

VALUE OF PHYSICAL THERAPY

Reducing Barriers to Care

HOW WE IMPROVE LIVES.



HOW WE IMPROVE LIVES



“Worldwide, physical inactivity is arguably on par with smoking as a health risk, killing more than five million people annually.”

HOW WE IMPROVE LIVES

- “When a behavioral strategy – such as hunting and gathering – becomes the norm, physiology adapts to accommodate and even depend on it.”
- “Although we have long known that exercise is good for us humans, we are only beginning to appreciate the myriad ways our physiology has adapted to the physically active way of life that hunting and gathering demands. Nearly every organ system is implicated, down to the cellular level.”

HOW WE IMPROVE LIVES



Don't miss out on the important moments because of pain. Call a physical therapist to get relief and get back to the things you love.

- Maintaining Mobility
- APTA – “...optimizing movement to improve the human experience”

HOW WE IMPROVE LIVES

The high cost of pain

A study published in the *Journal of Pain* estimated the national cost of pain to be in the range of **\$560-\$635 billion dollars.**

Smarter pain management is possible.

#GetPT1st on June 1

- Best Practices & Emerging Techniques
- Education & Prevention
- Maintaining Mobility & Function
- Acute ➤ Chronic

HOW WE IMPROVE LIVES

Common pain conditions (i.e., arthritis, back, headache, and other musculoskeletal) result in **\$61.2 billion in lower productivity for U.S. workers.**

- Journal of the American Medical Association, 2003.

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**The high
cost of pain**

- Keep them working
- Return to work quickly and safely
- \$ Loss due to Missed Work days increased > 200%

(Spine, 2012)

HOW DO WE REDUCE COSTS

Do you suffer from carpal tunnel syndrome?

New research shows that physical therapy can get the same results as surgery with carpal tunnel syndrome.

- Fernandez-de-las-Penas et al.
Pain, November 2015

- Alternative to unnecessary surgery
- Alternative to unhelpful surgery



Effectiveness of surgical versus conservative treatment for carpal tunnel syndrome: A systematic review, meta-analysis and qualitative analysis

The Effectiveness of Manual Therapy Versus Surgery on Self-reported Function, Cervical Range of Motion, and Pinch Grip Force in Carpal Tunnel Syndrome: A Randomized Clinical Trial

● **STUDY DESIGN:** Randomized parallel-group trial.

● **BACKGROUND:** Carpal tunnel syndrome (CTS) is a common pain condition that can be managed surgically or conservatively.

● **OBJECTIVE:** To compare the effectiveness of manual therapy versus surgery for improving self-reported function, cervical range of motion, and pinch-tip grip force in women with CTS.

● **METHODS:** In this randomized clinical trial, 100 women with CTS were randomly allocated to either a manual therapy (n = 50) or a surgery (n = 50) group. The primary outcome was self-rated hand function, assessed with the Boston Carpal Tunnel Questionnaire. Secondary outcomes included active cervical range of motion, pinch-tip grip force, and the symptom severity subscale of the Boston Carpal Tunnel Questionnaire. Patients were assessed at baseline and 1, 3, 6, and 12 months

1 month for self-reported function (mean change, -0.8; 95% confidence interval [CI]: -1.1, -0.5) and pinch-tip grip force on the symptomatic side (thumb-index finger: mean change, 2.0; 95% CI: 1.1, 2.9 and thumb-little finger: mean change, 1.0; 95% CI: 0.5, 1.5). Improvements in self-reported function and pinch grip force were similar between the groups at 3, 6, and 12 months. Both groups reported improvements in symptom severity that were not significantly different at all follow-up periods. No significant changes were observed in pinch-tip grip force on the less symptomatic side and in cervical range of motion in either group.

● **CONCLUSION:** Manual therapy and surgery had similar effectiveness for improving self-reported function, symptom severity, and pinch-tip grip force on the symptomatic hand in women with CTS. Neither manual therapy nor surgery resulted in changes in cervical range of motion.



Carpal tunnel syndrome (CTS), a pain associated with movements, accounts for nearly 50% of all work-related injuries.³¹ The prevalence in the general population is reported to range between 6% and 10%. Individuals diagnosed with CTS have been identified as significantly more likely to miss more work

The Cost-Effectiveness of Nonsurgical Versus Surgical Treatment for Carpal Tunnel Syndrome

Jay Pomerance, MD, David Zurakowski, PhD, Ilene Fine, BA

Purpose To compare direct costs and results for patients with electrodiagnostically proven carpal tunnel syndrome treated with surgery versus nonsurgical care.

Methods There is a retrospective study of 120 patients divided into 2 groups: subjects in group 1 had chosen nonsurgical treatment, whereas subjects in group 2 had chosen surgery with no nonsurgical treatment. Patients were matched on age, gender, severity of nerve conduction abnormalities, body mass index, smoking history, job category, and insurance coverage. Direct cost of care was measured. An incremental cost-utility ratio was calculated to compare costs between the different management strategies.

Results Group 1 follow-up averaged 13 ± 5 months compared to 12 ± 2 months for group 2. Steroid injections were used in 18 patients in group 1. Thirty-two patients in group 1 elected to have surgery during the follow-up period. Cost of care averaged $\$3335 \pm \2097 in group 1 and $\$3068 \pm \983 in group 2.

Conclusions The direct cost of nonsurgical care of confirmed carpal tunnel syndrome did not show a significant difference from that of surgical treatment without preoperative splinting or therapy. The incremental cost-utility ratio for carpal tunnel surgery was favorable. Surgery, rather than nonsurgical care, should be considered as the initial form of treatment when patients are diagnosed with carpal tunnel syndrome that is confirmed by nerve conduction studies, as this provides symptom resolution with a favorable cost analysis. (*J Hand Surg* 2009;34A:1193-1200. Copyright © 2009 by the American Society for Surgery of the Hand. All rights reserved.)

JOSPT PERSPECTIVES FOR PATIENTS

Carpal Tunnel Syndrome Physical Therapy or Surgery?

J Orthop Sports Phys Ther 2017;47(3):162. doi:10.2519/jospt.2017.0503

HOW WE IMPROVE LIVES

National average costs of orthopedic & neurosurgeries

Knee scope - **\$4,899**

Rotator cuff repair - **\$9,025**

Spinal fusion (lumbar) - **\$50,002**

healthcarebluebook.com

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**Cost
savings
matter**

HOW DO WE REDUCE COSTS

The background of the lower section is a collage of US dollar bills, including a \$100 bill and a \$50 bill, with various serial numbers and the word 'FEDERAL' visible.

Patients who get
imaging before
physical therapy
spend \$4,793 more
than those who
#GetPT1st.

Physical therapy = cost savings.

HOW DO WE REDUCE COSTS

Is your MRI misleading?



GETPTIST.COM

If you take people *without* back pain and put them through a CT scan or MRI, you get some surprising results.

% OF PEOPLE WITH "DISC DEGENERATION"
37% of 20 year olds
80% of 50 year olds
96% of 80 year olds



% OF PEOPLE WITH "DISC BULGING"
30% of 20 year olds
60% of 50 year olds
84% of 80 year olds



Pain management matters

People who opt for surgery for the treatment of degenerative disk disease did not experience greater outcomes in pain and disability as those who opted for physical therapy.

-Thomas Jefferson University Hospital, 2013

HOW DO WE REDUCE COSTS

The annual cost for chronic pain is as high as \$635 billion a year, which is more than the yearly costs for cancer, heart disease, and diabetes.

- The Journal of Pain, 2012

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**The high
cost of pain**

#GetPT1st

- Improper Management of Injuries = Secondary Injury
- Improper Management of Injuries = Injury Sequelae
- Improper Management of Injuries = Accelerated Degenerative Changes
- Improper Management of Injuries = Adapted / Sedentary Lifestyle

HOW DO WE REDUCE COSTS

- Early Access to PT = ↓ Risk of / Need for – Imaging, Surgery, Injections, Opioid Medication
 - Total Savings of \$2726.23 / episode of LBP

(Fritz et al, *SPINE* 2012)

- Overall 60% lower total LBP-related costs over 2 year follow up period

(Childs et al, *BMC Health Service Research* 2015)

- PT as Initial Management = \$4793 / pt savings compared to those receiving adv. imaging

(Fritz et al, *Health Service Research* 2015)

- PT for lumbar spinal stenosis yielded similar results as surgical decompression

- Outcomes were ↓ pain and ↑ function

(Delitto, *Annals Intern Med* 2015)

- PT for acute LBP is associated with decreased subsequent healthcare costs

(Fritz, *SPINE* 2008)

HOW DO WE REDUCE COSTS

- 171 patients randomized to direct PT access or Medical provider
 - Outcomes similar
 - No Adverse events or missed non-MS conditions
 - \$1543 savings / Pt = > \$250,000

(Denninger, JOSPT, 2018)

- 308 patients categorized as 'early' or 'late' PT consultation
 - Ave cost \$2172 greater in 'late' consultation group

(Horn, BMC Health Service Research 2018)

- 1531 patients with primary c/o non-specific neck pain
 - Early PT intervention Vs Delayed PT referral PRN
 - Improved 'Value' – Δ Disability / \$100; Δ Pain / \$100

(Horn, BMC Health Service Research 2016)

HOW DO WE REDUCE COSTS

- 1876 patients – **Shoulder** and Spine pain – PT only
 - Sig reduction of resources (costs, #visits, Opioid Rx)
 - Dramatic reduction in downstream costs

(Rhon, Pain Medicine, 2018)

- Pt presenting to PT with Osteoarthritis of the **Knee** considering TKA – 1 out of 4 do not go on to have surgery.

(Deyle, Annals of Internal Medicine, 2000)

HOW DO WE REDUCE COSTS

- *Non-pharmacologic* route for pain management
- Stanford 2018: Early PT = Decreased exposure to opioids
 - 7-16% Reduction overall
 - 33% reduction in subset of pt's Dx with LBP
 - 66% reduction if Dx with Knee pain.

(Sun, JAMA, 2018)

HOW DO WE REDUCE COSTS

Every day, 2,500
American youth abuse
prescription pain meds
for the first time.

**Opioid pain meds are
killing us.**

Physical therapy = a healthier alternative.

American Society of Addiction Medicine

HOW DO WE REDUCE COSTS

**Americans consume
99% of the hydrocodone
produced worldwide.***
Isn't there a smarter way
to manage pain?

Physical therapy = a healthier alternative.

***International Narcotics Control Board**

HOW DO WE REDUCE COSTS

- “The way we are currently managing musculoskeletal pain is unacceptable”

- Tim Flynn

“The financial burden of increased cost sharing in the absence of a complete picture with which to assess value encourages underutilization of both necessary and elective health care services, a situation that creates added demand and cost at future points when conditions are uncontrolled”

Greenfield S, Kaplan SH, Kahn R, et al. Profiling care provided by different groups of physicians: effects of patient case-mix (bias) and physician-level clustering on quality assessment results. *Ann Intern Med.* 2002;136:111–121

Wong MD, Andersen R, Sherbourne CD, et al. Effects of cost sharing on care seeking and health status: results from the Medical Outcomes Study. *Am J Public Health.* 2001;91:1889 –1894.

SUMMARY

- If we want to *reduce* healthcare costs, we should *increase* the utilization of Physical Therapy services.
- Smart Co-pay legislation will *incentivize* conservative care options that have proven to save money and improve outcomes.

LANGUAGE

- Sec. 2. 8 V.S.A. § 4088k. Is amended to read
- § 4088k. Physical therapy co-payments for certain plans
- For silver- and bronze-level qualified health benefit plans and any reflective health benefit plans offered at the silver or bronze level pursuant to 33 V.S.A. chapter 18, subchapter 1, health care services provided by a licensed physical therapist may be subject to a co-payment requirement, provided that any required co-payment amount shall not exceed 125 percent of the amount of the co-payment applicable to care and services provided by a primary care provider under the plan.