

INNOVATIVE APPROACHES TO PROMOTING MUSCULOSKELETAL HEALTH IN THE WORKPLACE




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Agenda/Learning Objectives

- Cost of Musculoskeletal Injuries on the Healthcare System
 - New evidence-based solutions
 - Utilizing the latest technologies to engage their employee populations
 - Conservative Care for Common Injuries
 - Non-Conservative Options and their costs
- 

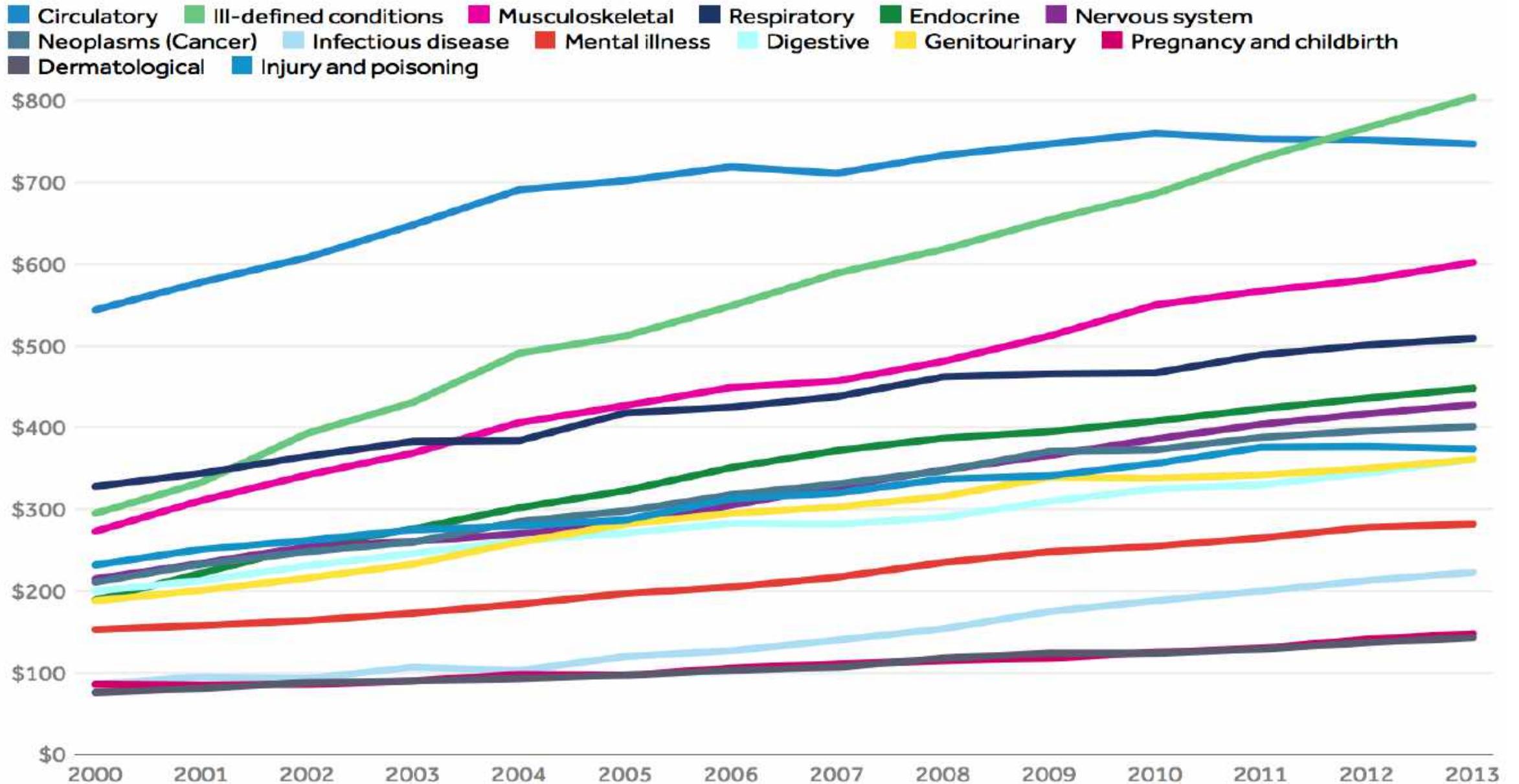
35 Diseases Associated with Sedentary Lifestyle and Stress



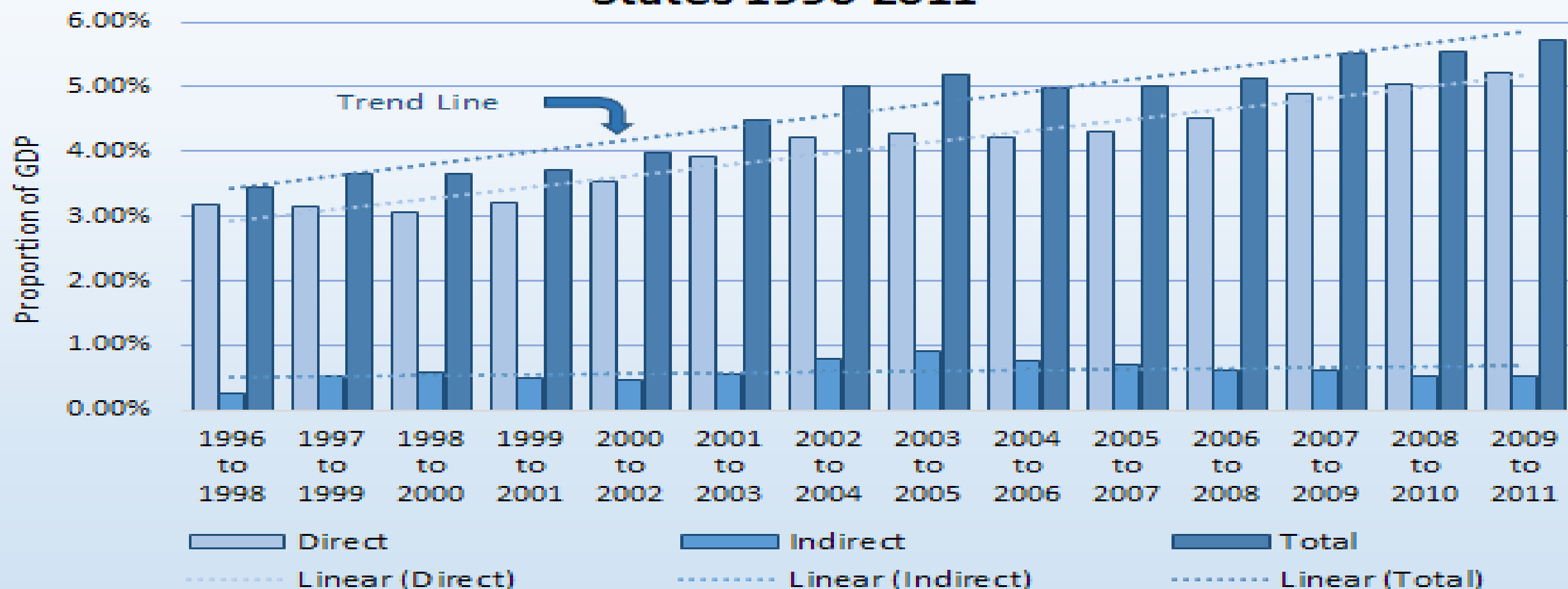
**Source - Levine , Mayo Clinic - Med Science & Sports*



Per Capita Expenditures in US \$ by disease category



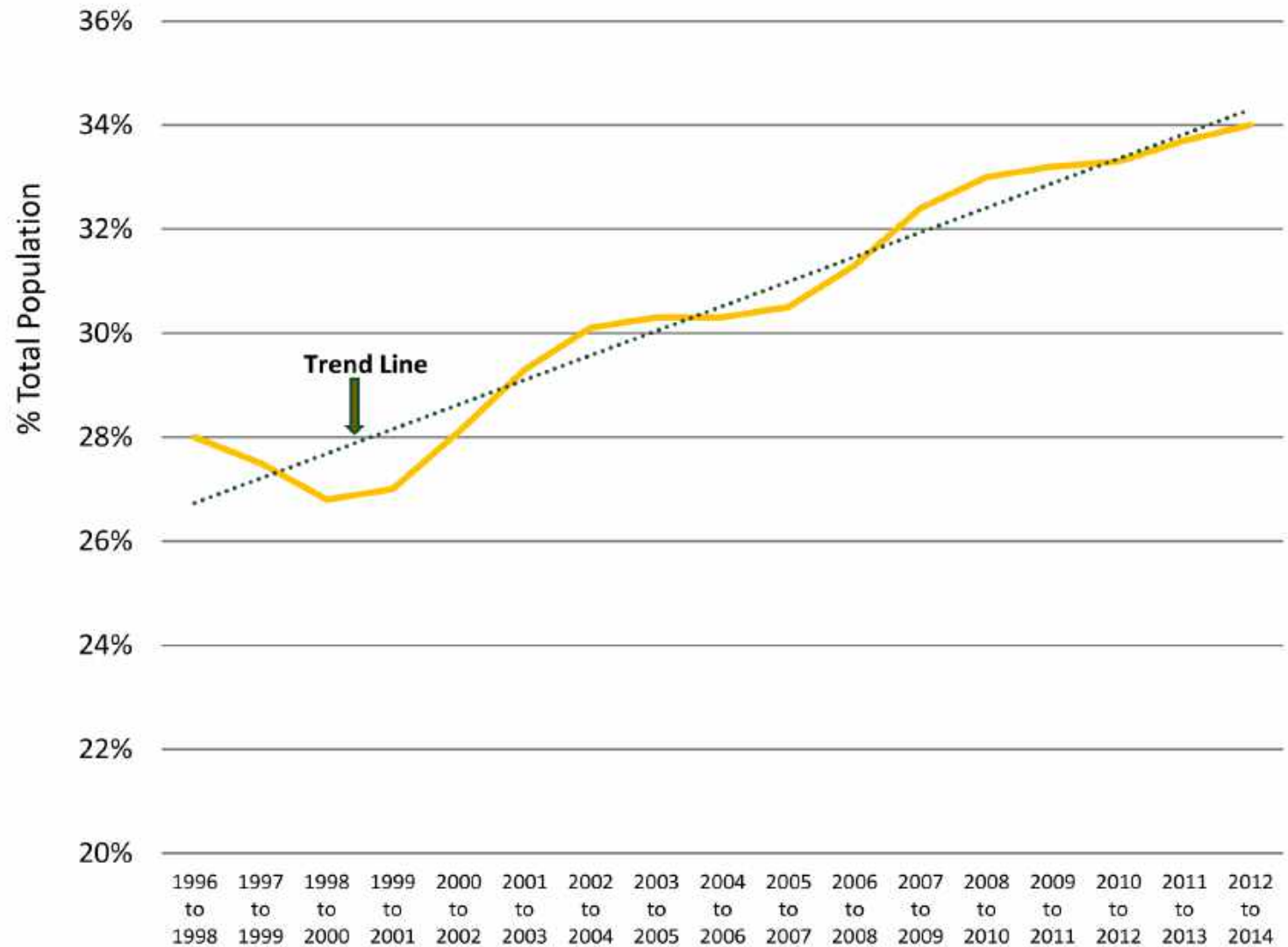
Trend in Annual Aggregate Direct and Indirect (Earnings Losses) Costs of Musculoskeletal Conditions as a Proportion of Gross Domestic Product (GDP), United States 1996-2011



Source: <http://www.bea.gov/national/xls/gdplev.xls>, accessed 3/18/2014 and smoothed over three years.

Source: Current GDP multiplied by inflation factors calculated per http://meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml, accessed 2/4/14.

Trend in Proportion of Population with Musculoskeletal Disease, United States 1996-2014



A close-up photograph of a person's hands. The person is wearing a white t-shirt. They are holding their right hand with their left hand, specifically gripping the base of the thumb and the wrist area, suggesting a source of pain or discomfort in the hand or wrist.

**ONE IN TWO ADULTS
\$213 BILLION**

COST OF MUSCULOSKELETAL INJURIES ON HEALTHCARE SYSTEM

According to a report issued by the United States Bone and Joint Initiative (USBJI), an estimated 126.6 million Americans (one in two adults) are affected by a musculoskeletal condition comparable to the total percentage of Americans living with a chronic lung or heart condition. The cost is an estimated \$213 billion in annual treatment, care, and lost wages.

United States Bone and Joint Initiative: The Burden of Musculoskeletal Diseases in the United States (BMUS), Third Edition, 2014. Rosemont, IL: Available at <http://www.boneandjointburden.org>. Accessed on May 21, 2018.

A STUDY PUBLISHED IN THE *JOURNAL OF PAIN* ESTIMATED THE COST OF ALL PAIN TO BE EVEN MORE — BETWEEN \$560 AND \$635 BILLION DOLLARS.

1:1 Ergo Assessments & Education



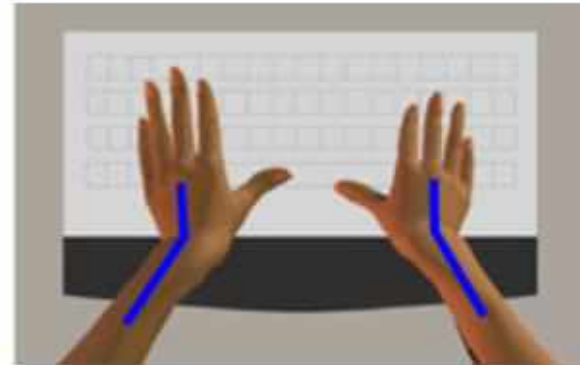
Self-Assessment Software

My wrists and hands are reasonably straight (not bent up / down or sideways toward the little finger).

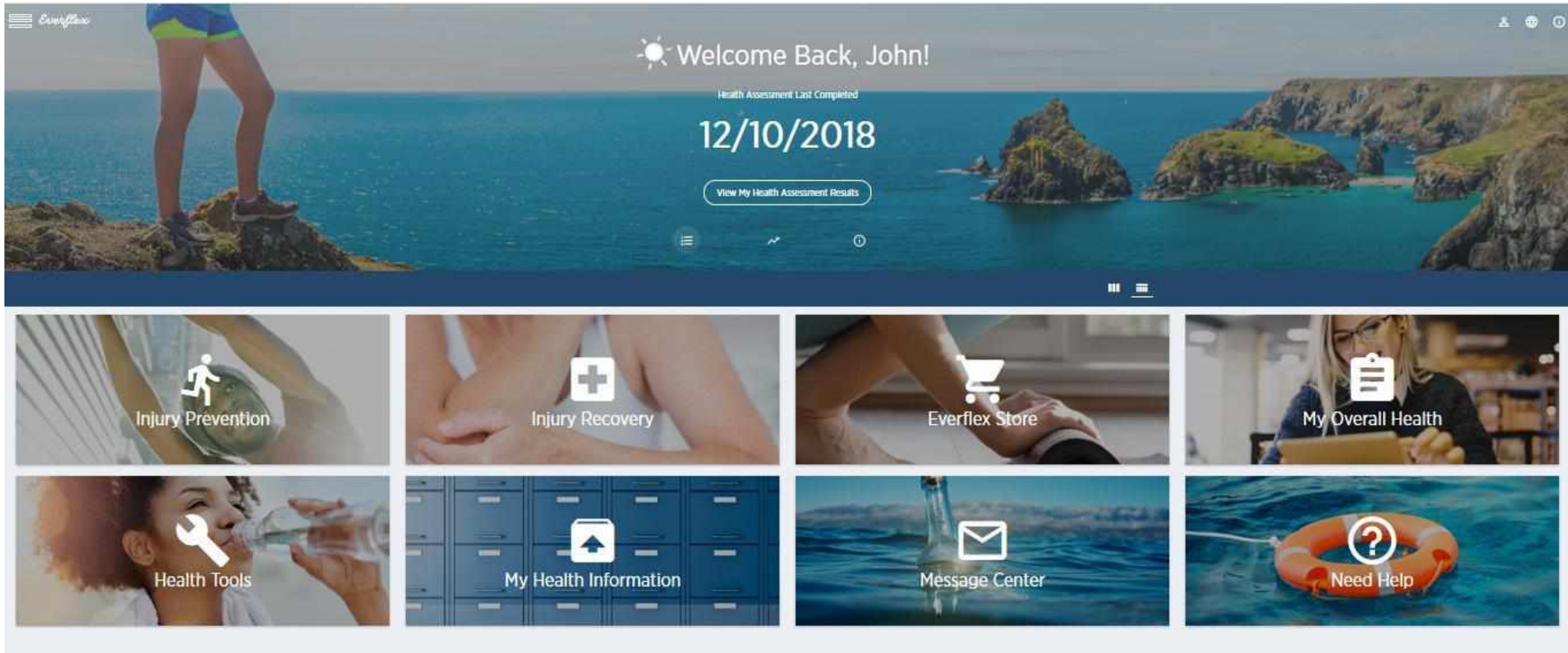
☒ Yes



☐ No



Software Solutions for Assessment/Treatment



Injury Prevention – Customized Plans

Sports Plans



Basketball



Running



Football - Backs and
Receivers



Football - Lineman,
Linebackers, and Defensive
Back



Baseball and Softball



Water Polo



Hockey



Walking



Cycling



Swimming



Golf



Tennis



Soccer



Sliding or Snowboarding



Lacrosse

Workplace Plans



Computer Worker



Office Clerical Worker



Police Officer



Farmers



Ranchers



Nurses



Factory Assembly Worker



Construction Worker



Facility Maintenance Person



Groundskeeper



Healthcare Worker



Warehouse Worker



Driver/Delivery Person



Teachers

How *does it work* ?

1. Select Problem Area



Select the body part where you are having problems.

2. Answer Questions



Answer a few short questions about your pain. These are the same questions a physical therapist would ask in an in-person consultation.

3. Receive Recovery Plan



Immediately receive a research-based & condition matched exercise recovery plan. Recovery plans use professionally-planned video exercises, which you can adjust to your needs.

1) *Select Problem Area*

Select one body part where you are having problems:

Front



Back



2) Answer Some Questions

Neck

Are you experiencing some type of discomfort in your head or neck?




Play the video above to hear a more in depth explanation of the question from your virtual physical therapist.

3) Start Video Exercise Plan

Headache Recovery Plan

01.01 Neck Self-Mobilization: Segmental SNAG (Cervicogenic Headache) Pattern 1



Up Next

Difficulty

Now playing

01.01 Neck Self-Mobilization: Segmental SNAG

01.01 Side Neck Stretch: Scalene stretch - supine

04.01 Neck Flexion: Longus colli - activation

Headache Recovery Plan

01.01 Neck Self-Mobilization: Segmental SNAG (Cervicogenic Headache) Pattern

Learn More

Beginner

Average

Advanced



TIME

SUBSCRIBE

CORONAVIRUS BRIEF

YOUR QUESTIONS ANSWERED

WEARING MASKS

SHOPPING SAFELY



COVID-19

Getting Back Pain While Working From Home? An Ergonomics Expert Offers Advice















Working from home causing body aches and pains

Updated 19 hrs ago



If you're experiencing more body aches and pains right now, you're not alone. From makeshift home offices to increased stress, this new norm is causing more body aches and pains.

Staying Active At Home

- Peloton
- Home Gyms
- On Demand Exercise
- FB/IG Live Stream Classes



Custom Landing Pages

Logged in as Henry Cabrera - [Settings](#) - [Logout](#)

Wellness Reward Shop

redeem your wellness points for 1 of our prizes



175 pts



225 pts



275 pts



500 pts



[view points history](#)



Preventive Screening
25 pts



Dental Visit



Vision Screening
5 pts



Skin Cancer
Screening 5 pts



5% Weight
Loss 15 pts



Flu Vaccine



TB Survey
5 pts



Biometric Screening
15 pts



Health Risk
Assessment 10 pts



Culinary Videos
1 pt (10 pts max)



Choose MyPlate
10 pts



Weight Watchers
40 pts



Family Health &
Well-Being 30 pts



Steps Log
1 pt (50 pts max)



Cardio Log
1 pt (50 pts max)



On-site Fitness
1 pt (50 pts max)

PPS WELLNESS PRESENTS

ON THE WAY TO CAPE MAY

VIRTUAL WALKING CHALLENGE

Sign up in April for
10 BONUS points!

Earn 20
points!

Top 3 Individual
Walkers earn a
giftcard!

Winning school
earns a
massage day!

5/4/20 - 5/31/20

Virtual Solutions for Addressing MSK Health

- Education Sessions
 - Workstation Setup
 - Safe lifting
 - Desk Stretches
 - Recordable



CMS Affirms Payment Parity for Telehealth, Adds More Covered Services

In its latest moves to expand telehealth adoption during the Coronavirus pandemic, CMS has added 85 telehealth services to the list of services covered by Medicare and emphasized that payment will be at the same rate as in-service care.



Source: ThinkStock



CMS Guidance Allows PTs in Private Practice to Provide Services Via Telehealth

In a major shift strongly advocated by APTA members, CMS will now include PTs in private practice among the providers able to bill for services provided through real-time face-to-face technology. But there are requirements.

The change is happening, albeit incrementally: [New guidance issued by CMS](#) now allows PTs in private practice to make full use of telehealth with their patients under Medicare Part B. Previously, only limited e-visits and other “communication technology-based services” were allowed; the change now includes PTs among the health care providers permitted to bill for real-time face-to-face services using telehealth. This policy change follows a robust advocacy campaign by APTA members and staff.

Tele - Physical Therapy

- 1) Payer Reimbursement
- 2) Updated Parity Guidelines
- 3) Many conditions can be supported at home with minimal equipment
- 4) Software-Hardware Considerations
- 5) Privacy and HIPAA compliance challenges with provider and employee
- 6) State Regulations



Impact of Physical Therapy Services on Low Back Pain Episodes of Care

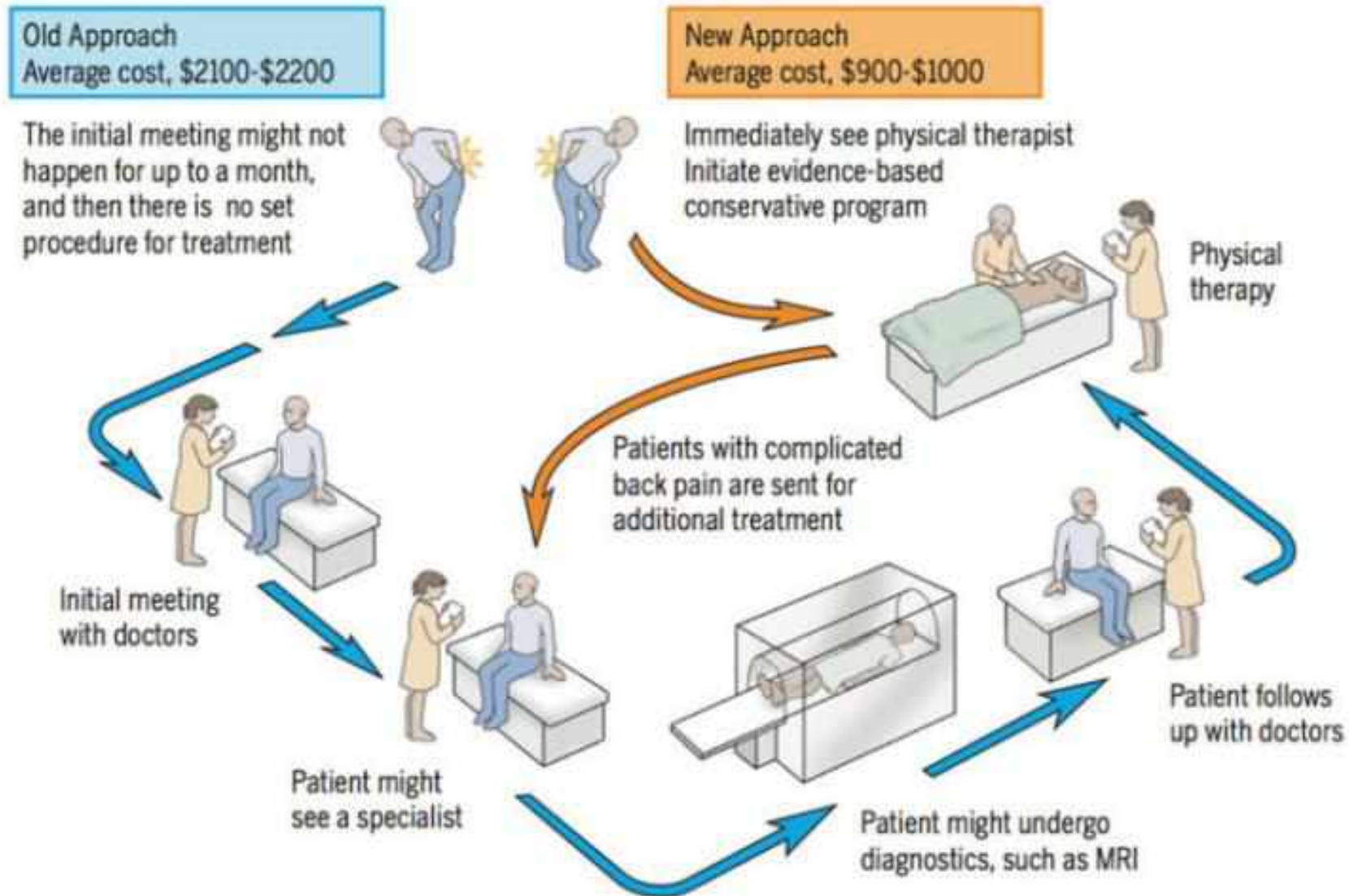
- *PPS commissioned Milliman to study episodes of care costs for the treatment of LBP and the impact of PT on these costs.*
- Why?
 - Musculoskeletal rehabilitation has been targeted under alternative payment methodologies (including bundled payments) for musculoskeletal episodes of care.
 - PPS sought assistance in developing a value based proposition to demonstrate and promote the value of private practice PT's impact on the episode of care costs for relevant musculoskeletal episodes of care.



Take home message...for low back pain with and without radiculopathy

- If a physician chooses to refer a patient to a physical therapist, referrals sent early (in the first 14 days) will result in lower costs and less use of invasive/higher cost procedures. **Earlier is better!**
- When accessing physical therapy for LBP, DIRECT ACCESS is the best lowest cost method and will result in less use of invasive/higher cost procedures. **Direct Access is the best!**
- Clinical care of patients with active care results in lower cost and quicker outcomes than with passive care. **Active care is the best!**

Virginia Mason –pathway for Low Back Pain Management



Why PT 1st?

A study, published in the journal *Health Services Research (HSR)* in 2011, reviewed 62,707 episodes of physical therapy over a 5-year period. Patients who visited a physical therapist directly for outpatient care (27%) **had fewer visits and lower overall costs** on average than those who were referred by a physician.

A Comparison of Health Care Use for Physician-Referral and Self-Referral Episodes of Outpatient Physical Therapy, doi.org/10.1111/j.1475-6775.2011.01324.x

An additional study in the journal of Health Science Research in May of 2018, also notes that physical therapy as an initial treatment for low back pain is effective, saves money, but also dramatically reduces the chance of a patient being prescribed an opioid medication.

Bottom line, the subjects in this study experienced lower costs after 1 year and **reduced their likelihood of being prescribed an opioid medication by 87%** vs. those patients that never visited a physical therapist.

Frognier, Bianca K., et al. "Physical Therapy as The First Point of Care to Treat Low Back Pain: An Instrumental Variables Approach to Estimate Impact on Opioid Prescription, Health Care Utilization, and Costs." *Health Services Research*, 2018, doi: 10.1111/1475-6775.12984.

CONSERVATIVE CARE OPTIONS

1. Physical Therapy
2. Wellness & Injury Prevention Programs
3. Work-Related Task Training Programs
4. Psychological Evaluation

NON-CONSERVATIVE OPTIONS

- Medications
- Imaging
- Surgeries
- Injections

Preliminary report from the Workers Comp Research Institute (WCRI)

- Similar findings to Milliman
 - Early intervention with conservative care saves costs with better outcome.

Why conservative care?

- Lower cost
- Better outcomes
- Less invasive care, less side effects
 - Invasive care comes with larger/more common side effects (opioids, injections, surgeries, etc.)



Conservative Care Solutions

- Prevention
 - Education
 - What to do if aches & pains BEFORE injury
 - Wellness
 - Generalized
 - Stretching Programs
 - Walking Programs
 - Wellness Challenges
 - Digital versions
 - Work duty specific prevention programs
 - Digital and in-person/self-guided
 - Remove barriers to continuing wellness programs aggressively!

Conservative Care Solutions

- Prevention
 - Ergonomic
 - Work station assessment & use
 - Set us, ergonomics and use
 - Job analysis and training
 - EX: PG&E linemen to assembly line
 - Post-offer, pre-hire physical screenings
 - Specific to job demands/duties

Conservative Care Solutions

- Post-injury management
 - Early recognition
 - Early intervention
 - Set up management program ahead of time
 - Choose providers within network that value conservative care 1st approach
 - Search out evidence based providers
 - Look at their outcomes and patient satisfaction ratings
 - Medicare as an example - <https://www.medicare.gov/physiciancompare/>
 - Job duty specific rehabilitation programs / return-to-work programs

Technology and engagement...

- Meeting people where they are.

We're a one-size-fits-you combination of evidence-based self-guided care, virtual PT, and in-person care options designed to fit the needs of your member population at scale.



TECH-ENABLED
SELF-GUIDED CARE



VIRTUAL
PHYSICAL THERAPY



IN-PERSON
PHYSICAL THERAPY

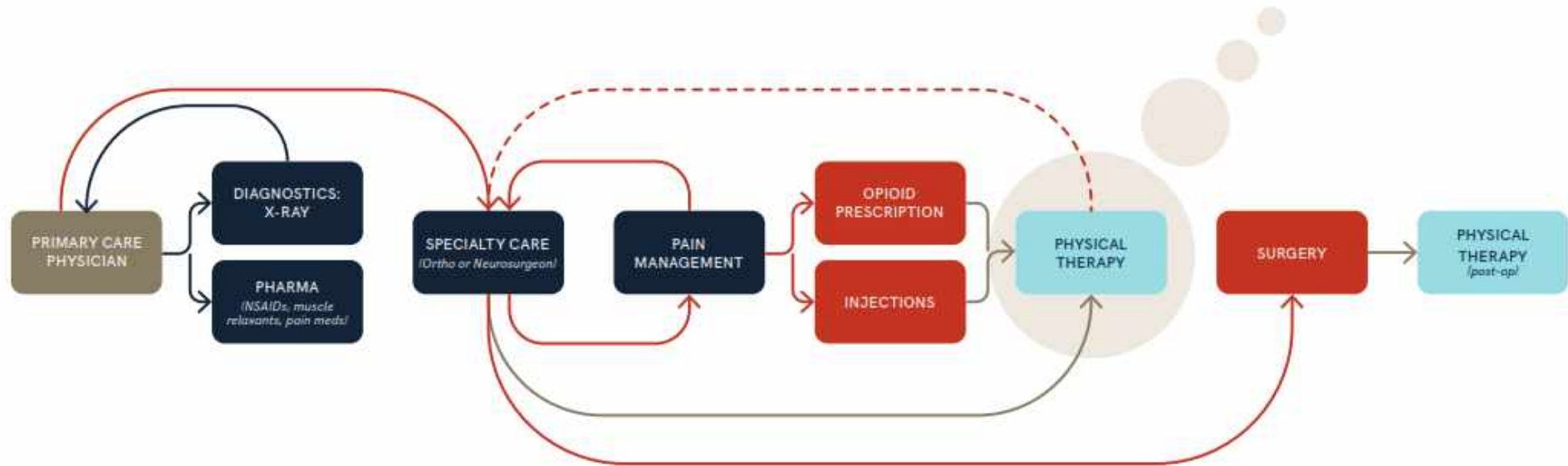
Case Management

- Working directly with the point person on managing a case
 - Who is this?
 - Nurse case manager
 - Physician
 - Physical Therapist???
- Looking at the traditional vs. conservative approaches and how to maximize the conservative pathways
- Managing the wellness side before there is a “case” to manage
 - Remove barriers to wellness early, before they are even perceived barriers
 - Comorbidities
 - Cultural changes – ergonomic screens, wellness/movement programs, etc



Conservative Care vs. Invasive Care

Today, the healthcare system is centered around acute and specialist care that does not present physical therapy until late in the patient journey—**when it's too late to be optimally effective.**



In 2018, we commissioned a study with Milliman, which showed that a physical therapy-first approach is the most effective method for treating MSK pain. Initiating care within 14 days of the onset of symptoms is critical.

Everflex is changing the game by making physical therapy accessible as a ***first step*** in the MSK management process.



Meet Mary.

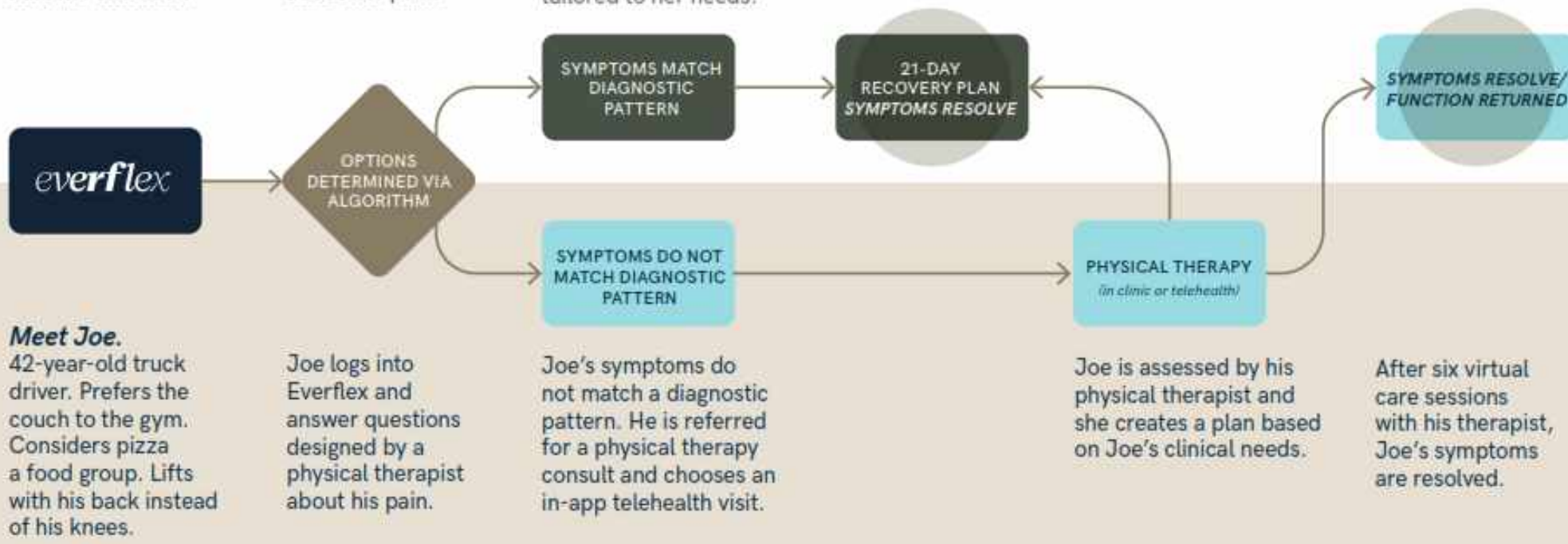
53-year-old mother of three. Hates cooking. Addicted to caffeine. Thought she was in good shape until she hurt her shoulder.

Mary logs into Everflex and answers questions designed by a physical therapist about her pain.

Algorithms match Mary's symptoms to a diagnostic pattern and she immediately gets a video exercise plan tailored to her needs.

Mary follows her 21-day recovery plan and her symptoms resolve.

Both Mary and Joe avoided costly specialty care, diagnostic imaging, pain management drugs, unnecessary surgery, and post-op physical therapy.



Return to Work

- Return to work protocols are in place
 - Does the protocol end too early?
- Perhaps the failure to return to work is not the return to work but the monitoring of that return to work past day/week #1
 - Discharge to wellness program, personal trainers, fitness/wellness program
 - Providers need to make this a part of the discharge process, not a mention at the discharge appointment

Concluding Thoughts

- COVID is forcing us all to adapt by the day
- Openness to Virtual Solutions has accelerated
- Flexibility is key
- Fitness Centers & Employers Can Work Together
- For Employer market, Leverage gatekeepers
- MSK Health is closely correlated with many other aspects of health
- Value Based Care/Cost of Care



GymHealthCheck.com



GymHealthCheck

Covid-19 Symptom Checker

Web-based and HIPAA-compliant Check-In System with contact tracing capabilities.

[Contact Us](#)

