Research Article IJPRT (2020) 3:17



International Journal of Pain Research and Treatment (ISSN: 2637-8825)



How Surgery Saves Money: A Paradox Explained

Tom Emerick¹, Nelson Hendler, MD, MS²

¹President, Emerick Consulting, former benefits executive for Burger King, British Petroleum and Walmart; ²CEO, Mensana Clinic Diagnostics, former assistant professor of neurosurgery, Johns Hopkins University School of Medicine, and past president -American Academy of Pain Management

Introduction

"A new analysis from U.S. federal government actuaries say that Americans spent \$3.65 trillion on health care in 2018, according to a report from Axios. "

This impacts on companies, where health insurance benefits are the second largest cost in a service business, and 3rd largest in manufacturing business². Back pain alone accounted for \$86 billion a year in 2008 ³. The top 5 expenses for a commercial line of insurance were for back pain, osteo-arthritis, childbirth, injuries, and non-hip/non- spine fractures⁴. Work related injuries cost an estimated \$1.2 trillion annually, which includes lost wage payment, medical care, and short and long term disability⁵.

Of all health care expenses paid by a company, workers' compensation becomes the most expensive, since the company pays not only for medical care, but also the lost wage of the employee. This is usually 66% of the employee's salary, which come to the employee tax free. This provides the employee with essentially the same income received when at work. These generous benefits lead insurance adjusters to suspect potential for abuse. Estimates of fraudulent claims range from 1% to 80% depending on unsubstantiated reports in the insurance literature^{6,7,8,9}.

However, methods to identify fraudulent cases are not always productive. The State Auditor of the State of California reported that the \$30,000,000 a year spent by the State of California to detect workers' compensation fraud was not cost effective ¹⁰. Detection methods used include Functional Capacity Evaluations (FCEs). However, Feeler and Schapmire in a review of 180,000 patients found that FCEs were subjective and had no predictive

*Correspondence to Author:

Nelson Hendler, MD, MS
CEO, Mensana Clinic Diagnostics,
former assistant professor of neurosurgery, Johns Hopkins University
School of Medicine, and past president -American Academy of Pain
Management.

Email: DocNelse@aol.com

How to cite this article:

Tom Emerick, Nelson Hendler. How Surgery Saves Money: A Paradox Explained. International Journal of Pain Research and Treatment, 2020, 3:17.



nor diagnostic value ¹¹. Attempts to blame prolonged recovery on psychological issues, using the Minnesota Multiphasic Personality Inventory MMPI are consistently thrown out of court often ¹².

The most reliable method of fraud detection is the Pain Validity Test, which can predict with 95% accuracy who will have abnormal medical tests, and predicts with 85%-100% accuracy who will not have medical test abnormalities, i.e. who is faking or malingering ^{13,14,15}. In a head to head comparison with the MMPI, in the same group of patients, the MMPI had no predictive ability ^{13,14,15}. The Pain Validity Test has always been admitted as evidence in 30 cases in 9 states, which are listed on SlideShare.net ¹⁶.

Once an injured worker has been identified has having a valid complaint of pain, the next step is to o identify the cause of the pain, and properly treat the worker. Research from several sources at Johns Hopkins Hospital report that 40%-80% of chronic pain patients are misdiagnosed ^{17,18,19}. When accurately diagnosed, 50%-63% of patients required surgery to improve ^{18,19}. While the "common wisdom" is that surgery is expensive, a more granular case by case examination documents that this is fallacious thinking. The following case examples show the benefit of accurate diagnosis and the application of the correct surgery resulting in significant cost savings.

Case Reports

Example #1

Carlos Cain see Facebook posting in Appendix A. The patient is a 54 year white male, an oil industry consultant, was rear-ended while driving

in a company car to another worksite. He had persistent pain in his neck and arms. He saw two orthopedic surgeons and two neurosurgeons in Houston, who spent 8 to 11 minutes with him, talked 7 to 8 minutes of the appointment time. and interrupted him within the first 12 seconds ^{20,21}. He had an MRI, which was normal but since 78% of damaged discs are not detected on MRI ^{22, 23} this was not unexpected. Since he had a normal MRI, he was told that he had chronic cervical sprain. None of the surgeons in Houston would operate on him. They referred him to physical therapy and placed him on narcotics. After two years of constant pain he came to Johns Hopkins Hospital, a Center of Excellence Hospital. At his initial evaluation, he received the Pain Validity Test, which predicted that he would have a 95% chance of having a medical test abnormality on the correct medical testing ^{24, 25}. He also took the Diagnostic Paradigm which provides diagnoses with a 96% correlation with diagnoses of Johns Hopkins Hospital doctors ²⁶, and can predict intra-operative findings with 100% accuracy ²⁷. The Diagnostic Paradigm found that the patient had internal disc disruption at C4-5 and C5-6, and anteriolysthesis of C5 on C6. The Treatment Algorithm, which is based on clinical evaluations at Johns Hopkins Hospital department of neurosurgery, recommended facet blocks, root blocks, and provocative discograms C4-C7 ²⁸. The provocative discograms documented disc damage at C4-5 and C5-6. Based on the results of these test, the patient received an anterior cervical fusion at these levels. with excellent pain relief in his neck and arms. Recovery time post operatively was 12 weeks, and he returned to work after that period of time.

Cost of Incorrect diagnosis for 2 years Cost of correct diagnosis with surgery for 3 months

Surgical evaluations X 4	\$2,000	Cost of Pain Validity Test	\$300
MRI 2 Tesla	\$500	Cost of Diagnostic Paradigm	\$800
Physical therapy \$270/week X 50	\$13,500	Neurosurgery Evaluation	\$500
Medication \$400/month X 24	\$ 9,600	MRI 3 Tesla	\$500
Lost wage \$4,000/month X24	\$96,000	Provocative discogram	\$1,500
		Facet blocks	\$1,500
		Root blocks	\$1.500

	Tom Emericl	k et al., IJPRT, 2020 3:17	
		3D-CT	\$700
		Flexion Extension X-rays	\$250
		Discectomy/anterior fusion	\$25,000
		Medication \$400/month X3	\$1,200
		Physical therapy \$270 x 4	\$1,080
		Lost wage \$4,000/month x 3	\$12,000
TOTAL COST	\$121,600	TOTAL COST	\$46,830
Cost Savings			\$74,770

Example #2

Janis Crist (see Facebook posting in Appendix A, and letter from her surgeon, Dr. Dellon) was a 33 year old financial analyst, a Series 7 broker, and an avid jogger. She developed a burning pain on the inside of right thigh radiating down her shin to the top of her foot. She was (mis)diagnosed with Reflex Sympathetic Dystrophy (RSD) (now called Complex Regional Pain Syndrome or CRPS). She began a trial with medication, and then a series of lumbar sympathetic blocks. Failing this, she had extensive physical therapy, and then another series of lumbar sympathetic phenol blocks. She had to stop all jogging, and the pain was so severe she had to stop work. She was given narcotics and anti-inflammatory medication. After two years, she was referred to Mensana Clinic. At her initial evaluation, she received the Pain Validity Test, which

predicted that she would have a 95% chance of having a medical test abnormality on the correct medical testing 24, 25. She also took the Diagnostic Paradigm which provides diagnoses with a 96% correlation with diagnoses of Johns Hopkins Hospital doctors²⁶, and can predict intraoperative findings with 100% accuracy 27. The Diagnostic Paradigm found that the patient had nerve entrapment of the femoral and common peroneal nerve. The Treatment Algorithm recommended current perception threshold testing, and peripheral nerve blocks. These blocks documented the peripheral nerve entrapments. Based on the results of these tests, the patient was referred for nerve decompression with excellent pain relief in the leg. Recovery time post operatively was 8 weeks, and she returned to work after that period of time. She resumed walking and the jogging within 5 months.

Α	Two	Year	Side	by	Side	Com	parison
---	-----	------	------	----	------	-----	---------

RSD		Nerve Entrapment				
Administer MCD Tests	\$0	Administer MCD Tests	\$1,200			
		and Get an Accurate Diagnosis	S			
Physical therapy		Physical therapy				
or chiropractic treatments		or chiropractic treatments				
\$15,000/yr	\$30,000	none	\$0			
Doctor visits for 2 years		Referral to plastic surgeon	\$500			
\$2,500/yr	\$ 5,000	One visit				
		Refer for EMG/NCV				
Sympathetic blocks		Bone scan, neurometer	\$3,000			
Series of 10	\$15,000	Peripheral nerve blocks X 3	\$3,000			
Second series of 10	\$15,000					
Medication for 2 years		Medication for 6 months	\$6,250			
\$12,500/yr	\$25,000	\$12,500/yr				
33 year old claimant- long term disability		33 year old claimant- long term disability				

Tom Emerick et al., IJPRT, 2020 3:17

\$36,000/yr \$54,000 \$36,000/yr for 6 months \$18,000

Decompression of trapped nerve \$15,000

Physical Therapy for a month \$1,200

Patient Returns to Work

Total for 2 years \$144.000 Total for 6 months \$48,150

Cost savings of old non-surgical treatment and correct diagnosis and surgery \$95,850

Example #3

Mary Lou see Appendix A below is a 37 year white female, was injured when slipped and fell at work. She saw an orthopedic surgeon, who spent 11 minutes with her, talked 7 minutes of the appointment time, and interrupted her within the first 12 seconds^{20,21}. She had an MRI, which was normal but since 78% of damaged discs are not detected on MRI^{22, 23} this was not unexpected. Since she had a normal MRI, she was told that she had chronic lumbar sprain. Since the surgeon would not operate on her, she was referred to physical therapy and given narcotics. After two years of constant pain she came to Johns Hopkins Hospital, a Center of Excellence Hospital. At her initial evaluation, she received the Pain Validity Test, which predicted that she would have a 95% chance of having a medical test abnormality on the correct medical testing ^{24,} ²⁵. She also took the Diagnostic Paradigm which provides diagnoses with a 96% correlation with diagnoses of Johns Hopkins Hospital doctors²⁶, and can predict intra-operative findings with 100% accuracy²⁷. The Diagnostic Paradigm found that the patient had internal disc disruption at L4-5. The Treatment Algorithm, which is based on clinical evaluations at Johns Hopkins Hospital department of neurosurgery, recommended facet blocks, root blocks, and provocative discograms L3-S1²⁸. The provocative discogram documented disc damage at L4-5, and facet blocks confirm facet joint instability. Based on the results of these tests, the patient received an L4-5 disectomy and fusion, with excellent pain relief in her back and leg pain. Recovery time post operatively was 12 weeks, and she returned to work after that period of time, as indicated by the letter from her family doctor in Manheim. PA.

A Three Year Side by Side Comparison

Misdiagnosis - Lumba	r Sprain	Accurate Diagnosis – Disrupted L4-5 disc				
Administer MCD Tests	\$0	Administer MCD Tests	\$1,200			
		And Get an Accurate Diagnos	sis			
Physical therapy		Physical therapy				
or chiropractic treatm	or chiropractic treatments					
\$15,000/yr	\$45,000	none				
Doctor visits for 3 years		Referral to neurosurgeon				
\$2,500/yr	\$ 7,500	One visit	\$500			
Refer for MRI	\$500	Refer for MRI, CT,				
		Provocative discogram				
		Facet blocks and root blocks \$3,00				
Medication for 3 years		Medication for 6 months	\$6,250			
\$12,500/yr	\$37,500	\$12,500/yr				
33 year old claimant- lost wage		33 year old claimant- lost wage				
\$18,000/yr	\$54,000	\$18,000/yr for 6 months	\$9,000			
Fraud Evaluation by Spe	ecial Investigation Unit	lumbar discectomy and fusion \$40,000				

(SIU)

Detectives \$3,500 Physical Therapy for a month \$1,200

Independent Medical Examination Patient Returns to Work

\$1,500

Functional Capacity Evaluation

\$1,800

Total for 3 years \$151,300 Total for 6 months \$61,150 Cost savings between old non-surgical treatment and surgery \$90,150

Discussion:

The case studies above illustrate several important concepts. These are:

- 1) 40%-80% of chronic pain patients, which represent over 90% of post-traumatic injury patients (workers' compensation, auto accident, property and casualty-premises cases) are misdiagnosed ^{17,18,19}. Doctors spend only 10-11 minutes evaluating a patient, during which time the doctor talks 7-8 minutes, and interrupt the patient after the first 11 seconds ^{20,21}.
- 2) Doctors order the wrong tests. The MRI fails to detect damaged discs 78% of the time^{22,23}. "False positives are shockingly common." ²⁹. In people with no back pain, MRI report herniated 28% of the time³⁰. The CT misses pathology 56% of the time compared to a 3D-CT³¹
- 3) This combination leads to increased health care costs ³²
- 4) Results are far more credible if they are validated by a third party, rather than by a vendor or some formulaic assessment of outcomes. There is difficulty in measuring outcome studies, (page 104) and 'Why Nobody Believes the Numbers" by Al Lewis describes why these techniques overstate or misstate impact." 33.

The best way to determine the efficacy of any program is to evaluate results. If results come from vendor of a service, they must be heavily referenced and documented. One of the authors (NH) has over 1,000 unsolicited letters from former patients, and their doctors or lawyers,

documenting the significant improvement using the guidelines from the Pain Validity Test and Diagnostic Paradigm and Treatment Algorithm, which on-line questionnaires found at www.MarylandClinicalDiagnsotics. com, or www.DiagnoseThePains.com. A small sample of these letters is included in Appendix A. Copies of all 1,000 letters can be mailed to any reader who would request them, to verify this claim. The value of these letters is that they represent third party validation of the approach of accurate diagnosis, and correct testing and treatment, including surgery in 50%-63% of the cases. The third-party validation is the most unassailable method of reporting outcome studies, rather than the typical self-reporting method often found in the medical literature. Obviously, a certain bias can creep into self-reported results, whether it be intentional or unintentional, while third party reporting is more objective and credible.

Accurately diagnosing claimants can also result in the reduction in reserves. According to Generally Accepted Accounting Practices (GAAP), if a case settles for less than the reserve, the difference can come to the income side of the ledger and drop to the bottom line. Table A below was derived from calls with two workers' compensation insurance companies, who were willing to share their reserve amounts for the diagnoses shown, with the stipulation that the name of the company was not revealed. Accurately diagnosing claimants can result in a significant increase in cash for a company.

TABLE A

							% of Time		
"Bad" Diagnosis	ICD-9	Reserve	"Good" Diagnosis	ICD-9	Reserve	Savings	"Bad" gets	Actua	l Savings
Reflex Sympath-			Nerve Entrapment				Converted	on 10	"Bad" cases
etic Dystrophy							to "Good"		
(RSD) of Leg	337.22	\$1,000,000	Peroneal	355.3	\$50,000	\$950,000	71%	\$	6,745,000
	337.21	\$1,000,000	Tibial	355.5	\$50,000	\$950,000	71%	\$	6,745,000
	337.29	\$1,000,000	Saphenous	355.79	\$50,000	\$950,000	71%	\$	6,745,000
RSD of arm	337.2	\$1,000,000	Ulnar	354.2	\$50,000	\$950,000	71%	\$	6,745,000
Causalgia-Arm	355.9	\$1,000,000	Thoracic Outlet	353	\$50,000	\$950,000	71%	\$	6,745,000
	355.71	\$1,000,000	Radial	354.8	\$50,000	\$950,000	71%	\$	6,745,000
Low Back Pain	722.52	\$98,000	Lumbar Facet	724.8	\$40,000	\$58,000	100%	\$	580,000
Lumbago	724.2	\$98,000	Disrupted Disc	722.1	\$55,000	\$43,000	100%	\$	430,000
Lumbar Sprain	724.2	\$98,000	Unstable L4-L5	724.9	\$60,000	\$38,000	100%	\$	380,000
Cervical Sprain	722.4	\$98,000	Cervical Facet	718.88	\$40,000	\$58,000	100%	\$	580,000
Whiplash	722.4	\$98,000	Cervical Fusion	722	\$55,000	\$43,000	100%	\$	430,000
Cervicalgia	723.1	\$98,000	Cervical Fusion	722	\$55,000	\$43,000	100%	\$	430,000
Fibromyalgia	729.1	\$90,000	Lyme Disease	x088.81	\$65,000	\$25,000	97%	\$	242,500
Failed Back	724.2	\$120,000	fusion of instability	724.9	\$85,000	\$35,000	35%	\$	122,500
Syndrome of	847.2	\$120,000	fusion of laminectomy	722.83		\$35,000	25%	\$	87,500
Various Types	723.8	\$120,000	Foraminotomy	723.4		\$75,000	40%		300,000
71	996.4	\$120,000	TENS for arachnoiditis	G-03.9	\$90,000	\$30,000	5%	-	15,000

One question which arises is why, with the obvious advantages to computer generated accurate diagnosis and correct treatment, are these procedures not more wide-spread. There are several speculative answers. Emerick and Lewis opine that assuming the Primary Care Provider (PCP) and nurse case manager are highly competent is a faulty assumption³⁴. The second faulty assumption is that a large number of patients are faking and malingering, which is not born out by accurate inspection of clinical cases. Rather than the 20% to 80% of suspected fraudulent cases reported in the insurance literature, research using the Pain Validity Test shows that 6% of non-litigant patients, 10% of auto accident patients, and 13% of workers' compensation patients fall into the exaggerating pain patient category, which means they have an 85% to 100% chance of not having abnormal medical testing ^{13,14,15,24,25,35}. A third faulty assumption is that the use of an Independent Medical Evaluation can reduced costs. However, very often, these reports are more of a legal and investigative than a medical document. In fact, one plaintiff attorney law firm in Racine, Wisconsin posts the following comments on their website

"The modus operandi of some of these ("independent") examiners to defeat the claim is obvious - attack the credibility of the claimant, making the claimant out to be dishonest. The presupposition is that every claim is a fraud and must be exposed. The task becomes one of discrediting the claimant, rather than ascertaining the cause of the condition or the nature and extent of disability."

"...These doctors have a penchant for writing reports that deny that there is any pathological condition whatsoever. If there is a true malady, they blame it on a pre-existing condition or a cause other than the trauma that is the subject of the litigation. If that doesn't work, then they minimize the extent of the injury." ³⁶.

The fourth complicating issue is the multi-factorial basis of workers' compensation costs. Trying to determine real savings is complicated. Rather than a case by case granular evaluation of cases, some companies use an Automated Case Management Systems to identify and correct expensive workers compensation cases. However, once an accident occurs, it triggers a cascade of events. Instead of bill reductions, Joe Paduda at Health Strategy Associates

recommends that payers "should be looking at medical cost per claim and replace network penetration with physician performance evaluation, based on total outcomes." ³⁷. Emerick and Lewis echo this sentiment, stating "…none of these ACO/PCMH Einsteins can measure savings, either – and it isn't that hard. They should just count up the events, procedures, and errors they are trying to reduce year over year, and see if that total declines." ³⁸.

These factors led Emerick and Lewis to address the problems of insured people in this country who are "overdiagnosed, overtreated, and generally overdoctored." ³⁹. This type of behavior is engendered, in part, by the pharmaceutical industry. One egregious example is the recommendation to use Lyrica to treat fibromyalgia. Hendler and Romano report that 97% of patients diagnosed with fibromyalgia do not meet the diagnostic criteria ⁴⁰. Yet countless ads appear on TV advocating Lyrica to treat fibromyalgia. One wonders what the Lyrica is actually treating.

To combat this, Emerick and Lewis have employed the concept of "Company Sponsored Centers of Excellence" (CSCOEs) which have salaried physicians, so they have only a minimal incentive to over-diagnose, overtreat and especially, over-operate" 41. The paradox is that these programs are not cheap, since they often recommend surgery, but there are real benefits to this approach. When compared to its own industry average, Lincoln Industries reported much lower workers compensation costs, and a 50% lower healthcare costs. 42. Johns Hopkins Hospital, one of the Company Sponsored Centers of Excellence (CSCOE), was able to save 54% on its workers compensation cost, using one simple expedient. Rather than allowing their injured workers see the local doctors who were misdiagnosing patients 40%-80% of the time, the workers' were encouraged to see Johns Hopkins Hospital doctors ⁴³. Other companies can expect comparable savings using the two tests from www.MarylandClnicalDiagnostics.com, since these tests produce diagnoses with a 96% correlation with diagnoses of Johns Hopkins

Hospital doctors, and recommend medical testing employed by these physicians ⁴⁴.

In summary. many of the unsubstantiated myths which percolate through the insurance industry need to be reexamined using the microscope of science and documentation. Hopefully, this paper will serve as a framework to help a company objectively verify programs which claim to offer cost savings.

References:

- Sherman, E, U.S. Health Care Costs Skyrocketed to \$3.65 Trillion in 2018, Fortune, February 21, 2019
- 2. Emerick. T and Lewis, A., Cracking Health Costs p. ix, Wiley, Hoboken, NJ, 2013
- 3. Dagenais, S, Caro, J. Haldeman, S., A systematic review of low back pain cost of illness studies in the United States and internationally, Spine J., Jan.-Feb., 8(1)8-20, 2008.
- Paquale, MK, Dufour, R. Schaaf, D., Reiners, AT, Mardekian, J, Joshi, AV, Patel, NC,, Pain conditions ranked by healthcare costs for members of a national health plan, Pain Practice, Feb. 14 (2) 117-31, 2014.
- 5. Fisher, TF, Perception difference between groups of employees identifying the factors that influence a return to work and a work-related musculoskeletal injury Work, 21(3) 211-20, 2003.
- Ted R and Larrubia E. "Anti-Fraud Drive Proves Costly for Employees." Los Angeles Times. Aug.
 2000. Accessed on May 2013 http://www.harp.org/wc2.htm [Access Online]
- 7. Paul LJ, Markovitz S, Fahs M, Landrigan P. Costs of Occupational Injuries and Illnesses. Ann Arbor: University of Michigan Press, 2000. pp. 195-197.Accessed in May,2013. http://www.press.umich.edu/ 16885/costs_of_occupational_injuries_and_illnesses [Access Online]
- Workers' Compensation Notes, AFL-CIO Department of Occupational Safety and Health, Issue 3-00, May/June 2000. Page 1.
- Kerr Peter. The Price of Health: Employee Fraud

 A special report; Vast Amount of Fraud Discovered In Workers' Compensation System. The New York Times. December 29, 1991.
 Accessed in June 2013 http://www.nytimes.com/1991/12/29/us/price-health-employee-fraud-special-report-vast-amount-fraud-discovered-workers.html?pagewanted= all&src=pm
- 10. Howle E. Workers' Compensation Report. 15(11): p 206, May 17, 2004.

- 11. Feeler L, St James JD, Schapmire DW. Isometric strength assessment, Part I: Static testing does not accurately predict dynamic lifting capacity. Work. 2010;37(3):301-8. [PubMed]
- 12. Sims DC. The myth of malingering: Is it the truth or a lie? The Plaintiff Magazine, pp. 1-4, Dec. 2007.
- Hendler N, Mollett A, Viernstein M, Schroeder D, Rybock J, Campbell J, et al. A comparison between the MMPI and the 'Mensana Clinic Back Pain Test' for validating the complaint of chronic back pain in women. Pain 1985;23(3):243-51 [PubMed]
- Hendler, N., Mollett, A., Viernstein, M., Schroeder, D., Rybock, J., Campbell, J., Levin, S., Long, D.: "A Comparison Between the MMPI and the 'Hendler Back Pain Test' for Validating the Complaint of Chronic Back Pain in Men." The Journal of Neurological & Orthopaedic Medicine & Surgery. Vol. 6, Issue 4:333-337, December, 1985.
- Hendler N, Mollett A, Talo S, Levin S. A comparison between the Minnesota Multiphasic Personality Inventory and the 'Mensana Clinic Back Pain Test' for validating the complaint of chronic back pain. J Occup Med. 1988 Feb;30(2):98-102.
- https://www.slideshare.net/DiagnoseMyPain/listof-cases-where-the-pain-validity-test-has-beenadmitted-as-evidence-125735150?qid=9732d9f6-9d6b-4a75-b8e0a4d51597cd78&v=&b=&from search=49.
- Dellon AL, Andronian E, Rosson GD. CRPS of the upper or lower extremity: surgical treatment outcomes, J. Brachial Plex Peripher Nerve Inj. 2009 Feb;4(1):1.
- Long D, Davis R, Speed W, Hendler N. Fusion for occult post-traumatic cervical facet injury. Neurosurg. Q. 2006;16(3):129-135.
- Hendler N., Bergson, C., Morrison, C.: Overlooked physical diagnoses in chronic pain patients in litigation, Part 2. Psychosomatics. 1996;37(6):509-517.
- 20. Rhoades DR, McFarland KF, Finch WH, Johnson AO. 2001 "Speaking and interruptions during primary care office visits." Fam Med. Jul-Aug;33(7):528-32.
- Gottschalk, A, and Flocke, S, 2005 "Time Spent in Face-to-Face Patient Care and Work Outside the Examination Room" Ann Fam Med November 1, vol. 3 no. 6 488-493.
- 22. Braithwaite I, White J, Saifuddin A, Renton P, Taylor BA. 1998 "Vertebral end-plate (Modic) changes on lumbar spine MRI: correlation with pain reproduction at lumbar discography." Eur Spine J., 7(5):363-8.
- 23. Sandhu HS, Sanchez-Caso LP, Parvataneni HK, Cammisa FP Jr, Girardi FP, Ghelman B. 2000,

- "Association between findings of provocative discography and vertebral endplate signal changes as seen on MRI." J Spinal Disord., Oct;13(5):438-43.
- 24. Hendler, N. and Baker, 2008 "An Internet questionnaire to predict the presence or absence of organic pathology in chronic back, neck and limb pain patients." Pan Arab Journal of Neurosurgery, Vol. 12, April No. 1: 15-24.
- 25. Hendler, N.: 1988 "Chapter 20 -Validating and Treating the Complaint of Chronic Back Pain: The Mensana Clinic Approach. " in Clinical Neurosurgery. Vol. 35 Edited by P. Black, E. Alexander., D. Barrow, et. al.,385-397, Williams and Wilkins, Baltimore.
- 26. Hendler N., et al. "Comparison of Clinical Diagnoses Versus Computerized Test Diagnoses Using the Mensana Clinic Diagnostic Paradigm (Expert System) for Diagnosing Chronic Pain in the Neck, Back and Limbs". Pan Arab Journal of Neurosurgery (2007): 8-17.
- 27. Landi A., et al. "Diagnoses from an On-Line Expert System for Chronic Pain Confirmed by Intra-Operative Findings". Journal of Anesthesia and Pain Medicine 1.1 (2016): 1-7.
- 28. Long DM., et al. "Fusion for occult post-traumatic cervical facet injury". Neurosurgery Quarterly 16.3 (2006): 129-135.
- 29. Emerick. T and Lewis, A., Cracking Health Costs p. 11, Wiley, Hoboken, NJ, 2013
- Jensen MC, Brant-Zawadzki MN, Obuchowski N, Modic MT, Malkasian D, et al. (1994) Magnetic resonance imaging of the lumbar spine in people without back pain. N Engl J Med 331:69-73.
- 31. Zinreich J, Long DM, Davis R, Quinn CB, McAfee PC, Wang H.Three-dimensional CT imaging in postsurgical "failed back" syndrome, Comput Assist Tomogr. 1990 Jul-Aug;14(4):574-80.
- 32. Landro L. The Biggest Mistake Doctors Make, The Wall Street Journal Nov. 17 (2013).
- 33. Emerick. T and Lewis, A., Cracking Health Costs pp 104-107, Wiley, Hoboken, NJ, 2013
- 34. Emerick. T and Lewis, A., Cracking Health Costs p 103, Wiley, Hoboken, NJ, 2013
- 35. Hendler, N, An internet based expert system to control workers compensation costs documented by outcome studies, Anaesthesia, Pain & Intensive Care, Vol. 17, No. 2, pp 166-170, May- August 2013.
- 36. (https://pittslaw.com/PittsLaw.10/independent.medical.examinations.html) 262-886-8240 JAPitts@PittsLaw.com.
- 37. https://www.joepaduda.com/2018/02/27/work-comp-medical-cost-vs-savings/
- 38. Emerick. T and Lewis, A., Cracking Health Costs p 93, Wiley, Hoboken, NJ, 2013

- 39. Emerick. T and Lewis, A., Cracking Health Costs p 72, Wiley, Hoboken, NJ, 2013
- 40. Hendler, N, and Romano, T. Fibromyalgia Over-Diagnosed 97% of The Time:Chronic Pain Due To Thoracic Outlet Syndrome, Acromo-Clavicular Joint Syndrome, Disrupted Disc, Nerve Entrapments, Facet Syndrome and Other Disorders Mistakenly Called Fibromyalgia, Journal of Anesthesia & Pain Medicine, Volume 1: Issue 1, pp. 1-7, 2016.
- 41. Emerick. T and Lewis, A., Cracking Health Costs p 93, Wiley, Hoboken, NJ, 2013

- 42. Emerick. T and Lewis, A., Cracking Health Costs p 168, Wiley, Hoboken, NJ, 2013
- 43. Bernacki EJ, Tsai SP. Ten years' experience using an integrated workers' compensation management system to control workers' compensation costs J Occup Environ Med. 2003 May;45(5):508-
- 44. Hendler, N, and Goff, R, Innovations Including Pain Validity Testing, The Self Insurer, pp 28-30, 2013



Appendix A Patient #1



12/05/2003

Welson Hendler, MD Mensana Clinto 1718 Green Spring Velley Boad Stevenson, Maryland 21153-9999

In re: Natson Clinic *

Dear Doctor Hendler:

I am writing to inform you that it was a real pleasure to see Linda was practically pain-free in her left lower extremity. She did walk unassisted in my office. I was particularly impressed with the accurate diagnosis that was made. She seemed to have greatly benefitted from the decompression of the affected nerves. I am sure that she will greatly benefit from the remaining surgeries. We are managing her blood pressure here, and she has enrolled in physical therapy.

I am sure that there are a few other patients here who would greatly benefit from the excellent case that you have provided in the Messana Clinic.

I will keep you informed of Linda's progress. We will be repeating her doppler flow study of the leq. She is already off of couradin.

Thank you again for providing such excellent care.

Sincerely

- TOL

Paul A. Corbier, M.D. Internal Medicine

DD: 12/05/2003

DT: 31f/12/05/2003 10:17:23

WC# WC#

LINDA (8) 12/05/2003 1 Fage(8)

HS

Watson Cleric LLP + 1600 Lakeland Hills Boulevard + (863) 680-7000 South + 1033 N. Parkway Fromago Road + (863) 647-8011 North Pediatrics + 1420 Lakeland Hills Blvd + (863) 680-7337 Lakeland Highlands - 2140 County Rd. 540A - (863) 647-2315
 Plant City + 1501 West Timbertone, Soc. 800 - (813) 719-2510
 Bartow + 2250 Ospery Blvd. Soc. 100 - (863) 533-7151

accredited by the Accreditation Association for Ambulatory Health Core, Inc.

Patient #2

Comments

facebook



LikeShow more reactions

CommentShare

Carlos Cain commented on your status.

Carlos Cain I owe my life to this man. After a seemingly insignificant auto accident. I not only endured horrible pain but the emotional trauma of being told by multiple doctors including one of best neurosurgeons in Houston that THERE WAS NOTHING WRONG WITH ME. Then I traveled to Baltimore and met Doctor Hendler. After multiple surgeries the "whiplash" injuries were repaired. After many years on pain meds I am now off all medication and pain free. I do have limitations but I'm no longer a slave to pain meds. May God bless you doc. I treasure your friendship and pray for you often. The software Dr. Hendler developed is based on clinical trials by some of the best doctors in the world. If you or anyone you know is in pain and can only find relief with drugs I implore you to use the tools on his website to determine the root cause of your pain and establish a medical plan that will allow you to LIVE again. Feel free to contact me if you have any doubts or questions about my experience with this man. Doc, you have helped thousands of injured souls regain their lives and their dignity. God has a special place for you. You are truly a Healer and a blessing to the thousands of lives you have touched over the years. May God bless you and all of your loved ones.

Patient #3



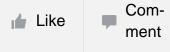
Janis Crist posted on your timeline



Janis Crist

August 15 at 12:45pm

This man has done miraculous things for me and many, many other people. -- I walk and run because of this man. --Everybody should celebrate him, as a doctor. The Pain Assessment Test at www.MarylandClinicalDiagnostics.com nailed my diagnosis perfectly, and once I was diagnosed accurately, I got the right treatment. I didn't have RSD, and you found the nerve entrapments which had been missed. Thank you Doc, thank you.



View Post

A. LEE DELLON MD, FACS

Plastic and Reconstructive Surgery, Surgery of the Hand, Microsurgery

February 23, 1998

Nelson H. Hendler, MD MS. Mensana Clinic 1718 Greenspring Valley Road Stevenson, Maryland 21153

Re: Janis XXX

Dear Doctor Hendler:

On Sunday, February 22nd, there were two messages on my machine from Janis. She has arrived back in Houston. She was actually quite happy on the telephone. She wanted me to know that she was on... just two medications. You will recall that she was on seven when she came to your clinic. Furthermore, she indicated that she had taken her first couple of steps without pain in her injured leg and the muscle cramps in both legs were gone. She just wanted to say thank you. I am passing this on to you.

This was really a good pickup on this lady on your part as this lady has certainly never had reflex sympathetic dystrophy despite her having had phenol lumbar blocks by the pain clinic in Texas.

On a more or less related note, one of our plastic surgery residents, Johnathan Winograd, gave a talk on reflex sympathetic dystrophy this past Thursday and I discussed with him that if he had some interest in this area at all, there needs to be a paper related to nerve compressions and RSD, etc. We will see if he picks up on this.

Thanks again for referring Janis.

Sincerely,

1.._,;t_,_

Lee Dellon, M. D.

ALD:esp

2328 West.Joppa Rd. Suite 235, Luthervilllle, Maryland 21093

(410) 832 7600

Peter A. Cary CaryMedia LLC

3237 Highland Lane, Fairfax, Va. 22031 (202) 253-6118 (c) (703) 849-8524 (h) email: peter.cary@verizon.net

Nelson Hendler, MD, MS 117 Willis St. Cambridge, MD, 21613 July 30, 2014

Dear Nelson:

When I was the managing editor of US News & World Report, I was struck by severe pain in both of my legs. The pain was so serious that I could barely walk. I saw my orthopaedist, who made a diagnosis, but I wanted a second opinion. I took your diagnostic test for chronic pain over the Internet and I was struck by how precisely it diagnosed the cause of my pain, S-1 radiculopathy. Your diagnostic test precisely matched the diagnosis done by my doctor after x-rays and MRI exams, which I found quite amazing.

You then referred me to a spine surgeon, Dr. Reginald Davis, of Baltimore. He performed surgery to correct my spinal stenosis. The problem was solved and my pain disappeared. I cannot tell you how appreciative I am of your test and for your surgeon recommendation.

I would recommend your Internet diagnostic test to anyone who has a chronic pain problem.

Sincerely,

Peter Cary

Former Managing Editor US News & World Report.

Patient # 5

Manheim Family Health Center

Lancaster General Medical Group

September 6, 2002

Nelson Hendler, M.D., M.S. Mensana Clinic 1718 Greenspring Valley Road Stevenson, MD 21153-9999

RE: Mary Lou DOB: 11Ail!llilii9

Dear Doctor Hendler:

I am writing to thank you for the excellent care you provided my patienh Mary Lou \underline{Rl} She is now completely pain free, has returned to work and is tapering off her antidepressants. Thank you again for your excellent care.

Sincerely,



R. Gary Hopkins, M.D.

RGH/ljs

Eugene K. Engle, MD

Terrence H.Jones, HD

R. Gary Hopkins, MO

William D. L Hunt, MD

Jill M. Herr, MD

I JO South Penn Street

Manheim, PA 17545 (717) 665-2496 Fax (717) 665-6345 www.LancasrerGeneral.org

(ouplement

Patient #6



MARYLAND CENTER FOR LIMB LENGTHENING & RECONSTRUCTION

2200 Kernan Drive Baltimore, Maryland 21207

Office: 410 448-3394 Toll free: 800 221-8425 EAX: 410 448-4229 www.umm.edu/mclir

January 31, 2000

Dror Paley, MD, FRCSC Co-Director

John E. Hersenberg, MD, FRCSC Co-Director

Kesta Tetoworth, MD

Bonnie Whest Administrator

Anil Bhave, PT Director, Gait Laboratory Coordinator, Clinical Research

Pamela Wilson, BSN, RN Lee Brady, BSN, RN

Nelson Hendler, M.D. Mensana Clinic 1718 Greenspring Valley Road Stevenson, MD 21153-9999

> Leafing MEDICAL RECORD: 08-83-51

Dear Dr. Hendler,

I am writing to you in reference to Lease I saw her in my clinic today following her sciatic nerve decompression. While she is experiencing typical postoperative pain from the approach to the sciatic nerve, she claims that the prior sciatic nerve pain that radiated down to her foot, is completely resolved. I have been following her for some cellulitis of her skin and a fluid collection which is now resolving as well.

I wanted to thank you very much for your correct diagnosis of Leslie and wanted to follow-up with you to let you know that her pain is now resolved.

Yours sincerely,

Dror Paley, M.D., F.R.C.S.C. Professor of Orthopaedic Surgery

University of Maryland School of Medicine University of Maryland Medical System

Specializing In:

- · Limb Lengthening and
- Correction Pediatric Orthopaedics
- Non-Unions Bone Defects

01/31/2000: JS. 02/01/2000: SJR