# Dr. Lauren Hebert, PT, DPT, OCS

# **MSD Prevention & Ergonomics**

Doctor of Physical Therapy Board Certified Orthopedics Specialist Ergonomics Specialist 592 Common Rd Dixfield, ME 04224 207-491-0299 Lhebertot@prexar.com

I have provided MSD Prevention & Ergonomics Consulting programs for more than 600 workplaces since 1982, teaching 100,000 workers how to avoid MSDs. Client companies have seen excellent outcomes in reduced injuries, claims, Worker Comp costs.

I provide to client workplaces... 1. an MSD Risks Assessment (ergonomics assessment, plus work risks observation re posture habits and body mechanics, plus review how company deals with its pain complaints). This results in a report on what are their risks and lists options of what they can do to correct those risks. This leads to next step: 2. a seminar for their managers and supervisors on what they can do to reduce pain, claims, worker comp costs ...then 3, the primary 'guts' of the program: a two-hr MSD School presentation to employees on how to avoid work pain problems and reverse musculoskeletal aging changes. The MSD School is in several versions to fit the jobs being addressed. One version is the Office Ergonomics School. Another is a dedicated Aging Worker MSD School.

I typically earn \$350/hr providing these services onsite at client workplaces, paid in full directly by the workplace. No insurance billing rip-offs.

## I offer PTs a self-study course on how to build a workplace consulting practice like this.

The self study course teaches how to do this. It is in five chapters. Each chapter consists of a powerpont slide show, audio lecture files, and support documents. Chapters include: 1. defining the prevention practice structure, needs, and opportunities. 2.neck-arm overuse MSD pathomechanics, risk factors, prevention tactics. 3. low back workplace MSD pathomechanics, risk factors, prevention tactics. 3. Ergonomics analysis techniques. 4. How to structure and present a workplace MSD SCHOOL to fit the client workplace. 5. How to MARKET prevention consulting services and manage a prevention consulting practice.

I also offer PTs a complete workplace consulting practice "kit" that fully replicates my practice: all versions of the MSD Schools on powerpoint, their lecture scripts, all marketing materials, outcomes, literature evidence references, practice guide, marketing guide, access to a web site where you can refer potential client workplaces to preview the program (great marketing tool)... and ongoing email support from me.

One can examine lots of details about this format Prevention Consulting at my blog teaching PTs how to do this at: <a href="https://hebertphysicaltherapy.com">hebertphysicaltherapy.com</a>

One can see how I describe these services to client workplaces at www.impacc.com

- \*\* Self study program for PTs is \$200.
- \*\* The complete practice 'kit' is \$600, and includes the self-study program.

#### SELF-STUDY COURSE TOPICS OUTLINE:

The Physical Therapist in the Workplace: Needs, Opportunities!

Workplace MSD epidemic; extremely costly re W Comp premiums, loss of critical employees,

Newer jobs have more repetitive tasks performed in static postures; confined posture-movement

Sedentary work; AGING workforce due to recession and technology effects

PT clinic practice dying hard and fast... TEOPTAWKI is here!

You must re-define what is the role of PT ... or you perish

Are you qualified? Do you need to be "certified" in ergonomics-prevention?

What profession is the MOST qualified to do this?... musculoskeletal function & dysfunction expertise!

The ergonomist (engineer) versus the PT-OT?

Is MSD an ergonomics issue? ...or is it worker posture habits, body mechanics, and fitness-for-work?

#### Re-defining the Roles of the Physical Therapist

APTA Vision 2020! PREVENTION emphasis

Nobody pays for prevention?... WRONG (we get #350/hr)

RE-define PT to deliver your skills-knowledge to workplace for primary prevention (RE-PACKAGE PT)

Do you dare to leave the clinic ?? (most do not)

Whole new MARKETING challenge here

#### This is a safe haven from today's hostile healthcare rip-off economy

No insurance billing; no ripoff networks; no referrals; private pay @ \$300/hr; no clinic overhead costs

## SCIENCE... Re-defining workplace musculo-skeletal disorders (MSD)

MSD as a "Nutrient Pathway Disorder"

Impaired perfusion: muscle contraction, tendon tension, joint loading exceeds perfusion pressure Forces anaerobic metabolism... huge increase in metabolic wastes, trapped in tissues... inflammation

## Repetitive motion injury... versus... "static posture disorder"

NOT repetitive motion 'friction' issues ... YES, a nutrient pathway issues

Repetitive motion has incomplete relaxation between contractions, increasing background pressures Thus becomes another cause of nutrient pathway deficit; blocked perfusion, anaerobic metabolism, pain

### Pathophysiology and pathomechanics of neck-arm overuse disorders

Reduced local tissue perfusion; PLUS proximal perfusion deficits due to thoracic outlet compression Forward head posture; lack of arm support adds to proximal posture loading; Adverse neural tension

Neurogenic risks at PNS, NV compression effects; Butler stuff

Neuroplastic risks at cord... neuroplastic risks at cortex from ongoing daily pain

Pain science stuff... complicated by stress (pain, conflict, worry-fear); pain avoidance mindset

Rotator cuff, impingements, late pi, med epi, pronator, deQuervains, CMC, TFCC, CTS-RST-CubTS-TOC Lower extremity MSD: PF, TTS, meniscus, piriformis, troch bursa, PFPS, ITB, hip DJD pathomechanics

# Pathophysiology and pathomechanics of low back overuse disorders

The Cascade of Dysfunctions, leading to Degenerations, leading to Derangements

The spinal segment load, movement, posture effects

Lumbosacral effects... the Lesion Complex between lumbar-SIJ-piriformis-hips

Zygoapoph DJD, HNP, DDD, SIJ, piriformis

Spine pain science risks; imaging risks

# The AGING worker! A huge emerging issue in the workplace!

Two definitions of musculoskeletal aging... water content and collagen changes

Loss of water... loss of elasticity and tensile strength

Accumulation of disorganized collagen

And this is all REVERSIBLE! (huge role for PT in the workplace)

Degenerative falls risks

Deconditioning; sedentary work; pain avoidance

Today's workplace: changes and unique challenges

Macro-trauma of the past replaced by micro-trauma of today

Confined work demands... repetitive tasks performed in fixed postures

NOTE: perfect posture is bad for you... if it is sustained Posture VARIETY far better than posture perfection

Evaluating the workplace; MSD Ergonomics Risks Assessment protocol

Using OSHA-300 data

Workplace MSD Ergonomics Risk Factors checklist list

See IMPACC's MSD RISKS LIST SCREEN TOOL!

NIOSH and WISHA protocols

REBA and RULA protocols

Old ergonomics approach: economy of motion; reduce movements to reduce loads... wrong

Wider diversity of movements and postures reduces ergo risks

Ergonomics versus worker behaviors risks

Engineer's Ergonomics approaches versus PT-OT ergonomics approaches

Non-Ergonomics risks: body mechanics, posture habits, fitness-for-work, Aging

The 5 "E's" of MSD Elimination

Specific new (versus outdated) Ergonomics tactics

When ergonomics cannot be fixed: alternative to ergonomics modifications

#### Reducing MSD COSTS

Socio-political complications of MSD and Worker Comp

Timely reporting; company response to first report; effective HCP; RTW; restricted duty; attitudes!

Providing the on-site workplace MSD SCHOOL! the gold standard of prevention intervention

Modifying MSD School to fit the workplaces: Office Ergonomics; Aging Worker School; more

#### THE KEY: Effective MARKETING of your services!

Finding your clients workplaces; big company traps, small company opportunities

Lauren's success secrets... tactics the WORK!

The 5 steps of the selling process... intro, LISTENING, present, overcome objections, closing the deal

Making the proposal... setting the price

KEY: the Pilot Project!

Overcoming any objections

Managing workplace POLITICS (mgt, supv, union, young workers, older workers, WComp systems

### YOUR Workplace Consulting Practice: startup & growth success plan

Consulting practice management and success

Start-up strategies: side-hustle; evolving to fulltime; or keeping it part-time Success examples: Lauren's prevention consulting practice; and others

Lauren, Gregg, Trisha, et al

Other cont educ options... Educata.com... Ortho Section APTA "The Injured Worker"... Other PT experts

OSHA.gov

<u>WWW.IMPACC.COM</u> (designed for prospective workplace clients to preview our prevention services) <u>www.hebertphysicaltherapy.com</u> (a wordpress blog teaching PT's on these topics)

#### CEU's?

Each state has its own CEU rules, some with very high fees, and ever-changing application processes. So, no, we do not apply for CEU's at various states. We leave that up to individual attendees to manage. Most states allow therapists to apply as attendees to obtain their CEU's, at a reduced cost. We leave that up to you. Therapists attend this course to gain expanded consulting business capabilities, not to seek CEU's. We will provide whatever documents you may need (resume, objectives, timed schedule, handouts) as requested.