supports, K-tape.</td>
<td>• Devices with metal stays or other systems designed to immobilize parts of the body.</td>
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<td>• Using temporary immobilization devices while transporting an accident victim.</td>
<td>• Any conditions that result in days away from work, restricted work, transfer to another job, or medical treatment beyond first aid.</td>
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<td>• Ergonomic recommendations: advice on how to perform a job safely, including body mechanics and work simplification</td>
<td>• Exercises recommended by a health care professional who trains the worker in the proper frequency, duration, and intensity of the exercise.</td>
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<td>• Using massages.</td>
<td>• Chiropractic manipulation or physical/occupational therapy.</td>
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Medical Treatment

- Outpatient OT/PT
  - Job specific goals
  - Workers compensation case manager, case adjuster, employer provider communication
  - Recommendations for change in work restrictions
  - Case management when worksite or workers comp problems occur (not following job restrictions, not getting paid)

Outcomes

- 93% of employees working with a Bellin Ergo/Rehab provider to manage MSD symptoms will experience symptoms that resolve or stabilize, which avoid a provider visit or an OSHA recordable injury.
What does success look like?

- Bend the curve in MSD injuries (incident rate, DART, Experience Mod)
- Retention
- Performance
- Attendance
- ROI

Employers working with Bellin ErgoRehab team focusing on Prevention & Early Intervention experience an average savings of $3.00-$4.00 for every $1.00 spent.

Summary: Key Points

- Focus on Prevention
  - SDOH
  - Holistic approach
  - Hiring the right individual for the job
  - Ergonomic considerations
- Early Intervention
  - Catch early
  - Employee participation
  - Company leadership involvement/support
- Medical Treatment
  - Job specific treatment programs/goals
- Outcomes
  - Bellin’s ErgoRehab Program: 93% resolved/stable rate
  - Average employer savings of $3.00-$4.00 for every $1.00 spent

THANK YOU
References


