


WHITE PAPER

Delivering High-Value Injury Prevention Programs for Employer Populations

By Medbridge




Hey, Drivers. Your Core Muscles Matter Too

✓ Completed Video • 3:10 min

Details Restart lesson

1 Squat ☒ Selected



3 sets 10 reps — hold

Show info Deselect exercise

Introduction

Musculoskeletal (MSK) injuries remain one of the most significant and costly health challenges facing today’s workforce. From desk workers to those in physically demanding industries, employees faced with frequent repetitive motions, awkward postures, and overexertion can experience injury, lost productivity, and long-term disability.

At the same time, employers are increasingly focused on prevention rather than reaction. Rising workers’ compensation costs, staffing shortages, and pressure to maintain productivity have made early intervention and injury prevention essential components of modern occupational health strategies.

Advanced primary care (APC) organizations are well-positioned to meet this need, yet many lack scalable digital care tools that allow them to extend preventive MSK care beyond on-site clinics and traditional paper-based programs.

IN THIS WHITE PAPER WE’LL COVER:

- The scale and cost of work-related MSK injuries
- Why prevention and early intervention are now business imperatives for employers
- How APC organizations can differentiate themselves with a proactive hybrid MSK care approach
- How Medbridge Pathways enables effective injury prevention programs for high-risk employee populations

Table of Contents

| | |
|---|----|
| The problem: MSK injuries are disruptive, expensive, and increasingly preventable | 3 |
| How Medbridge Pathways helps prevent and reduce MSK injury risk | 5 |
| Member journey: Marcus, industrial worker | 7 |
| Member journey: Ava, desk worker | 8 |
| The future of occupational health with Pathways | 9 |
| How employers win with Pathways..... | 10 |
| Conclusion | 11 |

The problem: MSK injuries are disruptive, expensive, and increasingly preventable



The burden of MSK injuries in today's workforce

MSK conditions are the leading cause of disability in the United States and account for approximately one-third of workers' compensation claims. Each year, they are responsible for an estimated 200 million lost workdays, contributing to nearly \$980 billion in annual economic burden when medical costs and lost productivity are combined.¹

Industries with the highest injury risk include:



Manufacturing



Construction



Agriculture



Transportation



Healthcare

These sectors rely heavily on physically demanding labor and face persistent challenges related to workforce turnover, aging employees, and staffing shortages.

Employers feel the financial strain

Work-related injuries carry both direct and indirect costs. Employers lose an estimated \$1,685 per employee per year due to illness- and injury-related productivity loss, while a single recordable MSK injury can cost up to \$26,000 when medical expenses, time away from work, and reduced capacity are considered.²

In addition, overexertion and repetitive motion are associated with the majority of job-related MSK injuries, indicating that many of these injuries are not random events but predictable and preventable outcomes of physical workload and fatigue accumulation.³

Why traditional occupational health programs fall short

Occupational health programs are often reactive, focusing on treatment after injury rather than prevention before it occurs. Common limitations include:

- Reliance on posters, paper handouts, or one-time trainings that don't improve outcomes
- Coverage gaps for second- and third-shift employees
- Siloed occupational health and MSK care services
- Insufficient staffing and budget to support proactive intervention and training

While these approaches might meet compliance requirements, they don't necessarily lead to measurable injury reduction or sustained behavior change.

The need for digital-first prevention in advanced primary care

Employers increasingly expect APC and occupational health partners to support total worker health, including injury prevention. Yet many organizations lack the digital tools necessary to deliver consistent, accessible preventive MSK care across diverse job roles, locations, and schedules.

To meet rising expectations, organizations need cost-effective solutions that:

- Extend provider expertise without adding headcount
- Engage employees before injuries become OSHA-recordable
- Integrate with existing care workflows and systems



DIGITAL MSK PREVENTION BOOSTS ROI

A study of 5,032 U.S. employees showed that digital MSK care significantly improved productivity and reduced absenteeism, with projected 12-month savings of **\$2,916 per participant**—demonstrating how early intervention can improve ROI.⁴

How Medbridge Pathways helps prevent and reduce MSK injury risk



Preventive and early intervention programs built for the workplace

Medbridge Pathways delivers preventive and early intervention MSK programs designed to support workers before injuries escalate. Each pathway includes a 12-week, phase-based program featuring:

- Pre-shift warm-up routines
- Education on job-specific mechanics and ergonomics
- Post-shift cool-down routines to support recovery

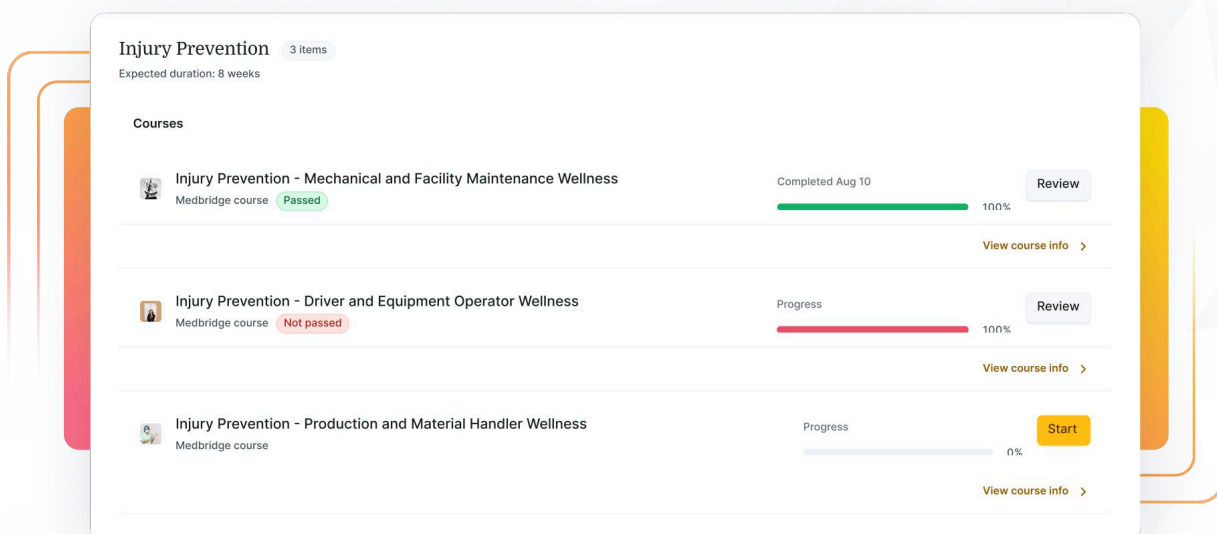
Programs are designed to fit into real-world work schedules and can be accessed before, during, or after shifts.

Designed for high-risk employee groups

Current occupational health pathways include three industrial athlete tracks:

- Production and Material Handlers
- Mechanical and Facility Maintenance Workers
- Drivers and Equipment Operators

Each track addresses the specific movement patterns, postural demands, and ergonomic risks associated with those roles. Injury Prevention for Desk Workers is currently in development and coming soon, expanding Pathways support to office-based roles.

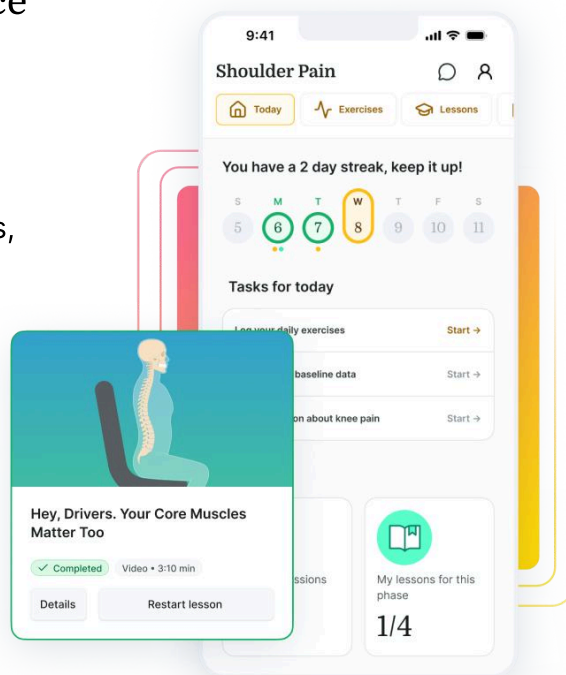


Engagement grounded in behavioral science

Sustained engagement is essential for helping workers reduce injury rates. Pathways incorporates:

- Bite-sized video education (under three minutes)
- Adult learning principles and engagement strategies, such as gamification, automated reminders, and phased progression, to build habits over time
- A mobile app that makes it easy for employees to access their programs anytime, anywhere

Patient education topics include proper lifting mechanics, grip modifications, posture awareness, fatigue management, hydration, sleep, and early warning signs of injury.



Interoperability with APC workflows

Unlike digital MSK vendors that pull patients out of existing care ecosystems, Medbridge Pathways integrates into clinical workflows, keeping providers actively involved in the care experience and preserving continuity across preventive and other clinical services.

73%

of users experience lower pain levels.⁵

68%

of users achieve better physical function.⁶

86%

of users say they are satisfied with their Pathways experience.⁷

Member journey: Marcus, industrial worker



Marcus, 42, works in a warehouse role that involves frequent lifting, bending, and repetitive movement.

Identified During Onboarding

During onboarding, he completes a brief screening that flags him as higher risk for MSK strain based on job demands and prior discomfort.

Enrolled in a Targeted Occupational Health Pathway

Marcus is enrolled in an occupational health pathway tailored to industrial workers.

The pathway is designed to fit into his workday and focuses on injury prevention, movement efficiency, and early symptom awareness.

Exercises Integrated Into the Workday

Marcus begins each shift with short, guided warm-up exercises designed for his job tasks.

He receives education on proper lifting mechanics, body positioning, and strategies for taking micro-breaks throughout his shift.

Exercises are brief and accessible, making adherence realistic during a busy schedule.

Ongoing Monitoring and Early Intervention

Marcus completes quick weekly check-ins about soreness, fatigue, or pain.

When mild low back discomfort appears, he accesses education focused on body awareness and symptom recognition, helping to prevent escalation.

A referral to a physical therapist is initiated before the issue escalates.

Outcome: Injury Avoided

Marcus continues working without injury or lost time.

His discomfort resolves before becoming an OSHA-reportable incident.

The employer reduces injury risk, workers' compensation exposure, and productivity disruption.

Member journey: Ava, desk worker

(Injury Prevention for Desk Workers pathway coming soon)



Ava, 36, works a desk-based job and spends most of her day seated.

Early Risk Identified Through Screening

A routine screening identifies early signs of neck stiffness, wrist discomfort, and reduced movement during the workday.

Enrolled in a Preventive Digital Pathway

Ava is enrolled in a desk worker occupational health pathway designed to address early MSK risk before symptoms become chronic.

Integrated Preventive Support

Ava receives short, guided movement breaks she can complete at her desk.

Educational lessons address posture, workstation setup, and repetitive strain risk.

Exercises are designed to be easy to complete during the workday.

Ongoing Engagement and Self-Awareness

Ava completes brief weekly check-ins to track discomfort and fatigue.

Early changes help Ava recognize and address issues before they interfere with work and life.

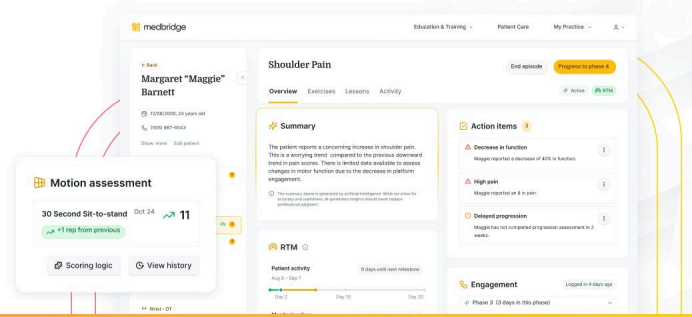
Outcome: Healthier Habits Help Prevent Chronic Injury

Ava builds healthier ergonomic and movement habits during the workday.

Early discomfort is addressed proactively, reducing the risk of chronic injury.

The employer supports workforce well-being while minimizing downstream healthcare and productivity costs.

The future of occupational health with Pathways



Pathways offers employers a cost-effective MSK care solution that makes it easier to improve employee health at scale while keeping care within the existing system.

Scalable prevention without adding staffing

Pathways extends provider expertise across multiple sites and shifts without requiring on-site physical therapists or athletic trainers at every location. For organizations facing limited access to PTs and ATs relative to the size of their workforce, Pathways helps bridge a gap that traditional staffing models can't realistically solve. Through guided exercises, education, and automated assessments, organizations can deliver effective preventive care to large populations while reserving in-person resources for higher-acuity needs.

A holistic total-worker-health model

Rather than focusing solely on MSK risk, Pathways supports a broader view of worker health. Programs incorporate education and behavior-change strategies related to recovery, sleep, hydration, and other lifestyle factors that influence injury risk, fatigue, and long-term resilience—reinforcing a culture of prevention and self-awareness.

Data-driven outcomes and accountability

Pathways generates actionable insights that help organizations demonstrate impact and continuously improve programs. Teams can track metrics such as engagement and satisfaction, reductions in injury incidence, return-to-work timelines (30/60/90 days), and trends in MSK-related utilization and costs, supporting both clinical and business decision-making.

Expanding tracks for diverse occupational roles

As workforce needs evolve, Pathways will continue to expand to support additional industrial and occupational roles. Future programs will enable organizations to address role-specific risks across a broader range of job functions, further strengthening prevention across the employee population.

How employers win with Pathways



Pathways enables providers to evolve from reactive, episodic care models into proactive partners that support worker health across the entire employment lifecycle. With Pathways, organizations can:

Differentiate with a proactive MSK prevention offering

Pathways allows APC organizations to offer structured, evidence-based MSK prevention programs tailored to specific job roles and risk profiles. By addressing injury risk before incidents occur, providers can distinguish themselves in competitive employer markets with a preventive approach that helps employers reach their safety, productivity, and cost-reduction goals.

Expand occupational health services without increasing head count

By delivering guided digital exercises, education, and assessments, Pathways extends the reach of providers without requiring additional clinicians or on-site staff. This enables organizations to scale services across multiple locations, shifts, and employee populations while maintaining consistency and clinical oversight.

Provide employers with the visibility and reporting they expect

Pathways generates data that supports transparency and accountability for employer clients. Providers can report on engagement, adherence, return-to-work timelines, and injury-related trends to help employers understand the program's impact, justify their investment, and make informed decisions about workforce health strategies.

By shifting from reactive treatment to proactive prevention, organizations can position themselves as not just care providers but long-term strategic partners, all while delivering measurable value to employers and employees.

Close the access gap with a flexible, 24/7 MSK solution

Many employees still lack timely access to MSK care due to shift schedules, location, or limited on-site resources. [Learn how solutions like Pathways help organizations extend care to every worker.](#)

Conclusion

MSK injuries are one of the most expensive and disruptive challenges in today's workforce, but they are increasingly preventable. Employers now expect APC partners to deliver modern, scalable solutions that protect worker health while maintaining productivity.

Medbridge Pathways enables organizations to meet these expectations with digital, evidence-based injury prevention programs that integrate seamlessly into existing care ecosystems. By investing in prevention and early intervention, APC and occupational health organizations can improve outcomes, reduce costs, and build stronger employer partnerships for the future.

About medbridge

Combining powerful digital patient care tools with the highest quality education, Medbridge is committed to making healthcare better for both providers and patients. Organizations across the care continuum use Medbridge to provide an enriched, digitally enabled experience that engages patients while streamlining and simplifying care. Designed with over a decade of insight from more than 350,000 clinicians and 25 million patients, Medbridge has helped thousands of organizations realize better patient outcomes. [Learn more.](#)

See how Medbridge can help your organization.

[Contact us to request a demo.](#)

References

1. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10788788/>
2. <https://www.cdcfoundation.org/pr/2015/worker-illness-and-injury-costs-us-employers-225-billion-annually>
3. <https://www.bls.gov/iif/factsheets/msds.htm>
4. <https://pubmed.ncbi.nlm.nih.gov/39016261/>
- 5, 6, 7. [Data from a Medbridge user study of 13 adults who used Pathways for four weeks](#)