PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

ID #:	DATE:			
Over the last 2 weeks, how often have you been				
bothered by any of the following problems? (use "✓" to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
	add columns	-	+	+
(Healthcare professional: For interpretation of TOTA please refer to accompanying scoring card).	AL, TOTAL:			
10. If you checked off any problems, how difficult		Not diffi	cult at all	
have these problems made it for you to do	Somewhat difficult			
your work, take care of things at home, or get	Very difficult			
along with other people?		Extremely difficult		
		LAUCING	ory annount	

Copyright © 1999 Pfizer Inc. All rights reserved. Reproduced with permission. PRIME-MD© is a trademark of Pfizer Inc. A2663B 10-04-2005

PHQ-9 Patient Depression Questionnaire

For initial diagnosis:

- 1. Patient completes PHQ-9 Quick Depression Assessment.
- 2. If there are at least 4 ✓s in the shaded section (including Questions #1 and #2), consider a depressive disorder. Add score to determine severity.

Consider Major Depressive Disorder

- if there are at least 5 ✓s in the shaded section (one of which corresponds to Question #1 or #2)

Consider Other Depressive Disorder

- if there are 2-4 ✓s in the shaded section (one of which corresponds to Question #1 or #2)

Note: Since the questionnaire relies on patient self-report, all responses should be verified by the clinician, and a definitive diagnosis is made on clinical grounds taking into account how well the patient understood the questionnaire, as well as other relevant information from the patient.

Diagnoses of Major Depressive Disorder or Other Depressive Disorder also require impairment of social, occupational, or other important areas of functioning (Question #10) and ruling out normal bereavement, a history of a Manic Episode (Bipolar Disorder), and a physical disorder, medication, or other drug as the biological cause of the depressive symptoms.

To monitor severity over time for newly diagnosed patients or patients in current treatment for depression:

- 1. Patients may complete questionnaires at baseline and at regular intervals (eg, every 2 weeks) at home and bring them in at their next appointment for scoring or they may complete the questionnaire during each scheduled appointment.
- 2. Add up \checkmark s by column. For every \checkmark : Several days = 1 More than half the days = 2 Nearly every day = 3
- 3. Add together column scores to get a TOTAL score.
- 4. Refer to the accompanying **PHQ-9 Scoring Box** to interpret the TOTAL score.
- 5. Results may be included in patient files to assist you in setting up a treatment goal, determining degree of response, as well as guiding treatment intervention.

Scoring: add up all checked boxes on PHO-9

For every \checkmark Not at all = 0; Several days = 1; More than half the days = 2; Nearly every day = 3

Interpretation of Total Score

Total Score	Depression Severity
1-4	Minimal depression
5-9	Mild depression
10-14	Moderate depression
15-19	Moderately severe depression
20-27	Severe depression

PHQ9 Copyright © Pfizer Inc. All rights reserved. Reproduced with permission. PRIME-MD ® is a trademark of Pfizer Inc.

A2662B 10-04-2005

Patient Health Questionnaire-2 (PHQ-2)

Over the last 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
For office coding:	0	+	_+	
	= Total Score			

PHQ-2 Scores and Proposed Treatment Actions

The PHQ-2 consists of the first 2 questions of the PHQ-9. Scores range from 0 to 6. The recommended cut point is a score of 3 or greater. Recommended actions for persons scoring 3 or higher are one of the following:

- Administer the full PHQ-9
- Conduct a clinical interview to assess for Major Depressive Disorder
- 1. Korenke K, Spitzer RL, Williams JB. The Patient Health Questionnaire-2: Validity of a Two-Item Depression Screener. *Med Care*. 2003, Nov;41(11):1284-92.
- 2. Kroenke K(1), Spitzer RL, Williams JB, Löwe B. The Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales: a systematic review. *Gen Hosp Psychiatry*. 2010 Jul-Aug;32(4):345-59.

GAD-7 Anxiety

Over the <u>last two weeks</u> , how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day	
Feeling nervous, anxious, or on edge	0	1	2	3	
Not being able to stop or control worrying	0	1	2	3	
Worrying too much about different things	0	1	2	3	
4. Trouble relaxing	0	1	2	3	
5. Being so restless that it is hard to sit still	0	1	2	3	
Becoming easily annoyed or irritable	0	1	2	3	
Feeling afraid, as if something awful might happen	0	1	2	3	
Column totals	+		+	+ =	
Total score					
If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?					

Source: Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD-PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues. For research information, contact Dr. Spitzer at ris8@columbia.edu. PRIME-MD® is a trademark of Pfizer Inc. Copyright© 1999 Pfizer Inc. All rights reserved. Reproduced with permission

Somewhat difficult

Very difficult

Extremely difficult

Scoring GAD-7 Anxiety Severity

This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of "not at all," "several days," "more than half the days," and "nearly every day." GAD-7 total score for the seven items ranges from 0 to 21.

0-4: minimal anxiety

5-9: mild anxiety

Not difficult at all

10-14: moderate anxiety

15-21: severe anxiety

Trauma Screening Questionnaire (TSQ)

Your own reactions now to the traumatic event

Please consider the following reactions which sometimes occur after a traumatic event. This questionnaire is concerned with your personal reactions to the traumatic event which happened to you. Please indicate (Yes/No) whether or not you have experienced any of the following at least twice in the past week.

		No	Yes
1.	Upsetting thoughts or memories about the event that have come into your mind against your will		
2.	Upsetting dreams about the event		
3.	Acting or feeling as though the event were happening again		
4.	Feeling upset by reminders of the event		
5.	Bodily reactions (such as fast heartbeat, stomach churning, sweatiness, dizziness) when reminded of the event		
6.	Difficulty falling or staying asleep		
7.	Irritability or outbursts of anger		
8.	Difficulty concentrating		
9.	Heightened awareness of potential dangers to yourself and others		
10.	Being jumpy or being startled at something unexpected		

If you have answered yes to 6 or more questions you are encouraged to consider whether you think that some counseling support may be of benefit in helping you to lower your on-going reactions to the traumatic event.

Source: Brewin, C. R., Rose, S., Andrews, B., Green, J., Tata, P., McEvedy, C., Turner, S. & Foa, E. B. (2002) Brief screening instrument for post-traumatic stress disorder. *British Journal of Psychiatry*, 181, 158-162.

Behavioral Health/Trauma References:

Ak et al. Alexithymia, somatosensory amplification and counter-dependency in patients with chronic pain. Pain Clinic. 2004;16:43-51.

Akbaraly TN, Brunner EJ, Ferrie JE, Marmot MG, Kivimaki M, Singh-Manoux A. Dietary pattern and depressive symptoms in middle age. The British Journal of Psychiatry. 2009; 195(5): 408-413

Altan L, Korkmaz N, et al. Effect of Pilates training on people with fibromyalgia syndrome: A pilot study. Archives of Physical Medicine Rehabilitation . 2009;90:1983-1988.

American College Health Association. American College Health Association-National College Health Assessment II: Undergraduate Student Reference Group Executive Summary Fall 2016. Hanover, MD: American College Health Association; 2017

www.apa.org/ptsd-guideline/treatmets/prolongedexposure

www.apa.org/ptsd-guideline/treatmets/eye-movement-reprocessing

Apkarian AV. Pain perception in relation to emotional learning. Curr Opin Neurobiol. 2008;18:464-8

Arroll et al. Effect of the addition of a "help" question to two screening questions on specificity for diagnosis of depression in general practice: diagnostic validity study. BMJ. 2005 Oct 15;331(7521) Epub Sep 15.

Arroll et al. Screening for depression in primary care with two verbally asked questions: cross sectional study. BMJ. 2003 Nov 15;325(7424):1144-6.

Asbury, A.K. and H. L Fields (1984). "Pain due to peripheral nerve damage: an hypothesis." <u>Neurology</u> **34**(12): 1587-1590.

Baherer-Kohler S Burnout for experts prevtin in the context of living and working. New York: Springer; 2013.

Bachelor A. Clients' perception of the therapeutic alliance: A qualitative analysis. Journal of Counseling Psychology. 1995;42(3):323

Baker G. Ross et al., "The Canadian Adverse Events Study: The Incidence of Adverse Events Among Hospital Patients in Canada, "Canadian Medical Association Journal 170 no. 11(2004): 1678-86.

Baliki MN, et al. Corticostiatal functional connectivity predicts transition to chronic back pain. Nat Neurosci. 2012;15:1117-9.

Bandura A. 1986. Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, Prentice-Hall.

Bartholody C, Klokker L, Bandak E, et al. 2016. A standardized "rescue" exercise program for symptomatic flare-up of knee osteoarthritis: description and safety considerations. JOSPT 46(11):942-A16.

Bearmann D, Shafarman S. The Feldenkrais method in treatment of chronic pain: A study of efficacy and cost effectiveness. American Journal of Pain Management. 1999;9:22-27.

Bedi RP, Duff CT. Client as expert: A Delphi poll of clients' subjective experience of therapeutic alliance formation variables. Counseling Psychology Quarterly. 2014;27(1):1-18

Beith, I.D., Robins, EJ, and Richards, PR (1995). An assessment of the adaptive mechanisms within and surrounding the peripheral nervous system, during changes in nerve bed length resulting from underlying joint movement. Moving in on Pain. M. O. Shacklock. Australia, Butterworth-Heinemann.

Benedetti, F. (2011). The patient's brain-The Neuroscience behind the doctor-patient relationship. Oxford, NY: Oxford University Press.

Blackburn-Munro G, Blackburn-Monro RE. Chronic pain, chronic stress and depression: coincidence or consequence? Neurendocrinol. 2001;13:1009-1023

Bogduck, N. (2204). "The neck and headaches" Neurologic Clinics 22(1):151-171.

Bordin, ES. The generalizability of the psychoanalytic concept of the working alliance. Psychotherapy theory, research & practice. 1979;16(3):252

www.brainspotting.com/about-bsp/what-is-brainspotting

Bruehl et al. Pain-related effects of trait anger expression: neural substrates and the role of endogenous opioid mechanisms. Neuroscience Biobehavioral Review. 2009;33:375-491.

Burton et al. Psychosocial Predictors of Outcome in Acute and Subacute LBP Trouble. Spine. 1995

Butler, D.S. (2000). The sensitive nervous system. London, Churchill Livingstone.

Burns et al. Anger management style moderates effects of emotion suppression during initial stress on pain and cardiovascular response during subsequent pain-induction. Annals of Behavioral Medicine. 2007;34:154-165

Buysse et al. the Pittsburgh sleep quality index. A new instrument for psychiatric practice and research. Psychiatry Res. 1989;28(2):193-213.

Cady, M. Paindemic: A practical and holistic look at chronic pain, the medical system, and the antiPAIN lifestyle. 2016. Morgan James Publishing.

Cameron M. 2018. Physical agents in rehabilitation: An evidence based approach to practice. 5e. St. Louis, MO. Elsevier.

Caudill, MA. Managing pain before it manages you. 2002. Guilford Press Burns et al. Anger management style moderates effects of emotion suppression during initial stress on pain and cardiovascular response during subsequent pain-induction. Annals of Behavioral Medicine. 2007;34:154-165

Cartwright et al., "REM Sleep Reduction, Mood Regulation and Remission in Untreated Depression," Psychiatry Researc 1221, no.2 (2003):159-67

Castellano F. et al. Racial emotion recognition in alcohol and substance use disorders: a metaanalysis. Neurosci Biobehav Rev. 2015;59:147-154

Caudill, MA. Managing pain before it manages you. 2002. Guilford Press

Cepeda MS, Carr DB, Lau J, Alveraz H. 2006. Music for pain relief. The Cochrane database of systematic reviews, Issue 2, Chichester, John Wiley and Sons, Ltd.

www.cdc.gov/violenceprevention/aces/fastfact.html

Creek, J. Creative leisure opportunities. Neuro Rehabilitation. 2008; 23:299-304.

Celikel, et al. Alexithymia and anxiety in female chronic pain patients. Annals of General Psychiatry. 2006;5:13

Chang, S. B., S.H. Lee, et al. (2006). "Risk factor for unsatisfactory outcome after lumbar foraminal and far lateral microdecompression". Spine **31**(10): 1163-1167.

Cheatle MD, Foster S, Pinkett A, Lesneski M, Qu D, Dhingra L. Assessing and managing sleep disturbances in patients with chronic pain. Anesthesiol Clin. 2016;34(2):379-93.

Chung et al. STOP questionnaire: A tool to screen patients for obstructive sleep apnea. Anesthesiology. 2008;108(5):812-21.

Colton HR, Altevogt BM. Committee on sleep medicine and research. Sleep disorders and sleep deprivation: an unmet public health problem. Washington, DC: National Academics press 2006.

Coppieters, M. W., and A. M. Alshami (2007). "Longitudinal excursion and strain in the median nerveduring novel nerve gliding exercises for carpal tunnel syndrome." <u>Journal of Orthopeadic Research</u> **25**(7):972-980

Coppieters, M.W., K.E. Bartholomeeusen, et al. (2004). "Incorporating nerve-gliding techniques in the conservative treatment of cubital tunnel syndrome." Journal of Manipulative & Physiological Therapeutics **27**(9):560-568.

Coppieters, M.W. and D.S. Butler (2007). "Do 'sliders and tensioners' tension? An analysis of neurodynamic techniques and considerations regarding their application." Manual Therapy doi:10/1016/j.math.2006.12.0008.

Corrigan et al. Brainspotting: sustained attention, spinothalamictracts, thalamocortical processing, and the healing of adaptive orientation truncated by traumatic experience. Medical Hypotheses. 2015. 84:384–394.https://brainspotting.pro/page/what-brainspotting

Corrigan F, Grand D. Brainspotting: recruiting the midbrain for accessing and healing sensorimotor memories of traumatic activation. Med

Costa LM, Mahr CG, et al. 2011. Self-efficacy is more important than fear of movement in mediating the relationship between pain and disability in chronic low ack pain. Euro J of Pain 15:213-219.

Cutshall SM, Anderson PG, et al. Effect of the combination of music and nature sounds on pain and anxiety in cardiac surgical patients: A randomized study. Alternative Therapies. JUL/AUG 2011;17(4):16-23.

Darlow B, Fullen BM, Dean S, et al. 2012. The association between health care professional attitudes and beliefs and the attitudes and beliefs. Clinical management and outcomes of patients with low back pain: A systematic review. Euro J of Pain. 16:3-17.

Darnall, B. The opioid-free pain relief kit: 10 simple steps to ease your pain. 2016. Boulder, CO. Bull Publishing Company.

Darnall, B. Less pain, fewer pills: Avoid the dangers of prescription opioids and gain control over chronic pain. 2014. Bull Publishing Company

Darnall, B. Psychological treatment for the patient with Chronic pain: Clinic health psychology. 2018. American Psychological Association.

Davis et al. Are reports of childhood abuse related to the experience of chronic pain in adulthood? A meta-analytic review of the literature. Clinical Journal of Pain 2005;21:398-405

Delitto A, et al. Low Back pain. J Orthop Sports Phys Ther. 2012 Apr;42(4):A1-57De Peretti, F., J. P.Micalef, et al. (1989). "Biomechanics of the lumbar spinal nerve roots and the first sacral root within the intervertebral foramina" Surgical & Radiologic Anatomy 11(3):221-225.

Devor, M. and Z. Seltzer (1999). Pathophysiology of damaged nerves in relation to chronic pain. <u>Textbook of Pain</u>. P.D. Wall and R.Melzack. Edinburgh, Churchill Livingstone.

Dilley, A., S. Odeyinde, et al. (2007). "Longitudinal sliding of the median nerve in patients with non-specific arm pain. Manual Therapy doi:10.1016/j.math.2007.07.004

Doidge, N. The brain that changes itself: Stories of personal triumph from the frontiers of brain science. 2007. New York, Penguin Books.

Doidge, N. The brain's way of healing: Remarkable discoveries and recoveries from the frontiers of neuroplasticity. 2015. New York, Penguin Books.

Dommisse, G. F. (1994). The blood supply of the spinal cord and the consequences of failure. <u>Grieve's Modern Manual Therapy</u>. J. Boyling and N. Palastrana. Edinburgh, Churchill Livingstone.

Egli M., et al. Alcohol dependence as a chronic pain disorder. Neursci Biobehav Rev. 2012;36(10):2179-2192

Duberg A, Habgerg L, Sunvisson H, Moller M. Influencing self rated health among adolescent girls with dance intervention: A randomized controlled trial. JAMA Pediatric. Jan 2013;167(1):27-31.

Elizabeth, V. Another string to our bow: Participant writing as research method. Art. January 2008; 9(1).

Engel, GL. (1997). The need for a new medical model: A challenge for biomedicine. Science, 196 (4286), 129-136.

EPIC – Potsdam study. Ford ES, Bergmann MM, Kroger J, et al. Health living is the best revenge: findings from the European Prospective Investigation into Cancer and nutrition-Potsdam study. Arch Intern med 2009;169(15):1355-62

Faskick, V. et al. The hippocampus and TNF: Common links between chronic pain and depression. Neuroscience and Biobehavioral Reviews. 2015;53:139-159.

Ferri et al. A single question for the rapid screening of restless legs syndrome in the neurological clinical practice. Eur J Neurol. 2007;14(9):1016-21.

Fields HS. A motivation model of pain: the role of opioids. Proceedings of the 11th world congress on pain. Seattle, USA: IASP Press; 2006. p. 449-559.

Finan PH, Goodin BR, Smith MT. The association of sleep and pain: an update and a path forward. J. Pain. 2013;14(12):1539-52.

Finkelhor D, Turner HA, Shattuck A, Hamby SL. Prevalence of childhood exposure to violence, crime, and abuse: Results from the National Survey of Children's Exposure to Violence. JAMA Pediatr. 2015;169(8), 746-754

Franklin KBJ. Analgesia and abuse potential: An accidental association or a common substrate? pharmacology, biochemistry and behavior. 1998;59:993-1002.

Galecki P, Mossakowska-Wójcik M. The anti-inflammatory mechanism of antidepressants – SSRIs, SNRIs. Prog Neuro-Psychopharmacology Biol Psychaitry. 2018;80:291-294.

Gardner T, Refschauge K, McAuley J et al. 2015. Patient led goal setting in chronic low back pain – What goals are important to the patient and are they aligned to what we measure? Patient education and counseling. 98:1035-1038.

Gardner T, Refschauge K, McAuley J et al. Goal setting in chronic low back pain. What is current practice and is it affected by beliefs and attitudes? Physiother Theory Pract Jan 18:1-11.

Gifford L. 2014. Aches and Pain. Cornwall: Wordpress

Gladwell V, Heed S, et al. "Does a program of Pilates improve chronic non-specific low back pain?" J Sport Rehabilitation. 2006;15;338-350.

Goddard, M.D. and J.D. Reid (1965). "Movements induced by straight leg raising in the lumbo-sacral roots, nerves and plexus, and in the intrapelvic section of the sciatic nerve." <u>Journal of Neurology, Neurosurgery, and Psychiatry</u> **28:** 12-18

Grander et al. Sleep disparity, race/ethnicity, and socioeconomic position. Sleep Medicine. 2016;18:7-18.

Grant S. Are there blueprits for building a strong patient-physician relationship? American Medical Association Journal of Ethics. 2009;11(3).

Grotle et al. Prognostic factors in first-time seekers do to acute LBP. Eur J Pain. 2007;11:290-29

Grotte M, Vollestad NK, Box JI. Screening for yellow flags in first-time acute low back pain: reliability and validity of a Norwegian version fo the acute low back pain screening questionnaire. The Clinical Journal of pain. June 2006;22(5):458-467

Hack, G. D., R. T. Koritzer, et al. (1995). "anatomic relation between the rectus capitis posterior minor muscle and the dura mater." <u>Spine</u> **20**(23):2484-2486

Hashmi, JA, et al. Shape shifting pain: chronification of back pain shifts brain representation from nociceptive to emotional circuits. Brain.2013;136:2751-2768.

Hanscom, D. Back in Control, 2nd Edition. 2017: Vertus Press.

Harris, D. Meditation for figety skeptics; A 10% happier how to book. Random house publishing group.

Higgins KS, Birnie KA, Chambers CT eat al. 2015. Offspring of parents with chronic pain: A systematic review and meta-analysis of pain, health, psychological, and family outcomes. PAIN, 156,2256-2266.

Hildebrandt, J. and J. Jansen (1984). "Vascular compression of the C2 and C3 roots-yet another cause of chronic intermittent hemicrania?" Cephalalgia 4(3):167-170.

HillierS, Worley A. The effectiveness of Feldenkrais method: A systematic review of the evidence. Evid Based Complement Alternat Med. 2015;2015:752160.

Hodgdon H, et al. Neurofeedback improves executive function in PTSD. Submitted for publication

Hui E, Tsan-keung Chui B, Woo J. Effects of dance on physical and psychological well-being in older persons. Archieves of gerontology and geriatrics. 2009;49: e45-e50.

Igarashi, T., S. Yabuki, et al. (2005). "Effect of acute nervoe root compression on endoneurial fluid pressure and blood flow in rat dorsal root ganglia." <u>Journal of Orthopedic Research</u>. **23**(2): 420-424.

Jabbur, S.J. and N. E. Saade (1999). "From electrical wiring to plastic neurons: evolving approaches to the study of pain. Pain **Suppl 6:** S87-92.

Jacka FN, Pasco JA, Mykletun A, William LF, Hodge AM, O'Reilly SL, Nicholson GC, Kotowicz MA, Berk M. Associaion of western and traditional diets with depression and anxiety in women. Am J Psychiatry. 2010 Mar;167(3):305-11.

Jamison RN. (2011). Nonspecific treatment effects in pain medicine. Pain clinical updates, 19(2),1-7).

Jansen, J. (2000). "Surgical treatment of non-responsive cervicogenic headache." <u>Clinical & Experimental</u> Rheumatology **18**(2 Suppl 19): S67-70.

Jansen, J, A. Bardosi, et al. (1989). "Cervicogenic, hemicranial attacks associated with vascular irritation or compression of the cervical nerve root C2. Clinical manifesations and morphological findings." Pain **39**(2):203-212.

Jansen, J., E. Markakis, et al. (1989). "Hemicranial attacks or permanent hemicrania-a sequel of upper cervical root compression." <u>Cephalalgia</u> **9**(2):123-130.

Johns Mw. A new method for measuring daytime sleepiness: the Epworth sleepiness scale. Sleep 1991;14(6):540-5.

Johnson, E. K., and C. M. Chiarello (1997). "The slump test: the effects of head and lower extremity position on knee extension." <u>Journal of Orthopaedic & Sports Physical Therapy</u> **26**(6):310-317.

Joseph CN et al. Slow breathing improves arterial baroreflex sensitivity and decreases blood pressure in essential hypertension. Hypertension. 2005;46:714-18.

Jull, G., and K. Niere (2004). The cervical spine and headache. <u>Grieve's Modern Manual Therapy: The Vertebal Column.</u> J. Boyling, Jull GA. London, Churchill Livingstone.

Jull, G., P. Trott, et al. (2002). "A randomized controlled trial of exercise and manipulative therapy for cervicogenic headaches." Spine **27**(17):1835-1843; discussion 1843.

Kabot-Zin, Jon. Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. Ransom house publishing group.

Katon, W, et al. Chronic pain: lifetime psychiatric diagnoses and family history. Am J Psychiatry. 1985;142(10):1156-1160.

Kendall NAS, Linton SL, Main CJ. Guide to assessing psychosocial yellow flags in acute low back pain: Risk factors for long term disability and workless. Wellington: Accident Rehabilitation & compensation Insurance Corporation of New Zealand and the National health committee; 1997.

King, B. The Laughing Cure. 2016. Skyhorse Publishing

Kivimaki et al. Work stress and incidence of newly diagnosed fibromyalgia prospective cohort study. Journal of Psychosomatic Research. 2004;57:41-422

Ko, Kientz, Choe, Kay, Landis, Watson. Consumer sleep technologies: A review of the landscape. JCSM. 2015;11(12):1455-1461.

Kopera M., et al. Relationships between components of emotional intelligence and physical pain in alcohol-dependent patients. J Pain Res. 2017;10:1611-1618.

Kuncewicz, E., E. Gajewska, et al. (2006). "Piriformis muscle syndrome" <u>Annales Academiae Medicae Stetinesis</u> **52**(3):99-101; discussion 101.

Kuppusamy M, et al. Effects of bramari pranayama on health-A systematic review. Journal of Traditional and complementary medicine. 2018;8(1):11-16.

Kutner M, Greenberg E, Jin Y, Paulsen C. 2006. The health literacy of America's adults: Results from the 2003 National assessment of adult literacy (NCES 2006-483). U.S. Department of Education. Washington Center for Education Statistics.

Lai JS, Hiles S, Bisquera A, Hure AJ, McEvoy M, Attia J. A symematic review and meta-analysis of dietary patterns and depression in community dwelling adutls. Am J Clin Nutr. 2014 Jan;99(1):181-97.

Ledgerwood A, Boyolstun AE. Sticky prospects: Loss frames are cognitively stickier than gain grames. J Exp Psychol Gen. Feb 2014;143(1):376-385.

Lenzen, Saet et al. 2017. Disentangling self-management goal setting and action planning: A scoping review. PLoS ONE 12(11):e0188822.

LePort A, Gueguen A, Kesse-Guyot E, et al. Association between Dietary Patterns and Depressive symptoms over time: a 10 year follow up study of the GAZEL cohort. Sun Q, ed. PLoS ONE. 2012;7(12):e51593

Mastin, Bryson, Corwyn. Assessment of sleep hygiene using the sleep hygiene index. J Behav. Med 2006;29(3):223-7.

Maitland, G. (1985). "The slump test: examination and treatment" <u>Australian Journal of Physiotherapy</u> **31:** 215-219

Matsoda P, Christodoulopoulou T, et al. Music's use for anesthesia and analgesia. The Journal of alternative and complementary Medicine. 2013;19(4):298-307

Melzack, Ronald and Joel Katz. "Pain in the 21st century: The neuromatrix and beyond" Psychological Knowledge in court. Sringer US, 2006, 129-148.

Mika, J, Zychowska M, Makuch W, Rojewska E, Przewlocka B. Neuronal and immunological basis of action of antidepressants in chronic pain-clinical and experimental studies. Pharmocol Reports. 2013;65(6):1611-1621.

Levine P. Healing Trauma: A pioneering Program for restoring the wisdom of your body. 2008. Boulder, CO. Sounds True, Inc.

Levine P. In an unspoken voice: How the body releases trauma and restores goodness. 2010. Berkley, CA. North Atlantic Books.

Levine P. Waking the tiger: Healing trauma. 1997. Berkley, CA. North Atlantic Books.

Louw A. Pain neuroscience education: Teaching people about pain. 2018. Orthopedic physical therapy products.

Lucette Lagnado, "U.S. Probes Use of Antipsychotic Drugs on Children," Wall Street Journal, August 11, 2013.

Lumely et al. Pain and Emotion: A Biopsychosocial Review of Recent Research. J Clin Psychol. 2011 Sep:67(9):942-968

Lumley et al. Alexithymia and pain in three chronic pain samples: Comparing Caucasians and African Americans. Pain Medicine. 2005;6:251-261.

Lombardo et al. The help question doesn't help when screening for major depression: external validation of the three-question screening test for primary care patients managed for physical complaints. BMC Med. 2011 Oct 18;9:114. doi: 10.1186/1741-7015-9-114.

Lumely et al. Pain and emotion: A biopsychosocial review of recent research. J clin Psychol. 2011 Sept: 67(9):942-968.

Lumely, MA. The two views of emotion in psychosomatic research. Journal of Psychosomatic Research. 2010;68:219-221.

Lundborg, G. and B. Rydevik (1973) "Effects of stretching the tibial nerve of the rabbit. A preliminary study of the intraneural circulation and the barrier function of the perineurium." <u>Journal of Bone & Joint Surgery-British</u> Volume **55**(2):390-401.

Ma X, Yue Z-Q, Gong Z-Q, et al. The effect of diaphragmatic breathing on attention, negative affect and stress in healthy adults. Frontiers in Psychology. 2017; 8:874.

Mackinnon, S. E. (1992). "Double and multiple "crush" syndromes. Double and multiple entrapment neuropathies." Hand Clinics 8(2):369-390.

Maitland, G. (1985). "The slump test: examination and treatment" <u>Australian Journal of Physiotherapy</u> **31:** 215-219

Mason H et al. Cariovascular and respiratory effect of yogic slow breathing in the yoga beginner. What is the best approach? Evid based compement alternat med 2013. 2013:743504

Miciak, M. (2015). Bedside Matters: A conceptual framework of the therapeutic relationship in physiotherapy. (Doctor of Philosophy), University of Alberta.

Mollayeva et al. The Pittsburgh sleep quality index as a screening tool for sleep dysfunction in clinic and non-clinical samples: A systematic review and meta-analysis. Sleep Med Rev. 2016;25:52-73.

Morin et al. The insomnia severity index: psychometric indicators to detect insomnia cases and evaluate treatment response. Sleep. 2011;34(5):601-8

Mosel GL. Do training diaries affect and reflect adherence to home programs? Arthritis Rheum. Aug 15, 2006; 55(4):662-664.

Moseley L. Painful yarns: Metaphors and stories to help understand the biology of pain. 2007. Orthopedic Physical Therapy Products.

Musik MA et al. Volunteering and depression: the role of psychological and social resources in different age groups. Soc Sci Med; 2003 Jan;56(2):259-69.

Nagappa, et al. Validation of the STOP-Bang questionnaire as a screening tool for obstructive sleep apnea among different populations: A systematic review and meta-analysis. PLoS One. 2015, 10(12) e0143687.

Naik GS, Gaur GS, Pal GK. Effect of modified slow breathing exercise on perceived stress and basal cardiovascular parameters. International Journal of Yoga. 2018;11(1):53-58

Nakamichi, K. and S. Tachibana (1985). "Restricted motion of the median nerve in carpal tunnel syndrome." <u>Journal of Hand Surgery-British Volume</u> **20**(4):460-464.

Nesse RM, Ellsworth PC. Evolution, emotions and emotional disorders. American Psychologist. 2009;64:129-139.

Nicholas MK, Linton SJ, Watson PJ, Main CJ. 2011. "Decade of the flags" working group. Early identification and management of psychological risk factors ("yellow flags") in patients with low back pain: A reappraisal. Physical Therapy 91:737-753.

Nickel, B et al. Words do matter: A systematic review on how different terminology for the same condition influences management preferences. BMJ Open 2017;7:e014129

www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml

Nowakowska-Domagala K and Jablkowska-Gorecka K. The Interrelationships of coping styles and professional burnout among physiotherapists. Medicine (Baltimore). 2015 July;94(28):1.

Nutt, Wilson, Paterson. Sleep disorders as core symptoms of depression. Dialogues in clinical neuroscience. 2008;10(3):329-336.

Ogata K. and M. Naito (1986). "Blood flow of peripheral nerve: effects of dissection, stretching and compression." Journal of Hand Surgery-American Volume **11B**(1):10-14.

Ohayon M et al. Sleep health 3 (2017) 6-19.

O'Keeffe M, Cullinane P, Hurley J, et al. What influence patient-therapist interactions in musculoskeletal physical therapy? Qualitative systematic review meta-sysnthesis. Physical therapy. 2016;96(5).

Olfson, F. et al., Trends in Antipsychotic Drug Use by Very Young, Privately Insured Children," Journal of the American Academy of Child and Adolescent Psychiatry 49, no.1 (2010): 13-23.

Parke, W. W. and R. Watanabe (1985). "The intrinsic vasculature of the lumbosacral spinal nerve roots." <u>Spine</u> **10**(6):508-515.

Pennebaker. Opening up: the healing power of expressing emotions. 2012; New York, Guilford Press: p 12.

Pikus, H.J. and J. M. Phillips (1995). "Characteristics of patients successfully treated for cervicogenic headache by surgical decompression of the second cervical root." <u>Headache</u> **35**(10):621-629

Pikus, H.J. and J. M. Phillips (1996). "Outcome of surgical decompression of the second cervical root for cervicogenic headache." Neurosurgery **39**(1):63-70; dicussion70-71.

Pincus et al. A Systematic Review of Psychological Factors as Predictors of Chronicity/Disability in Prospective Cohorts of LBP. Spine 2002

Plemmons, G., et al. abstract, "Trends in Suicidality and Serious Self-Harm for Children 5-17 Years at 32 U.S. Children's Hospitals, 2008-2015," 2017 Pediatric Academic Societies Meeting in San Francisco.

Pugh JD, Williams AM. Feldenkrais method empowers adults with chronic back pain. Holist Nurs Pract 2014 May-June;28(3):171-83.

Pustulka-Piwnic U et al. Burnout syndrome in physical therapists –demographic and organizational factors. Med Pr. 2004;65(4):453-62.

www.ptsd.va.gov/understand tx/mes for-ptsd.asp

Quartanat et al. Anger suppression, ironic processes and pain. Journal of Behavioral Medicine. 2007;30:455-469.

Raftery, M.N., K. Sarma, et al (2011). "Chronic apin in the Republic of Ireland—community prevalence, psychosocial profile and predictors of pain-related disability: results from the Prevalance, Impact and Cost of Chronic Pain (PRIME) study, part 1". Pain 152 (5):1096-1103.

Renyolds F. Coping with chronic illness and disability through creative needlecraft. British Journal of Occupation Therapy. August 1997;60(8): 352-356.

Riley J, Corkhill B, Morris C. The benefits of knitting for personal and social wellbeing in adulthood: findings form an international survey. British Journal of Occupational Therapy. 2013;76(2): 50-57

Raymond MW, Webster BS, Stover HS, Simon H. 2000. The relation between pain intensity, disability, and the episodic nature of chronic and recurrent low back pain. Spine 25(7):834-841.

Roehrs et al. 2015. Sleep in America® poll.

Russo MA, Santarelli DM, O'Rourke D. The physiological effects of slow breathing in the healthy human. Breathe. 2017;13(4):298-309.

Sacks, V, Murphey D, Moore K. Research brief: Adverse Childhood Experiences: National and state-level prevalence. Child Trends: July 2014. Publication #2014-28

Sacks, V, Murphey D. The prevalence of adverse childhood experiences, nationally, by state, and by race or ethnicity. Child Trends: February 12, 2018.

Sanchez-Villegas A, Toledo E, de Irala J, Ruiz-Canela M, Pla-Vidal J, Martinez-Gonzalez MA. Fast-food and commercial baked goods consumption and the risk of depression. Public Health Nutr. 2012 mar; 15(3):424-32.

Saoji AA, et al. Effects of yogic breath regulation: A narrative review of scientific evidence. Journal of Ayurveda and integrative medicine.2018

Sapolsky RM. Why Zebras Don't Get Ulcers: The acclaimed guide to stress, stress-related diseases and coping. 2004. W.H. Freeman. New York.

Sapolsky RM. Behave: The biology of humans at our best and worst. 2017. New YorkPenguin Books.

Salovey P and Mayer JD. Emotional Intelligence.: Imagination, cognition and personality. 1990;9:189

Sayar et al. Alexithymia and anger in patients with fibromyalgia. Clinical Rheumatology. 2004;23:441-448.

Scaer, Robert C.: The Trauma Spectrum. Hidden Wounds and Human Resiliency. W.W. Norton & Company, N.Y. & London, 2005

Schaufeli WB et al. On the clinical validity of the Maslach Burnout Inventory and the burnout measure. Psychol Health. 2001;16:565-582.

Schmidt SG. Recognizing potential barriers to setting and achieveing effective rehabilitation goals for patients with persistent pain. Physiotherapy theory and practice. July 2016;32(5):415-426.

Schulte EM, Avena NM, Gearhardt AN. Which foods may be addictive? The roles of processing, fat content and glycemic load. Weir TL ed. PLoS ONE. 2015;10(2):e0117959.

Seal, K.H. et al., "Bringing the War Back Home: Mental Health Disorders Among 103,788 U.S.

Veterans Returning from Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities," Archives of Internal Medicine 167, no. 5 (2007): 476-82.

Sengupta P. Health impacts of yoga and pranayama: A state-of-art review. International journal of preventive medicine. Jul 2012;3(7):444-458.

Shacklock, M. (1995). "Neurodynamics" Physiotherapy 81: 9-16.

Shacklock, M. (2005). Clinical Neurodynamics. Edinbugh, Elsevier.

Sidarta A, Vahdat S, et al. Somatic and reinforcement-based plasticity I nthe intial stages of human motor learning. J Neruosci. 2016 Nov 16;36(46):11682-11692

Siengsukon, Al-Dughmi, Stevens. Sleep Promotion: Practical infomraiton for physical therapists. Phys Ther. 2017;97(8):826-836.

Siddiqui, M., E. Kradimas, et al. (2006). "Influence of X stop on neural foramina and spinal canal area in spinal stenosis." Spine **31**(25):2958-2962. 30:2039-2044.

Song R, Lee EO, et al. Effects of Tai Chi exercise on pain, balance, muscle strength and perceived difficulties in physical functioning in older women with osteoarthritis: A randomized clinical trial. The Journal of Rheumatology. 2003.

Stickglod, R. "EMDR: A Putative Neurobiological Mechanism of Action," Journal of Clinical Psychology 58 (2002):61-75

Strack F, et al. Inhibiting and facilitating conditions of the human smile: a nonobtrusive test of the facial feedback hypothesis. Journal of Personality and Social Psychology. 1988:54(5)&68-777.

Stanton TR, Henschke N, Maher CG, et al. 2008. After an episode of acute low back pain, recurrence is unpredictable and not as common as previously thought. Spine 33(26):2923-2928.

Stinley NE, Norris DO, Hinds PS. Creating mandalas for the management of acute pain symptoms in pediatric patients. Art Therapy: Journal of the American Art Therapy Association. 2015; 32(2):46-53.

Subramaniam M. et al. Psychiatric morbidity in pain conditions: results from the Singapore Mental Health Study. Pain Res Manag. 2013;18(4):185-190.

Sugawara, O., Y. Atsuta, et al (1996). "The effects of mechanical compression and hypoxia on verve root and dorsal root ganglia. An analysis of ectopic firing using an in vitro model." Spine **21**(18):2089-2094.

Suri P, Rainville J, Fitzmaurice GM et al. 2011. Acute low back pain is marked by variability: An internet-based pilot study BMC Musculoskeletal Disorders 2011, 12:220

Suri P, Rainville J, Schepper DE et al. 2018. Do physical activities trigger flare-ups during an acute low back pain episode? A longitudinal case-crossover feasibility study. Spine 15;43(6):427-433

Taylor, Lichstein, Durrence, Reidel, Bush. Epidemiology of Insomnia, depression and anxiety. Sleep. Nov 2005;28(11):1457-1464

Thorberg FA, et al. Alexthymia and alcohol use disorders: a critical review. Addic Behav. 2009;34(3):247-245.

U.S. Department of Health and Human Services, Administration on Children, You and Families, Child Maltreatment 2007, 2009

Van der Kolk et al. Neurofeedback for PTSD, "submitted for publication

Van der Kolk, B. The Body Keeps the Score. 2015. Penguin Books.

Von Piekartz, H. J. M., S. Schouten, et al (2007). "Neurodynamic responses in children with migraine or cervicogenic headache versus a control group. A comparative study." <u>Manual Therapy</u> **12**(2):153-160

Vranich, B. Breathe: The simple revolutionary 14 day program to improve your mental and physical health. 2016. Griffin.

Wall. P.D. and R. Melzack (2005). <u>Textbook of Pain.</u> London, ElsevierWalkup, JT et al., Cognitive Behavioral Therapy, Sertraline, or a Combination in Childhood Anxiety N Engl J Med 2008; 359:2753-2766December 25, 2008DOI:10.1056/NEJMoa0804633

Walker M. Why we Sleep: Unlocking the power of sleep and dreams. 2017. New York, Scribner.

Wamsley, EJ et al., "Dreaming of a Learning Task Is Associated with Enhanced Sleep-Dependent Memory Consolidation," Current Biology 20, no. 9 (May 11, 2010); 850-55.

Wang C, Schmid CH, et al. A randomized trial of Tai Chi for fibromyalgia. The New England Journal of Medicine. 2010; 363:743-54.

Wang C, Collett JP, Lau J. The effects of Tai Chi on health outcomes in patients with chronic conditions. Arch Intern. Med 2004;164:493-501.

Watson P, Kendall N. Assessing psychosocial yellow flags. In: Gifford LS, ed Topical Issues in Pain 2. Falmouth: CNS Press; 2000

Wiesler, E.R., G.D. Chloros, et al (2006). "Ultrasound in the diagnosis of ulnar neuroplathy at the cubital tunnel." Journal of Hand Surgery-American volume **31**(7):1088-1093.

Wiesler, E.R., G.D. Chloros, et al (2006). "The use of diagnostic ultrasound in carpal tunnel syndrome" <u>Journal of</u> Hand Surgery-American volume **31**(5):726-732.

Wilski M, et al. Work locs of control and burnout in Polish physiotherapists: the mediating effect of coping skills. Int J Occup Med Environ Health. 2015;28(5):875-89.

Whooley MA et al. Case-finding instruments for depression. Two questions are as good as many. J Gen Intern Med. 1997 Jul;12(7):439-45.

Wright J, Chung MC. Mastery or mystery? Therapeutic writing: A review of the literature. British Journal of Guidance & Counseling. 2001. 29:3, 277-291.

Wright, T.W., F. Glowczewskie Jr., et al (2001). "Ulnar nerve excursion and strain at the elbow and wrist associated with upper extremity motion." <u>Journal of Hand Surgery-American volume</u> **26**(4):655-662.

Woolf, C.J. and R.J. Mannion (1999). "Neuropathic pain: aetiology, symptoms, mechanisms, and management." <u>Lancet</u> **353**(9168):1959-1964

Zelman DC, et al. The effects of induced mood on laboratory pain. Pain. 1991;46(1):105-111

Zoffness, R. (2019). The chronic pain and illness workbook for teens: CBT and mindfulness-based practices to turn the volume down on pain. Oakland, CA. New Harbinger Publications, inc.

Zondervan DK, Friedman N, Chang E, Zhoa X, AugsburgerR, Reinkensmeyer DJ, Cramer SC. Home-based hand rehabilitation after chronic stroke: Randomized, controlled single-blind trial comparing the MusicGlove with a conventional exercise program. J Rehabil Res Dev. 2016;53(4):457-72

Zou Y et al. Meta-anaylsis fo effects of voluntary slow breathing exercises for control of heart rate and blood pressure in patients with cardiovascular diseases. Am J Cardiol. 2017 Jul 1;120(1):148-153

Fellowship of Pain Science course work through Evidence in Motion, including lectures taught by:

- Kory Zimney PT, PhD
- Jessie Podolak PT, DPT, FPS
- Mark Shepherd PT, DPT, OCS, FAAOMPT
- Stephen Schmidt PT, MPhysio
- Debbie Rico PT, DPT
- Lindsay Marth MA, OTR/L, BCPR, TPS
- Rebecca Vogsland DPT, OCS, CMTPT, CSMT, TPS
- Brett Neilson PT, DPT
- Dana Scott PT, SPT, CSMT, TPS
- Mai Huong Ho-Tran PT, DPT, TPS, RYT, TCR