

PHARMACIST & TECHNICIAN CE:

What Matters to You? Applying Whole Health Care to Pain Management

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The United States healthcare system has been described as inefficient with a low return on investment in extending the average life expectancy of the population.¹ This has been encouraging clinicians to scrutinize the foundation of the traditional approaches to healthcare. Currently, the biomedical approach to healthcare - which focuses primarily on the biological factors behind an illness and excludes psychological, environmental and social influences on a person - is predominant. Clinicians who are looking to change from the traditional are starting to adopt a biopsychosocial approach in order to look at the whole person. This is also known as Whole Health.

When implementing a Whole Health approach to care, the patient is empowered and equipped to participate in their own health outcomes.² Whole Health leverages mindfulness and self-management techniques to emphasize the fundamental components of a healthy lifestyle including nutrition, physical activity, sleep, social relationships, and the environment. This patient-centered approach supplements the traditional model and integrates complementary strategies such as yoga, tai chi, and acupuncture. Complementary and integrative health options are often welcomed by patients that feel stuck in the biomedical approach to healthcare.

The Whole Health approach, piloted in the Veterans Health Administration (VHA) in 2011, can be visualized through “The Circle of Health” (Figure 1). The Circle of Health can be incorporated for any patient and adapted to nearly any health condition. As the Whole Health approach is vastly different from the biomedical approach that many clinicians are more familiar with, the University of Wisconsin-Madison partnered with the VHA to create a Whole

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Learning Objectives

- Define the Whole Health approach
- Describe the role of the pharmacy team in Whole Health care
- Recognize patients that would benefit from goal setting
- Identify evidenced-based non-pharmacologic approaches for various types of pain

Health library to help advance skills of clinicians who might not be sure where to start when incorporating Whole Health into their practice.²

The Circle of Health (Figure 1) depicts the patient at the center of their own well-being. Patients are encouraged to focus beyond just their symptoms and are invited to explore their life aspirations and what really matters to them. This exploration guides goal setting for their care. Those with the same list of health problems will have very different goals, and ultimately, have very different health plans. Note how the “Me” circle is surrounded by “Mindful Awareness.” Central to mindful awareness is the ability to be fully aware and present in the current situation in a non-judgmental way. This means noticing symptoms, as well as behaviors and thought patterns, and how they affect health. As we extend outward in the Circle of Health, it broadens to incorporate self-care first, then professional and complementary care, and finally the community of the patient.

Even though Whole Health is intended for treatment across the continuum, it is particularly applicable to patients with chronic pain. Within chronic pain management, there is an increasing focus on non-opioid and non-medication treatments. Therefore, the pharmacy team needs to become knowledgeable

of non-medication treatments, such as complementary and integrative health treatment modalities. Within the context of pain management, it’s important to think of the person rather than the disease state. However, getting started can be challenging.

The purpose of this review article is to describe how the Whole Health approach fits into a pharmacy setting, with an emphasis on pain management. This article will outline opportunities for pharmacists and pharmacy technicians to incorporate a Whole Health approach into their practice.

Getting Started

Applying Whole Health Care to Pain Management

Patient interactions can easily go in the wrong direction when a patient feels that their goals do not align with the health care team. A provider may place a high priority on lowering the dose of oxycodone, whereas the patient would like to be able to walk their dog but their back hurts too much. If the provider starts the visit by talking about the risks of opioid overdose, the patient may feel belittled and admonished, and no closer to their goal. The patient may leave the interaction feeling like they are labeled as a drug addict and may withdraw from care. To better guide the conversation, it is recommended

to first ask your patient “What matters to you?”² The answer to this question can then guide the visit to help the patient achieve what is important to them. It is also important to be aware of prior knowledge or understanding a patient has developed about their condition. Knowing a patient’s prior knowledge helps the health care team meet the patient’s level of understanding instead of assuming what the patient may or may not know. After establishing the patient’s goals and baseline knowledge, pain management then needs to focus on these goals.

Whole Health utilizes functional goals instead of traditional pain scores to assess effectiveness of a pain treatment. Functional goals are different than traditional pain scores in that they help patients think about what would be different in their life if pain interfered less. Treating according to a pain score does not always help to meet a functional goal as treatments may have undesirable side effects. For example, increasing an opioid medication may lower the pain score, but result in sedation that prevents the patient from leaving the house. The patient is therefore no closer to walking their dog than they were on the lower dose. Functional goals may be difficult to obtain as many patients feel that they have low function and cannot conceive how their life would be different with less pain. In this circumstance, patients might benefit from meeting with a health coach for ongoing goal setting discussions.

To help determine goals, patients must first examine their current state. Completing a personal health inventory is a cornerstone of the Whole Health process. See Figure 2 for a sample.

Completing the personal health inventory helps patients to look at their life in its current state and contrast that to their desired state by factoring in health, personal, and social goals. In some cases, a personal health inventory can identify when basic needs are not being met.³ After completing a personal health inventory, with patient’s goals and personal agenda identified, the biopsychosocial model can apply evidence-based Whole Health options to create a personal health plan.

FIGURE 1. The Circle of Health

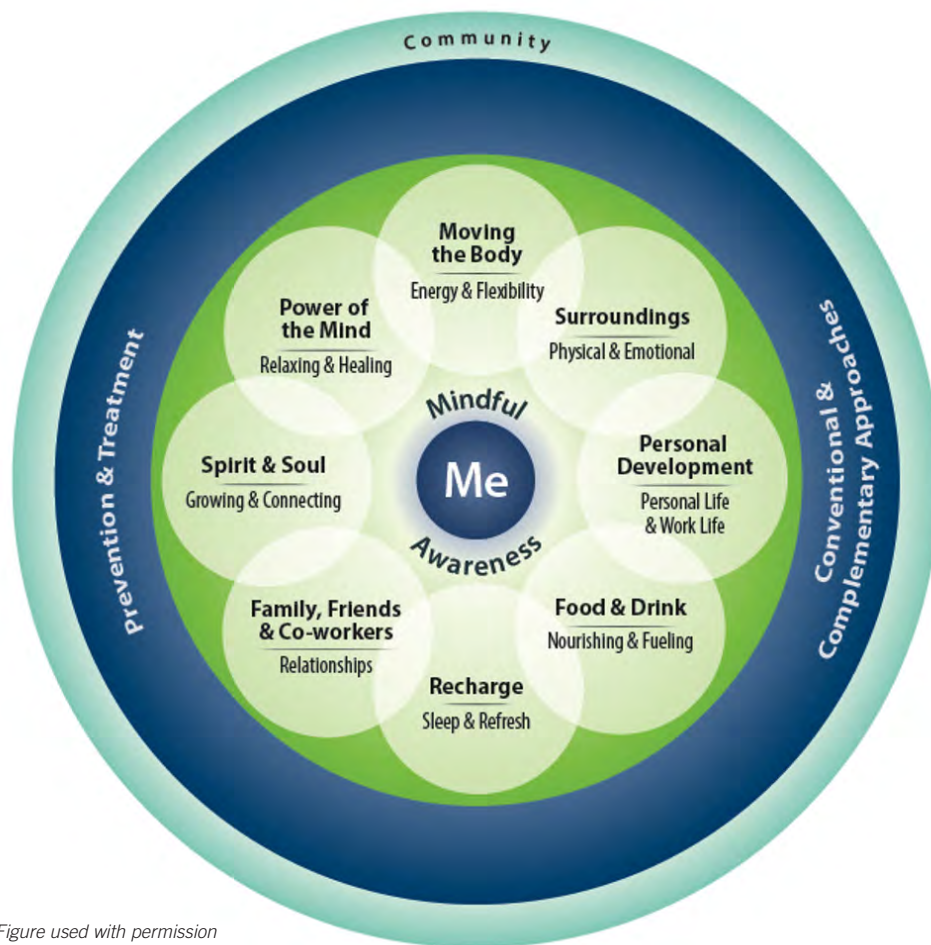


Figure used with permission

Review of Select Whole Health Treatments

The Whole Health approach encompasses a wide variety of complementary treatments. Evidence for many complementary treatments is often low quality in part due to the inherent challenges of blinding in clinical trials evaluating physical and mind-body therapies. However, these treatments are generally low risk and the potential benefits, for most patients, will outweigh potential risks. Discussion of all complementary treatments is beyond the scope of this article. Therefore, this review has been limited to the most commonly utilized treatments⁴ which a pharmacist may be likely to encounter, or recommend in practice. Additional non-pharmacologic treatments and indications may be found in Table 1.

Exercise-Based Therapies

Exercise plays an important role for those suffering from chronic pain by altering pain perception through increased active coping skills, strength, flexibility and functional capacity.⁵ For patients with fibromyalgia, a 2013 Cochrane review found statistically significant differences favoring resistance training interventions over control group(s) in multidimensional function.⁶ The review found improvements in Fibromyalgia Impact Questionnaire (total score decreased 16.75 units on a 100-point scale; 95% CI -23.31 to -10.19), self-reported physical function (lower scores indicate better health) (-6.29 units on a 100-point scale; 95% CI -10.45 to -2.13), pain (-3.3 cm on a 10-cm scale; 95% CI -6.35 to -0.26), tenderness (-1.84 out of 18 tender points; 95% CI -2.6 to -1.08), and muscle strength (27.32 kg force on bilateral concentric leg extension; 95% CI 18.28 to 36.36).⁶ A 2010 report from

FIGURE 2. Sample Personal Health Inventory

Personal Health Inventory

Use this circle to help you think about your whole health.

- All areas are important and connected.
- The body and mind have strong healing abilities.
- Improving one area can help other areas.
- The inner ring represents your mission, aspirations, or purpose. Your care focuses on you as a unique person.
- Mindful awareness is being tuned in and present.
- Your self-care and everyday choices make up the green circle.
- The next ring is professional care (tests, medications, supplements, surgeries, examinations, treatments, and counseling). This section includes complementary approaches like acupuncture and yoga.
- The outer ring includes the people and groups who make up your community.

Rate where you feel you are on the scales below from 1-5, with 1 being miserable and 5 being great.

Physical Well-Being				
<input type="radio"/> 1 Miserable	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5 Great
Mental/Emotional Well-Being				
<input type="radio"/> 1 Miserable	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5 Great
Life: How is it to live your day-to-day life?				
<input type="radio"/> 1 Miserable	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5 Great

What is your mission, aspiration, or purpose? What do you live for? What matters most to you? Write a few words to capture your thoughts:

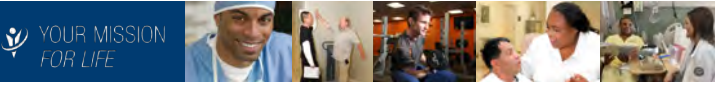
Where You Are and Where You Would Like to Be
 For each area below, consider "Where you are" and "Where you want to be". Write in a number between 1 (low) and 5 (high) that best represents where you are and where you want to be. You do not need to be a "5" in any of the areas now, nor even wish to be a "5" in the future.

Area of Self Care	Where I am Now (1-5)	Where I Want to Be (1-5)
Moving the Body: Our physical, mental, and emotional health are impacted by the amount and kind of movement we do. Moving the body can take many forms such as dancing, walking, gardening, yoga, and exercise.		
Recharge: Our bodies and minds must rest and recharge in order to optimize our health. Getting a good night's rest as well as recharging our mental and physical energy throughout the day are vital to well-being. Taking short breaks or doing something you enjoy or feels good for moments throughout the day are examples of ways to refresh.		
Food and Drink: What we eat and drink can have a huge effect on how we experience life, both physically and mentally. Energy, mood, weight, how long we live, and overall health are all impacted by what and how we choose to eat and drink.		
Personal Development: Our health is impacted by how we choose to spend our time. Aligning our work and personal activities with what really matters to us, or what brings us joy, can have a big effect on our health and outlook on life.		
Family, Friends, and Co-Workers: Our relationships, including those with pets, have as significant an effect on our physical and emotional health as any other factor associated with well-being. Spending more time in relationships that 'fuel' us and less in relationships that 'drain' us is one potential option. Improving our relationship skills or creating new relationships through community activities are other options to consider.		
Spirit and Soul: Connecting with something greater than ourselves may provide a sense of meaning and purpose, peace, or comfort. Connecting and aligning spiritually is very individual and may take the form of religious affiliation, connection to nature, or engaging in things like music or art.		
Surroundings: Our surroundings, both at work and where we live, indoors and out, can affect our health and outlook on life. Changes within our control such as organizing, decluttering, adding a plant or artwork can improve mood and health.		
Power of the Mind: Our thoughts are powerful and can affect our physical, mental, and emotional health. Changing our mindset can aid in healing and coping. Breathing techniques, guided imagery, Tai Chi, yoga, or gratitude can buffer the impact of stress and other emotions.		
Professional Care: "Prevention and Clinical Care" Staying up to date on prevention and understanding your health concerns, care options, treatment plan, and their role in your health.		

Reflections
 Now that you have thought about what matters to you in all of these areas, what is your vision of your best possible self? What would your life look like? What kind of activities would you be doing?

Are there any areas you would like to work on? Where might you start?

After completing the Personal Health Inventory, talk to a friend, a family member, your health coach, a peer, or someone on your healthcare team about areas you would like to explore further.



the American Society of Anesthesiologists concluded that physical or restorative therapies such as fitness classes and exercise therapy is effective for low back pain as well as other pain conditions.⁷ Similarly, the American College of Rheumatology/ Arthritis Foundation makes strong recommendations for exercise and tai chi for treatment of hip and knee osteoarthritis (OA).⁸ Recommendations note that there is insufficient evidence to recommend one form of exercise over another; however, patients are more likely to experience benefit from specific exercise recommendations rather than simple encouragement to exercise. Delivery of instruction by a physical or occupational therapist is crucial for the appropriate initiation and maintenance of exercise as a part of OA management.⁸

Acupuncture

Evidence for acupuncture published in randomized controlled trials (RCT), systematic reviews, and meta-analyses are

conflicting and guidelines from various organizations differ in recommendations. As an example of favorable results, acupuncture has shown beneficial results in chronic shoulder pain; a German RCT compared the effectiveness of traditional Chinese acupuncture, sham acupuncture, and untreated controls on pain relief.⁹ Patients were given 15 treatments over 6 weeks. A 50% reduction in pain by visual analog scale was achieved in 65% of patients receiving traditional Chinese acupuncture, 24% for sham acupuncture and 37% for untreated control.

The American College of Rheumatology conditionally recommends acupuncture for patients with knee pain associated with OA while the American Academy of Orthopaedic Surgeons does not.^{10,11} A 2014 literature review of 59 systematic reviews conducted by the VHA concluded with a high degree of confidence that acupuncture has positive effects in migraine prophylaxis, treatment of headaches, and chronic pain. Further results of the review are illustrated

in Table 2.¹²

Chiropractic Medicine & Massage Therapy

There is mixed evidence for spinal manipulation therapy for pain management, which is usually performed by a chiropractor. An RCT at two VHA clinics found no significant difference in pain or function when spinal manipulation therapy was compared with sham intervention,¹³ while two other RCTs demonstrated benefit of spinal manipulation for the treatment of pain.^{14,15} Of the prementioned trials finding benefit for chiropractic therapy, the first compared chiropractic manipulation to physical therapy and found no significant difference between groups but ultimately demonstrated reductions in current pain scores (52.7%, 50.9%); least pain scores (40.4%, 45.4%); worst pain scores (42.1%, 37.2%); usual pain scores (41.1%, 46.7%); and number of days per week in pain scores (24.3%, 18.9%) for both chiropractic care

TABLE 1. Complementary and Alternative Medicine Treatment Options for Common Pain Conditions

<i>Complementary and Alternative Medicine Therapies</i>	<i>Fibromyalgia</i>	<i>Headache</i>	<i>Back Pain</i>	<i>Osteoarthritis</i>	<i>Other Pain Types</i>
Acupuncture ^{9,12,18}		Migraine prophylaxis Headache treatment		Knee	TMJ Shoulder Cancer Pregnancy
Mind Body Therapies (i.e., mindfulness, meditation, hypnosis, CBT, ACT, Guided Imagery, Biofeedback) ¹⁹⁻²²					Burn Post-operative Trauma Cancer
Chiropractic/Massage ²³⁻²⁶		Tension-type			Neck Shoulder
Exercise ^{8,19,26-28}				Knee Hip	General MSK
Yoga ^{8,17,28}				Hip	
Tai Chi ^{8,17,19,28}		Tension-type		Knee Hip	
Myofascial Release ²⁹					

GREEN boxes indicate conditions with evidence for treatment with the corresponding therapies; YELLOW boxes indicate more specific conditions with evidence for treatment with the corresponding therapies; WHITE boxes indicate conditions with little-to-no evidence for treatment with corresponding therapies
CBT – Cognitive Behavioral Therapy, ACT – Acceptance and Commitment Therapy, TMJ – Temporomandibular Joint, MSK – Musculoskeletal

and physical therapy respectively.¹⁴ The second beneficial trial compared thrust manipulation to non-thrust manipulation in older adults with low back pain. Again, no significant between-group differences were found, but both treatments demonstrated reduction in pain and disability.¹⁵

Massage is also commonly utilized for pain with very low to low quality evidence for the treatment of low back, neck and shoulder pain, though benefits are usually short-lived.¹⁶ Although evidence for spinal manipulation and massage is low, in 2017 the American College of Physicians made strong recommendations for both as an initial non-pharmacologic treatment of acute, subacute, and chronic low back pain as these therapies will benefit some patients and are of low risk compared with pharmacologic and more invasive treatments.¹⁷

The Role of the Pharmacy Team in Whole Health Chronic Pain Management

A pharmacy team understands most intimately the role of conventional treatments, especially medications, in pain management. In the management

of chronic pain, however, conventional treatments alone are not the sole treatment option. It has become apparent, now more than ever, that an integrative approach must be used including conventional, complementary, and self-care methods for chronic pain management. Because the pharmacy team is often thought of as the most accessible healthcare professionals and is involved in patient care in a variety of ways, it presents an opportunity to be on the frontlines of a Whole Health approach. Pharmacists and technicians can integrate components of Whole Health into their daily interactions with patients. It might be as simple as asking patients during medication reconciliations,

“What really matters to you?” rather than blaming a patient for not adhering to their medications as prescribed.

A Whole Health approach offers unique opportunities for the pharmacy team. Since conventional treatments heavily rely on pharmacologic therapy, the pharmacy team can identify patients that would benefit from setting goals in order to create a realistic and attainable pain management plan. When goals are set, patients can then be referred for evidence-based services that match their condition and interests (Table 1). Knowing your local resources will help guide patients to these opportunities.

Currently, the VHA is incorporating a Whole Health approach, with the Tomah

TABLE 2. Positive Effects of Acupuncture¹²

<i>Evidence of positive effect (high degree of confidence) for treatment</i>		
Headache	Migraine prophylaxis	Chronic pain*
<i>Evidence of potential positive effect (moderate-to-high degree of confidence) for treatment</i>		
Cancer pain	OA	General pain
Temporomandibular joint pain	Pregnancy pain	Chronic pain*

**Hempel and colleagues noted that while there was evidence of positive effect in chronic pain, there was unclear evidence of positive effect for certain chronic pain conditions, specifically back, neck, and fibromyalgia pain.¹²*

Patient Case Example

Let's look at a potential chronic pain patient case to understand how Whole Health methodology can be incorporated. Jennifer is a 70-year-old retired teacher who suffers from ongoing neck pain and right knee pain over the last year. X-ray and MRI of her neck show degenerative changes but otherwise normal and x-ray of right knee shows osteoarthritis.

Traditional over-the-counter medications provide minimal relief and six weeks of physical therapy was not helpful. She is started on twice-daily oxycodone and although this does help her pain, her function has not improved. The medication is causing her to be drowsy and constipated. Jennifer feels her pain is having a negative impact on her life. Neck pain is preventing her from driving her car and medication side effects are keeping her from engaging in enjoyable activities, like walking the dog. The mild depressive symptoms she has dealt with intermittently in her life have now become more persistent, her sleep quality is decreasing, and she has gained 10 pounds. She has a good relationship with her ambulatory care pharmacist with whom she discusses her continued pain concerns and side effects.

Jennifer's ambulatory care pharmacist discusses her goals and helps her complete a brief personal health inventory, which reveals that she is motivated to reduce her opioid use due to her concerns for side effects, but she needs alternatives for relief when pain is aggravated. The personal health inventory also identifies that Jennifer's sense of purpose, mindful awareness, and sleep quality are areas impacted by pain. Jennifer and her pharmacist discuss acupuncture as a potential option that is available for referral and has evidence for her knee pain and potentially her neck pain as well. They discuss goals like walking the dog daily, they review resources for developing a sleep hygiene routine, and Jennifer agrees to begin keeping a food and drink diary. After some discussion, it becomes clear that Jennifer feels her more persistent depressive symptoms are fueled by lack of purpose. The pharmacist helps her brainstorm and after some thought, Jennifer begins volunteering at a preschool to channel her passion for teaching and regain her sense of purpose.

Eventually, Jennifer is able to eliminate her daily pain and manage occasional neck and knee stiffness without medication after a slow, patient-directed opioid taper. By focusing on her patient-identified goals instead of just medication risks, her quality of life and function significantly improve. She also finds acupuncture beneficial and continues with treatment two to three times per year to maintain her new level of improved function.

VHA hospital as one of the flagship Whole Health sites in the nation. In Tomah, Whole Health has taken off, including the development of dedicated space. The pharmacy team has been involved in Whole Health through staff training for employees, referring patients to Whole Health coaches for completion of the personal health inventory and goal setting, and continually discussing complementary

and self-care management techniques with each patient.

The pain pharmacist has been further involved by assisting with the development of a Whole Health Opioid Safety shared medical group with chronic pain patients. This group is designed to specifically discuss aspects of Whole Health with coaching, opioid safety, and pain neuroscience education in a small group setting over 10

weeks. Additionally, the pain pharmacist took on another role in Whole Health by becoming trained and credentialed to provide battlefield acupuncture (BFA) for patients. Battlefield acupuncture, or auricular acupuncture, is a part of Whole Health and is expanding across the VHA system. Battlefield acupuncture was developed in 2001 by Air Force Doctor Colonel Richard Niemtow for active military during deployment. It was later transferred to the VHA system for use in Veterans. Battlefield acupuncture differs from traditional acupuncture in that BFA utilizes small tack needles which are placed in specific points in the ear alone, are left in for up to 3 days, and then fall out naturally or are removed by the patient. Traditional acupuncture, in comparison, uses points placed on multiple areas of the body (which may include the ears) and needles are removed at the end of the session before the patient goes home. The pharmacy team has been able to get involved outside of the pharmacy setting by getting this specialized training.

Conclusion

Medications and the pharmacy team have traditionally been placed center-stage in pain management. As pharmacists and pharmacy technicians continue to integrate more fully into the ever-changing health care model, it is imperative to complement our traditional functions. Becoming informed of and leveraging a Whole Health approach provides opportunities for the pharmacy team to provide extraordinary patient-centered care and improve pain management.

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The contribution in reviewing is greatly appreciated!

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Assessment Questions

1. Due to current inefficiencies in the United States Healthcare system in extending the overall life expectancy of the population, the model of care is beginning to shift from a biomedical approach to a(n):
 - a. Biopsychosocial approach
 - b. Homeopathic approach
 - c. Salutogenic model
 - d. Stewart method
2. A visual aid which can be used to explain and understand the Whole Health Approach is:
 - a. The Circle of Life
 - b. Maslow's Hierarchy
 - c. The Circle of Health
 - d. The Meridian Chart
3. Which of these tools can help patients identify what is important to them?
 - a. PHQ9
 - b. Personal health inventory
 - c. AUDIT-C
 - d. BPI
4. Which of these should help guide a Whole Health focused pain management plan?
 - a. Setting functional goals
 - b. Setting opioid dose limits
 - c. Setting up an opioid taper schedule
 - d. Setting a pain score goal
5. There is evidence for Mind-Body Therapies in which of the following conditions?
 - a. Fibromyalgia
 - b. General Pain
 - c. Low Back Pain
 - d. Migraine
 - e. All the above

6. The American College of Rheumatology conditionally recommends acupuncture for:
 - a. Fibromyalgia
 - b. Migraine
 - c. Osteoarthritis of the Knee
 - d. Temporomandibular Joint Pain
 - e. All the above
7. Many complementary treatment recommendations are supported by:
 - a. Low Quality Evidence
 - b. Moderate Quality Evidence
 - c. High Quality Evidence
8. Examples of how the pharmacy team can play an active role in Whole Health treatments include:
 - a. Referring for Whole Health coaches
 - b. Educating about complementary treatments
 - c. Monitoring and adjusting medications based on patient goals
 - d. Administering Battlefield Acupuncture
 - e. All the above
9. Did the activity meet the stated learning objectives? (if you answer no, please email sarahs@pswi.org to explain)
 - a. Yes
 - b. No
10. On a scale of 1 – 10 (1-no impact; 10-strong impact), please rate how this program will impact the medication therapy management outcomes or safety of your patients.
11. On a scale of 1 – 10 (1-did not enhance; 10-greatly enhanced), please rate how this program enhanced your competence in the clinical areas covered.
12. On a scale of 1 – 10 (1-did not help; 10-great help), please rate how this program helped to build your management and leadership skills.
13. How useful was the educational material?
 - a. Very useful
 - b. Somewhat useful
 - c. Not useful
14. How effective were the learning methods used for this activity?
 - a. Very effective
 - b. Somewhat effective
 - c. Not effective
15. Learning assessment questions were appropriate.
 - a. Yes
 - b. No
16. Were the authors free from bias?
 - a. Yes
 - b. No
17. If you answered “no” to question 16, please comment (email info@pswi.org).
18. Please indicate the amount of time it took you to read the article and complete the assessment questions.

CE FOR PHARMACISTS & TECHNICIANS

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Quiz Answer Form

circle one answer per question

- | | |
|--------------|-----------|
| 1) a b c d | 10) _____ |
| 2) a b c d | 11) _____ |
| 3) a b c d | 12) _____ |
| 4) a b c d | 13) a b c |
| 5) a b c d e | 14) a b c |
| 6) a b c d e | 15) a b |
| 7) a b c | 16) a b |
| 8) a b c d e | 17) _____ |
| 9) a b | 18) _____ |

May/June 2020
 What Matters to You? Applying Whole Health Care to Pain Management

ACPE Universal Activity Number:
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Target Audience: Pharmacists & Technicians

Activity Type: Knowledge-based

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