2020 EMERGING TRENDS IN WELLNESS
Boston, MA | April 1 & 2
Wellness Workdays

OccMedCIC
CONSULTING AND INJURY CARE

BARRIERS TO WELLNESS IN BLUE COLLAR WORKERS: IMPLICATIONS AND SOLUTIONS

Emerging Trends in Wellness Conference

April 1, 2020

OBJECTIVES

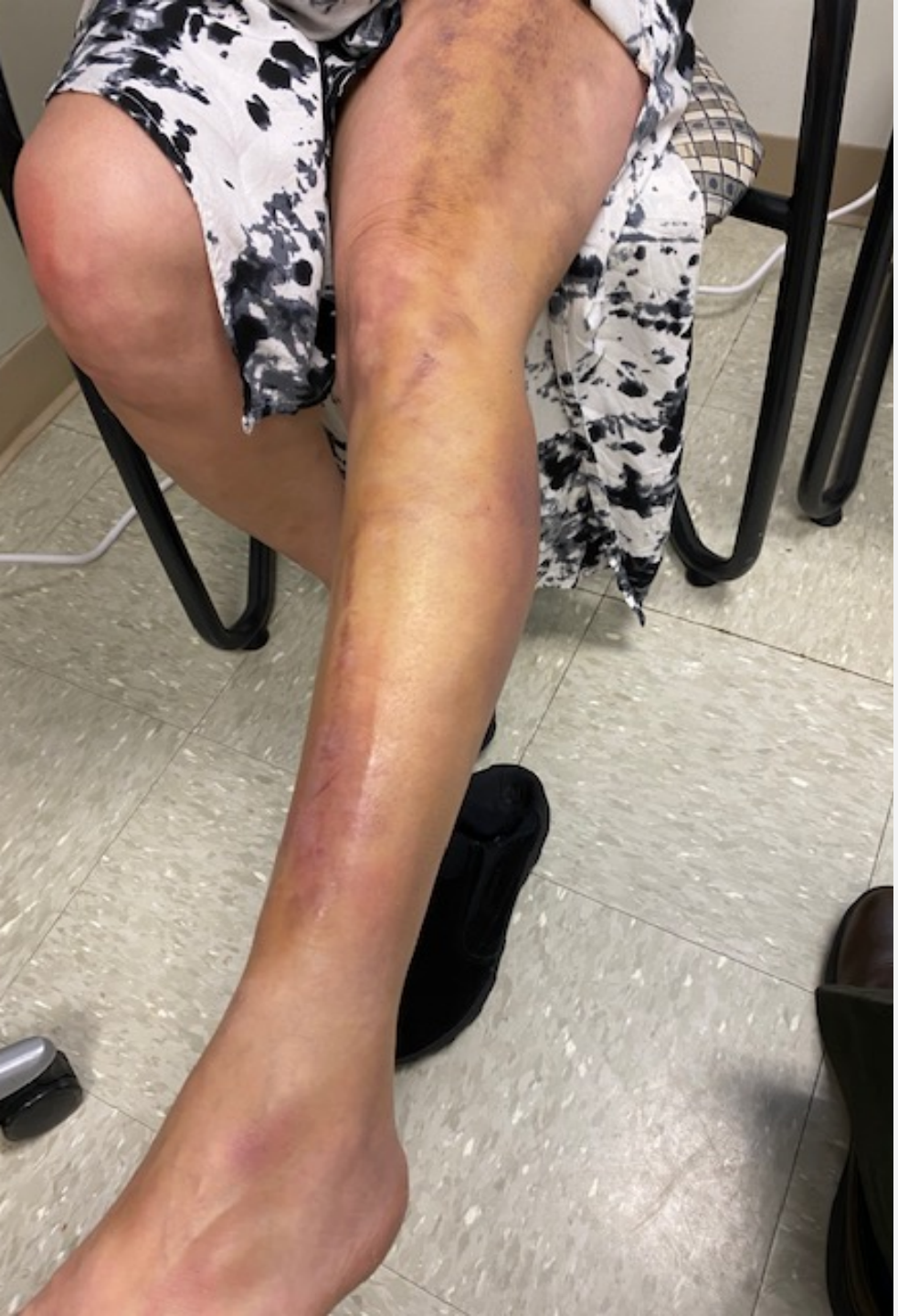
Outline	Review	Identify	Discuss
Challenges to wellness faced by blue collar workers	Research findings	Opportunities for secondary and tertiary prevention	Barriers and potential interventions to improve wellness

WORK LIFE IN CONSTRUCTION

- Arise 4 AM
- Quick morning ritual, pack for day
- Drive or carpool long distance to a job site
- Start 6 AM
- End 3 PM unless OT
- Saturday is time and a half or double time
- Pace is fast, everyone pressured to produce
- All jobs on deadlines that must overcome weather related interruptions
- Boston is union town, worker either company or out of hall

WE LOOK AT THEM BUT DO WE SEE?

WHAT DOES IT TAKE TO DO THIS JOB OVER-TIME?



WORK LIFE FOR TRADES MEN AND WOMEN

Hazards include

- Material handling
- Sharp blades or edges
- Power tool use (torque)
- Vehicular
- Weather related (wind, sun, cold, heat)
- Co-worker error
- Falls from height
- Slips/trips
- Material toppling over striking worker

DETERMINANTS OF RISK

- External
  - Housekeeping
  - Safety program
  - Top down attitude towards safe work conditions
  - Repetitive tasks
  - Lack of job task rotation
  - Accumulation of injuries
- Internal
  - MSK reserves
  - Mental health resiliency
  - Lifestyle impediments (smoking, substance use)
  - Inadequate sleep
  - Failed caloric balance
  - Sleep apnea
  - Inadequate leisure time physical activity
  - Low Vit D
  - Sarcopenia

TORN DISTAL BICEPS 2/3

LITERATURE REVIEW

- Scandinavians
  - One system…own it (versus in US dual system rife with cost shifting)
  - Sustainable jobs as society pays for the road-kill
    - US catching on…How to reduce disability roles?
    - Retain project patterned after Washington State Occ Health
  - Scandinavian studies show physical activity performing construction tasks does not impart same benefits as sustained leisure time physical activity in terms of CV fitness nor body habitus/weight control
  - https://www.ncbi.nlm.nih.gov/pubmed/23329153
  - https://www.sjweh.fi/show_abstract.php?abstract_id=1357

BOSTON STUDY

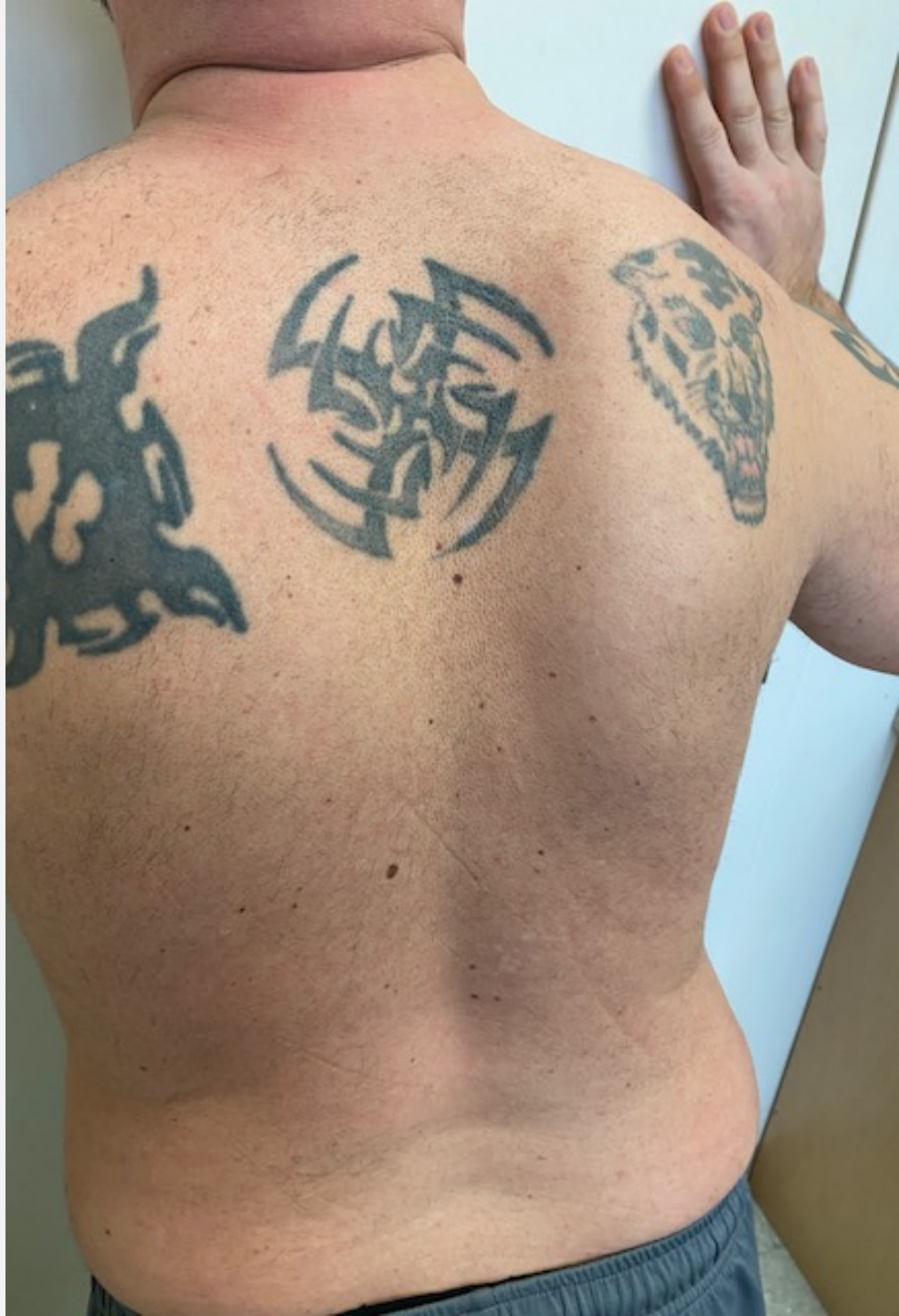
- Self report questionnaire
- Accelerometers (Measured activity)
- Results: Cannot rely on self report
- **Conclusions: Mirrors Scandinavian studies**
- **Workers need balance and activity outside of work**
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4530451/
- Arias OE, Caban-Martinez AJ, Umukoro PE, Okechukwu CA, Dennerlein JT. Physical activity levels at work and outside of work among commercial construction workers. J Occup Environ Med. 2015;57(1):73–78. doi:10.1097/JOM.0000000000000303

TOTAL WORKER HEALTH STUDY

- Barriers:
  - Dynamic nature of construction…workers coming and going from sites
  - Inability of subcontractors to make changes to their worksite
  - Competing safety and production priorities
  - Variation in management commitment
  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6265748/
  - Peters SE, Grant MP, Rodgers J, Manjourides J, Okechukwu CA, Dennerlein JT. A Cluster Randomized Controlled Trial of a Total Worker Health® Intervention on Commercial Construction Sites. *Int J Environ Res Public Health*. 2018;15(11):2354. Published 2018 Oct 25. doi:10.3390/ijerph15112354

SOFT TISSUE INJURY AT WORK= SPORTS MEDICINE + OTHER

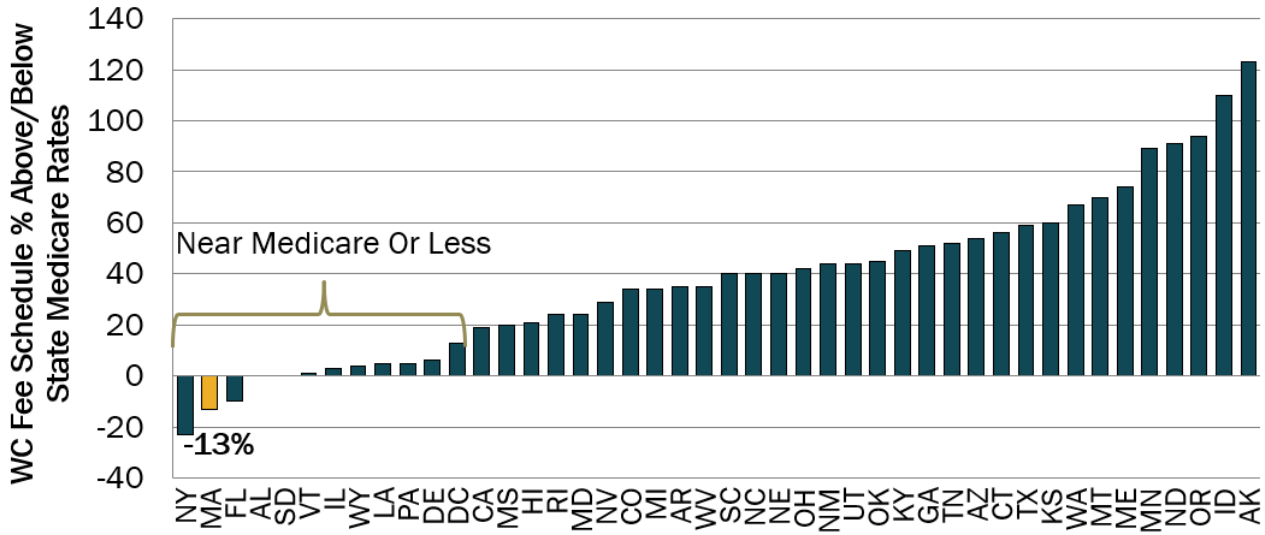
- Document what stakeholders need to know about the claim
  - What, when, where, how
  - Pertinent past medical history
- Handle issues of work relatedness
- Intervene early on potential delayed recovery
- Treat worker with respect and dignity…deliberate, transparent, communication with stakeholders
  - MA Choice state: no retention no impact



WHY TALK ABOUT SYSTEMS?

Because systems impact care delivery and outcomes.

About A Quarter Of States Had Fee Schedule Rates For Office Visits Near Medicare Or Less



Source: *Designing Workers' Compensation Medical Fee Schedules, 2016* (2016)

WCRI

QUESTIONS

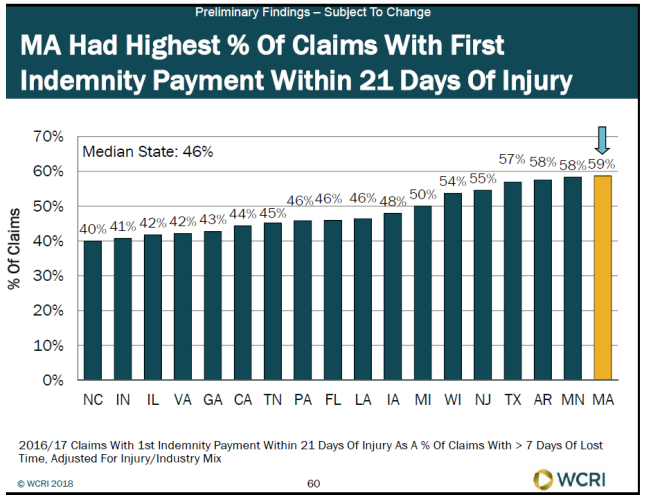
- How does MA WC system perform for workers?
- How does MA WC system perform compared to other states?
- What advances, since 1991, should MA WC system look to incorporate?

Presentation to Mass DIA Heath Care Services Board
Dr. John Ruser, President and CEO, WCRI; 12/2/17

GOOD FEATURES TO MA WC SYSTEM:

PWPP, 2CD OPINION, % INDEMNITY WITHIN FIRST THREE WEEKS.

- However, closer look:
- 32% OOW at 7 days highest amongst states studied by WCRI; drives other costs
- This statistic suggests MA WC System is weak on front end
  - Represents potential for small $ investment, high return…low hanging fruit



MASSACHUSETTS WC SYSTEM

- **Last reformed 1991**
  - Mistake…reimbursements not linked to anything alive, thus reimbursement drifted to one of lowest in nation
- **30 Occ Med clinics have closed**
  - Those remaining, 80:20 rule or bust
  - Subsidize injury care via other revenue (non-evidence based)

ROLE OF A VALUE PROPOSITION PRACTICE

Emphasis on up front care

Attention to yellow flags or early warning signs of delayed recover

Transactional calls

Adequately resourced care coordination (allow therapeutic alliance)

https://www.ncbi.nlm.nih.gov/pubmed/22015667; Improving quality, preventing disability and reducing costs in workers' compensation healthcare: a population-based intervention study.

OccMedCIC

CONSULTING AND INJURY CARE

COHE RESULTS

- Proven superior to "usual community care" in 10 years of follow-up studies
- From its first year, workers treated by COHE members have done better:
  - fewer lost time injuries,
  - shorter length of disability,
  - fewer denied claims,
  - faster claim closure,
  - fewer appeals and litigation,
  - fewer disability pension and reduced entry onto SSDI
- And so have employers
  - Fewer lost workdays
  - Significantly reduced overall claim cost (>$2,000 / claim 3 years later.

Reference: 2011 – Wickizer TM, Franklin G, Fulton-Keohe D, et al Improving quality, Preventing Disability and Reducing Costs in Workers' Compensation Healthcare: A Population-based Intervention Study. Medical Care 10ll; 49:12, 1105-1111

Courtesy Dr. Jennifer Christian

WHAT'S THE MOST IMPORTANT SOFT TISSUE WE TREAT?

- A robust system for MSK injuries attends to this
- How?
  - Care messaging and delivery process
  - Triage of Resources
  - Care coordination

38 YO CARPENTER

- Lifting drywall with another person, twisted trunk
- Pain right lower abdomen
- 5’3” 240# and pear shaped
- Spanish speaking Medical Assistant “interprets”
- Looks de-trained and less robust than expected for job; no program

CARPENTER'S SECOND VISIT

- Teachable moment in second visit:
  - Communicate importance of "career fitness", improved resilience, e.g., prevent future injuries
  - Introduce core program
  - Emphasize need for graduated physical activity program with aerobic and resistive training aspect (therapy band)
  - Touch on nutrition & portion control
  - Pilot program: MA with therapeutic alliance calls weekly with explicit goal of reinforcing home program

FUNCTIONAL ASSESSMENT

ADDITIONAL STEPS FOR CARPENTER

- Discharged but suggest employer place at less arduous task for next few weeks
- Explicit Rationale: worker needs re-acclimating, has slight residual, reference our focus on career fitness
- **Goal:** Don't let reality get in the way of common-sense
- Incentives are aligned…when worker does better, all stakeholders win

WHAT JUST HAPPENED?

- Secondary Prevention
  - Early recognition of condition to obviate pathology, recurrence, complications, and surgical procedures
- Tertiary Prevention
  - Slow progression and lower burden of existing disease

CAREER FITNESS…PART OF VALUE PROPOSITION

- Savings for worker
  - Lost wages
  - Lost hours (means interruption in group health insurance and other benefits for family)
  - Preserve livelihood (in and of itself has health and wellness benefits)
- Savings for Stakeholders
  - Obviate lost time injury (EMR hit)
  - Save indemnity cost
  - Obviate extensive PT costs (risk iatrogenic disability via externalizing and "waiting to be fixed")
  - Reduce likelihood of chronicity (creeping catastrophic)

OccMedCIC
CONSULTING AND INJURY CARE

42 YO HOME CARE AIDE

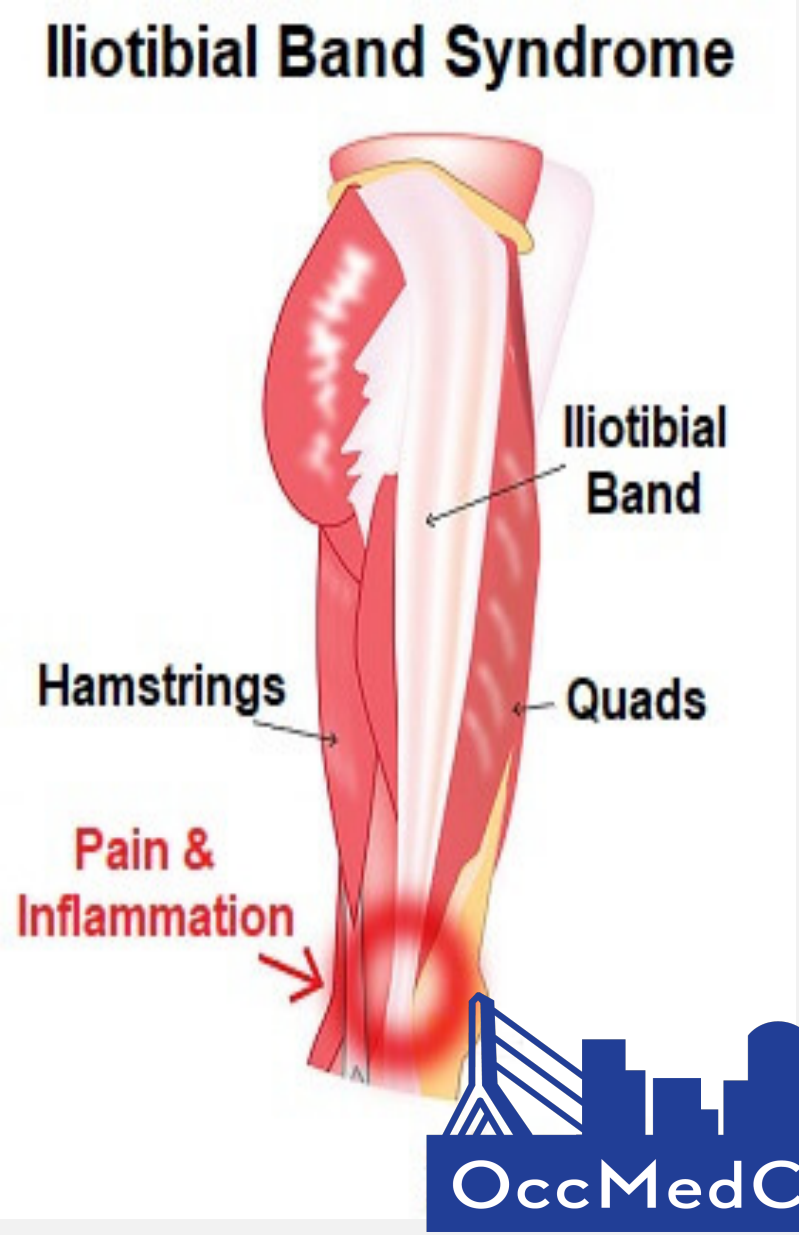
Felt pop in left knee when transferring patient

Also complains of low back pain (acknowledges this is intermittent/pre-existing)

Exam without effusion or fluid in knee, xray OK, gait stifled, low back range of motion reduced, movements guarded but no radicular findings; anterior fat pads tender

Initial program given & worker advised to walk normally; referred to PT due to poor body awareness

At time MD follow-up worker describes plateauing with anterior knee pain better but persisting back and intermittent lateral knee pain despite 8 PT visits



OccMedCIC
CONSULTING AND INJURY CARE

HOME HEALTH AIDE, CONTINUED

- Exam at time of follow-up confirms:
  - Iliotibial band (ITB) tightness on left
  - Residual low back end range discomfort
  - Poor lift/hold tolerance to functional assessment
  - Fear avoidance behavior
  - Extremely poor core conditioning
- MSK Medicine: tight back and buttock, leads to recurrent tightening ITB and lateral knee pain, altered gait had imparted anterior knee pain
- Now What?

WELLNESS INTERVENTION

For The Home Health Aid

- Insight oriented discussion using motivational interviewing techniques
- Chaperone/medical assistant steps into "health coach" role reinforcing MD comments and developing her own therapeutic alliance
- Together we take worker through targeted home program
  - Series of "stretches"/core strength exercises

DRILL DOWN: COMPONENTS OF INTERVENTION

- At time of extended visit
  - Hands on technique demo
  - Pictures of poses to jog her memory on her phone
  - Education on muscle balance, key role of connective tissue
  - Point out/extinguish fear avoidance behavior as barrier to MSK recovery
- F/U and Reinforcement
  - Schedule follow-up
  - Med Assistant call between visits
  - Call to HR, explain progress to date, secure appropriate mod duty
  - Emphasis internal versus external locus of control

WHAT JUST HAPPENED?

- Fear avoidance behavior or kineseophobia represents critical barrier to MSK recovery
- Attitude adjustment…perceptions, pre-conceived notions, anxiety from prior injury or ACE (adverse childhood events)
- Often, to achieve full recovery residuals from prior injury episodes must be addressed
- Secondary/tertiary prevention
- Avoid "creeping catastrophic" or high dollar cost claims that originate with relatively minor MSK injury

CHALLENGES

No viable business model for this under current MA WC law and reimbursement

Cost shifting; only 20% of actual costs are borne by employers

Abdicate care to urgent care facilities or community health centers

INNOVATIVE APPROACHES WORTH EXPLORING

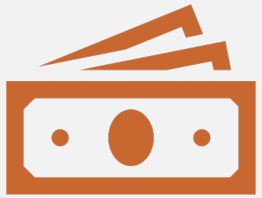
- Value proposition practice benchmarked nationally to address deficits in current MA WC System including emphasis on front end of care cycle
- Wellness via onsite Trailers at Construction Sites
  - Team Approach with Safety Professional and Treating Provider that "gets it"
  - ATCs or other Health Coach personnel instead of standard EMT that can pursue wellness curriculum plus take advantage of "teachable moments"
- WC Carrier passes on savings via reduction in premium that helps defray cost of preventative efforts

OccMedCIC

CONSULTING AND INJURY CARE

NIRVANA. WOULDN'T IT BE GRAND IF….

Resources were channeled towards the front-end of claim cycle



Instead of being paid by the widget, reimbursement was outcomes based

Services were sponsored based on value

The Hitman's Bodygaurd, Samuel L. Jackson tells Ryan Reynolds, "My thing is better than your thing".

Wellness Initiatives

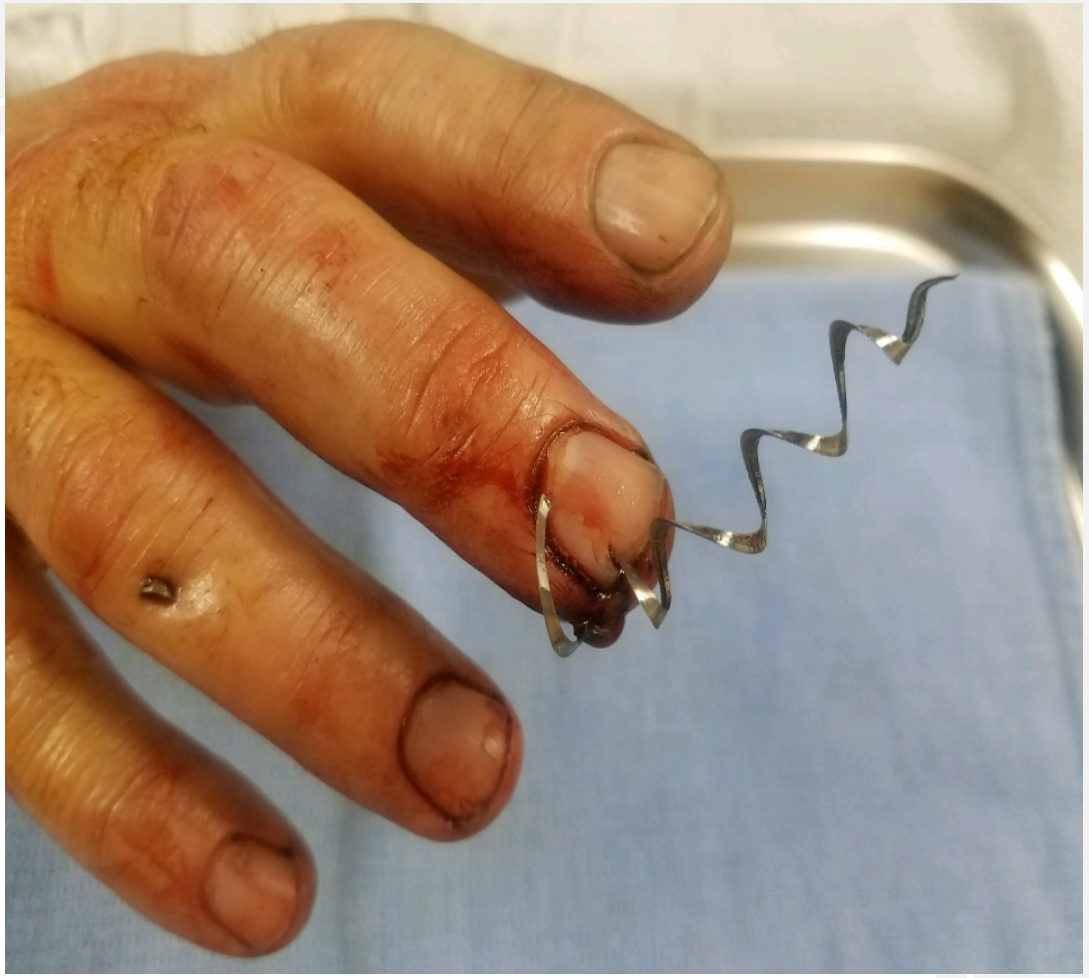
- Opportunities exist to intervene and achieve secondary/tertiary prevention early in care cycle versus…
- High dollar cost items at the back-end of care cycle are unlikely to benefit worker (e.g., IMEs, surveillance) and have lower ROI

INNOVATIVE SOLUTIONS

Unlock potential of augmented telehealth

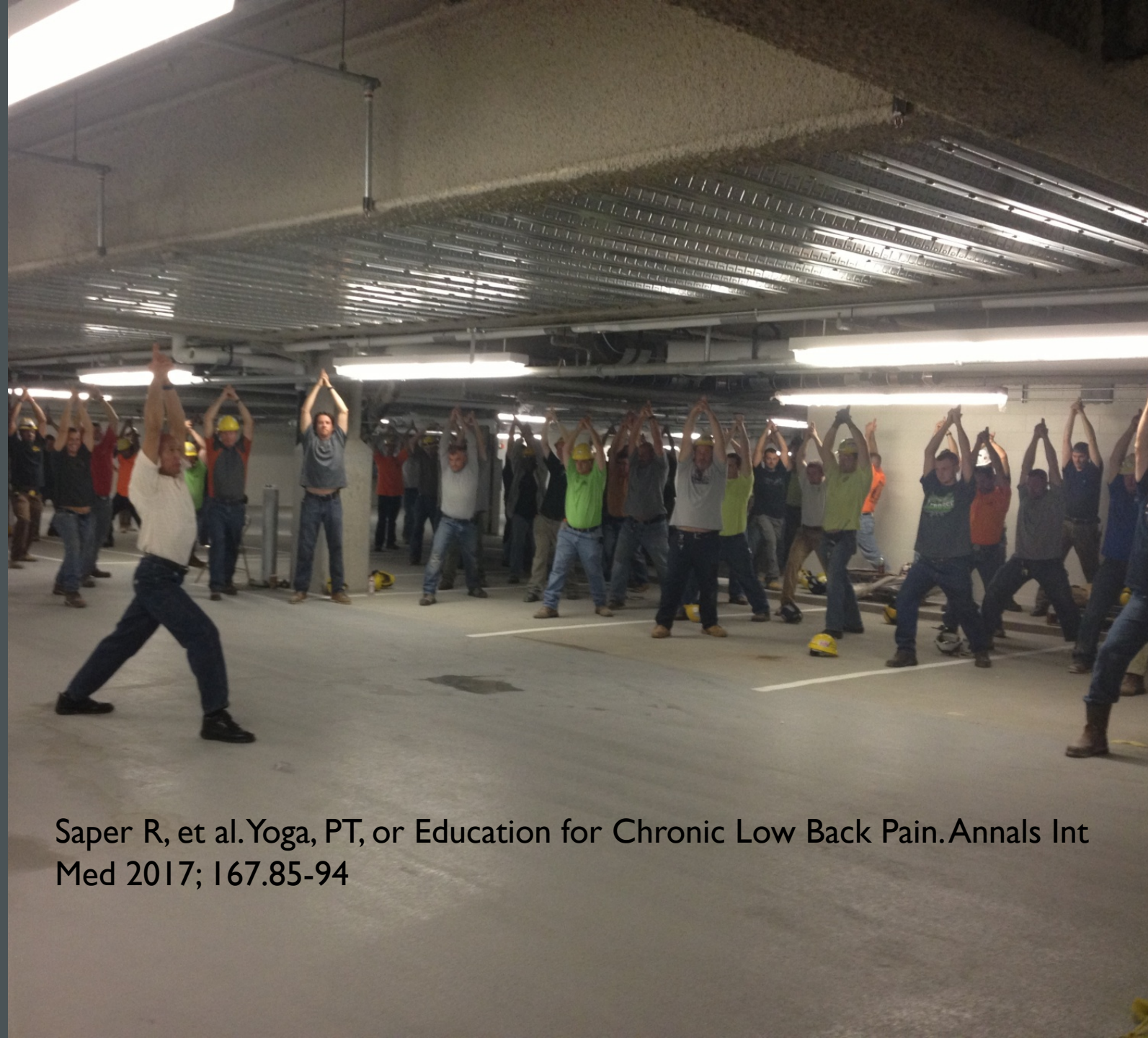
- Wound, injury triage
- Follow-up visits…save time, travel, "exposure"

- Collaboration and Cross Fertilization
  - Near end of care cycle for injury, pivot to career fitness and segue way to enhanced onsite wellness team member (timely introduction with targeted emphasis)
  - Conversely, onsite wellness team member suspects an underlying problem poses barrier for the worker to achieve his/her goals…suggests discussion with provider next scheduled time onsite



IMPACT

- Who wins?
  - Worker
    - **Increase** Productivity
    - **Increase** Quality of life
  - All stakeholders + Yoga studio
- Who gets cheated?
  - Pharma
  - Pain clinics
  - Plaintiff attorneys?



Saper R, et al. Yoga, PT, or Education for Chronic Low Back Pain. Annals Int Med 2017; 167.85-94

QUANTUM LEAP FROM WIDGET DOC TO MEMBER OF WELLNESS TEAM

Instead of being paid to do "X procedure" or treat "X problem" the provider facilitates wellness

How? Impact barriers to optimal MSK and other health parameters

OccMedCIC

CONSULTING AND INJURY CARE

HOW can you intervene?

Keuna Reeves in Matrix just starting to "see" the code.

- Current Status: bifurcated US healthcare in US System
  - Introduces artificial and capricious boundaries that limit our abilities to address the person as a whole
  - "Social tagging", e.g., acute low back pain
  - Solution: ***Read The Code***
    - "See" the root problem and address it
    - Example: Worker with horrid sleep apnea that imparts elevated risk of MSK injury from lowered awareness but the provider treats only the MSK injury in yet another overweight person
    - Fix the injury, OK great…but what about "the root problem(s)"???

NEEDED: ATTENTION TO THE SYSTEM OF CARE

Consider discomfort without dysfunction

- No lost time, no claim
- Residual from prior injuries from sports, work, or life
- Treat "War Wounds" or residuals before they impact livelihood

Examples

- Rigger with fear avoidance, poor core, and wearing back brace years after spine surgery
- Labor Foreman with ITB and pyriformis syndrome treated at pain clinics as sciatica

PIE IN THE SKY?

CONCLUSIONS

- "See" the worker, "read the code"
- Blue collar workers need/deserve wellness too!
- Construction workers don't get what they need from their work task activity alone
- Risk of injury and potential downward spiral of MSK injury
- Treating provider can impart secondary and tertiary prevention
- Collaborative team-based approach to wellness